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THE

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BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY

WILLIAM O. MARKHAM, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PHYSICIAN TO ST. MARY'S HOSPITAL.

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BRITISH MEDICAL JOURNAL:

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EDITED BY DR. MARKHAM.

LONDON: SATURDAY, JANUARY 3, 1863.

General Remarks

ON THE

PRACTICE OF MEDICINE.

BY

P. M. LATHAM, M.D.

The Heart and its Affections, not Organic.

I.—*General View of the Subject. The Pulse.*

It is always desirable to trace out the just limit of a subject, and to note the right places within it for all known facts; and also where kindred facts, hereafter to be known, may take up their places beside them. This I some years ago sought to do, as far as my observation then enabled me, for the subject of diseases of the Heart (*Lectures on Clinical Medicine, comprising Diseases of the Heart*). It was a sketch only that I attempted. But the facts there considered, numerous as they are, and facts of the like nature hereafter to be known, numerous as they may be, would go to make up a part only of the entire subject. My concern was with structural diseases and disorganisations of the heart; and the facts brought under consideration went to denote them in their kind and in their seat, whether beginning or progressive, stationary or receding, curable or incurable; also their causes, consequences, and events.

But there are numerous facts, unquestionably belonging to the pathology of the Heart, which are of another kind, and which cannot be made to fall within the assigned limit. Therefore we must enlarge its boundaries, that nothing may be excluded which is found legitimately to belong to the subject.

In every organ of the body, and preeminently in the Heart, the living actions and sufferings of disease have a compass and a reach far beyond its material framework; and not only beyond it, but independent of it. Excess and defect in the force of the Heart's impulse, excess and defect in the number of its beats; also derangements of their natural order and sequence, and the same made perceptible in the arteries; also varieties of morbid sensation immediately referrible to its seat, from a mere sense of weight and oppression to acute and agonising pain: any of these may exist alone, or a few or many of them in combination, and yet the Heart be perfectly healthy and sound of structure.

But the Heart must act thus and suffer thus from some vital necessity, although that necessity be not demonstrably inherent in its own structure. And not being in the Heart, where is it and what is it? These truly are the very objects of inquiry. Such affections have been denominated nervous and sympathetic. But to call them nervous would seem to imply that they all belonged to one pathological category: and this is certainly not the case. To call them sympathetic, if the term be not taken in any strict sense, would be less objectionable. But if we so designate them, we must be allowed to embrace more than is usually included under that title.

The Heart passes for the most sympathising organ in the body. And it may be really so; or it may be that it does not in fact sympathise more than other organs, only more apparently. For who shall say that every part of the body does not sympathise with every other part, and that its functions are not put out of sorts by every other's detriment or disease? But the functions of many parts are hidden functions, and we know not how it may be with them. Yet the functions of others are apparent enough; of those, for instance, which secrete; and we know that their secretions are ever apt to be altered and vitiated, not merely by diseases of their own, but by diseases, small and great, beginning and ending in other parts, and altogether restricted to them. And so, too, of the heart: it cannot beat a beat too many, or too few, or too strong, or too weak, without its being straightway perceived; and thus we become convinced that it has as many modes of abnormal action derived from diseases without as from diseases within itself.

But it is not enough that sympathies and sympathetic disorders should be admitted as bare realities. They must become objects of familiar knowledge, if the physician is to make any safe use of them for practical purposes.

There are sympathetic affections of the Heart so constantly found in company with certain conditions of disease in the constitution at large and in particular organs, that they have seemed to be naturally annexed to them, and have come to be ranked among their symptoms, and taken for proofs of their existence, and for guides of their treatment. Such are the greater force and frequency of the Heart's action in fevers and inflammations. A fever is hardly thought to be a fever, or an inflammation to be an inflammation, without them. Nor are these sympathetic affections of the Heart barely *annexed* to such conditions of disease. They are often found to keep exact measure with them. Degrees of frequency and force in the action of the Heart and arteries, and their variations from time to time, follow degrees and variations of febrile and inflammatory movements, as they increase and decrease and rise and fall, and so give notice of their incidents and tendencies and events; moreover, of what they need and what they will bear, for cure or palliation or safe conduct.

Again, there are sympathetic affections of the Heart found in company with certain conditions elsewhere, yet neither constantly so nor in all persons, but occasionally and seldom, and in a few. They look like mere casualties, if such things can be.

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Or if they come from a real physical necessity (as indeed they may), that necessity does not grow out of the nature of the disease, but out of the constitution of the individual man who suffers it. Such are the palpitations of the Heart and the irregular and intermittent pulse, which sometimes go along with disorders of the digestive and assimilative functions; which attend states of plenitude and emptiness of the blood-vessels and morbid qualities of the blood itself; also which are found in nervous and mental maladies. Of all these I will not say that no orderly account can be given, only that they can hardly be made out to follow exact rules. Nevertheless, they demand careful consideration; for when they come to be viewed in their instances and examples, then will appear their great importance. They will not, indeed, be found to claim the rank and value of symptoms, because their alliance with the diseases which they accompany is occasional only and extraordinary. Nevertheless, what is occasional only and extraordinary is sometimes as a light let in from a new quarter, and bringing into view what would otherwise have lain hid. And thus these unwonted sympathies of the Heart denote a possible reach of diseases beyond their common range. Pointing to things which come to pass beyond our thought and reckoning, they serve to abate our wonder at the strange turns and issues of even common diseases, which have taken the wisest and most experienced by surprise.

But sympathetic affections of the heart, in their wide range and in their multitudinous forms and instances, have a very unequal interest. As there are some which cannot be made too much of, so there are others which cannot be made too little. What can be said of palpitations of the heart, and intermissions, and irregularities of its beats, which come and go during a man's whole existence, neither originating in any known disease, nor terminating in any, nor abridging in any measure the duration of life. They must come from something, but we know not what. We may call them sympathetic, but it must be in a very lax sense.

There are diurnal variations in the state of the circulation which belong naturally to all men. In the great majority, they concern only the force and frequency of the heart's action, raising it a little and quickening it a little at different times of the same day. They must be owing to something, yet they are consistent with perfect health. But in some these diurnal variations go beyond the mere force and frequency of the heart's action. They go even so far as to disturb the rhythm and succession of its beats, making them intermit and flutter at different times of the same day. And these too must be owing to something, and yet they are consistent with perfect health.

The observations which have been made may at least serve to notify the extent of the subject in hand. They do not pretend to have done anything towards setting it in order. If inquiry into the sympathetic affections of the heart is to be fairly and fully carried out, it must begin with those which are the most common and the most constant, and so pass from them to those which are more rare. It must start from the well observed varieties of modes and degrees of action in the heart and arteries, which experience takes and uses as its every day index of diseases and its every day guides to practice. The elements of the whole subject are to be found in the Doctrine of the Pulse.

Before we proceed, let us just consider the standpoints from which we must needs make our survey. There is no organ of the body which during life submits its structural condition so freely to our knowledge as the Heart. Of the changes it is capable of undergoing, from age, from accident, or from disease, it is remarkable how many may be fairly reckoned within reach of our diagnosis; its bulk, whether great or small; its consistence, whether hard or soft; its cavities, whether dilated or contracted, and even which is dilated and which contracted; its orifices, whether free or straitened, and even which is free and which is straitened. All this knowledge is put within our reach by auscultation and the stethoscope. Without them it would be unattainable, and with them it is only attained after a world of patience and industry and infinite trials and experiments. Difficult, however, as it is to get, it is pretty safe and sure when we once have got it. Another circumstance, which greatly helps to make our knowledge of the heart's structural diseases among the surest knowledge we possess, is that their immediate effects upon the organ itself, as well as their distant effects throughout the body, result in a great measure from mechanical necessity. Hence there is a good deal in every case which can be reckoned with much exactness. But it is far otherwise when the Heart being sound of structure is functionally deranged. All that then arises must come from vital necessity. All our reckonings are then made from other points of view, and by other means and instruments, and with less certainty.

Well, but the elements of the subject are then, it has been said, in the Doctrine of the Pulse.

There is not any disease, great or small, in any part of the body, vital or not vital, which the physician does not think to know better than he would otherwise know it, and treat it better than he would otherwise treat it, by interrogating the pulse. The information he thus gains is sometimes much and is sometimes little; but very seldom indeed is it none at all. To be fully aware when it amounts to much, or little, or nothing—that is, to appreciate the pulse at its true worth—is among the chief concerns of medical practice. Very seldom, indeed, I repeat, does the pulse convey no information at all. Even when amid a complex of symptoms, it remains just as it is in health; yet, negative sign as it then is, does it often become, under the circumstances, more pregnant of meaning, and give surer notice of what is going on, and of what should and what should not be done, than the most positive fact among them all. The pulse remaining steady to the force and frequency of health is often the very thing that is wanted to interpret a crowd of urgent and doubtful symptoms; to stamp them all with their true value, and make them pass just for what they are worth. Thus, an appeal to the pulse is indispensable in every case. There is no getting on safely without it.

But the Heart is the prime mover all the while; and the heart is so far the *pulse*. By its all-pervading sympathy, it feels all that is hurtful throughout the body; and by its own peculiar mode of action it tells all that it feels, and telegraphs intelligence of it through every artery that can be felt.

The Heart using its proper language of sounds and impulses, how clearly and emphatically does it speak of its own diseases to the ear and touch of experience. Then the complete information which we desire comes almost always directly from itself, and further appeal to the arteries is superfluous. On some rare occasions, perhaps, the heart's direct language concerning its own diseases may not be so absolutely indubitable, but that it may gain clearness and explanation by what is further spoken through the arteries. But the converse of this comes to pass when the Heart is perfectly sound, and when it has nothing to tell of itself, but a great deal to tell of every organ and system of organs in the body beside itself, and of all diseases everywhere beyond itself and out of itself. Then its most frequent, precise, and trustworthy intimations are conveyed through the arteries, its own direct sounds and impulses being but of rare and occasional use and significance.

It requires some courage to talk gravely and with a purpose of instruction about common things. For either people do not listen at all, expecting to hear nothing new; or they listen reluctantly, not liking to be schooled about what they understand perfectly (they think) already. And if there be any one thing which medical men may be thought to understand better than another, and to have, literally and in every sense, at their fingers' ends, it is the pulse. And yet I am about to take upon myself to speak even to medical men about the pulse. It lies, indeed, at the very root of my subject to do so. But apart from this formal consideration, I am persuaded that I should be rendering an useful service to my profession if I could speak of it as I desire. I conceive that this same lamp, which we all familiarly use and trust to guide our daily path, may still be placed in a better position, and thence be made to throw a more certain light upon the great objects of practical medicine.

All that can be known concerning the pulse, we learn either by attending to each separate beat, or to several beats in succession. By attending to a single beat we learn whether the pulse be hard or soft, large or small, that is, its qualities. By attending to many in succession we learn whether it be frequent or infrequent, regular or irregular, or intermitting, that is, its number and its rhythm. And it must be obvious that its number and rhythm alone can be submitted to actual measurement, and that all the rest, the qualities namely of each particular beat, is to be determined by the perceptions of the person who feels it. But men's watches agree better together than their perceptions. Looking to our several watches, we have an index as nearly uniform as possible, and so we are always of one mind about the number of the pulse and its rhythm. Consulting our several perceptions, we use a variable index; and no wonder that about the *qualities* of the pulse we are apt to differ. Yet, after all, practical men are found to agree pretty well about the quality of the pulse in particular instances. And it is because they consult it with no purpose of refining, but with the single aim of finding in it something to help them in their knowledge and treatment of disease. This single aim is mine. Therefore, in every part of the subject, and above all in this, which is naturally open to refinement, I shall avoid new names and new distinctions; for I know full well that if I cannot handle the subject with simplicity I shall make a puzzle of it. Let us, then, first consider the number of the pulse, whether it be frequent or infrequent, and the succession of its beats, whether it be regular or irregular, and afterwards the qualities of the pulse, whether it be hard or soft, large or small—in fact, these are all the distinctions which I wish to insist upon.

Let me add a single remark, lest I should seem to affect an over-simplicity. It is one thing for a man to understand a matter for himself and for his own use, and another thing to understand it and explain it for the use of others. Therefore, I would not exclude a regard to other modifications of the pulse (whatever they may be), which any man's own observation may have taught him, and which he may have used for guidance and direction in the management of disease. There may be many such with which I have no acquaintance. Still, since there are things which practical men often know assuredly, and employ successfully, yet of which they cannot convey to others either the knowledge or the use; and since this is especially true of our present subject, I would willingly avoid those parts of it which, whatever I may fancy myself to know, I am still incompetent to explain.

The Summer of 1862. The registrars for England and Scotland report that the highest temperature recorded last summer at any of the stations from which returns are made to them was 84·5° in England, and 80·5° in Scotland. In such returns the difference of temperature in places at no great distance from each other is very remarkable. In May last the thermometer was at 81·5° at the Royal Observatory and only 74·6° at Guildhall; 75° at Bournemouth, and only 66° at Ventnor. In July also, when the wave of heat again passed over England, the reading was 80° at Cardington, and only 70·5° at Aspley, in the same county of Bedford; 84° at Downside College, near Bath, and but 74·2° at Clifton. At the Royal Observatory the mean amount of cloud was 7·8 (of 9) in the three months April to June, and 7·3 in the three months July to September. The mean of 55 stations in different parts of Scotland shows that in the six months April to September the sun shone for only 1,052 hours, which is less by 128 than the average of the preceding six years. The amount of sunshine in the summer was almost the least ever known, says the Registrar-General of Scotland, and the amount of cloud the greatest; and these two things have held so remarkably as the rule for the last three years as to be confirmatory apparently of Sir J. Herschell's suggestion, that our seasons experienced a disturbance from a cosmical influence in 1859 from which they have not yet recovered. The amount of ozone varies greatly. It is very small in the metropolis; the mean of each quarter of this year has ranged from 0·2 at Camden Town in the first quarter to 2·1 at the Royal Observatory in the same quarter. At the coast and at some inland stations the mean has been as high as 5, 6, and 7. There are varieties such as these in the mean of the very last quarter; 0·7 at Downside College, Bath, and 5·7 at Clifton; 0·3 at Cockermouth, and 7·9 near Silloth. At Bournemouth, again, above 5 in the first and second quarters of the year, and not much above 4 in the third: at Worthing, on the same coast, 4·6 in the first quarter, and above six in the second and third. A few instances will show the variation in daily range of temperature; the mean in the last quarter was only 8·9° at Scarborough, 9·1° at Ventnor, 9·3° at Aspley, and at Bournemouth it was 17·7°; at Aldershott, 18·8°; at the Royal Observatory, 19°; at Leyton, 20·1°.

Original Communications.

DYSCHROMATODERMA; OR, DISCOLOURATION OF THE SKIN.

By Erasmus Wilson, F.R.S.

Chromatogenesis, or the production of colour, is an animal function enjoyed by the skin, in common with certain other of the organs of the body; for example, the eyeball, the liver, the lungs, etc. It is the source of the varieties of tint which are met with in the human race; which distinguish the Ethiopian, the American Indian, the Mongolian, the Caucasian, and the Albino; and, like other functions, it is subject, besides its physiological variations, to changes which are of a pathological nature, and which constitute the so-called "disorders of the chromatogenous function."

The disorders of the chromatogenous or pigmentary function of the skin, giving rise to dyschromatoderma, are all represented by the four colours—black, white, yellow, and blue, and the combinations of black and yellow constituting the various tints of brown.

Black is the archæus of melanopathia, melasma or nigredo cutis, ephelis, and stearrhœa nigricans; while the absence of black constitutes leucopathia, leucosma or alphosis, and albinismus. Yellow is represented by lentigo, flavedo cutis, and stearrhœa flavescens; and the blending of black and yellow gives rise to the various hues of chloasma and fuscedo cutis; the yellow and the black together sometimes producing a greenish tint, as in certain varieties of chloasma and lentigo. The presence of blue pigment in the skin, constitutes the cyanopathia cutanea of Billard d'Angers.

Melasma or nigredo cutis (nigrities) has of late attracted some notice in consequence of the researches of Addison and others; it has received the additional synonym of "bronze skin"; and, possibly, some further observations on this morbid state may not prove uninteresting to those who have given their attention to the subject or are seeking information with regard to a very curious but not very rare pathological phenomenon.

The main points that I propose to illustrate in this essay, are: Firstly, the existence of a peculiar form of anæmia, which may be termed melanæmia, in association with melasma; secondly, the origin of melanæmia and melasma in debility and exhaustion of parts of the nervous system; and, thirdly, to deduce from these premises a principle of medical treatment.

Anæmia is practically a deficiency of the red element of the blood; but, besides the red element, the blood is known to possess a yellow colouring principle, and, probably, a black colouring principle. Under the influence of certain physiological or pathological operations, these three principles may undergo changes—changes of quantity and intensity; and accompanying these changes the anæmia may assume a diversity of complexion. The anæmia may have a colourless character, leucanæmia; it may have a yellow and greenish tint, chloranæmia; or, as I shall endeavour to show, it may have a blackish hue, and so give rise to a form of anæmia which I have commonly observed in relation with melasma and the melasmic diathesis; and which is accurately described by the term melanæmia.

The diagnosis of anæmia is generally determined by the appearance of the skin, of the mucous membrane of the mouth, of the gums, and especially of the conjunctiva; and according to the extent of deficiency of the red principle of the blood, will be the degree of blanching of these several parts. Consequently, there may exist every shade of variety of degree of anæmia, from the merest indication of that state to the most confirmed bloodlessness.

So in melanæmia, the anæmia may be slight or strongly marked; and the peculiar darkness of hue which the eyeball acquires, may be scarcely apparent, or so striking as to attract the attention of the most cursory observer. In melanæmia, the mucous membrane of the mouth generally presents no differences from the ordinary appearance of anæmia, nor in many instances does the conjunctiva; but the especial sign of melanæmia is, a vivid brightness, a brilliancy, and sparkling lustre of the eyeball, a liquid depth of colour of the humours of the eye, and a strongly contrasting whiteness of the sclerotica, the effect being often increased by a more or less deep tint of a dull blackness of the integument of the eyelids, more especially of the fold of skin of the upper eyelid which immediately borders the eyelashes. It is difficult to convey in words an appearance which is only recognisable to the observer as the result of close attention, and which can only be distinguished by careful comparison with the normal standard. But, in a well-marked example, there is no fact in medicine more demonstrable than the melanæmic or melasmic eye, not only in association with melasma of the skin; but, also, independently of the latter affection.

The melanæmic or melasmic eye is sometimes the only sign of anæmia which can be discovered in the individual, who, possibly, regards himself as in perfect health; but where it exists, it may be looked upon as indicating a predominance in the blood of the melanic principle, and a predisposition to melanæmia and melasma; in a word, it manifests a melasmic diathesis. On the other hand, melasma may exist without this symptom of melanæmia being present; apparently, because, in the latter instance, the colouring principle finds a natural outlet through the skin, and the melanopathia its special field of development in the cutaneous tissue; or, perchance, the abnormal pigment may at the same time be eliminated from the blood through some other emunctory organ.

It will be seen by these observations that I look upon melasma and melanopathia, not as a substantive disease, but as depending upon an altered state of the blood, a cacochymatous or dyscrasic condition of the blood, in which there exists a deficiency of the red principle and an excess of the black pigmentary principle; not, possibly, in the precise form which it afterwards assumes in the cells of the rete mucosum, but in that more elementary and diffusible shape in which it is first generated and held in solution or suspension in the vital fluid.

The term melanæmia is one of recent origin and was intended by its first author to signify the actual presence of pigment in the blood, as demonstrable by the microscope. To determine the diagnosis of melanæmia, therefore, according to this view, it becomes necessary to be provided with the appurtenances of science, and moreover with leisure. A portion of blood must be taken; it must be properly diluted; it must be disposed on a suitable slide; it must be attentively examined; and then, the important fact is demonstrated of the presence of pigment, it may be in the form of granules or perhaps in that of cells or scales. But it is clear that this process so valuable in our schools of pathology—namely, our hospitals and infirmaries—is inapplicable to the daily routine of medical life, and that melanæmia as a demonstrable fact must be regarded as a scientific curiosity, comparatively unapproachable by the physician or the surgeon engaged in active practice.

But the term melanæmia, as used by me, has a different signification from that described above, and is intended to point out a clinical sign which may be tested by every one, and by which the presence of pigment in the blood may, as I believe, be as certainly determined as by the actual physical examination of that fluid. This clinical

sign is the melanæmic or melasmic eye already mentioned, and which I regard as an unfailing indication of a melasmic diathesis.

For a comprehension of what is included by the term melasmic diathesis, we are indebted to the researches of Frerichs of Berlin. Dr. Frerichs has shown that the blood of the spleen, as a consequence of retardation or torpor of its venous circulation, passes into a state of partial coagulation, and that the red corpuscles, at the same time, by a process of morbid chemical metamorphosis, are converted into pigmentary matter. The pigmentary matter is discoverable, with the aid of the microscope, in the form of free granules, and of cells and scales containing pigment-granules, and bearing in themselves the evidence of being altered blood-corpuscles. It is found in the blood of the splenic and portal vein, and may be traced thence through the pulmonary vessels into the general circulation. It is not improbable that any cause capable of producing torpor of portal circulation may give rise to similar results, and that the melanæmic or melasmic eye may in this way become an important sign by which the diagnosis of disorder of the abdominal organs may be determined when no other apparent symptom exists.

Dr. Frerichs has also shown that the pigment-matter may be detected in the lobules of the liver, and that its presence there occasions certain morbid phenomena. And that, next to the liver, it makes its way to the brain, and there gives rise to certain peculiar appearances and, doubtless, to altered function of that organ. And, furthermore, that it may, through the arterial current, reach every part of the body. The arrest of the pigment in the liver may, no doubt, in part, be mechanical; but its detention by the cerebral substance would seem to indicate an affinity between the nervous-matter and the pigmentary-matter, and suggest an explanation of the curious nervous and cerebral symptoms which are not unfrequently associated with melasma.

Another phenomenon will follow upon this; pigment-matter being proved to be actually present in the blood; the emunctory organs by which it is naturally eliminated will be excited to a more active secretion; the rete mucosum will receive a larger share of the pigment-pabulum; and the colour of the skin will be consequently deepened, either generally or partially, in obedience to other physiological and pathological laws. The tendency of the pigment-matter to seek the brain is a curious fact, and suggests the idea that this election may explain the early suffusion of the eyeball with the pigment, and the occurrence of the melanæmic or melasmic eye, when no other outward symptom of melasma is present. In observing this peculiar eye with attention, it has seemed to me that the choroid coat of the eyeball was more deeply pigmented than usual; that this extremely deep tint threw a stronger shade of blackness on the humours, and was the origin of part of the vivid brilliancy of the eye; and that, moreover, the extreme depth of black of the pigmentum nigrum was perceptible through the tunica albuginea.

But the melanæmic or melasmic eyeball looks as if it were suffused with a transparent pigmental fluid; or I might compare its appearance to a pure white seen through a black tinted glass; suggesting the idea of the black pigment being in the state of solution in the blood and in the fluids derived from the blood, as well as being corporeally visible in the shape of granules, as already described. Indeed, it is evident that the pigment, to be secreted by the skin, must be in a state of solution. This solution may be, and no doubt is, in part, supplied by the pigment-granules; but there are, besides, other soluble pigments, no doubt formed during the metamorphosis of the red corpuscles of the blood.

The origin of pigment by the metamorphosis of the red corpuscles of the blood explains the association of anæmia and melasma; and the presence of the melasmic or of the melanæmic eye becomes the proof that the change which has taken place in the blood is not, as in leucæmia, the reduction of the normal proportion of hæmatine and the development of white corpuscles, but the destructive metamorphosis of the red corpuscles (hæmic dyscrasis) and the conversion of the hæmatine into a melanic pigment. What the true explanation of this curious change in the economy may be, whether it depend upon physiological conditions or a more or less intense pathological action, is not at present easy to decide; but of two facts I have satisfied myself—namely, the frequent association of morbid nervous phenomena with melanæmia, and a greater difficulty in restoring the normal condition of the blood than in ordinary leucanæmia.

As may be inferred from these observations, the melanæmic eye is far from being uncommon; I have seen it three or four times in the course of a morning's duty. But melasma is comparatively rare. The melanæmic eye indicates a melasmic diathesis; that is to say, that state of the constitution in which there exists a tendency to torpid or obstructed circulation of the portal vessels, with a disposition to the metamorphosis of the red element of the blood-corpuscles into pigment. It is always associated with the common signs of anæmia to a greater or lesser degree, with more or less debility, and commonly with symptoms of dyspepsia, often with nausea and weight or oppression at the epigastrium, and sometimes with slight cutaneous disorder or other affection of the economy.

Let me cite a few instances, taken as they occur in my daily practice, as a further illustration of this phenomenon.

A young physician was introduced to me by his friend to ask my opinion as to the best course to pursue in reference to practice. Our conversation ended, I demonstrated to him the melasmic eye, of which he was, unknown to himself, the subject. Like all aspirants for medical honours, he had been working too hard; he had lowered his nervous tone. His digestive powers had suffered in consequence. There was, doubtless, torpor of circulation in the portal system, and the consequent development of pigment in the blood, or melhæmic dyscrasis. His conjunctiva and tongue were slightly pale, and he had the characteristic black transparency of the eyeball. Both he and his friend recognised the melasmic eye; and I suggested to him, as a medicine appropriate for the removal of its cause, the nitromuriatic acid with tincture of gentian.

My friend F. brought to me his daughter, a little lady of nine years old, for a slight pityriasis of the scalp. I was glad of the opportunity of demonstrating to my friend the melasmic eye, which in this young lady was well marked; there was, besides, a slight but general sombre or ashy hue of the complexion which seemed due to a blending of black, yellow and blue, and a certain metallic polish of the skin. When she was seated by her sister, who was also out of health, the contrast was very apparent. There were no symptoms of ailment about the young lady that would have attracted attention but for the pityriasis; and for this alone she was brought to me. Her appetite was not quite so good as usual; but her father had not observed anything else.

A surgeon of eminence brought to me his son, suffering under a slight attack of leprous psoriasis. The boy possessed a large cerebral development, was pale and thin and had the melanæmic eye of moderate intensity. His father told me that he had been to the sea-coast; but that since his return he had suddenly and unaccountably fallen off in strength, and that under the influence of this state of debility, the squamous eruption had appeared on his skin. My reading of the case was: Abnormal activity of an excitable brain induced by study, partial exhaustion of the nervous system by growth, and consequent debility of the organic functions; then, as

an ulterior consequence of lowered nervous tone and retarded circulation of the chylopoietic organs; hæmic-dyscrasis, assuming the melanic type.

The melanæmic or melasmic eye as a sign of aberration of health is a purely medical symptom; it is rarely or never so marked as to attract the attention of the patient; and it is therefore of the more importance that the medical man should be acquainted with it; inasmuch as it serves to denote the presence of a *causa morbi* in the economy; and, moreover, a cause which if not removed, may run on silently and insidiously and be productive of serious ultimate consequences.

In the preceding three cases I have alluded to three common causes of melanæmia; namely, exhausted nervous power from over study; altered nutrition accompanying the growth of the body; and weakened nutritive powers originating in the exercise of a morbidly excitable nervous system. I have also seen it associated with other temporary disorders of the economy, as in the following example. A veterinary surgeon consulted me for exfoliating maculæ on the palms of the hands, caused, as he believed, and no doubt excited by the use of a blistering fluid to a horse's legs. The eruption appeared immediately after rubbing in a quantity of this fluid and leaving it on his hands for some time afterwards. As I knew at the first glance that the eruption was syphilitic, I beat over the usual ground of symptoms, skin, throat, nerves, etc., but found no trace of a corroborating secondary symptom. I then pushed my inquiry home to the lair of the evil, and discovered a small red patch in the sinus præputii, and a little induration. He informed me that the chancre had been so slight that he had given it very little attention, and, not suspecting its nature, he had adopted no treatment whatever. It commenced nine weeks back, and the eruption on his hands two weeks ago. He had taken arsenic for the latter; and but for my diagnosis and inquiry, would never have connected the two disorders. This patient had a melasmic eye; but, as it had not attracted his notice, he was unable to tell me if it had shown itself before or subsequently to the chancre.

I could multiply these cases of melanæmic or melasmic eye, for they are very common, to an indefinite extent, but the enumeration would be little more than a repetition of the four cases already detailed. But I am not at present dealing with the question of the physiological origin and distribution of the pigment element of composition of the animal organism, but simply with its pathological origin. It seems to me not unlikely that the normal origin of the black pigment of the organism may be a metamorphosis of the hæmatine of the blood; but the abnormal source of the pigmentory element appears decidedly, as Dr. Frerichs states, to have this origin; to be in fact, a hæmic or melhæmic dyscrasis. The pigment principle is no doubt diffused throughout the entire circulation; and under the influence of the special conditions of the skin is developed in the rete mucosum as a pigmentary substance, and is regulated and controlled by physiological laws. But, when it is developed pathologically, its control by physiological laws is no longer possible.

To a process similar to that described by Dr. Frerichs as occurring in the spleen, but in a different locality, namely, the uterine veins, is probably to be ascribed the deep discolourations of the integument of the eyelids in menstruation. In a case of hysteria which once came under my notice, the black pigmentary secretion was eliminated by the skin of the eyelids in such abundance as to appear on the surface as a moist secretion that could be wiped away with a sponge. And the blood of this patient was so loaded with the pigmentary matter, that it was observed in the fluids which were thrown from the stomach by vomiting, in the egesta from the bowels, and in the urine. It is needless to repeat that, together with this destructive metamorphosis of the red corpuscles of the blood, there was a deficiency of hæmatine to an extreme degree.

Recurring to the phenomena described by Dr. Frerichs, namely, the partial coagulation of the torpid stream of venous blood in the sinuses of the spleen; the decomposition and metamorphosis of the red corpuscles of these coagulated agglomerations into pigment matter, and the detention of the particles of the pigment by the liver, where they excite a variety of morbid processes; the question arises: Do not these changes take place even more frequently than Dr. Frerichs imagines? Do they not take a prominent share in the production of many of the disorders of daily observation? Are they not continually before us without attracting our attention? I think they do, and are; and I am led to this conclusion by the great frequency of the melasmic eye and its associated symptoms. Let me cite an example of everyday experience. A lady, of fifty, leucanæmic, complained to me of constant nausea, vomiting after every meal, frequent diarrhœa; a feeling of extreme uneasiness with weight at the epigastrium, and extreme languor and lassitude, with great weariness. I prescribed for her, quinine. A fortnight later I saw her again, and she gave me the following account of herself: "I felt," she said, "that there was something that required moving from here," placing her hand over the epigastrium, and including in its stretch a part of the stomach, the duodenum, and the central portion of the liver; "I therefore took four grains of blue pill at night, and the following morning a senna draught. The quantity of black offensive stuff that came away was quite wonderful, and my nausea, my sickness, and the uneasiness and weight at the pit of my stomach were immediately removed." Was not this a case of melasmic excretion from the liver? I must confess I thought so, and think so still. But, it may be suggested, this patient was leucanæmic: yes, she was so, as far as the eye and skin were concerned; but only because the melanic matter was all collected in the liver, where it had been detained by a process of filtration, and whence it was subsequently eliminated.

In further corroboration of this, the practical bearing of the subject, I may call to mind the constant accompaniment of nausea and an uneasy epigastric sensation with melasma; and the unshaken conviction of the patient that the liver is the source of the evils complained of. A lady whose case is reported (Case I) remarks that a dose of calomel immediately dissipates her unpleasant feelings; that her complexion immediately becomes clear, and the melasmic blotches on her face less evident; and that, when she has failed to take the remedy, she has more than once suffered an attack of jaundice. And in truth, theoretically as well as practically, we must admit the capability of a dose of blue pill or calomel of disgorging the liver of its "atra bilis"—of its melanic accumulation—and of rendering more active and free the abdominal venous circulation.

Passing onwards to my second proposition—that melanæmia takes its primary origin in debility or exhaustion of the nutritive or trophic filaments of the nervous system, I must appeal for my illustration to the cases which I am about to report. I may observe that I have been led to this conclusion by the history of the patient, and by tracing the origin of the malady to its apparent source. It is remarkable that the subjects of melasma are, for the most part, of the female sex—of a sex in whom the nervous system plays a more conspicuous part than it does in man; that they range in age between twenty-five and fifty—a period during which the harsher realities of life are most pungent in their operation on the nervous system; and that, in almost every instance, an exciting cause may be found in injury done to the nervous system, either indirectly as an effect of some exhausting disease or organic lesion, or directly in the form of a sudden or violent shock.

The operation of the injury to the nervous system

would seem to be expended on the nutritive organs, with a consequent deterioration of their functions. The innervation and circulation of the chylopoietic apparatus is disturbed and impeded; nutrition is weakened; assimilation is imperfect; and cacochymia follows; and with cacochymia a want of the natural harmony of proportion of the different pigmentary principles of the blood. It may be that the red principle—the hæmatine of the blood—is chemically converted into the melanic pigment; or it may be that the melanic principle is simply a carbonaceous product resulting from the waste of the organic tissues.

In melasma, we find an illustration of a principle not uncommon in pathology; namely, the persistence of the local abnormal action of the part after the general economy is restored to health. It would seem to be the natural habit of the blotches of melasma to remain for years or for life, when a constitutional debility or a morbid cause capable of keeping them up can no longer be traced. And, in one of the cases reported in this paper, after the restoration of the patient to a better state of health, after the establishment of a healthier hæmatosis, and after the removal of the stains by local means, the general tint of the complexion acquired a deeper, but, at the same time, a distinctly healthier tone than before. My patient exchanged a complexion of a faded, patchy, muddy hue, for that of a handsome brunette, the tint of brown being richer and brighter than before, and suggestive of the idea of a more copious oily secretion being blended with the pigmentary secretion.

In another case, one of melano-leucopathia, which I published several years back (portraits), I drew attention to the curious results to the economy of a variation of the standard of colour of the skin. In this case, there were four shades of colour present at the same time, the natural tint, the leucosma, the general melasma, and the partial melasma. Nature had, so to speak, physiologically adopted these four tints, and the question arose: Which would she decree to be the proper standard when a process of restoration of the pigment in the leucosmic patches was established? I solved this question experimentally by inducing a restoration of the pigment secretion on the white patches, through the agency of a stimulant application; the colour returned on these patches. I had set the melanic machinery in motion; but how was I to control it? It passed the original normal standard; it went on, and it passed the deep tint of general melasma; it still went on, until it reached and almost exceeded the deepest tint of all, the partial melasma. Here, then, was an example, not of a natural standard, but of an acquired or morbid standard.

[*To be continued.*]

COMPOUND COMMINUTED FRACTURE OF BOTH LEGS: DOUBLE AMPUTATION: RECOVERY.

By Anthony Martin, Esq., Evesham.

William Robbins, aged 11, a spare, thin looking lad, came under my care on April 6th last, with the above accident. It appears that he was in the act of crossing the line of the West Midland Railway, to speak to his father, who was at the time engaged in loading a cart, when a luggage train, which was shunting goods, came on the line he was crossing, and knocked him down in the middle of the space between the rails, whence he tried to extricate himself; and, in so doing, got both his legs across the rail, and the wheels of six or seven trucks passed over them.

Upon examination, it was found that the right leg from the middle third to the ankle-joint was completely crushed, the large vessels and nerves ruptured, and the muscles in front and back of the leg totally destroyed; the foot was wholly denuded of its integuments. The left limb was not injured so much as regards external appearance. The foot was completely crushed, but the integuments of the limb were whole, with the exception of an aperture high up close to the junction of the posterior tibial with the popliteal artery, from which considerable hæmorrhage was taking place, the artery being found to be ruptured. The soft parts of this limb were evidently much bruised as high as the middle third of the thigh. I adopted the circular incision in both instances, removing the right leg below the knee-joint in the upper third. There was considerable difficulty in tying the posterior tibial artery, from the unusual amount of retraction. The left limb I removed immediately above the knee-joint, on account of the division of the posterior tibial artery. No difficulty occurred in this operation; but the muscles were very dark, from the bruising before mentioned, presenting almost an ecchymosed appearance. The patient was put under the influence of chloroform.

Immediately on the completion of the operation, he was removed to the workhouse; the stumps were dressed with strapping and wet lint, a few points of suture being first introduced, and an opiate was administered.

April 7th, 10.30 A.M. He had passed a good night, and looked cheerful and composed. Pulse 110, and fluttering. He complained of no pain.

April 8th. The dressings were removed this morning. The general appearance of the stumps was good, though the soft parts of the left stump were much contused. Pulse 120, and very compressible. The opiate was repeated.

April 9th, 7.30 A.M. He slept well after the opiate; but the tongue was inclined to dryness. The bowels were freely relieved, and there was some discharge from the wounds.

April 11th. There was no apparent change, except that the left stump did not seem to be healing as well as the right.

April 13th. Some considerable bleeding took place in the night from the left stump, which looked gaping and sloughy. The last of the sutures was removed this morning. The pulse was much quicker, 135, and feebler. His appetite was good. Beef-tea and wine were given freely, and the opiates were continued.

April 19th. The left stump was still sloughy, discharging freely. Most of the ligatures on the arteries came away this day. The pulse was still very quick; it had not unfrequently been up to 150 since the last report.

April 22nd. There was slight improvement in the left stump. The sloughs had separated to a considerable extent. The pulse had diminished in frequency, though still very weak. The ligature from the femoral artery had come away this day. The wine and beef-tea were continued, with a mixture of cinchona and mineral acid.

April 30th. The general condition of the lad had greatly improved since the last note. The sloughs the left stump had been very considerable, and the bo e was protruding, but the right stump had gone on remarkably well.

May 15th. The right stump was healed; from the left, about an inch of the femur was removed.

The lad is now perfectly recovered; but, from the severity of the case, it seemed desirable to publish a report of it. The only untoward circumstance was the extensive sloughing in the left limb; this was occasioned by the nature of the injury, which could not be accurately diagnosed before the operation. But, had it been foreseen, I should rather have risked the irritation of the gangrenous inflammation than have amputated the limb high enough to remove all the injured portion of the muscles.

ON THE DEATH-RATES IN THE COTTON DISTRICTS.

By John Beddoe, B.A., M.D., Physician to the Bristol Royal Infirmary.

At page 6 of the last Quarterly Report of the Registrar-General occur the following observations, which may serve as a text for the present paper.

"It is right at the present time to guard against deductions from the returns of mortality which they do not justify.... The allowances may or may not have been sufficient in amount, but the returns of mortality furnish no evidence of the fact; they only show that extreme consequences of famine have not yet been manifested in Lancashire.... Recreation in the open air, moderation in meat and drink, and the due administration of domestic offices, are beneficial to health; but, if they have been compensation for the loss of wages, the tables above quoted are silent on the point. These tables prove that, under circumstances favourable to human life, the mortality in England was reduced last quarter, and that the districts of the cotton manufacture were not prevented by the distress from participating in the benefit; they cannot show that, if Lancashire had been prosperous, the health of its people would not have been still better, and a further reduction of mortality obtained."

Doubtless these remarks are made by the Registrar-General with the praiseworthy object of preventing the current of public and private charity from being checked by a partial consideration of the facts relative to the mortality in the cotton districts which appear in his own tables. While thoroughly sympathising with this object, I think that the Registrar has failed to seize the full meaning of the facts in question, and that it may tend most to the general good and the interests of sanitary science if their import be clearly pointed out.

For the purposes of this investigation, I have divided the unions of Lancashire into two, and subdivided them into five groups, taking as the leading principle in the arrangement the more or less intimate dependence of each on the cotton manufacture.

In the first class I have placed those unions in which more than one-fourth of the adult population, male and female, were, according to the census of 1851, engaged in the spinning, weaving, printing, and dyeing of cotton. These are, Ashton, Blackburn, Haslingden, Chorley, Bury, Burnley, Oldham, Preston, and Bolton.

In the second appear only Manchester and Rochdale, places in which the number of operatives employed as above is considerably less than one-fourth, but where the distress is great, and the rates are stated by Mr. Farnall to be heavier than in some of the preceding class—doubtless in part, at all events in the case of Manchester, from the fact that there are immense numbers of persons who appear in the census under various heads, but who depend more or less directly on the cotton manufacture for their means of living.

In the third are six districts, where less than one-fourth of the adult population are employed as above, and in none of which, so far as we can learn, are the rates heavy. Even in Wigan, the only one of the six in which we hear of much distress, they have not reached the proportion of five shillings. These are, Wigan, Chorlton, Salford, Clitheroe, Leigh, and Barton-upon-Irwell. I will call this, for convenience sake, the half-cotton group.

In the fourth are seven districts, which have little or no direct connexion with the manufacture; viz., Ormskirk, Prescot, Warrington, Fylde, Garstang, Lancaster, and Ulverstone.

The fifth group might have been classed with the fourth, but is sufficiently important and peculiar to form a separate subdivision, including only Liverpool and West Derby, or the town and suburbs of Liverpool.

More clearly to exhibit the facts, I have constructed, from the data supplied by the Registrar-General, two tables, which are appended to this paper. In the one, I have calculated, for each district or group of districts, the rates of mortality in the summer quarters of 1861 and 1862; in the other, the summer of 1860 is also taken into account.

The summer quarter of 1862, as may be gathered from the words above quoted of the Registrar-General, was unusually healthy throughout the greater part of England. Cold summers almost always are so in this country; and September was the only month of the three constituting the quarter whose temperature reached the average. Accordingly, all the eleven registration provinces, except the metropolis, and most of the counties, exhibited a decline of the rate of mortality, as compared with that of 1861. If the whole county of Lancashire had merely participated in this general improvement, there would have been nothing very remarkable in the fact; and, at the first blush, the figures show little more; while they also show that, in the extraordinarily healthy summer of 1860, the death-rate in Lancashire, as over all England, was lower still. It is only when we come to divide Lancashire into two sections, on the plan above stated, that we arrive at the markworthy result, *that the whole of the decline in the county has taken place in the cotton districts;* while there has been a positive increase in the other or more prosperous group of unions. We find, moreover, that while in the latter the increase of mortality over the healthy summer 1860 is prodigious, amounting to 27 per cent., in the former the decline remains even on that comparison.

Proceeding further to subdivide these two groups into five, we find the facts continuing to tell in the same direction. In the summer of 1861, while all Lancashire was still prosperous, the death-rates increased pretty uniformly in the several sub-groups of districts, the increase varying only between 20 and 27 per cent., and being exactly equal in the cotton and no-cotton groups. This increase, then, might fairly be attributed to meteorological and other analogous causes operating on all alike. But in the summer of 1862 a great change has taken place. The meteorological causes of disease remain, as before, common to the county; but the previous concert in the fluctuation of the death-rates is altogether broken, and, instead of 120 and 127, the extremes are as wide apart as 92 and 132. What can be the disturbing elements? Are they connected with the consequences of the scarcity of cotton? The figures yield an unequivocal affirmative. The much-cotton groups give in 92 and 98; the no-cotton ones, 117 and 132; while the half-cotton group occupies, as, *ex hypothesi*, it should do, an intermediate position (109).

To test yet further the accuracy of the results arrived at, we may now examine the returns from those districts in other counties than Lancashire where the cotton manufacture is extensively carried on. Tested by the census reports of 1851, these appear to be Stockport in Cheshire, Todmorden and Saddleworth in the West Riding, Hayfield and Bakewell in Derbyshire, and Carlisle. In every one of these six districts there is a decline, and in most of them a considerable one. In Hayfield and Bakewell, indeed, the decline falls much short of that in the remainder of the county; but in Todmorden and Saddleworth it far exceeds the average of the West Riding; while the remainders of the counties of Cumberland and Cheshire yield a positive increase of mortality. On the whole, there are, in the five counties above mentioned, twenty-three which may be considered as cotton districts, and sixty-three which are otherwise. Of the former, only two—viz., Chorley and Clitheroe—or 8 per cent., present an increased death-rate; while, of the

latter, no less than twenty-four, or 38 per cent., are found to do so.

It may be worth while to point out that the distress which prevailed in Coventry, and the neighbouring unions of Nuneaton and Foleshill, two years ago, was observed at the time to be accompanied by a decline in the mortality. In the present year, Coventry, never fully recovered, has again relapsed into deep distress; and again the same coincidence appears.

All these facts are more clearly set forth in the subjoined tables. On careful consideration, I can perceive no objection to their validity worthy of mention. It may perhaps be said that emigration may have diminished the population of many of the distressed towns, and thus lessened their death-rates. It is, however, highly improbable that such emigration can have taken place to any noteworthy extent: Haslingden is the only district where the local registrar takes any notice of it. The class most prone to migrate—viz., the young adults—is precisely that which always furnishes fewest deaths. Moreover, the rather high birth-rate tells strongly against such a supposition. The decline in the usually high marriage-rate, which in Blackburn, Ashton, Preston, and Hayfield is great, but elsewhere moderate, is, of course, due to the pressure of poverty and the gloom and uncertainty of the future.

It seems to me that from these data we are entitled to conclude that the partial stoppage of trade in the cotton districts was, during last summer, attended by a great diminution in the death-rate; and that of this diminution it was a remote or indirect cause.

The proximate causes could be better set forth, and their relative importance more accurately estimated, by one better acquainted with the country and people than the present writer. Some of them, however, I have no doubt, are those indicated in the notes appended to their reports by some of the district registrars. Such are the greater amount of fresh air and out-door exercise obtained by the factory operatives, the cutting off from drunkards and opium-eaters of the means of indulging in their vicious habits, and the greater attention and care bestowed on young children by their mothers, who, from the shortness of work, are kept at home, instead of deserting their houses for the mills. Possibly we may add to these the greater purity of the air, no longer sullied by the fumes which, in a manufacturing town, are thought to furnish the most palpable evidence of prosperity.

It is a subject of grave consideration how to mitigate, henceforward, the virulence of those physical and social evils which seem to be so interwoven with our manufacturing system that its sudden collapse wears in the Registrar-General's reports the aspect of a positive blessing. Happily, the days are long past when, in the interest of greed against health and life, the disgraceful opposition to the Ten Hours Bill was carried on. Much has been done by enlightened and benevolent manufacturers, in the way of improving the ventilation and arrangements of factories and schools, diminishing or counteracting the production of noxious dust, etc.; but much yet remains to be done in improving the physical conditions under which the cotton and other manufactures are carried on. Of the social evils connected with the system, those resulting from the employment of married women in factories are still more difficult to deal with, and more intimately connected with the prosperity of the trade; for so long as it flourishes and affords high wages to female labour, so long will the temptations of the factory attract mothers from their proper sphere—the home.

In conclusion, I must again caution the reader against drawing too hasty or too extensive corollaries from the facts which have been substantiated above. They show, it is true, that hitherto the effects of famine have not been experienced, except, perhaps, in isolated cases; and that the comparison of the condition of the Lancashire folk, as it has been hitherto, with that of the peasantry of Munster and Connaught in the terrible years of the potato-blight, is a gross exaggeration. But they do not prove that the bare subsistence, secured by the public bounty and the systematic and unwearied exertions of the relief committees to the great majority of the poor, which sufficed to preserve them from sickness during the summer, will carry them equally well through the damp, inclement Lancashire winter, when also the deficiency of warm clothing, unfelt in summer, may tell with deadly effect. Nor can we say whether the scanty subsistence, which is the habitual lot of large numbers of people in other and hitherto less prosperous districts, and serves to maintain in them a certain standard of health, may not in the course of time tell very unfavourably, and produce low forms of chronic disease, among the hitherto well-fed and comfortable operatives, overlookers, and shopkeepers of Lancashire.

TABLE I, *exhibiting the Rates of Annual Mortality in the Summer Quarters of* 1861 *and* 1862.

Districts, etc.	1861.	1862.	Increase.	Decrease.
England	2.012	1.836		.176
Lancashire	2.436	2.116		.320
First group: Ashton, Blackburn, etc.	2.387	1.892		.495
Second group; Manchester and Rochdale	2.920	2.176		.744
Third or half-cotton group	2.266	1.980		.286
Cotton Division	2.533	1.967		.566
Fourth group: Prescot, etc.	1.932	1.820		.112
Fifth group: Liverpool	2.624	2.768	.144	
No-cotton Division	2.384	2.436	.052	
Stockport	2.368	2.043		.325
Rest of Cheshire	1.856	1.883	.027	
Hayfield and Bakewell	1.956	1.768		.188
Rest of Derbyshire	2.062	1.600		.462
Todmorden and Saddleworth	2.136	1.768		.368
Rest of West Riding	2.138	2.056		.082
Carlisle	2.070	1.865		.205
Rest of Cumberland	1.762	1.782	.020	
Coventry, Nuneaton, Foleshill	1.904	1.600		.304
Rest of Warwickshire	2.010	1.912		.098

TABLE II, *exhibiting the Relative Proportions of the Mortality in Three Summer Quarters, that of* 1860 *being taken as the standard.*

Districts, etc.	1860.	1861.	1862.
England	100	117	107
Lancashire	100	125	109
Cotton Division	100	125	99
No-cotton Division	100	125	127
Ashton, Blackburn, etc.	100	127	98
Manchester and Rochdale	100	123	92
Half-cotton group	100	120	109
Prescot, Ulverstone, Fylde, etc.	100	124	117
Liverpool	100	125	132

EXTRAORDINARY SELF-MUTILATION. The woman, the subject of self-mutilation, the wife of a barman, named Jane Brickland, aged 38, for some time past had given way to drinking habits, and while intoxicated she deliberately chopped off her left hand and wrist. She then wrapped up her arm, and in proceeding to the University College Hospital she called in at the Lord Wellington, and, having taken some brandy, she walked into the hospital, and told the porter she had cut herself. Unwrapping her arm, she said she had left her hand at home; it was a beautiful hand, and she was sorry she had not brought it, as they might have put it on again. During the exhibition of the limb she maintained a remarkable degree of coolness. Mr. Gee, house surgeon, immediately attended, but he found it necessary to send for Mr. Quain, and shortly afterwards the arm was operated on. It is believed that the woman will recover. (*Express.*)

Reviews and Notices.

THE RENEWAL OF LIFE: Clinical Lectures illustrative of a Restorative System of Medicine, given at St. Mary's Hospital. By T. K. CHAMBERS, M.D., F.R.C.P., Physician to St. Mary's Hospital, etc. Second edition. Pp. 420. London: 1863.

WE are told that "a rose by any other name would smell as sweet"; and, for the sake of the man who said it, will admit the proposition, though not convinced of its truth. There are, however, certain things which undoubtedly require distinct and particular designations; and we think we may fairly say that Dr. CHAMBERS has laid himself open to criticism in putting the title of "Renewal of Life" on the back of the book now before us. It is only fair to the buyer and reader of a volume, that its name should present some idea—more or less distinct—of the nature of its contents. A book is, in one sense, a commercial article, and should, therefore, be properly ticketed when exposed for sale; but who would ever guess the quality of this book from reading the title on its back? A spiritual minded person would, we suppose, seek in it an account of man's probable state in the next world. Poets might regard it as a poem on the return of spring:

> "But oh! my country's wintry state,
> What second spring can renovate?"

Patriots would turn to it as to a treatise on the regeneration of the human race or on the rights of the sovereign peoples. Male and female octogenarians, inordinately fond of life, would snatch at it as for a recipe of an elixir of life. Botanists and agriculturists would smell in it a treatise on manures—the decay of animal and vegetable matters, and their conversion into new living structures. These, and a score more such fanciful ideas, would different people attach to the book with this title. But we venture to say that no living soul would ever guess that the volume in reality contained a series of capital clinical lectures delivered by Dr. Chambers to the students of St. Mary's Hospital.

Twenty-nine lectures, in fact, a *l'envoi*, and an appendix, make up the volume, of which we will say at once that the perusal cannot fail to be a source of instruction and pleasure to the medical student and the practitioner of medicine. Dr. Chambers's mode of instruction is happy; and his practical method of treating disease founded on common sense and science. If, therefore, we followed him along, through these lectures, in his descriptions of the practical applications of our art to the cure of diseases, we should have little more to do than to praise and to agree with him. His practice is, we believe, *au fond*, very much the practice, more or less pronounced, of all enlightened medical men of this time of day; and this practice he lays down before the student in a manner suggestive, happy, and philosophic. We accede this to his practical teachings—in fact, to twenty-eight twenty-ninths of his book—but, unfortunately, we must take strong exceptions to the remainder, the one twenty-ninth part of the same—to his opening chapter.

In this chapter, Dr. Chambers explodes theories and expounds a theory. He, properly enough, does not go so far as to trouble himself with the theories of the ancients; they have been too often slain. But what he does is to tilt at what he calls "five principles very widely prevalent at the present day," which principles he "holds to be essentially erroneous and blind;* viz., allopathy, homœopathy, evacuation, counterirritation, and stimulation." We need hardly add that a reformer who lays prostrate all the effete principles of his day, of course has a new system of therapeutics to substitute for them; and, in the present instance, it is one which Dr. Chambers "makes bold to call the 'Restorative.'"

Now, if we wished for a better proof of the evil results of seizing hold upon any one particular theory in medicine as a guide to the treatment of diseases, we should find it here; and we are surprised that so acute a reasoner as Dr. Chambers did not see the pitfall which he was digging for himself in starting such a narrow theory as the basis of his practice. The fate of the innumerable theories of the past which he himself tells of, as having died the death, should have taught him caution in fixing his faith upon a new one. Happily, however, as we have already said, Dr. Chambers is too good a practical physician to allow his theory to interfere with his practice. Thus, though he derides what he calls *allopathy*, he, nevertheless, does not despise the use of sudorifics, under certain circumstances, when the skin is dry; nor a purgative when the bowels are confined. Theoretically, he holds *evacuation* to be erroneous and blind; but when the "typh-poison" (as he calls it, and as he believes) is disturbing the stomach, he does not hesitate to evacuate it by an honest emetic; nor does he hesitate to practise evacuation by evacuating blood at the mouth of a vein, when occasion requires. *Counterirritation*, again, is a false and blind principle; but the practical thing implied in the term, we are happy to see, Dr. Chambers makes use of just like the rest of the world. He uses a blister; but gives a different account of its action. What is called *stimulation*, also, is right in practice, but wrong in its theory. Alcohol, people have wrongly thought, is in itself a giver of vital force; not so; it is an agent which helps us to get the vital force out of other articles. Stimulants, then, are rightly given; only the givers are theoretically wrong in the application. *Chemical systems*, too, are all wrong. But yet, like a practical man, Dr. Chambers does not hesitate to ascribe the use of hydrochloric acid (which he highly extols in low fevers) to its neutralising agency upon the "superalkalinity" or "subacidity" of the blood in that disease. Nor, *vice versâ*, does he fail to connect the good effects of alkalies in rheumatic fever with a superabundance of acids, or a deficiency of alkalis, in the secretions.

Hence, then, as far as we can see, the terms allopathist, counterirritator, Brunonian, evacuator, iatrochemist, and so on, apply just as fairly to Dr. Chambers as they do to any other medical man. He uses the same remedies and treats diseases as all the rest of us do; only he gives a new name to his practice. We, of course, omit one of his false principles, homœopathy; upon which we shall have a word to say further on.

Let us glance at his theory. The five false principles referred to by Dr. Chambers are, he says, based

* These are the words of the first edition. In this edition, instead of "erroneous and blind", we read "misleading".

upon a false foundation. They are based on the idea of disease being an entity, a positive existence, a *materies morbi*.

"Disease," says Dr. Chambers, "is in all cases, not a positive existence, but a negation; not a new excess of action, but partial death; and, therefore, the business of the physician is not to take away material, but to add; not to weaken, but to renew life."

Really we think we must misapprehend the meaning of Dr. Chambers, or we could hardly have believed his worship of a theory could have led him to dogmatise in such a fashion as to make his practice distinctly contrary to his theory. Surely it is mere confounding of terms to say that disease has no positive existence. Why, what is the typh-poison but a *materies morbi* of which Dr. Chambers tells us? It goes down, he believes, with the saliva into the stomach; there, perhaps, grows and multiplies, and enters the system through the digestive canal.

"At an early stage, even after the poison has begun to act upon the system, the fever may be arrested by emptying the stomach, and thus, apparently, preventing the whole dose being taken up."

Dr. Chambers may, perhaps, say the typh-poison is not the disease; that the disease is the morbid action which the typh-poison sets up; but this is not the way (as we see) that he deals with the matter practically. He attacks the typh-poison in the stomach as a veritable entity; and so also would he attack the poison, which, when it has entered the blood, is producing the phenomena of fever, if he could. Of course, we all fully understand that there are here two distinct elements of treatment to be considered: First, the neutralisation or elimination of the poison, if so it may be; and secondly, the restoration to health—to their natural condition—of the parts injured by the presence of the poison.

This typh-poison is surely here practically just as much a positive existence as is the thorn in a man's flesh. The thorn excites inflammation; the typh excites fever. You remove the thorn, and then that diseased condition which has been excited by it gradually disappears. Dr. Chambers evacuates the stomach of its typh-contents, and cuts short the fever. Of what avail is it here to say that the disease has no positive existence?

Dr. Chambers has in all this evidently confounded the exciting agent of disease with the effects which it produces in the body. No one, of course, pretends that he can eliminate the *effects* produced by the poisoning typh—*i. e.*, the alteration of fluids and structures resulting from its action.

The pathological teaching of the last thirty years at least has taught us that, when the fever has got possession of the body, we have but one duty to perform; viz., to guide the weakened organs and assist the injured body through the struggle of disease back to health. We have certainly understood for many a long year past that all diseases were signs of weakness, and that the duty of medicine was, by its aids, to restore (if so it might be) the body back to health. Surely, therefore, Dr. Chambers need not have claimed, at this time of day, the title of restorative for medicine.

Hence, the term Restorative Medicine is a contradiction, or rather a violent pleonasm; the practice of medicine being actually and truly the practice of the restoration of the sick body to health. We distinctly object, moreover, to being called allopath, or evacuator, or iatrochemist, or any other such one-sided name; and we equally object to taking the new title which Dr. Chambers offers us; viz., that of restaurateurs, restoratorists, or revivalists. To all such titles we enter a decided protest; boasting and claiming to be simply medical practitioners, as Hippocrates was before us, tied by the leg by no one therapeutical theory whatever; because medicine, being yet but an experimental art, is incapable of yielding any one rational theory which shall fit all our wants. In fact, we evacuate, we stimulate, we purge, we bleed, we blister, we counterirritate, because we learn from experience that these agencies incidentally assist in restoring to health the diseased body. We do all this just as Dr. Chambers does; and we affirm that this is neither allopathy, nor homœopathy, nor stimulation, nor any other of those "blind and erroneous" modern principles of action which he repudiates; neither is it restorative medicine, which he would call it. It is simply the practice of a reasonable medicine.

Dr. Chambers will not be surprised that we have a word to say to him on his mode of dealing with homœopathy. He is aware that we hold very distinct opinions on that subject. He objects to the "denouncing and deriding the practice of homœopathy. Denunciation is not argument; and the subject of human life is too serious for ridicule." And he maintains that "the promulgator of such a doctrine could logically demand that the experiments on which it be based should be tried." But surely Dr. Chambers has satisfied himself of the absurdity of this doctrine. Surely he must know that the experiments he asks for have been tried and tested fifty times, over and over again; and their utter fallacy demonstrated.

Dr. Chambers, again, must know that of the persons calling themselves homœopaths in the present day—most of them, at least—practice medicine just as he does, use the same remedies, and give the same doses. And yet he recommends the students he addresses to try these homœopathic recommendations for themselves, and watch their results. See, he says, if quinine will stop ague. Try if arsenic will beget psoriasis, or iron anæmia. "The action, also, of infinitesimal doses may be tried upon malingerers and 'hospital birds' who occasionally sneak into our wards." "Minute quantities of digitalis or saltpetre ought to diminish the daily secretion of urine," etc.

Now, we enter a distinct protest against his recommendation. We say that there are things concerning which he has a right to ask the student "*jurare in verba magistri.*" We say, that there are so-called systems or systematised farces, which it is not only idle but wrong to recommend to the serious consideration of students. But why, above all, on his own principles, recommend the ingenuous minds of the students to occupy time in experimenting on this particular one of the five modern principles which he denounces as "blind and erroneous"? Surely this is illogical.

Homœopathy, universally condemned, and practised by no member of the profession who is known as a man of science beyond the street in which he lives, a senseless and baseless delusion, has no kind of claim to the student's attention. If the medical student is to be told to try for himself the empti-

ness of homœopathy, why not recommend him to try in the same way clairvoyance, spirit-rapping, Holloway's ointment cures, and the rest of these things? The promulgators of these trickeries could demand it on Dr. Chambers's principles; they all refer to their experimental proofs. But is there never to be an end of the trial accorded to each new quackery? Are we bound to waste all our days in experimenting the new remedy of every new or old quack that swears in its efficacy?

In the present state of science, are we not justified in believing all specific curers of cancers to be downright quacks: and that any one, for example, who boasts the possession of a specific for consumption, stands in a like position? Because these men impudently go into the market-places and shout out the wonderful powers of their wares in the ears of the populace, surely we men of medicine are not bound to listen to them, even though they back their promises and assertions with what Dr. Chambers calls a "Bible oath." Because a man, for example, can so delude himself as to swear that he believes serpent's excrement is something like a specific in consumption, are we bound to condescend to the repeating his experiments, or even to listen patiently to his barefaced nonsense? No; there must be some show of reason in the proposed remedy when medicine proceeds to its investigation; there is a degree of condescension to which medicine is not called upon to suffer, even to satisfy the cravings of an ignorant public.

But we have outrun our limits; and must conclude by again repeating that in our opinion Dr. Chambers has published a very good course of clinical lectures; that the instruction conveyed in them is good, practical, and scientific; and that we much wish his book had a better title, and that his introductory chapter had been omitted. We should then have had nothing to do but utter words of praise of it.

We are glad to find that, in this edition, Dr. Chambers has altered some phrases which we considered too popularly jocose in his first edition. We trust that his pruning-pen will not yet rest contented. We could still point to passages in which the metaphor is sadly overstrained and out of place. We also trust Dr. Chambers will, in his next edition, discard the word "allopath". To whom does he refer in using such a term? We know a vast number of medical men, but certainly, of the species *medici*, we know not a single one who can be included in his subspecies, "allopaths". Dr. Chambers even goes so far as to speak of "wise and foolish" allopaths. As homœopaths are not allopaths, we suppose allopaths must be, in Dr. Chambers's sense, medical men not homœopaths; and such medical men are by him bundled up with homœopaths, and treated as of equal worth. Thus, the allopathist (medical man) and homœopathist are made to run in couples. This is not right; for medicine is not homœopathy, however many its errors may be.

PROFESSIONAL TESTIMONIAL. A silver tea-service, a binocular microscope of one hundred guineas value, and a silver inkstand, have been presented by his friends and patients to Mr. Robinson, F.R.C.S., on the occasion of his leaving Edgware, where he has been engaged in practice during the past twenty years.

DR. RADCLIFFE'S LECTURES
AT
THE ROYAL COLLEGE OF PHYSICIANS.

IN his eighth and last lecture, Dr. Radcliffe spoke of pain and paralysis, prefacing what he had to say with some remarks on "The State of Irritation." On this point, a physical explanation was offered, which was in accordance with the physiological view of muscular action and sensation propounded in the first four lectures. The "state of irritation" was seen to have nothing to do with an inflammatory or congestive condition, except that it may, in some instances, give rise to such a condition as a secondary result.

Speaking of pain, and sensations analogous to pain, Dr. Radcliffe adduced evidence to show that their physiological and pathological conditions were, in every particular, analogous to the physiological and pathological conditions of the various forms of convulsion, spasm, or tremor. The physiological evidence adduced was very curious; the facts themselves being at once novel and striking. The pathological evidence amounted to this: that pain, and the sensation analogous to pain, were, as a rule, associated with a state of deficient vigour in the circulation, respiration, and innervation, and not with the contrary state. It was argued, for example, that pain, as a rule, is the precursor of inflammation, and not the attendant; that pain gives place to tenderness where inflammation is developed, except in those cases in which the inflammation is in a place where the due amount of swelling cannot take place, and where, consequently, this resisted swelling becomes a very intelligible cause of pain.

The treatment suggested by these considerations is analogous to that recommended in the different forms of tremor, convulsion, and spasm; and with respect to this matter, the lecturer said that his own experience left him no room to doubt that this mode of treatment led to more satisfactory results than that which is dictated by the notion that pain, and the sensation analogous to pain are the signs of exalted vital activity in nerve-tissue.

With respect to paralysis, the lecturer said much upon the current views which regard cramps and other disorders of muscular motion, and pain and the analogous disorders of sensation, as conclusive evidence that the paralysing lesion is of an inflammatory or congestive character. Dr. Radcliffe held that the very opposite view is much nearer the truth; and he supported his opinions with a great amount of evidence. As to the use of strychnine and belladonna in the treatment of paralysis, the conclusion come to was that the cases in which these drugs are likely to be useful or harmful are not those in which they are spoken of on high authority as useful or harmful, but rather the reverse.

The lecturer maintained that symptoms of irritation are in no sense a reason for the adoption of remedies which will diminish a hyperæmic condition of some part of some nervous centre, and in that way lower functional activity, but rather the reverse; and he asserted broadly that he had good reason for believing that this view would bear the test of actual practice.

British Medical Journal.

SATURDAY, JANUARY 3RD, 1863.

RETROSPECT AND PROSPECT.

THE author of the Pythagorean *Aurea Carmina* enjoined his disciples to question themselves individually each night, as to their transgressions, their actions, and their omissions.

"Μήδ' ὕπνον μαλακοῖσιν ἐπ' ὄμμασι προσδέξασθε,
Πρὶν των ἡμερινῶν ἔργων τρὶς ἕκαστον ἐπελθεῖν·
Πῇ παρέβην; τί δ' ἔρεξα; τί μοι δέον οὐκ ἐτελέσθη;"

The duty here insisted on is incumbent on bodies of men acting in common no less than on individuals; and therefore we, writing at the close of the year one thousand eight hundred and sixty-two, purpose to glance back at some of the events and topics of the past year, in which the medical profession is specially interested.

Various events which have from time to time occurred, and practices which are upheld, within the profession, or in its relations to the public, have during the year been recorded and commented on in this JOURNAL. Let us recal to attention the principal of these.

The faulty state of our system of giving and taking medical evidence in courts of law has been several times brought under notice. It is felt strongly by ourselves, as well as by many at least of our fellow-associates, that the present plan, by which the medical witnesses are made to assume the position of advocates on each side, is neither conducive to the ends of justice nor creditable to our profession. The remedy for this, as has been several times pointed out, is the appointment of experts on the part of the Crown to examine into the medical points of any case brought forward—whether of poisoning or of lunacy—so as to avoid that discreditable display of conflicting evidence which only confirms the public in their notions of the fallacy and uncertainty of medical science.

Another matter connected with the position of the medical profession in law courts, on which we have found it necessary sometimes to comment strongly, is the apparent readiness with which some members of the profession throw in the weight of their testimony towards passing a harsh judgment on the errors or omissions of a professional brother, who may, by an unfortunate event in his practice, have subjected himself to legal process on the part of those who—naturally enough, it may be admitted—imagine that his conduct requires investigation and perhaps punishment. The remarks which we have made on this subject have, we have been glad to find, already produced good effect; and we trust that what has been said will lead to a more extensive and practical recognition of the obligations which the great principle of charity to our neighbour and brother imposes on us all.

While we have been obliged to lament the frequent manifestations of a want of true charity, and to stimulate the exercise of this virtue among ourselves, it has no less been our duty to animadvert on the evils arising from the misplaced or pseudo-charity which prevails in our public institutions for the relief of sickness; and to show how unjust is the custom under which the medical attendants on our hospitals, infirmaries, and dispensaries, generally receive no remuneration for their labours—bestowed often on persons who have no claim for gratuitous relief. The subject has engaged the attention of several active members of our Association; and it is to be hoped that means will be found to arrest the spread and diminish the prevalence of a so-called system of charity, which, being compulsory, is in fact no charity at all.

Closely connected with the subject just mentioned, is that of the medical relief of the sick poor. To remedy the evils and inconsistencies of the system under which this relief is at present afforded, our excellent and zealous associate Mr. Griffin is, we believe, still labouring. The matter has also been brought under the notice of our Committee of Council, who, in April last, addressed to the Poor-law Board a memorial, setting forth the amendments which they considered advisable. We wish we could congratulate the Poor-law surgeons on the prospect of a speedy and satisfactory settlement of this difficult question; but we would urge on them, and on our associates generally, to study the matter in an aspect which shall be at once just and liberal, and not to despair of gaining by perseverance that redress for which the faults and anomalies of their position call.

Another matter, having a bearing on the public position of the medical profession, is the conduct of its members towards the practitioners of the so-called homœopathic system. On two or three occasions during the past year, attention has been called to alleged consultations of medical men with globulists. We believe, however, that the previous condemnation of the practice in this JOURNAL, supported as it was by the general professional sentiment, has had the effect of showing that the deliberate contact and consultation of truth with error and falsehood cannot be tolerated among us. A remarkable instance of the recognition of this principle was shown some months ago in a case, in which a leading physician in one of our large manufacturing towns actually threatened legal proceedings against a fellow-practitioner for reporting that he—the said physician—had met a homœopath in consultation.

Another matter at once of professional and public

interest, which has come under notice during the past year, is the qualification of coroners. The death of Mr. Wakley having left a vacancy in the coronership of West Middlesex, and the district having been thereon divided into two parts, our associate Dr. Lankester offered himself as a candidate for the central division. Feeling—independently of the high qualifications of Dr. Lankester for the duties of the office—how specially the medical man rather than the lawyer was fitted for the office of coroner, we did not hesitate to support Dr. Lankester's claims to the best of our ability. The result of the combined and energetic action of the profession in London on his behalf was his election to the office—an encouraging instance of the carrying out of an important principle as to the qualifications of the coroner, and of the success which may be expected from a display of well-organised energy.

From these matters, in which the relations of the medical profession to the public are most prominent, let us turn to a few of these in which this double aspect is less distinct, and which are, at first sight, more strictly professional.

The Medical Council met in May last; and, among the principal matters which it took into consideration, were the Medical Act and the new *Pharmacopœia*. The Medical Act, while it has not been without some good result, has not been so effective to fulfil all its objects as is desirable; and the Council have, therefore, taken in hand the preparation of a draft bill, which will probably be brought forward for consideration at their meeting next year. The great ultimate causes of difficulty and delay in the preparation of a national *Pharmacopœia* have been the question of the abrogation of the existing rights of the three Colleges of Physicians to publish their own *Pharmacopœias*, and that of the adjustment of weights and measures. The former question has, we believe, been settled easily; the latter has been more difficult to manage. After much discussion of the subject, both in the Council and without, the matter has been for the present arranged by the retention of the old grain (an alteration of which was at first proposed) together with the avoirdupois ounce; and the abolition of the apothecaries' scruple and drachm. The proposed alteration in our medicinal weights has caused attention to be directed to the decimal or metrical system in use in most continental countries; and the advantages of this system, and the importance of at least introducing it collaterally with our ordinary system, have been ably insisted on by several correspondents who have carefully studied the subject.

The regulations of our licensing bodies have undergone considerable modifications since the Medical Council commenced action. These regulations, thus altered, were given in full in the JOURNAL of Sept. 27th and Oct. 4th; and the principal changes which they had undergone were pointed out. At the close of the year, the ancient University of St. Andrew's has been holding the last of its examinations under the old *régime*; the ordinance of the Scottish University Commissioners demanding residence from future candidates. We learn that above two hundred and fifty practitioners have sought to avail themselves of the opportunity now for the last time offered them, without restraint as to numbers, of being admitted to examination for their degree on the mere production of a diploma or license from some other board.

While most of the examining boards have fallen in with the desires of the Medical Council, the College of Surgeons of England has called on itself considerable obloquy by not strictly complying with the wish of the Medical Council that the testing of general education should always precede the commencement of professional education. In the matter of its self-government, the College, on the occasion of election of members of its Council, departed from its ordinary course so far as to elect a provincial surgeon—Mr. Paget of Leicester. It has, however, still adhered to certain objectionable customs in regard to the election of the president and of the examiners, which we pointed out and commented on at the proper time.

The Royal College of Physicians of London has fully organised its scheme of giving a general license to practise medicine, completing that organisation a few weeks ago, by the appointment of an examiner in surgery in the person of Mr. Erichsen.

Among those interested in our great London hospitals, the leading topic of discussion has been that arising out of the removal of St. Thomas's Hospital, necessitated by the purchase of its site for railway purposes. Arguments for and against the rebuilding of the hospital in a rural locality have been brought forward; and, as the affair at present stands, the hospital is temporarily located in what was once known as the Surrey Gardens, with the prospect of being rebuilt in a more suburban situation than that which it formerly occupied, but nevertheless very accessible to patients.

In the medical staffs of hospitals, changes have, as usual, occurred. Among them we may refer to the retirement of Dr. George Budd from King's College Hospital, and of Dr. Bence Jones from St. George's, as illustrations of the recognition of a principle which we have advocated. We could wish, however, that the principle of retirement after holding office during a certain number of years were more generally acted on.

Among the deaths which have occurred in the medical profession during the past year, that of Sir Benjamin Brodie has called forth the most widely spread and unanimous expressions of regret both

within and without the profession. A sketch of the professional life, character, and writings of this distinguished surgeon was published in the JOURNAL for November 15th. During the year, also, there has departed a man noted in the annals of medical politics—Mr. Wakley. His death gave occasion to a contest for the succession to his office of coroner, to which we have already alluded as resulting in a manner highly satisfactory to the medical profession.

In scientific matters, there has been a display of energy in the direction of inquiring into some of the unsettled points of medical science. The Royal Medical and Chirurgical Society has adopted the plan of appointing committees to inquire into certain subjects. A report on Suspended Animation was presented during the last session, and was published in abstract in this JOURNAL for July 5; and a committee has been formed by the same society for the purpose of investigating the action and uses of chloroform. Our Association also, at its annual meeting last August, instituted a series of inquiries into the action of remedies, which, it is trusted, will bring forth results of great practical benefit.

The progress of several special subjects of scientific interest has also been noticed in our pages. The investigations of M. Marcy on the pulse, the splendid discovery of the spectrum analysis by Bunsen and Kirchhoff, and the researches of M. Pasteur on the question of spontaneous generation, are among the matters which have been laid before our readers. The modern doctrines regarding syphilis, also, have been ably expounded by Mr. Henry Lee, as well as by Mr. Berkeley Hill, who has furnished an epitome of the views of the leading continental syphilographers.

In the surgical world, ovariotomy is in the ascendant. This operation, once regarded as formidable and hence rare, has been performed many times, with such results as appear to justify a position for it among recognised surgical proceedings. On two recent occasions, it has formed the subject of debate in the Royal Medical and Chirurgical Society; and during the year, the success with which it has been performed here has caused our French *confrères* to direct their attention to it, and to perform it in several instances, with various results.

Having thus taken a rapid review of some of the leading medical topics of the past year, we would now say a few words on the position of the Association and of its JOURNAL.

The Association, we believe, was never in a more healthy state than at present. We learn that the number of resignations, which ordinarily take place at the end of each year, is on this occasion much more than compensated by the accession of new members. Our financial position, too, is very satisfactory. The London meeting continues to be remembered with the highest satisfaction; and the proceedings on that occasion, in regard to an inquiry into the action of medicines, have, it is believed, done much to uphold the reputation of the Association as a means of promoting medical science. The Association also, at the same meeting, adopted a series of resolutions respecting an improved system of registration of births and deaths in Ireland; and negotiations on this subject are still proceeding with the Secretary and Council of the Social Science Association.

The various Branches have also manifested their usual activity, and in some cases have shown a desire to increase their utility. The Lancashire and Cheshire Branch, especially, has instituted meetings for the reading of papers, and has organised a scheme for the yearly delivery of short courses of lectures on topics of medical science.

In the JOURNAL we have, as heretofore, endeavoured to collect the most important professional information current. Our own share in this, and of the manner in which we have striven to uphold just and right principles, we must leave to the judgment of others. But we must express our hearty and sincere thanks to those who have so liberally aided us by their contributions. It would be impossible to particularise all to whom we are thus indebted; but the scientific reputation of a medical periodical cannot be small when it numbers among its contributors such men as Dr. Acland, Dr. Beale, Dr. Hughes Bennett, Mr. W. Bowman, Dr. Burrows, Dr. T. K. Chambers, Mr. Clendon, Dr. Copeman of Norwich, Dr. R. P. Cotton, Mr. De Morgan, Mr. R. Dunn, Dr. Fleming of Birmingham, Dr. Goodwin of Bury St. Edmunds, Mr. Greaves of Manchester, Dr. Headlam Greenhow, Mr. E. Hart, Dr. Harley, Mr. P. Hewett, Dr. Graily Hewitt, Mr. T. Hunt, Mr. J. Hutchinson, Dr. Handfield Jones, Dr. Latham, Mr. J. Z. Laurence, Mr. Henry Lee, Mr. Paget of London, Mr. Paget of Leicester, Mr. Prichard of Bristol, Dr. Ranking of Norwich, Mr. Rigden of Canterbury, Dr. Roberts of Manchester, Dr. Routh, Dr. Russell of Birmingham, Dr. Hyde Salter, Dr. Shann of York, Dr. Sharpey, Dr. Skinner of Liverpool, Mr. Square of Plymouth, Mr. Steele of Liverpool, Dr. Swayne of Bristol, Mr. Syme of Edinburgh, Mr. Toynbee, Mr. Haynes Walton, Dr. Waters of Liverpool, Mr. Thos. Windsor of Manchester, Mr. J. C. Wordsworth, etc. All of these, with many others whose names the limits of our space alone prevent us from mentioning, have contributed from the stores of their experience and study to the enrichment of the JOURNAL.

For the future year, our prospects are equally encouraging. Among those on whom we can already depend for contributions in the form of clinical lectures, etc., are Dr. L. Beale, Mr. Brodhurst, Dr. W. Budd, Dr. Burrows, Mr. Curling, Mr. Prescott Hewett, Dr. George Johnson, Dr. Latham, Mr. Henry

Lee, Mr. James Paget, Mr. Solomon of Birmingham, Mr. Syme of Edinburgh, Mr. Haynes Walton, Mr. Spencer Wells, and Mr. Erasmus Wilson. In addition to the valuable communications which there is every reason to expect from these gentlemen, supplies will no doubt, as heretofore, come in abundance, with little or no solicitation from us.

Altogether, there is every reason to expect that, when the time for our annual gathering shall again come round, the Association will be found to have become more stable, more vigorous, and more useful, than even it has already been. *Floreat semper.*

A VILLAGE HOSPITAL.

We are glad to find that the modest village hospital at Cranley flourishes. The object of this hospital is stated in the report before us—its third annual report.

"The institution of the village hospital resulted from the absolute necessity of providing better accommodation for the poor, in cases of sickness or accident, than that afforded by their own homes. The distance of the London hospitals prevents them from being of much use to the poor in country districts; and the change also to the atmosphere of London is oftentimes in itself prejudicial to the health of country patients."

The hospital contains six beds; and, during the past year, thirty cases have been treated in it. The advantages gained to the labouring poor by such establishments—placed at his very door—are manifest enough. Patients suffering from accidents and acute diseases receive instant relief. There is another incidental good which also arises out of them; and that is, that they afford the village surgeon an opportunity of performing operations and studying diseases, such as he could not otherwise possess. They appear also to be capable of very economical management.

One or two points in the Report are worthy of especial attention. The patients seem all of them to have been of the labouring class; and yet we find that about one-fourth of the expenditure of the little hospital was paid for by them, through a system of weekly payments. Of £175 expended, £45 were paid by patients. Could any more striking proof be given of the abuses practised in our metropolitan hospitals, after the manner to which we have so often called attention?

One other remarkable fact we see in the balance-sheet: £6 are charged for surgical instruments, but not a single penny for drugs!

We cannot, however, help asking one question of Mr. Napper, the medical superintendent. Why should he be called upon to give his gratuitous services to this village hospital? We have no doubt that he has subscribed his money to it. On what principle of equity or ethics, then, is he to be called upon to give his time, talents, and services into the bargain? Surely it is for the benefit of the community in which he dwells, and not for his own, that this labour of his is given. Why, then, should not the community pay for the benefit? Who will say that, in such case, the community at large is not infinitely better able to bear the burthen of the charge than the individual doctor?

THE WEEK.

The Tartuffe of the medical press closes its journalistic year with a reiteration of the shameless calumny which, for purely commercial purposes, he was pleased to invent and bring against the British Medical Association in August last. He now again, with the unction of his unfailing tribe, takes credit to himself for having made public property of the proceedings of the Association. We are not going again to relate Tartuffe's tricks on the occasion referred to; they stand recorded on our pages. But as we then told that gentleman, we tell him again, he may rest assured his mouthpiece shall not repeat the invention without receiving the denial to it. He shall not, so far as we are concerned, have the benefit of the credit which his assertions might otherwise obtain simply through unblushing repetition of them, after their utter want of foundation has been again and again demonstrated. Let it then be known that the *Lancet*, whose reporters had the freest admissions to all the meetings of the Association, and who actually reported and printed the proceedings of the Association, and who was offered by this Journal slips of all the papers read at the meeting, has the courage again, after the cool reflection of many months, to print the following lines, when pluming himself on what he has done for the profession.

"The British Medical Association has held its annual meeting. We had occasion to give a practical rebuke to the ridiculous arrogance of a party which assumed an exclusive right of property in the mental labours of those eminent men who contributed addresses and papers to the Society. The British Medical Association, like every other body professing scientific and public objects, will henceforth recognise the necessity of acting under the eye of the press. It will not again commit the absurd mistake of supposing that these objects can be attained by confining a knowledge of its labours to that section of its own members who alone read the record of their own doings in the little publication devoted to that purpose." If this be the best feather Tartuffe can find to adorn himself with, our readers may take their measure of his plumage.

The *American Medical Times* gives the following doleful account of the state of the drug market in New York.

"The effect of the rise of prices is very sensibly felt by druggists. In many instances, the prices of the most common drugs have increased fifty per cent. The druggist, however, can scarcely add to his charges in the retail of drugs without receiving censure. The retail drug business must, therefore, suffer severely. But the retail druggist who does a large business in prescrip-

ions has a remedy in the enormous profit on prescriptions. Physicians should be informed of this increase in the price of drugs; and as far as possible, when prescribing for the poor, select those articles least expensive, and yet capable of accomplishing the desired result."

We understand that an action has been brought against Dr. Philbrick by the man Bull, to recover damages for the loss of his wife. We have already freely expressed our opinion concerning the evidence of the medical men who gave evidence at the coroner's inquest into the cause of the woman's death. We have shown that the main part of that evidence which was brought to bear against Dr. Philbrick was mere matter of opinion, and that the conclusions formed thereon were not fairly warranted either by practical experience or pathological considerations. The result of all this is, that Dr. Philbrick is now, and we need hardly add, in our opinion most unjustly, exposed to the serious injury of a law-suit, of a heads-I-win-tails-you-lose character. It is perfectly clear that, in a case of this kind, Dr. Philbrick must be a loser even if he win the day. We feel bound to say that we think Dr. Philbrick in this matter deserves the sympathy and support of his professional brethren; for, had his professional brethren stood by instead of condemning him, this action never could have been brought against him. We are satisfied that every one who, unbiassed, investigates the history of the coroner's inquest out of which the action arises, will agree with the view we have here given of it.

From the following paragraph in the *American Medical Times*, we must conclude that the abominable trade of abortion-procuring is not uncommon in New York.

"Another case of induced abortion has come to light in this city by the death of the victim. Such an occurrence is suggestive of the thought that this is but an accidental exposure of a large and lucrative business. How many similar operations are performed, of which we know nothing, can only be surmised. There is no doubt, however, that the abortionists form a distinct craft among us, and are never in want of engagements. But they are rarely detected in their black art, and, when arrested, easily escape from the grasp of justice."

The announcement made in the following paragraph will rather startle some of our readers, and, in fact, contains matter worthy of serious consideration.

"The Royal Dublin Society met on Saturday evening, to hear a lecture from Professor Gamgee on disease and mortality among cattle. When he had concluded, Mr. Ganley, salesmaster, made an extraordinary statement. He said that, unless some means were devised to give some compensation to the farmer for diseased cattle, it was impossible to prevent him from selling them, or the butcher from killing and selling them. Unless some society were formed to have diseased meat paid for, it would be killed and eaten. There was no use in mincing the matter, he said; every one of the salesmen sold diseased cattle. The farmer could not otherwise pay his rent. The disease is so prevalent, that he could not live were he to submit his cattle to destruction. Professor Gamgee said he would have gone 1,500 miles to hear this confession; and he agreed with Mr. Ganley that some plan should be adopted for paying the farmer for diseased cattle."

We suppose that we are to conclude from the statement of Mr. Ganley, if it be true, that disease is so rife in cattle that the salesman cannot live unless he gets a price for the diseased meat which falls into his hands. The enormous quantity of what is called diseased meat which (notwithstanding the attempts made to suppress the illegal traffic) is daily thrust upon our markets, indicates that an immense number of our meat-supplying kine must be in a state of disease. The subject, in all its bearings, is one which requires a thorough investigation; it is still under a cloud. We should like to know, in the first place, what "diseased meat" is; to have, in fact, a fair and practical definition of the term. Then, again, it would be well to know whether there are any diseases which, killing or tending to destroy the animal, do *not* render its flesh improper food for man; and what those diseases are, which, killing the animal, render the meat absolutely unfit for human food. Some food, we must suppose, is condemned as unfit food, not because it is the meat of diseased animals, but because it is far advanced in the stage of putrefaction. Again, above all, it would be highly satisfactory to have proofs, tangible and distinct, of the injury inflicted on humanity by the effects of this "unfit" food. At present, the whole subject seems to us to be in a highly unsatisfactory state. No doubt authorities do well, in the meantime, to err on the right side, and destroy all meat which may fairly be, *à priori*, considered as unfit for consumption. We cannot, however, help asking the question: Is the whole of the meat coming under the head of what we read of as "condemned" really and truly incapable of affording healthy nutriment, when properly operated upon by cooking and the digestive organs? Regular markets of horse-flesh are now established in Berlin; and it is hardly to be supposed that all the horses killed there can be without disease; yet, under the direction of the sanitary police of that city, the flesh is sold and eaten, and produces no ill effects, as far as we know, among the Prussian hippophagi.

We much regret to note, from the following paragraph in the *American Medical Times*, that political animosities touching the American war are too readily excited even amongst our professional brethren.

"A London medical contemporary sneeringly remarks that American army surgeons who attempt to gain a livelihood by practice, after peace is restored, will quickly be reduced to the condition of the Lancashire operatives. This remark has significance only to an English mind, which cannot conceive of a country where the honest, frugal, and industrious citizen never knows want. And yet it ought to be apparent, even to Englishmen, that a country capable of carrying on the most gigantic war of

modern times, and at the same time of charitably relieving their starving countrymen by shiploads of food, cannot have a class of necessary paupers."

M. Burggraeve has put into practice the theory of M. Polli—the employment of the sulphites in supposed cases of morbid ferments in the blood. The iatro-chemists, therefore, are still alive, notwithstanding Dr. Chambers's objections to them. M. Burggraeve has communicated to the Belgian Academy of Medicine his experience in the use of these agents in cases of wounds, abscesses, and burns. The sulphite of magnesia is administered internally—one *gramme* (fifteen grains), in a glass of sugared water, four or six times a day. The sulphite of soda is employed externally, in lotions, etc. It produces, we are told, immediate local anæsthesia, which is particularly appreciated in burns, and allows of their being dressed and cauterised without pain. In sixty-five cases of wounds thus treated, the effects produced were immediate; the wounds improved, and became of a healthy colour; active granulation took place; the pus was scanty, inodorous, and tough as gluten. The application thus also acted as a disinfectant.

Hospitals of a certain class are, it would seem, leaving Paris for the country. L'Hospice des Incurables for men is shortly to be transferred to Ivry. L'Hospice des Ménages is also to be installed without the walls of Paris, at Issy, two *kilomètres* from the fortifications.

The Chair of Midwifery at Milan is at the present time being disputed (by *concours*) by Professors Grillenzoni of Ferrara (a deputy), Col-Bene of Modena, Paccianti of Naples, Madruzza of Bologna, etc.!

L'Union Médicale takes the following French view the St. Thomas's Hospital question:—"A commission has been sent abroad to study hospital constructions; and the model adopted for its reconstruction is that of the Hospital of Vincennes. But the '*medical officers*' object: 'We must have a central hospital, or our school will lose its importance.' Thus two rival interests are called into play, and the general one is forgotten—viz., that of the patients and of humanity. Happily, however, the local press is there to defend the right, and will defend it."

On the 17th ult., the Nestor of German physiology, Professor Purkinje, kept his seventy-fifth birthday. A series of ovations were made to him, finished up by an evening torchlight procession.

At the French Academy of Medicine have been nominated for the ensuing year—as President, M. Larrey; as Vice-President, M. Grisolle; and as Secretary, M. Béclard.

A pamphlet by Dr. Palasciano has been forwarded to us. Dr. Palasciano wrote it in consequence of finding that "the President had communicated to the Chamber of Deputies at Turin that the glory of having discovered the presence of a projectile in Garibaldi's foot belonged to an Italian—to the Deputy Cipriani, who, long before the advent of any foreign surgeons, had communicated the fact to him (the President) in a letter. [*Applause.*]" Dr. Palasciano now, by documents, shows this statement to be an error; and that the credit of the true diagnosis belongs to himself.

Dr. Heller, in *Wien. Med. Wochenschrift*, gives the following analysis of the urine of a lad six years old, who died of hydrophobia. The quantity operated on was about one pound. Its specific gravity was 1036, and very acid. The sediment consisted of uric acid, and was in greater abundance than Dr. Heller had ever met with. No urate of ammonia was found in the sediment. Of albumen, and of carbonate of ammonia, there was only a trace. It contained no sugar. The uropheine and uroxanthine were slightly increased. In the clear urine was also contained much uric acid. The urea was greatly increased, and was equal in quantity to what is met with in meningitis. The chlorides were very slightly diminished; the sulphates greatly increased. The earthy phosphates were much, and the alkaline phosphates slightly, increased.

M. Sédillot was made a Commander of the Order of St. Gregory the Great by the Pope, on the occasion of his medical inspection of the army of occupation at Rome.

A Berlin journal says:—"There are at this moment on our capital seven markets of horse-flesh. In the course of the first ten months of the present year 750 horses have been killed. No horse can be killed in these markets without a certificate from the veterinary surgeon of the police.

M. Dubois, in his eloge of Thénard, made the following comparison between chemistry and medicine before the Academy of Medicine:—"Chemistry had presented a marvellous spectacle to the world; very different from medicine, whose annals date from 3000 years ago, and which is yet still seeking a path in the midst of the uncertainties of its theories and the efforts of its experience." The Perpetual Secretary of an Academy of Medicine, writes a critic, speaking in the name of the Academy, before the Academy of Medicine, should have suppressed a parallel so unfavourable to medicine, particularly as it is not entirely true.

M. Delbrück has attempted to show that during sleep only a small amount of oxygenated air is required. His experiments, writes *L'Union Médicale*, are, however, valueless as demonstrative of the fact. They merely show that man and animals endeavour to preserve themselves from the effects of cold during the night—nothing more.

At Vienna, on the 13th ult., the fiftieth doctor-jubilee of Dr. F. Jäger was celebrated. He received

e good wishes of all the medical corporations; a w doctor's diploma was handed to him by the octorial College. Dr. Jäger's merits and works as oculist are well known. He was, we read, the ost faithful disciple of his master, Beer—the under of the Austrian school of ophthalmology. is fame has spread through all Europe; and nume- ous orders adorn his breast.

THE LATE DAVID EVANS, Esq., OF BELPER.

THE death of Mr. Evans of Belper, which took place on ne 20th of November last, requires more than a passing otice.

For the last eight or ten years, owing to the infirmities f advanced age, he had retired from the active duties of is profession; but for many years previous to that me he was widely known as a most eminent operative nd ophthalmic surgeon. His operations, in many cases, ere marked by great ingenuity and boldness, almost lways justified by success. He tied the carotid artery hree times; twice successfully. As a lithotomist, and perator for hernia and cataract, he was particularly suc- essful.

One striking excellence in Mr. Evans' professional haracter was the tenacious perseverance he displayed n applying the resources which great natural ability and careful observation constantly suggested; and he was hus, under Providence, the means of saving life in cir- umstances often considered hopeless, as illustrated by he following cases.

In a case of poisoning by laudanum, where the pa- ient had taken an ounce and a half of laudanum and alf a pint of gin, he successfully emptied the stomach, n December 6th, 1817, by means of a large syringe at- ached to an œsophageal tube on the principle of the tomach-pump, two years before that instrument was nvented. The case was published in 1823 in the *Transactions of the Associated Apothecaries and Surgeon-Apothecaries of England and Wales.*

But the operation which caused a great sensation at hat time, and extended his reputation even to foreign ountries, was a case of aneurism of the arteria inno- minata, treated successfully by ligature of the common arotid on the distal side of the tumour. The case is recorded in the *Lancet* of November 1828, and in War- lrop's work on *Aneurism.* It may be interesting to the profession to know that the patient on whom this opera- tion was performed is still living at Belper, in the enjoy- ment of good health, after a lapse of thirty-four years.

About the year 1833, Mr. Evans extirpated a cancer- ous uterus, in the case of Mrs. H., who survived the operation thirteen months. The uterus is at present in the museum of Queen's College, Birmingham.

The unwearied attention and kindness which Mr. Evans exercised in the discharge of his professional duties, his readiness at all times to lend his aid, and the confidence he inspired in those who sought it, will be testified to by all who knew him, in every station of life. Of his general character, it is more difficult to speak. Unobtrusive and retiring, and possessing an almost childlike simplicity, he was distinguished in an eminent degree by that charity which "thinketh no evil," while, at the same time, he was ever active in suggesting and promoting every good work. He is gone, full of years, to his rest, having entered his eighty-third year; but his memory will be long cherished, not only by the numer- ous family which he has left behind him, but by the many friends far and near who have long appreciated his worth.

THE LATE ROBERT KNOX, M.D.

DR. ROBERT KNOX, well known to Edinburgh medical students of thirty or forty years ago, as a highly success- ful teacher of anatomy in that city, died of apoplexy at his residence in Hackney, on December 20, 1862. He was the son of Robert Knox, teacher of mathematics in the University of Edinburgh, and was born in that city on September 4, 1793. He claimed descent from that ancient and reputable Scottish family of Knox, of which John Knox, the energetic and turbulent Puritan reformer and iconoclast, was a member; and, we believe, was lineally descended from William, a brother of John. He was educated at the High School of Edinburgh, where he obtained the gold medal in 1810, and where his name still shines from a tablet on the wall, on which the names of the medallists are recorded. On leaving school, he studied medicine in the then illustrious Medical School of the University of Edinburgh, and, on taking his de- gree, entered the Army, and was appointed Staff-Assist- ant Surgeon, and attached to the 72nd Regiment. He soon after went to the Cape, and saw active service during the first Kaffir war in the years 1819-22. On his return he quitted the army on half-pay, and began to teach anatomy in Surgeon's Square, Edinburgh, as suc- cessor to Dr. Barclay. This was the meridian period of Dr. Knox's life. As an anatomist and teacher he was unrivalled: his lecture-rooms were crowded; and he is said to have taught between five and six thousand pupils during the time of his professorship, amongst whom the names of William Fergusson, John Hughes Bennett, Richard Owen, John Goodsir, the late Professor Reid, and the late Director-General Alexander, shine conspicuously. In 1845, he left Edinburgh and came to London, where his intellectual activity found vent in a variety of occupations. He gave lectures on Ethnology, at the principal scientific institutes in the kingdom; he attached himself to the Royal Free Hospital in Gray's Inn Lane, and was pathologist to the Cancer Hospital. He also employed himself extensively in literature: and, in addition to a translation of Cloquet, which he had brought out some years before, and of Tiedemann on the *Arteries*, he translated Milne-Edwards' *Manual of Zoology* (of which a second edition was on the eve of publication at the time of his death); he wrote a new *Manual of Anatomy*, a particularly valuable book for the glimpses which it gave, short though they were, at a something in anatomy above and beyond the dry empiri- cal enumeration of surfaces and processes; a *Manual of Artistic Anatomy for the Use of Painters, Sculptors, and Amateurs*; a work entitled *Great Artists and Great Anatomists*; and, lastly, his immortal book on *Ethnology, or the Races of Men.* But besides these greater works, were many lesser memoirs scattered throughout the transactions of various natural history societies, of which a paper on the *Affinities of the Trout and Salmon* at- tracted much attention. Dr. Knox was early married, and had six children, of whom one only survives him. So far as outward person is concerned, nature was nig- gard in her gifts. He had lost an eye from small-pox in early childhood, and his features otherwise were not prepossessing; but no man can expect to be armed at all points; and if Dr. Knox was as ugly as Jack Wilkes, he was as great a favourite with the women. In gifts of speech he was unequalled. His voice bland and harmonious; his manner earnest and persuasive; his *facundia*, or by whatever other name we may call that seemingly inex- haustible flow of the choicest and most apposite language, his clearness, his logical precision in speaking, and the enormous amount of information on all subjects connec- ted with natural history and fine art, which flowed without effort from his lips—all conspired to make him justly a favourite with all who formed his acquaintance. (*Medi- cal Times and Gazette.*)

REGISTRATION OF BIRTHS AND DEATHS IN IRELAND.

Extract from the Minutes of Council of the Social Science Association, November 20, 1862.

In pursuance of notice, Mr. Hastings called attention to the following resolutions of the Council, passed on the 7th of December, 1861:—

"That a deputation be appointed to confer with the Irish Government, in promotion of an Act for the Registration of Births and Deaths in Ireland; and especially to press upon the Irish Government the expediency of proceeding in this matter on the principles adopted by the Council in their resolutions of June 7th, 1860."

"That the deputation also confer on the same subject with other members of the legislature."

Mr. Hastings read communications received from the President of the Royal College of Surgeons of Ireland and the Secretary of the British Medical Association, offering the cooperation of those bodies in the matter; and moved:—

"That the deputation be requested to act forthwith on the subject, to add to their number such members of the Association as may enable them to communicate directly with the Irish Government in Dublin, and to accept the offer of cooperation from the British Medical Association."

"That, in the event of the Irish Government declining to accede to the representations of the deputation, the Executive Committee be authorised to prepare a Bill embodying the principles approved by the Association, with a view to its introduction into Parliament."

The motion was seconded by Dr. Greenhow, and carried.

Extract from Minutes of a Meeting of Deputation, Nov. 29, 1862.

It was resolved:

"That the Irish members of the deputation be requested to place themselves in communication with the Irish Government, for the purpose of ascertaining whether it is proposed to introduce a Bill for the Registration of Births and Deaths in Ireland during the next session of Parliament, and to urge upon the Government the great importance of framing a Bill upon the scheme suggested by this Association, and comprised in the following heads:—

"1. That there should be local scientific supervision of the registration of births and deaths.

"2. That the office of Superintendent-Registrar of Births and Deaths be held by persons well acquainted with the physical and biological sciences, versed in sanitary and vital statistics, and qualified to make medico-legal investigations.

"3. That all sickness attended in public institutions, or at the public expense, should be reported to and registered by the Superintendent-Registrar.

4. That the cause or manner of death be in every instance authenticated by a certificate from a duly qualified medical practitioner, and that when such certificate be not delivered to the Registrar at the time of the registering the death, he shall report the circumstance to the Superintendent-Registrar, who shall forthwith make inquiry into the case.

"5. That the registration of births be compulsory; and that still-births after the sixth month of pregnancy, when not certified by a legally qualified medical practitioner, should be subject to the regulation stated in the last clause.

"6. That the Superintendent-Registrar should be paid by a stipend out of funds provided by Parliament, and be debarred from private medical practice."

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the Journal cannot be sent to them.

Philip H. Williams, M.D., *General Secretary.*
Worcester, November 10th, 1862.

WEST SOMERSET BRANCH.

A *conversazione* meeting will be held at Clarke's Hotel, Taunton, on January 7th, 1863, at 7 P.M.

Gentlemen desirous of communicating papers or cases, are requested to send notice to the Honorary Secretary.

W. M. Kelly, M.D., *Hon.. Sec.*

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 9th, 1862.

B. G. Babington, M.D., F.R.S., President, in the Chair.

CASE OF A WOMAN WITH THREE HANDS; ILLUSTRATED BY ANALOGOUS MALFORMATIONS IN THE LOWER ANIMALS.

BY J. JARDINE MURRAY, ESQ., BRIGHTON.

[*Communicated by* Charles H. Moore, *Hon. Sec.*]

The case, which was illustrated by large photographs, derived additional interest from the circumstance that no similar malformation had been met with in the human species.

The patient, aged 38, was a well-developed, healthy, active, and intelligent woman. She was married, and had had one child, in all respects normal. None of her relations had been or was the subject of malformation. The left upper extremity was the only abnormal part. The limb was muscular, the shoulder natural, and the external condyloid ridge of the humerus very prominent. Flexion of the elbow-joint was imperfect. The supernumerary hand was somewhat smaller than that which it so strangely accompanied. The thumbs were rudimentary. In working as a charwoman, the patient leaned on the back of the flexed carpus. The double-hand could grasp firmly, though the maximum of power was not equal to that of the woman's right hand. Sensation was equally acute in all three hands.

Explanation of the case was sought for by referring to comparative teratology; and drawings of two cases of double fore-foot in the pig were exhibited, in both of which the duplicity, as in the double-hand, began at the carpus. Drawings and preparations of somewhat similar malformations in birds were also shown.

University of Edinburgh. A poll for the election of Honorary President of the Associated Societies of Edinburgh University took place on Tuesday fortnight. The votes recorded were as follows:—For the Lord Advocate, M.P., 115; for the very Rev. Dean Ramsay, 100; for the Rev. Charles Kingsley, 81. The Lord Advocate, being highest on the poll, was elected. The office has been held successively by Sir E. B. Lytton, Sir John M'Neill, and Professor Aytoun.

Correspondence.

DR. TWEEDIE AND DR. MURCHISON.

LETTER FROM CHARLES MURCHISON, M.D.

SIR,—The letter from Dr. Tweedie in your last number, together with your comments thereon founded upon his statements, demand a reply from me. I have at the same time to express surprise, that you should have passed a judgment on the case, upon the assertions of one side only, notwithstanding the unbiassed opinion arrived at by your reviewer. I have important corrections to make on those assertions, which must lead your readers to a different conclusion.

1. It is not the fact that I drew up my statistical tables, either at the suggestion, or on the plan, or under the directions of Dr. Tweedie, nor that I undertook the work for his lectures. I had begun the analysis of the data contained in the records of the Fever Hospital, as an independent research, *months* before I heard or knew of Dr. Tweedie's intended lectures. Dr. Tweedie may know when he formed his decision; but he is not, and cannot be, a competent or credible witness as to when I formed my design, and began the execution of it. Dr. Tweedie asked me to ascertain for him the sexes and mean ages of one hundred cases of typhus and typhoid fever; and on my reminding him, that I was already engaged in a much more extended inquiry, he expressed a wish to avail himself of the results for his lectures. The internal evidence respectively of his work and mine will show that I had a higher aim, than that of being a mechanical drudge to Dr. Tweedie. The conception, plan and execution of my tables were wholly and solely my own.

2. It is not the fact that Dr. Tweedie was in possession of my tables, "*at least* a year before his lectures were delivered," for the tables were brought down to December 31st, 1857; they were not even finished until February 1858, while Dr. Tweedie's first lecture, in which they were used, was given on March 12th, 1858.

3. It is not the fact that Dr. Tweedie was not informed of my intended paper to the Royal Medical and Chirurgical Society, until *after* he had received my tables. When they were handed to him, he was distinctly aware that they were only lent to him for his lectures, and that they were prepared to accompany that paper, which bears the record of having been received by the Society on March 30th, and read on April 27th, 1858. (*Med-Chir. Trans.*, vol. xli, pp. 219-306.)

4. The appended notes, to which Dr. Tweedie refers, were brief memoranda, not exceeding two or three pages, explanatory of the object of the tables; while the paper under reference extended to eighty-eight pages of letterpress. Dr. Tweedie never saw the manuscript of this paper, which alone contains the passages, where his language and mine is identical. I had the permission of the Hospital Committee, as well as the sanction of *both* the physicians, Dr. Tweedie and Dr. Southwood Smith, to make use of the records of the hospital for fever statistics; and I can prove by the testimony of a distinguished Fellow of the College of Physicians, that he had perused the complete manuscript of my essay *before* the delivery of Dr. Tweedie's first lecture, at which he was present.

5. Dr. Tweedie, in his published *Lectures* (page 198), actually cites, not MS. memoranda, but my *printed essay*, as the source whence he derived the information which, according to your reviewer, he has made use of in such a manner, as to lead to a wrong impression as to the shares contributed by him and me respectively. He refers to it repeatedly, and at one place observes: "I am bound to acknowledge, that for the statistical facts, I am indebted to the recently *published paper* of my colleague, Dr. Murchison, who, availing himself of the ample opportunities the Fever Hospital afforded, has produced a most valuable monograph on the mortality of the different forms of fever, and on the causes, which apparently influence their prevalence. (*Med-Chir. Trans.*, vol. xli.)" *

6. It is necessary to bear in mind the distinction between the crude materials existing in the Registers of the Fever Hospital, and the conclusions which by analysis may be educed from them. No complaint has been made of Dr. Tweedie's having used my tables; he had my permission to use them. But it is otherwise when he adopts my reasonings and views, in the *ipsissima verba* of my printed essay, in such a manner as to lead his readers to think, that my remarks are his own observations upon the facts collected by me. The very manner in which he introduces my name at certain places, is calculated to make the reader believe, that some of my remarks are his qualifications of views expressed by me. A comparison of page 202 of Dr. Tweedie's lectures with page 290 of my essay in the *Med-Chir. Trans.*, is sufficient to show, that the notice in my preface was fully called for. It is unnecessary for me to enter into the details of the manner in which Dr. Tweedie has appropriated my writings, as this has been done by your reviewer, who, as you say, "took the case as it stood before him in the works of the two authors," unbiassed by either party, and whose statement of facts is in no way invalidated by your remarks. (See also *Med. Times and Gazette* of January 3rd, 1863.)

7. I have not been indebted to Dr. Tweedie for any facts obtained by him by correspondence with leading provincial physicians, as to the recent prevalence of fever. The leading physicians of Great Britain and Ireland well know how often I have troubled them, during the last six years, for information on this point; and, indeed, Dr. Tweedie, in his *Lectures* (p. 200), admits that I had made a valuable addition to the statistics of the London Fever Hospital, by collecting those of provincial and other hospitals.

8. With reference to Dr. Tweedie's statement, that he had mentioned to me some months ago his intention of republishing his lectures, I beg to remind Dr. Tweedie that *it was I* who, in August, interrogated him whether the report to that effect was correct, adding that if such was the case, I would require of him to alter the expression made use of in his lectures in the *Lancet*, that he had suggested my inquiries to me (*vide Lancet* 1860, i, 3); and that if he did not do so, I should be under the necessity of taking notice of the matter as an unwarranted assertion. Dr. Tweedie at once consented to omit the expression objected to, and did so; yet he now reiterates that it is strictly accurate. This I again emphatically deny. It is an erroneous, and apparently ineradicable, impression on Dr. Tweedie's mind, that what was lent to him for his use, was originated by him.

9. I have no recollection of Dr. Tweedie asking me if I desired him to make any other alterations; but even if he did so, I could not have stated the grounds of my present complaint. It was not until some weeks after the occasion alluded to, on finding how my words had been attributed to Dr. Tweedie, in one of the Cork Fever Hospital Reports, that I was induced for the first time to read Dr. Tweedie's lectures, so as to discover the free use which he had made of my writings without acknowledgment.

10. The preceding paragraphs have reference solely to my essay in the *Med-Chir. Trans.*; and I beg to call the attention of your readers to the circumstance, that my preface contains no other allusion to Dr. Tweedie in

* The first half of Dr. Tweedie's lectures were delivered in March 1858, and the remainder in 1859; *but none of them were published* until 1860. My essay was published in December 1858.

connection with that paper than the following:—"Most of the tables contained in the essay referred to, together with my remarks upon them, have been adopted by Dr. Tweedie in his Lumleian Lectures, published in the *Lancet* for 1860."

11. The only other reference to Dr. Tweedie in my preface is as follows:—"Dr. Tweedie, being about to republish his lectures, I feel it due to myself further to state, that most of his facts and reasonings bearing on the question of 'change of type' of continued fevers will be found in a paper published by me in the *Edinburgh Medical Journal* for August 1858. As Dr. Tweedie omits to mention my paper, I think it necessary to allude to the circumstance, lest it might appear that I had now borrowed some of my remarks from his lectures without acknowledgment." The paper here referred to had no connection with that published in the *Med.-Chir. Trans.*; and but few of the facts and reasonings contained in it were derived from the statistics of the London Fever Hospital. Dr. Tweedie's lecture, treating on the subject in question, was not delivered before 1859;* and in the meantime, he received from me two copies of my paper, having mislaid one of them. I never had any conversation with Dr. Tweedie on the question of change of type in fever, except in reference to the published paper which I had given to him. Concerning this paper, your reviewer, who was guided solely by the documents before him, observes:—"The facts collected by him (Dr. Murchison), and a great part of the arguments derived from them (as given in a paper published in the *Edinburgh Monthly Journal* for August 1858), have been transferred by Dr. Tweedie to his lectures (pp. 214—217) without the least acknowledgment, and even in such a way as to lead to the impression that they are Dr. Tweedie's own." If this be the opinion of an unbiassed reader, it is obvious that the explanation in my preface was necessary for my own protection.

12. I have further to observe, in reference to the indignant tone of Dr. Tweedie's remarks, that although five weeks have elapsed since the publication of my work, Dr. Tweedie only now comes forward to express them publicly. On December 2nd, he deputed a distinguished Fellow of the College of Physicians to see me in reference to the statements in my Preface concerning himself. That gentleman, after carefully investigating the whole of the documentary evidence, and hearing what Dr. Tweedie and I had to state, informed Dr. Tweedie by letter that, in his opinion, I should have been open to serious misconstruction if I had remained silent, and that the remarks in my Preface were justified by the facts of the case. Indeed, the referee's letter was so similar in its terms to those employed by your reviewer, that when the review appeared, the referee thought it necessary to communicate with Dr. Tweedie to disown its authorship. *I invite Dr. Tweedie to publish his own referee's letter.*

Lastly, I have to observe that the remarks in my Preface, which have led to this discussion, were made, not aggressively, but in self-defence, to protect myself from the imputation of having copied from Dr. Tweedie without acknowledgment. Entire sentences in Dr. Tweedie's published Lectures are couched in the identical words employed in my previously published essays; so that I was under the necessity of giving some explanation. If seniority in standing is to justify the appropriation of the labours of a junior, a new canon will have been introduced into the code of professional ethics. And, because I have acted in self-defence, Dr. Tweedie has so far forgotten himself as to attribute to me "the most unworthy motives". I need hardly add that I repudiate the imputation. Such language is unusual on the part of one Fellow of the College of Physicians towards another; while the imputation of motives in all such discussions is commonly regarded as the sign of a weak cause, or of a failing argument. Moreover, this remark has been elicited from Dr. Tweedie, not by my Preface, which he allowed to pass for weeks without any public notice, but by the review in your pages, with which I had no connection whatever.

I am, etc., CHARLES MURCHISON.

79, Wimpole Street, W., December 29th, 1862.

[Dr. Murchison is under a misconception in supposing that, in the remarks made in our last number, we passed any judgment upon the case. What we did was this: we willingly accepted Dr. Tweedie's statement as explaining away the charge of plagiarism brought forward in the review. The charge of plagiarism, it must be remembered, was not made by Dr. Murchison himself in the Preface to his work on *Fevers;* but, as we said last week, the statement there made, after comparing the writings of the two authors, led our reviewer to make use of the expression in question. EDITOR.]

VACCINATION.

LETTER FROM THOMAS S. FLETCHER, ESQ.

SIR,—I understand that it is the intention of government to bring in a Bill in the next session of Parliament materially to alter the present Vaccination Acts; or to repeal them, and introduce another *de novo*. If this be the case, it is important to know the opinion of the Government Inspectors. Dr. Stevens was here lately to inquire into the working of the Vaccination Acts in this union. He says: "The public vaccinators in this union are far too numerous"; and "it appears necessary that vaccination should be carried on only at certain more or less distant periods, quarterly or half-yearly, according to the population of the station, and be persevered in so long as there were any applicants. Each periodic vaccination should be preluded by public notices posted and distributed in the neighbourhood of the station. Should it appear the public neglect to attend, an example should be made by legal proceeding; and a printed statement of the successful result of any such proceedings, if appended to succeeding public notices, would materially aid in increasing the attendance of the public at the stations."

Experience convinces me universal vaccination can never be carried out by the above plan. The great mass of the public will not be vaccinated, when, where, and by whom, the law says they shall; and the more you try by law to compel them, the less likely you are to succeed.

Why not try a simple registration measure; and if persons have a conscientious objection, let them (under certain regulations requisite for public safety) retain their opinions.

I would propose that parents not having a child vaccinated, and on the eighth day taken for inspection, and the vaccination registered, as directed (Schedule A.), should be liable to a fine not exceeding twenty shillings; and if not paid, an imprisonment not exceeding seven days. Should they afterwards continue to neglect, they will again be liable to the same proceedings.

(1) Should the child be incapable of taking the vaccine disease; or (2) should it not be in a fit state to be vaccinated; or (3) should they be unable to procure satisfactory lymph; or (4) should there be delay from the child having been (as it is commonly called) "vaccinated", and it has not taken effect; or (5) should they have a conscientious objection to vaccination: if they fill up the following exemption-paper, and register it, where and when the vaccination was to have been registered, it will prevent proceedings being taken.

The first reason for exemption requires a medical

* See previous note.

rtificate; and, being permanent, need not be renewed. ıe others are temporary, and must be renewed in June d December in each year. Own residence and full rticulars of the then residence of the child, must ways be given.

I would also propose that the Registrars, at the end of quarter, when they apply for their fees for registering rths, should also receive from the same source the edical fees for gratuitous vaccination. One uniform e of, say 2s. 6d., for each certificate they have received chedule A) of vaccination having been performed atuitously; and pay the fees over to the medical an who certified to the vaccination. If the latter live it of the district, payment might be made by post-office der, unless otherwise requested. Do this, and the or can then be vaccinated, when, where, and by whom ey please.

A measure of this kind will meet with the hearty coeration of the public and the profession; and vaccinion will, without any trouble, very soon become unirsal.

By the following proposed register, a Registrar can once and at any time, see who are and who are ot vaccinated, or have claimed an exemption, especially January and July. If neither vaccination nor exemption be registered, legal proceedings can easily be instituted.

I am, etc.,

T. S. Fletcher,

Bromsgrove, November 27, 1862.

Vaccination Register.

1	2	3	4	5	6	7	8
No. in this and the Register of Births to correspond.	Date of birth.	Name.	Address.	Date of registration of vaccination, termination, exemption, or death.	Date of temporary claims of exemption.	Name and address of vaccinator, and fee, if any, paid.	Date, name, and address of the re-vaccinator, and fee, if any, paid.

This is the only book that would be required.

Schedule A.—*Vacciaation Notice Paper.*

No. in the Vaccination Register.

To the parents or persons having the care or custody f , the child of , of .

I give you notice and require you to have the following vaccination certificate filled up, and registered at my ffice, before the child is *six* months old.

Dated day of , 186 .

Name.

Registrar of the district of.

Certificate of Vaccination.

The above child was* on the day of ; and it was examined by me on the ay of , 186 . The vaccination has taken successful effect. †

Name.

Title.

Address.

* State if vaccinated or gratuitously vaccinated.

† If inspected by a qualified pupil, insert name, and for whom.

The following is only required in cases of *Gratuitous Vaccination.*

The above child was gratuitously vaccinated at my request. ‡

Name.

Address.

Receipt for Gratuitous Vaccination.

No. in the Vaccination Register.

The Registrar of , has paid me for the gratuitous vaccination of , the child of , of .

Dated day of , 186 .

Name.

Address.

‡ Parent or nurse in charge of the child.

If vaccination is not gratuitously performed, cut off the schedule below the vaccination certificate, and destroy the remainder. If gratuitously, cut it off above the receipt for gratuitous vaccination.

Parents and others (and not medical men) should be expected to register the various certificates. This they might do by post, free of expense. The medical man should fill up and retain the receipt till paid.

Claim of Exemption.

For the following reason, I claim an exemption from having , the child of , vaccinated, and the vaccination registered.

Reasons:

Dated day of , 186 .

Name.

Residence.

Address of the child in full.

The Royal Triple-Birth Donation. The Rev. S. B. Craig, of the Mariners' Church, Hull, has received the following letter:—"Sir Charles Phipps has received the commands of her Majesty the Queen to forward to the Rev. Stewart Craig the enclosed post-office order for £3, payable to him, and to desire that he will have the goodness to hand the amount to Mrs. Harriet Harding, as a donation from her Majesty, to assist her after her confinement of three children at one birth; that circumstance having been brought under her Majesty's notice in consequence of an application from Mr. Locking in Mrs. Harding's behalf. Buckingham Palace, Dec. 20, 1862. (*Hull Packet.*)

Certificates of Lunacy. The most unhappy of the professions in its appearances in public, is once again the object of general comment and satirical denunciation. If Æsculapius doth still preserve a watchful eye over his earthly children, we fear that he must often be blind, if the gods can weep, from the tears shed over his undegenerate but very unfortunate race. At the same time he must learn, even from what is at present going on, that the institution he has the credit of founding had in it a soul of truth of some depth, or it had never lived till this hour, buffeted as it has been, sneered at, scorned, subjected to every hardship, asked questions which could never be answered, insulted for giving negative replies, implored to do labours at any price that could never be done, and then denounced for explaining the impossibility of the impossible. He must see in his invention the figure of a living thing, but sadly shattered now, and wrung with torture terribly; a thing to be doubted these many years to come, to have to undergo long penance and reformation, and still to live and still to come out in the end very strong, very powerful, as fair as all else amongst which it moves, an absolute science.

Medical News.

Apothecaries' Hall. On December 24th, the following Licentiates were admitted:—

Cass, William Leonard, Goole, Yorkshire
Lindsay, James Murray, Queen's Road, Grove Lane, Camberwell
Martin, Adam Rae, Rochester
Peacock, Albert Louis, Huntingdon
Swales, Peter, Helmsley, Yorkshire
Young, Francis, 114, Carlton Road

APPOINTMENTS.

Anderson, John, Esq., appointed Junior House-Surgeon to the Manchester Royal Infirmary, in the room of W. O. Jones, Esq.

Blake, Valentine W., Esq., re-appointed Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital.

Brown, Alfred, Esq., appointed Consulting Surgeon to the Wandsworth Dispensary.

Eastlake, Henry E., M.D., appointed Accoucheur to the St. Marylebone General Dispensary, in the room of A. J. B. Squire, M.B.

*Heath, Christopher, Esq., F.R.C.S., appointed Lecturer on Anatomy in the Medical School of the Westminster Hospital.

*Holthouse, Carsten, Esq., F.R.C.S., appointed Lecturer on Surgery at the Westminster Hospital Medical School.

Jones, William O., Esq., appointed House-Surgeon to the Manchester Royal Infirmary, in the room of W. R. Heath, Esq.

*Orford, William C., Esq., re-appointed Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital.

Roe, Edwin H., Esq., appointed Physician's Assistant to the Manchester Royal Infirmary, in the room of C. H. Braddon, M.D.

Thompson, Reginald E., M.B., appointed Physician to the St. George's and St. James's Dispensary, in the room of J. H. Stallard, M.B.

Poor-Law Medical Service.

Braddon, Charles H., M.D., to be Resident Assistant Medical Officer to the Brydge Street Workhouse, Manchester..

*Pollard, James, Esq., to the St. Mary Church District of the Newton Abbot Union.

Richardson, Daniel, Esq., to the Northern District of the parish of Brighton.

*Weaver, Frederick P., M.D., Medical Officer and Public Vaccinator to the Frodsham District of the Runcorn Union.

Royal Navy.

Caldwell, J., Esq., Assistant-Surgeon H.M.S. *Mars*, to be Surgeon.

Coghlan, Thomas, M.D., Assistant-Surgeon H.M.S. *Beagle*, to be Surgeon.

Davidson, James, M.D., Surgeon, to the *Meeanee*.

Hudson, John, Esq., Assistant-Surgeon H.M.S. *Cumberland*, to be Surgeon.

Willes, George J., Esq., Surgeon, to the *Egmont*.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Halkyard, H., Esq., to be Surgeon 31st Lancashire R.V.

Rice, J., Esq., to be Surgeon 3rd Middlesex A.V.

DEATHS.

Bevan. On December 24th, 1862, at Newland, Gloucestershire, aged 77, Jane H., widow of Robert Bevan, M.D., Monmouth.

Bossey, Peter, Esq., Surgeon, late of Woolwich, at Worthing, aged 56, on December 22nd, 1862.

*Evans, David, Esq., at Belper, Derbyshire, aged 82, on November 20, 1862.

Knox, Robert, M.D., at Hackney, aged 69, on December 20, 1862.

Maillardet, John W., Esq., late Deputy Inspector-General of Hospitals, Madras Army, at Crail, Fife, aged 56, on Dec. 19th, 1862.

Ruttledge. On November 21st, 1862, on Miniery island, from the wreck of the *Colombo*, aged 20, James Heydon Ruttledge, Ensign 67th Regiment, only son of James Ruttledge, M.D., of George Street, Hanover Square.

Thompson. On December 26th, 1862, at Cheltenham, Stewart Thompson, Esq, Madras Civil Service, youngest son of William Thompson, M.D., of Lisburn, Ireland.

Woodward. On December 26th, 1862, at 81 Cambridge Street, Sophia, widow of Thomas C. Woodward, Surgeon, late of Penton Mewsey, Hants.

Garibaldi and his Wound. The voyage and the open and mild air of Caprera have already contributed much to the health and spirits of the invalid. He congratulated himself often on being able to return to his solitude, which enables him to take open air exercise. The wound has begun to heal; the swelling of the foot is almost gone; the rheumatic pains are hardly felt.

Medical Schools Lancashire Funds. Several of the London schools have raised subscriptions for the Lancashire operatives. St. Mary's Hospital leads the way, we believe, in the work of benevolence; St. Bartholomew's, Guy's, and we hope other hospitals have done likewise.

American Army Surgeons. As a general thing, the older surgeons have been broken-down political hacks, who had no business at home, and therefore could carry with them no practical experience into the army. Then, again, a great proportion of the surgeons are young men. Many of this class are talented and well educated, theoretically; and, under the guidance of men of more mature years, will come to be ornaments to their profession. These young men, I know, would gladly avail themselves of the practical experience of older men. There is also a class of ignorant men, who gained their appointments by political influence, which neither time nor circumstances can alter for the better: they are not capable of improving by experience. (*American Medical Times.*)

Sheppard Asylum at Baltimore. This institution was founded by the late Moses Sheppard, a wealthy merchant of the Society of Friends, who, several years before his death, conceived the project of testing the curability of unfavourable cases of insanity, by a more liberal expenditure of money than the friends of most asylums would reasonably permit. To this end Mr. Sheppard, having no relatives, left his whole fortune, amounting to six hundred thousand dollars, to found and maintain an experimental institution for one hundred patients. After several years of careful consideration, the trustees of the Sheppard Asylum have commenced the construction of their building, on a plan submitted by Dr. Brown, who now studies the organisation and management of European asylums, to report whatever may serve to carry out the humane purposes of the benevolent founder of this unique institution. Dr. Brown, after having visited the most celebrated asylums in Great Britain, Holland, Germany, Switzerland, and France, expresses regret at having found, thus far, but inconsiderable rewards for the commendable liberality of the Board he represents. (*Dr. Lee's Correspondence.*)

Ages of the Nobility. It appears from *Who's Who in* 1863, that the eldest duke is the Duke of Cleveland, who is 74 years old, and the youngest the Duke of Norfolk, aged 15; the eldest marquis is the marquis of Lansdowne, 82, the youngest the Marquis of Ely, 13; the eldest earl is the Earl of Charlemont, 87, the youngest the Earl of Charleville, 10; the eldest viscount is Viscount Combermere, 89, the youngest Viscount Downe, 18; the eldest baron is Lord Sinclair, 94, the youngest Lord Rossmore, 11; the eldest member of the Privy Council is Lord Lyndhurst, 90; the youngest Earl Spencer, 27; the eldest member of the House of Commons is General Hon. Sir Hugh Arbuthnott, member for Kincardineshire, who is 83, the youngest Mr. Reginald A. Vyner, the member for Ripon, 23; the eldest judge in England is the Right Hon. S. Lushington, aged 80, the youngest Mr. Baron Wilde, 46; the eldest judge in Ireland, Chief Justice Lefroy, 86, the youngest Mr. Justice Keogh, 45; the eldest judge in Scotland, the Lord Justice General, 69, the youngest the Lord Justice Clerk, 52; the eldest archbishop is the Archbishop of Dublin, 75, the youngest the Archbishop of York, 43; the eldest bishop is the Bishop of Exeter, 85, the youngest the Bishop Designate of Gloucester and Bristol, 43; the eldest colonial bishop is the Bishop of Toronto, 83, the youngest the Bishop of Ontario, 37; the eldest baronet is Sir Tatton Sykes, 90, the youngest Sir George R. Sitwell, 2; the eldest knight is General Sir James L. Caldwell, 92, the youngest Sir Charles T. Bright, 30.

OPERATION DAYS AT THE HOSPITALS.

NDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

ESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

DNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

URSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

IDAY. ..... Westminster Ophthalmic, 1·30 P.M.

TURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

NDAY. Medical Society of London, 8.30 P.M. Mr. Hancock, "On the Superiority of Chopart's Operation and Excision of the Ankle over any other Method, in all Cases admitting of their performance."—Entomological.—Epidemiological.

ESDAY. Pathological, 8 P.M. (Anniversary.)—Photographical.—Ethnological.

DNESDAY. Obstetrical Society of London, 8 P.M. Anniversary Meeting. Address by the President, Dr. Tyler Smith; Paper by Dr. Aveling, Sheffield.—Geological.

URSDAY. Royal, 8.30 P.M.—Antiquarian,

DAY. Astronomical.—Archæological Institute.

PULATION STATISTICS AND METEOROLOGY OF LONDON—DECEMBER 27, 1862.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
uring week.....	Boys .. 829 / Girls .. 781	1610	1292
verage of corresponding weeks 1852-61		1861	1560

ometer:
ighest (Th.) 30.231; lowest (Sun.) 29.762; mean, 30.094.
rmometer:
ighest in sun—extremes (Fri.) 57 degs.; (Mon.) 43.3 degs.
n shade—highest (Th. & Fri.) 50 degs.; lowest (Mon.) 33.4 degs.
ean—42.2 degrees; difference from mean of 43 yrs.+5.0 degs.
ange—during week, 16.6 degrees; mean daily, 8.2 degrees.
an humidity of air (*saturation*=100), 88.
n direction of wind, S.W.—Rain in inches, 0.08.

TO CORRESPONDENTS.

All letters and communications for the JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

RESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

.—It is generally understood that Princess Alice's confinement ill take place in April.

TITLE OF M.D.—A correspondent asks, whether a physician o has no degree of Doctor of Medicine, is justified in signing mself M.D.? The answer is plain and undoubted. He has no ght whatever. More than this; he is, there can be little or no ubt, liable to prosecution under the Medical Act, for assuming a le which he does not possess. We have already said: that, der the present ethical condition of medical affairs, we think professional man can refuse to give the courtesy-title of Dr. to y physician—licentiate of a College of Physicians—who choses claim it; and we have given the reasons of this opinion of rs. But this assumption of the courtesy-title of Dr., is a vastly fferent thing from actually signing M.D.—*Doctor Medicinæ*—to e's name, without possessing an University diploma. The phyian, non-diplomatised, who designates himself *Doctor Medicinæ*, mmits a most unjustifiable act—one which, as we believe, nders him liable to legal prosecution under the Act.

HISTORY OF THE PARISIAN MEDICAL SOCIETY.—This society was founded in the year 1837, by a few gentlemen, after issuing the following address:—

"The reputation acquired by the medical school of Paris attracts to this city numerous foreigners, many of whom find that in a foreign language it is exceedingly difficult to communicate their observations to others with that clearness and precision which a scientific subject demands; hence they are almost precluded from entering into the discussions of those societies which at present exist. They have also discovered that there are no ready means of consulting the numerous journals published in their own countries; and that while prosecuting their profession abroad, they incur the risk of neglecting its advances at home. Under these circumstances, several gentlemen, who have long experienced the utility of such institutions, conceived the idea of establishing a society in Paris, having two objects: first, the reading papers and discussing topics connected with medicine in the English language; and secondly, procuring medical journals for circulation amongst its members. A meeting having been called, and the above objects stated by the chairman, the following gentlemen resolved to form themselves into a society for the purpose of carrying them into effect:—Dr. J. H. Bennett (now Professor of Medicine in the University of Edinburgh), Dr. J. Cartmell, Dr. C. Cogswell, Mr. G. Cooper, Dr. D. Embleton, Dr. J. A. Fraser, Mr. R. M. Glover (subsequently Dr. Glover, now deceased), Mr. J. Godfrey (Senior Surgeon to the Bristol Hospital, lately deceased), Dr. J. Houseman, Dr. S. Hunter, Dr. A. Lyszczynski, Dr. G. Minchin, Dr. J. Morison, Mr. J. Ozanne, Dr. S. Palmer, Dr. J. B. Richardson, M. Roger, Interne at the Hôtel-Dieu (now Physician to one of the Hospitals, Paris), Dr. J. Shannon, Mr. A. J. Walsh (now practising as a Physician in Dublin), Mr. J. Williams (now Dr. Joseph Williams of London). It was resolved that this association should be called the Parisian Medical Society; and several resolutions were proposed and agreed to, having reference to its constitution and government. Every information regarding the society will be given to those gentlemen desirous of becoming members, on application, either personally, or by letter post paid, to Dr. Cogswell, No. 20, Rue Neuve Racine, before the 1st of January, 1838, early in which month the Society's meetings will commence."

E. T.—Our correspondent will find his question answered in the following words of the *Chemical News*.

"The terms *deodoriser* and *disinfectant* are sometimes—we might say, generally—used with most unscientific laxity. A substance which is merely a deodoriser is often called a disinfectant; and both words are often applied to bodies which are only antiseptics. It is true that there are some things which are at once both deodorisers and disinfectants, as is the case with the permanganates of potash and soda. These bodies, by easily parting with their oxygen, hurry organic matter in a state of decomposition to the last stage of oxidation, so destroying the compounds which possess the repulsive odours evolved in the course of decomposition, and also, no doubt, burning up the effective agents in the production of some diseases. They have, too, the effect of decomposing any sulphuretted hydrogen or sulphide of ammonium which may have been produced in the decomposition of organic matter. Nor, so far as water is concerned, do the results end here. In the case of water which may have become contaminated with lead, Mr. Condy has shown that the permanganates have the power of converting the protoxide of lead which the water holds in solution into the insoluble peroxide, and so effectively removing every trace of the metal."

A QUESTION REGARDING CONSULTATIONS.—SIR: As a member of the Association, I beg to ask your opinion on the following point. A medical man, being asked by one of his own patients to call me in for consultation, refuses to meet me, on the ground of my being considerably his junior. The qualifications of this gentleman are as follows:—L.S.A.London, 1849; M.R.C.S., 1860. My qualifications are:—L.R.C.S.I., 1855 (January); L.S.A.London, 1857; M.D. Queen's University, Ireland, 1861. Has a medical man any right to refuse to meet another in consultation for such a reason? In case of such refusal, what course should be pursued? I should be obliged by a reply in the "Answers to Correspondents" in your JOURNAL. I enclose my name and address on the other side.

December 20th, 1862. I am, etc., Q. U. I.

[We believe that, according to the rigid doings of the stiff physicians of the gold stick age, it would not have been considered etiquette for a junior physician to be called in to consult in a case upon which a senior physician was in attendance. But such doings are now something like matter of history. We apprehend that no physician, nor any other medical man in London, would object to meet any other physician in London, merely because he was his junior. The refusal referred to by our correspondent, made on the grounds of age and standing, is quite behind the times and the liberal spirit of the age. We need hardly add, that there is no *right* beyond the force of modern ethical opinion to bring a man to such a meeting; and we know of no other remedy for the thing beyond what can be administered by the voice of professional opinion on the subject. EDITOR.]

A. T.—The term *hyperchromatopsie* is used by the French to indicate an anomaly of vision, under the influence of which the patient is led to attach ideas of colours to certain objects or certain forms, which have no real connexion with colours.

PRESCRIBING BY MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.—SIR: In reply to your correspondent, "A General Practitioner", in your last number of the BRITISH MEDICAL JOURNAL, and for the information of my brother practitioners, I beg to refer them to some printed observations issued by the Apothecaries' Society of London, with respect to evidence to be adduced in support of an action in the County Court, for the recovery of the penalty incurred for practising as an apothecary without legal qualifiation.

"The practice of an apothecary consists in attending and advising patients afflicted with diseases requiring medical treatment, prescribing, compounding, and supplying medicines for their cure or relief; for instance, diseases of the brain, the lungs, the heart, the stomach, the liver, and the bowels, when the disorder is unattended by any external wound, sore, or tumour; and when medical treatment, unaided by any manual operation, is called for. The following observations of Mr. Justice Cresswell, in the case of the Apothecaries' Company *v.* Lotinga, will be read with advantage. 'Now, I apprehend that an apothecary is a person who professes to judge of internal disease by its symptoms, and applies himself to cure that disease by medicines. A surgeon may lawfully do this if the medicines are administered in the cure of a *surgical* case; if, for instance, in the case of a broken leg, it becomes necessary to administer medicine; but, on the other hand, if a surgeon takes upon himself to cure a fever, he steps out of his lawful province, and is not authorised to administer medicine in such a case. But then it is said, if he did not supply the medicine as a surgeon, still he did not supply them as an apothecary, but as a *chemist*. But a chemist is one who sells medicines which are *asked for*, not to *select medicines, and determine on which he ought to give*.' A bill is not absolutely necessary, as evidence can be given that the patient was attended as medical men ordinarily do attend, and that the services were not gratuitous."

I have no doubt that Mr. Upton, the clerk of the Apothecaries' Society, will furnish any gentleman with a copy of the printed instructions; and, as quackery among chemists is so common, and the Apothecaries' Act so little understood, I think it would be a prudent step to copy the observations issued by the Society of Apothecaries into an early number of the BRITISH MEDICAL JOURNAL.

I am, etc.,

December 22nd, 1862. ANOTHER GENERAL PRACTITIONER.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, January 1863.

COMMUNICATIONS have been received from:—Mr. WILLIAM COPNEY; Dr. LATHAM; Mr. H. G. HARDY; Mr. CHRISTOPHER HEATH; Mr. E. L. HUSSEY; Dr. WALKER; Dr. W. R. HILL; Dr. J. GARDNER; Mr. J. VOSE SOLOMON: THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. JOHN BEDDOE; Mr. HENRY DUNCALFE; Dr. C. MURCHISON; Dr. PHILBRICK; Mr. ERASMUS WILSON; Dr. EVANS; Mr. A. MARTIN; Dr. BULLAR; Dr. GRAILY HEWITT; and Mr. C. E. SLOPER.

BOOK RECEIVED.

Researches on the Nature, Pathology, and Treatment of Emphysema of the Lungs. By A. T. H. Waters, M.D. London: 1862.

Aloina.—The discoverers of this (vide "Edinburgh Monthly Journal of Medical Science for Feb. 1851), the CRYSTALLINE PURGATIVE PRINCIPLE OF ALOES, continue to prepare and supply it. They have the gratification of knowing that the most eminent of the profession prescribe it, to the exclusion altogether of the various kinds of aloes. Orders executed direct or through any Drug house, by T. & H. SMITH & CO., 69, Coleman Street, London, and 21, Duke Street, Edinburgh.

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General Remarks
ON THE
PRACTICE OF MEDICINE.

BY

P. M. LATHAM, M.D.

THE HEART AND ITS AFFECTIONS, NOT ORGANIC. (*Continued.*)

II.—*Number of the Pulse. Is there any certain Number, or any Limit between certain Numbers, that can be assigned as the Standard of Health generally?*

THERE is a good deal in the nature of things without us which might favour the expectation that the things within us would be found to observe a more exact and undeviating order than in fact they do. Thus, prior to experience, it might not be at all unreasonable to expect that the pulse would be numerically the same in every healthy man; that the Heart would contract within the minute a certain number of times, neither more nor less; that at each contraction it would deliver into the arteries a certain quantity of blood, neither more nor less; and that the exigencies of health in all organs of the body would require blood to be thus supplied to them according to one exact measure of time and quantity. But a very little observation directed to the point will be enough to show that the pulse of health differs greatly as to number in several men. One man's pulse will be found to beat twenty beats in a minute more than another man's; while there is no appreciable difference between them of mind or body, and none of habit or pursuit, to account for it. In some, the pulse habitually reaches 80; in some, it falls short of 60; and in some, and those the majority, it is found at various numbers intermediate between the two. But which tells the best for health and long life—a pulse between 50 and 60, between 70 and 80, or between 60 and 70—my own experience has not yet informed me.

But while it is true that there is no general law of health requiring the pulse to be of any certain number, and that the same in all men; and true also that the pulse may take a wide numerical range in several men, and be consistent with health in them all; yet is there not some certain number which, being found in the great majority, may be deemed healthy by preeminence? The world is very curious about this matter; and physicians have made it so by their constant habit of counting the pulse. Therefore they are bound to give the best answer they can to its questioning.

People in general have no notion of the sort and amount of evidence often needed to prove the simplest matter of fact. To the question—What is the numerical standard of the healthy pulse?—some might answer 68, some 70, and some 72. But I am convinced that, as an ascertained fact, nobody knows anything about it. The least sufficient proof of it which can be conceived would be so laborious, and so beset with possible fallacies at every step, that the result would hardly be trustworthy. It would require that a hundred people at least should be the subject of experiment; and, considering that they would stand as the representatives of all mankind, a hundred is few enough. Then these hundred men should be all nearly of the same age, and all in perfect health constantly and every day as long as the experiment lasted; and they should be under observation for several weeks at least, and in the meantime have the number of their pulse noted and recorded day by day and several times a day. These are a few only of the conditions which the experiment would demand. Lastly would come the formidable calculations of arithmetic, and its severe result, announcing, perhaps, that the number of the pulse in a healthy man at the prime of life was $1\frac{1}{7}$ beats in a second.

Now, to those who walk about with their eyes open, objects often present themselves with a fidelity and truth which are too apt to suffer diminution and loss when the same objects are submitted to more curious experiments. For Nature herself is wise and discriminative in the conditions she imposes for obtaining different sorts of knowledge; and thus oftentimes she is sternly practical, requiring that what is intended for *use* should be learnt *by use;* bringing all that can or need be known within the reach of daily observation, and presenting it as her own free gift to common sense.

From use, and the daily habit of counting the pulse, all that concerns its numerical healthy standard must have taken some orderly shape in the minds of most physicians. The following is the shape which it has taken in mine. Perhaps, in such a matter, I may appeal to my own case, and not be blamed for egotism. The oracle of old made it the top of wisdom to know oneself, but did not fix the credit due to that fragment of self-knowledge which enables a man to keep count of his own pulse. My own pulse, when I am quite well and quite free of excitement both from within and from without, is 56. And this number of 56 I meet with in others who are in good health often enough to show that the thing, taken alone, means nothing wrong; but seldom enough to show that it is not common. The same I would remark of the pulse of 80. I find it often enough in healthy people to make me sure that, taken alone, it denotes no evil; but seldom enough to make it uncommon. A pulse which is less in number than 56, or more than 80, is so rarely the habitual pulse of health, that I am obliged to regard it as exceptional, and can make no comment upon it from my own experience. Practically, then, and saving exceptions, I am wont to consider 56 and 80 as the two extremes consistent with health. But truly there are eminent odds between them.

Surely somewhere between these extremes, and *distant* from both, are the numbers at which the pulse is most frequently found in the healthy. Now *equidistant* from both is 68; but one would not venture to fix upon this as the number of health by preeminence. Thus far, however, one might safely go. The difference between 56 and 80 is 24, or three times eight. Add eight to one extreme, 56, and deduct eight from the other extreme, 80; and eight

will remain intermediately, including the numbers between 64 and 72. And between these numbers (it would come as near the truth as experience can bring us to say) the pulse is found in the great majority of healthy people. But *the centre* equidistant between 64 and 72 is 68 : therefore it may be added, that the pulse of health hovers about 68, being as often a trifle more as less, and less as more.

This, then, is the best answer I have to give to the general question, What is the numerical standard of the pulse in health ?

Have Individuals a certain Number of the Pulse as their own Standard of Health ?

But, while there is no general law of health requiring the pulse to be of a certain number, and that the same in all men, yet may there not be a special law or (something like it) a necessity of health in each individual fixing his pulse to some certain number, and keeping it constant to the same? Observation must settle the question ; and mine leads me to settle it in the affirmative.

It has been seen what a wide numerical range is consistent with health. Now, whatever be the habitual number of the pulse within that range in the *healthy* man, it is, as far as I see, always the same so long as body and mind are at rest and under no present excitement. If its number be 60, it is always 60 ; if 70, it is always 70 ; if 80, it is always 80. But a very little stir of body, a very little emotion of mind, even the stimulus of a temperate meal, is enough to add a few beats a minute to the pulse of the healthiest man ; and as soon as body or mind is at rest again, or digestion is over, his pulse settles down to its habitual number.

The causes of excitement here contemplated are independent of disease. They belong to the occurrences of every day, such as even many times every day must and do accelerate the pulse inevitably and innocently, and then leave it to reach its standard number again. And it always *does* reach it, if the man be in health.

Observe, *by health* I here mean not merely a state of exemption from positive disease, but of exemption too from those caprices of feeling and function which are called nervous, and are ever making the pulse run wild, and hardly allowing it to remain at any given number for an hour together. Of health thus understood, it is a chief characteristic that the pulse is habitually constant to a certain numerical standard, and that it does not deviate from it but for adequate and appreciable causes. These causes, considered comprehensively, involve within them the whole pathological meaning and import of the number of the pulse both as a symptom of disease and guide to practice.

Increased Number of the Pulse in Diseases.

There is nothing that a man can feel or suffer—feel as a passing incident of health, or suffer as a constant inseparable element of disease, which may not be put down for a cause of accelerated pulse. Of the incidents of health more need not be said at present. But of diseases, whatever be their kind, if by any avenue of sympathy they can reach the heart, they all accelerate the pulse. All inflammations, all fevers, do so. The inflammation which comes on abruptly from injury, accident, or exposure, and overtakes men in the midst of good feeding and rude health, and calls for bloodletting to arrest it,—this, preeminently the inflammation of strength, accelerates the pulse. Again : the inflammation which comes from nothing seen or known, but arises and proceeds furtively in constitutions bad by nature, and made worse by poverty and wretchedness, and admits no bloodletting for its cure,—this, preeminently the inflammation of weakness, accelerates the pulse. The fevers (call them by what name you please) which dominated in the hospitals of London thirty years ago, which bore and required and were properly treated by such remedies as exercise restraint upon the movements of the Heart and arteries—by calomel, and antimony, and purgatives, and not unfrequently by bloodletting in its several kinds ; also the fevers which now dominate in the same places, and which will bear no such remedies and no such handling, and are properly treated by whatever can raise, sustain, and stimulate—by wine, brandy, ammonia,—these, preeminently the fevers of weakness, and those, preeminently the fevers of strength, both alike have among their symptoms the frequent pulse.

In short, whatever be the nature of the disease, if the Heart feel it at all, however diversely it may otherwise show what it feels through the pulse, whether in rendering it stronger or weaker, harder or softer, larger or smaller, than natural in several cases, it will surely in all of them render it more frequent. Often the Heart is a more delicate test of something wrong within the man than his own consciousness. His Heart is beforehand with him. It tells of disease covertly but surely progressive by the unnaturally frequent pulse, while his own feelings persuade him that he is well. At length, after the lapse of weeks or even months, the constitution is awaked, as it were, to a conscious alarm, and, by its fever and its nervous irritation, confirms what the Heart has forefelt and foretold by the frequent pulse. Tuberculous disease often forms and germinates and maturates under these conditions.

Difference between the Number of the Pulse and the Quality of the Pulse, as Signs of Disease, and what each respectively imports.

Such are the facts, stated generally. We come now to consider their pathological and practical import. This greater number of the pulse in diseases, whence comes it, and what does it mean ? What is the nature and amount of help which it contributes towards our knowledge and treatment of the case in hand ? For surely the number of the pulse ought to have a vast deal to teach us, seeing what a point we make of ascertaining it in every instance. The pulling out of the watch, and the deliberation which follows, must appear to the patient at least the most solemn part of the interview with his physician. And, if this grave business has no great use in it, it becomes a mighty foolish pretence. Far be it from me to allow that it is so. But let us inquire and see. One thing is plain to common sense ; namely, that the number of the pulse is just the sort of symptom which ought to be pushed as far as it will fairly go, and relied upon as far as it can be safely trusted ; for the information it has to give, being in itself so easily ascertained and so indubitable, that no two men can disagree about it who are able to count.

Now the frequent pulse, being equally the accompaniment of numerous diseases different in kind, cannot take its origin from any of those proper elements which severalise them. It is proper to no disease; yet its constant presence in almost all forbids it to be regarded as an accident in any. Moreover, the frequent pulse is a passing event of health, as well as a necessity of disease. Its origin, therefore, must be sought in something common to both —something belonging to life and sympathy, in their widest sense—something without which neither action nor feeling nor suffering can exist—something without which there could be neither health nor disease.

For the sake of illustration, let me here anticipate a part of our subject which will be considered hereafter in its turn. Let me take the *qualities* of the pulse and their meanings, and put them in contrast or comparison with the *number* of the pulse and its meanings, and illustrate one by the other. The quality of hardness in the pulse has most important meanings as a symptom of disease; but in health I am not aware that the pulse ever assumes that quality, or suffers that quality to be forced upon it. Heat, exercise, and stimulant drinks will for a time augment the frequency and force of vascular action. But mere force of vascular action is a different thing from the quality of *hardness* in the pulse. This they cannot produce unless they first produce disease. I am not aware that by any possible contrivance we can make a soft pulse a hard one at will. In order to the change, there must first be disease. Seeing, then, that this quality of hardness in the pulse has no existence apart from disease, I infer it to be in its very nature essentially morbid.

But in health the number of the pulse is continually found to transgress its habitual standard from obvious causes. Every sense and sensation, every moral feeling and faculty of the mind, opens an avenue to impressions which travel to the heart, and may so operate upon it as to raise the frequency of the pulse *without first producing disease.* Thus it is that the ordinary casualties of life accelerate the pulse by exciting thoughts, feelings, and perceptions which are pleasurable or painful in an unusual degree. And thus it is that we can accelerate the pulse at will by subjecting the man to influences capable of being felt above measure mentally, morally, or corporeally. Seeing, then, that this numerical frequency of the pulse, unlike its quality of hardness, may exist apart from disease, I conclude that it is not in *its own nature* essentially morbid.

But though it is not in itself essentially morbid, yet is it found in constant connection with diseases, and is reckoned among their symptoms. The question then arises, *how* is the number of the pulse connected with diseases?

There is good reason, then, for believing that frequency of pulse is produced in diseases after the same manner that it is produced in health; and that diseases operate upon the Heart so as to accelerate the pulse, *not as diseases*, but as simple irritants. They can and do operate upon it as diseases, when they change the *quality* of the pulse; and they can and do operate upon it as simple irritants when they change the *number*. And they may do both the one and the other in the same instance.

In almost all diseases (it has been already said) the pulse is raised above its habitual numerical standard. But no disease can be mentioned in which it is always or so far of a certan number, that the nature of the disease can be taken from the number of the pulse. On the other hand, it is only in particular diseases that the pulse assumes certain qualities. But then the quality may be so distinct and unequivocal, and so commonly annexed to the disease, as to admit it to be reckoned among its symptoms. This is the case with the quality of hardness in the pulse of inflammation.

How and whence comes this difference? It comes because the number of the pulse has nothing to do with the disease as such, but the quality of the pulse has everything. It comes because the number of the pulse is annexed to the moral, nervous, vital conditions of the man, which may be influenced by several diseases in the same way, or by the same disease in several ways, according to the varying susceptibility of individuals; but the quality of the pulse is annexed to the nature of the disease, which is the same in all men.

It is, then, the difference of the thing signified which separates and contrasts the quality and the number of the pulse as symptoms. The quality gives information concerning the nature of the morbid processes going on. The number tells nothing concerning these processes, but rather intimates how the system at large is affected by them, be they what they may. The quality notifies disease simply; the number how the constitution bears it, whether it feels it in that degree in which (so to speak) it ought to feel it, or feels it less than it ought and is passive under it, or more than it ought and is exorbitantly affected by it.

With this clue we are prepared to deal with the subject more closely. And, albeit the number of the pulse tells nothing of the nature of any disease; albeit it guides neither the choice nor the aim of any remedy, so far as that remedy is counteractive of morbid processes going on, yet it is not without reason that physicians are ever counting it and making much of it. For it denotes things more important than the diseases themselves, viz., how life and the springs of life are affected by them, whether they will hold out, or whether they will fail. And in treatment it guides us to things just as important as the very remedies, if there be any such, which are directly curative; viz., the force and extent to which they can be curatively employed.

But nothing can be taken for *absolutely true* in practical medicine. Hence they who profess to teach others out of their own experience, should be careful of using language which may imply more than that experience will justify. At the same time, they must not be continually dealing in doubts and reservations, and so bring their experience below its value by seeming to have small confidence in it themselves. The truth which medicine is concerned with is a *truth of degrees;* the same, nevertheless, which the moral world is governed by. Wise men seek it and cultivate it, and make the best of it. In medicine there is small philosophy, and no use in making it seem less than it is.

That the pulse is constant to a certain number in each healthy man, is a fact already mentioned, and an important one it is. And this fact, it might be thought, would become a standard of reckoning in each man's disease. But in their ordinary practice,

physicians seldom come to the management of diseases with the knowledge of this fact. Our patients are too often strangers to us until we are called to treat them; and then we cannot take for our standard of reckoning the exact number which belongs to health in the individual man, but can only assume the healthy limit of the generality, and consider that his pulse falls somewhere within it, viz., between 64 and 72.

It is worth a passing notice, how much safety and success in the treatment of present disease are promoted, when the physician has already known his patient in previous health or in previous illness, or in both. Hereditary constitution, and personal constitution and personal habits; hereditary disease, and personal disease once suffered but now past, may leave a perpetual entail of something able to give a shape or colour to every future malady which may happen to a man, and suggest one mode of treatment and prohibit another. I am even persuaded that any single severe attack of disease, and how the patient bears it, and how he gets rid of it, will furnish an exposition of what power there is in him for bearing and recovering from all diseases as long as he lives. And a physician who has had the treatment of him in one such disease, and brought him safely through it, has gained thereby a forecast of much that will surely be found in all future diseases which he may suffer, as well as of the sort of remedies that they will require. If this, indeed, be true, it were well for people in general that they were aware of it. It might cure them of their fickleness in running from one physician to another, and teach them for their own sakes an honest allegiance to the one who, whatever others may know better than he, knows *them* best, at all events.

The health of individuals may differ from the health of the many in some distinct peculiarity, and be sound authentic health nevertheless. And this individual peculiarity of health may impress an inevitable peculiarity upon every disease which the man suffers, and yet leave it not less the same disease as that which bears the same name in the many. The peculiarity of the man's health may be an uncommon frequency or infrequency in the habitual number of his pulse, and this may be carried forward into all his diseases. Thus, whenever he is ill, his pulse will be much more or much less frequent than in just proportion with other symptoms which constitute the disease than experience says it ought to be. And thus I have known some cases in which the unduly slow pulse of health was still the unduly slow pulse in disease, even in severe disease, and the patient has been thought much less ill than he really was. And I have known many cases in which the unduly rapid pulse of health was still the unduly rapid pulse in disease, even in trivial disease, and thus the patient has been thought much more seriously ill than in fact he was.

In the treatment of disease our business is with the individual, and our experience of the many goes to fit us for our dealings with the one. Yet it may not exactly fit us. But if to it be added a prior experience, had of the individual now the subject of treatment, then it becomes a perfect experience, and as nearly infallible as the nature of the things to which it is applied will allow it to be.

Original Communications.

DYSCHROMATODERMA; OR, DISCOLOURATION OF THE SKIN.

By Erasmus Wilson, F.R.S.

[*Concluded from page 7.*]

My third proposition relates to the therapeutical management of these curious complaints, with the view of establishing a principle of treatment. If the theory which I have advanced be correct, if melasma be a consequence of hæmic dyscrasis resulting from a depression of nervous tone; then, the principle of treatment must be, to restore nervous power; to improve digestion and assimilation; and to stimulate the skin to a more healthy local function.

In practice we should direct our treatment, firstly, to the regulation of the digestive and assimilative organs, to establish a healthy basis for further operations, and with the conviction that improvement of digestion and assimilation will directly improve the nutrition of the nervous system, and indirectly the nervous function. Secondly, a comparatively sound state of the nutritive and assimilative functions being established, we should have recourse to those remedies, known as neurotonics, that act directly on the nervous substance, and with the purpose of giving strength and energy to the nervous system. Thirdly, and, concurrently with the two preceding stages of the medicinal course, we may prosecute the local treatment, namely, stimulation of the skin, to restore the healthy tone of the tissues, and their active agents, the local vessels and local nerves.

The treatment which, in my hands, is most successful in restoring the tone and function of the digestive and assimilative organs is, nitromuriatic acid with gentian or orange-peel; a mild sedative aperient, such as equal parts of compound extract of colocynth and extract of henbane, once or twice or three times a week, as may be necessary; or, where the want of action of the alimentary canal seems to depend on nervous irritability, a quarter of a grain of extract of belladonna at bed-time every night; or again where a loaded state of the vessels of the liver is present with a sluggish circulation of the portal vein; then an occasional dose of calomel or blue pill, followed by an aperient draught. When the digestive organs are sufficiently strengthened to bear iron, we shall find an useful remedy in the tincture of the sesquichloride, or in the conjunction of this preparation of iron with phosphoric acid and tincture of orange-peel; or with infusion of quassia

For specific operation on the nervous system and nerves, the best remedies are: quinine, citrate of quinine and iron; and, lastly, when all has been got out of the preceding remedies that they can give, arsenic; either the liquor arsenici chloridi; the liquor potassæ arsenitis; or the arseniate of soda. The formula which I published many years ago, of the ferro-arsenical mixture, can hardly be improved upon.

For local treatment, the best remedies are: the juniper tar soap, used as an ordinary soap, and well rubbed into the affected parts of the skin, night and morning; or, where additional stimulation is required, frictions, with the hypochloride of sulphur ointment; or, in more inveterate cases, especially of ephelis of the forehead and face, pencilling with a solution of caustic potash or carbolic acid, one part to four or eight of distilled water, according to the degree of reaction required. The reaction should not amount to more than a slight erythema and simple exfoliation of the cuticle, and the

remedy may be repeated as soon as the skin acquires its natural state, and until the discoloration is entirely removed. The juniper tar soap should be continued during the period of use of the caustic potash and carbolic acid solution, as well as when the simpler process is followed.

In the cases which follow, the greater proportion, indeed almost all, were examples of melanæmia, two only, out of the nine, being instances of leucanæmia; and of the nine cases seven were those of ephelis. The predisposing cause was nervous exhaustion, prostration, and debility, sometimes occasioned by a moral shock, sometimes by sorrow and anxiety, or by fright or over-exertion, or over-active growth; and sometimes by visceral disorder, or by eruptive fever as in the instance of small-pox. The duration of the disease when the cases first came under my notice, varied from one year to twenty.

It may be well, also, in conjunction with the treatment of the disease, to pass in review the general symptoms of melanæmia, as deduced from the reported cases. They may be grouped under three principal heads, nutritive, gastric, and nervous. The symptoms evincing disordered nutrition, are: thinness and spareness of habit; softness of muscle; pale and discoloured skin. The symptoms denoting weakness of the digestive organs, are: loss of appetite; dyspepsia; weight at the epigastrium; flatulence; sometimes nausea and sickness; sometimes constipation, but, in general, there is little change in the action of the bowels. The symptoms shewing feebleness of the nervous powers, are: debility, languor, lassitude, listlessness, restlessness; depression of spirits; melancholy; nervous irritability; giddiness, dimness of vision; sometimes sleeplessness, headache, feeble action, and palpitations of the heart; loss of energy and courage; in one case there existed nervous monomania; in another there was "misery and despondency." Besides these, the general symptoms of melanæmia, there were other associated symptoms showing the connection between this distressing disease, and disorder of the nervous system, for example: neuralgia; alopecia areata; stearrhœa; urticaria; prurigo; and eczema.

In reference to ephelis, one of the commonest of the dyschromata, and a frequent example of melanopathia; it may be well to make a few explanatory remarks. Ephelis is a melasma occurring in well defined but irregular patches, of a size varying from a quarter of an inch to several inches in diameter; it is, essentially, a melasma partialis or melasma figurata, as distinguished from melasma generalis or melasma diffusa, or nigredo cutis. The term "ephelis" takes its origin from the discoloration produced in the skin by the action of the sun, and therefore, signifies simply "sunburn." It belongs to the nosological group of maculæ or stains, and is well defined by Plenck as follows:—"Ephelis est macula fusca, lata, solitaria, vel agminata."

The colour of ephelis varies from a slight shade of brown, or bronze, to the deepest tint of black. It is chiefly met with on the face and neck or backs of the hands, or other parts of the surface that are habitually exposed to the air and light. It is unaccompanied with hyperæmia or any roughness or morbid change in the epidermis, other than the alteration of colour; and is commonly smooth and uniform with the rest of the skin. Its customary seat is the forehead, the upper lip, the cheeks, and the neck; but it is also seen, not unfrequently, on parts of the skin which are ordinarily covered by the clothes.

Ephelis being essentially a brown stain, identical with that which is left on a part of the skin that has been previously irritated and influenced by the heat of the sun, a "macula fusca" as Plenck calls it, it is somewhat jarring to our understanding to read of "ephelis alba," a term applied to that state of deprivation of pigment of the skin which is more properly denominated leucopathia or alphosis partialis vel figurata. Ephelis alba is intended to signify a white patch similar in shape and size to the brown or black patches of ephelis fusca or melasma figurata, and allied to it, in a certain degree, as being a disorder of chromatogenesis.

Plenck makes six genera of Maculæ, as follows:—Maculæ fuscæ, rubræ, lividæ, nigræ, albæ, et incerti coloris; but the true maculæ of the skin may, without inconvenience, be reduced to three; namely, M. fuscæ, nigræ, et albæ. The genus *Maculæ fuscæ* includes the lighter tints of black, the browns and the yellow; or, as he designates them, fuscedo cutis; ephelis; lentigo; and flavedo cutis. The genus *Maculæ nigræ* embraces the deeper tints of black, namely, nigredo cutis; melasma; and melas; and the genus *Maculæ albæ*, albor cutis, and alphos.

Ephelis he denominates liver spot, probably from the hepatic colour of the tint of brown; and lentigo he compares in colour, figure and size, to lentil seeds. "Lentigines sunt maculæ fuscæ, quæ, colore, figurâ et magnitudine, lentes referunt." Lentigo, popularly termed "freckles," presents divers hues of yellow, from a bright golden tint to a sallow brown, or a brown verging on green. Freckles are commonly developed on the face and hands under the influence of the stimulus of light and of the rays of the sun; but they are also met with on other parts of the body habitually clothed. They are an appendage of a weak and delicate or irritable skin, and are usually met with in young persons, mostly of fair complexion and of a weak or debilitated constitution.

Plenck divides ephelis into eight species, chiefly in reference to the nature of their cause; for example, he has: E. solaris; ignealis; a vesicatorio; gravidarum; hepatica; dysmenorrhœalis; hæmorrhoidalis; et neonatorum, maculæ luteæ; and, these causes, in different language may be stated as follows: 1. Ephelis from the direct action of an irritant upon the tissues of the skin, *e.g.*, E. solaris, ignealis et a vesicatorio. 2. Ephelis from a reflex action operating on the tissues of the skin, and originating in irritation of the stomach, liver, uterus or other abdominal and pelvic organs; the agent of reaction being the nerves and specially the nutritive or trophic nerves. The same explanation applies to lentigo; freckles may be either the effect of a direct irritant operating on the skin, as in the instance of the sun's rays; or they may be the effect of distant nervous irritations originating in the nervous centre; or in the irritation of internal organs, and very probably of the organs of nutrition. Of the latter kind are the "cold freckles" which are found on the covered parts of the skin in young persons, and in a similar situation in persons of mature age or of advanced life.

The following cases of melanæmia and melasma are taken without selection, chiefly from patients who have consulted me during the last few months.

Case I. *Melanæmia; Ephelis Frontis et Labii Superioris; Nervous Prostration.* A lady, aged 38, married, the mother of four sons, ranging in age between 10 and 16, is the subject of dark brown stains of irregular form and size situated on the forehead and upper lip.

She is a person of delicate frame; but is at present enjoying better health than for some years past. She dates her loss of health to the birth of her last child, ten years back; she was confined prematurely and nursed her child too long; and suffered subsequently from menorrhagia and disorder of the womb. She has also suffered in health from residence in hot and cold climates; also from long and forced journeys.

Her complexion is sallow; and the conjunctiva is anæmic, brightly white with a dark shade, which gives the whiteness a peculiar pearl-like transparency and brilliancy. Superadded to the sallow complexion and to the brilliant anæmic eye, are the irregular blotches or stains of a dark brown on the upper lip, on the forehead, and scattered in smaller spots on the cheeks. Her

skin is fine and delicate, and that of the face irritable, so that she is unable to use soap.

She soon falls into a state of debility from over-exertion or other depressing cause; the debility is accompanied with nausea and sickness, and sometimes with severe nervous headaches, which are relieved by sickness. The action of the kidneys is natural, perhaps somewhat deficient in amount of secretion; and she has a slight tendency to swelling of the ankles. Her tongue is soft and pallid; the bowels sluggish and irregular; and she suffers from languor and lassitude; but soon picks up her strength in the bracing climate of Scotland. Her circulation is natural; her hands and feet habitually warm; but there is a slight *bruit* in the action of the valves of the heart. She has had no rheumatism.

She gives the following account of the occurrence of the present affection. She had been travelling for four days over frozen snow, and the jolting was so severe and continuous as to produce a sickness resembling sea-sickness in one of the party. She was excessively fatigued by this journey; and, having two further days of exertion to go through, was, finally, thoroughly exhausted. She experienced nausea, sickness, and a feeling as though her liver were disordered; there was a yellowish tinge in her skin, and an orange colour of the urine, which induced her to apprehend an attack of jaundice. Suddenly, after these symptoms had continued for about a fortnight, she was surprised at perceiving that which she thought at the time to be a smudge of dirt upon her upper lip. It appeared, she believed, in the course of the night, and has remained until the present time, upwards of twelve months, varying a little in depth of colour with her health—being lighter when she is feeling well, and darker when out of health; but exhibiting no tendency to disappear.

The eruption of the ephelis on her face, she thought, relieved the symptoms of general disorder under which she had been labouring; the nausea and sickness subsided; and she felt that the attack was gradually passing away.

Such is the history of a curious disorder, associated with anæmia; and of a nature difficult to remove, because of its dependence upon those obscure causes of malassimilation and malinnervation, which keep up the anæmia, now that the original causes have ceased. It was a question whether a long course of bromide of potassium, prescribed for the uterine affection, could have been the cause of the discoloration. I have no hesitation in saying, no, it was not; for similar cases are constantly occurring in which no bromide of potassium has been exhibited. Some, having in mind Dr. Addison's cases, have thought that the suprarenal capsules might be concerned. There is no good reason for believing that they are; although it is not unlikely that there may be some morbid action present in the solar plexus, or those of its filaments that preside especially over assimilation and healthy sanguification.

In the course of treatment which this lady has undergone for her complaint, she took two minims of Fowler's solution of arsenic three times a day for six months, and has latterly commenced the use of Donovan's solution. I stopped the latter remedy, believing that her digestive functions were not sufficiently established in power to enable her to derive advantage from arsenical medicines, and put her upon a course of general tonics, beginning with nitromuriatic acid and a mild bitter. Locally, I prescribed a stimulant plan of treatment.

Case II. *Melanæmia; Ephelis Frontis; Melasma Diffusa; Nervous Prostration.* A lady, aged 34, unmarried, is the subject of ephelis frontis, of two years duration. Her eye is anæmic and brilliant (melanæmia); she is thin, dyspeptic, nervous, and subject to depression of spirits. She complains of feeling ill, but without being able to define her illness.

She says that she had an attack of small-pox five years back; that she kept her bed for three weeks; up to this time she was stout and fat, but that since this illness she has been gradually getting thinner and weaker.

Two years ago she was much alarmed by a fire, which occurred in the house in which she was living; she stood for some hours on the wet pavement, without shoes or stockings, and exerted herself a good deal.

When all was over, her strength gave way, she felt thoroughly prostrated, and has been highly nervous ever since. It was after recovering from this shock that she first perceived the dark brown stains on her forehead, which have continued ever since, being sometimes lighter and sometimes darker in their hue. She first noticed them in the course of the supraorbital nerves, where, at present, they form two triangular patches, which spread upwards to the band of hair which covers the temples; and, at the upper part of the forehead, the apices of the triangles are connected by a transverse bar.

Her uterine functions are regular, and there is no trace of visceral disease; but she is impressed with the belief that her liver is out of order.

Case III. *Melanæmia: Ephelis Frontis et Faciei; Trifling Constitutional Disturbance.* A lady, aged 35, the mother of two children, has ephelis on the forehead and face. She reports herself as enjoying good health, and only seeks for the removal of the discoloured stains which mar her beauty. She is thin, somewhat sallow, and has a brilliant melanæmic eye. Her digestion is not strong, and she sometimes has fits of depression of spirits. Her habits are active; she is naturally energetic, but for some time past has lost her usual determination and courage. Nine months back she fractured her leg while hunting; but the stains on the face have been in existence for two years.

Case IV. *Leucanæmia; Ephelis Frontis; Origin in Nervous Shock.* A lady, aged about 40, unmarried, has ephelis of the forehead; the discoloration is most marked on the temples, in the course of the supraorbital nerves, and across the upper part of the forehead. The stains made their appearance eight years back, after severe affliction; and she first perceived the disorder in the form of two narrow bands, which followed the direction of the trunks of the supraorbital nerves.

She is thin, nervous, subject to pains in the head when her liver is out of order, and dyspepsia; but considers that she enjoys a fair average health. Her eye is somewhat anæmic (leucanæmia); and the mucous membrane of the tongue pale; she is also troubled with occasional attacks of palpitations of the heart, which are obviously nervous, as there is nothing abnormal in the sounds or action of the heart in the interval of the attacks.

Case V. *Melanæmia; Fuscedo Cutis; Ephelis Crurum; Deranged Nervous Functions.* A lady, unmarried, enjoyed good health up to the age of twenty; she was plump and strong and cheerful. At this time she had a love-disappointment, and became depressed and weak. She was then attacked with neuralgic odontalgia, which recurred three or four times a year for a period of four years. Her next misfortune was the sudden and painful death of a sister; she was stunned by the shock, and, for two or three months afterwards, unable to sleep. She describes her waking sensations to have been as though a plate of iron clasped her head; as though she were a statue; and as though she were benumbed and dead.

She is now thirty-six years of age. The skin of her face has a brownish or dirty yellow hue (fuscedo cutis); her eyes are bright, but heavy; the conjunctivæ have a dusky whiteness; the edges of the eyelids are pale, as are her lips and tongue. She is depressed in spirits, and haunted with the idea of having about her some

loathsome disease, which she fancies every one she meets must detect. This disease, she believes, produces swelling of her nose and wrinkles upon the eyelids and around the eyes. She has two or three circular spots of ephelis on the legs. Menstruation is regular, but deficient both in quantity of excretion and colour; the latter is brown, and sometimes pale.

The history of this poor lady's case seems to point to the shock which overpowered her nervous system sixteen years back, and from which she has never recovered, as the primary origin of her illness. The first effect of the shock upon the nervous system was neuralgia; then the shock was repeated, with the consequence of loss of sleep and a general feeling of lifelessness and torpor; and following on this, at a later period, defective hæmatosis and anæmia, with the presence of black pigment in the blood—melanæmia. The melanæmia, which is not strongly defined, has engendered a muddy discoloration of the skin of the face and several small patches of ephelis on the legs.

Case VI. *Melanæmia; Melasma Palpebrarum; Alopecia Areata.* A gentleman, a lithographic artist, aged 45, consulted me for alopecia areata, of which he had several circular patches on the scalp. He suffers from dyspepsia, has a pale tongue, is languid and weak, and depressed in spirits, but without regarding himself as ill. His visit to me had reference, as I have already stated, to alopecia areata, and not to any derangement of general health. His complexion is dark; but the most striking feature of his face is a well-marked melanæmic eye, with a dark discoloration of the integument of the eyelids, which adds to the brilliancy of the abnormal eye.

When I directed his attention to the colour of the eye and of the integument around it, he called it a "flat darkness" and "flat shadow"—technical terms belonging to his own profession, which express very truthfully this appearance of the eye. He moreover remarked, that he never succeeded in getting the expression of his eye in photography, in consequence of this peculiarity. He said that it was regarded by his family as an indication of his state of health, being deepest when he was weak and unwell, and less apparent after change of air and when he felt better in physical strength. It also increased when he had an attack of dyspepsia.

He is unable to assign a cause for, or a period of origin of, this melanopathic discoloration; and he has no patches of dyschroma on any part of the body. Four years back he met with a frightful accident—a fall—which crushed his forearm. This accident produced a severe shock to his nervous system; he was insensible and suffered from vomiting at the time, and for some months afterwards experienced considerable nervous irritability. The attacks of dyspepsia have been more severe since this accident.

The alopecia areata showed itself suddenly, as is commonly the case with this disorder, about four months back.

Case VII. *Melanæmia; Melasma; Alphosis; Stearrhœa Capitis; Alopecia Asthenica.* A gentleman, aged 48, late a military officer, applied to me for a stearrhœa flavescens of the scalp; and at the same time complained of dyspepsia, nervousness, and sleeplessness.

Observing that he possessed a strongly marked melanæmic eye, which was brilliant and white with a transparent tint of blackness, but without any alteration of colour of the integument of the eyelids, my first question to him was: "Have you any dark blotches about your skin?" His answer: "No; but I have some white patches;" and he immediately proceeded to show me a patch of alphosis in the submaxillary region, in which, besides the achroma of the skin, the hair growing on the patch was white. Further: on examining his body, the skin of the abdomen was found mottled with melasma and alphosis. In the hypochondriac and inguinal regions were two large and irregular patches of alphosis, and several of small size on the scrotum. The deep brown tint of the abdomen, increasing in blackness around the white patches, he regarded as his natural colour; but I had no difficulty in proving to him that neither the dark nor the light skin were normal, but that both were extremely exaggerated; and, in one or two smaller patches, the skin preserved its natural tint of brown, while that which surrounded them had an abnormal tint of blackness. It will be remembered that he made no complaint to me of the melanopathia and the leucopathia, and would not have mentioned them but for my inquiry, founded on a diagnosis of dyschroma; such diagnosis being suggested by that remarkable abnormal phenomenon, the melanæmic or melasmic eye.

This gentleman was obviously anæmic; and the brilliant, deep, liquid eye contrasted strangely with the pale, yellow, muddy, and ill-nourished skin of the face and scalp. There were other symptoms betokening a deep-seated malassimilation; his tongue was pale, and circulation languid; but there was nothing to lead to the suspicion of organic disease. He told me that the leucopathia and melanopathia had followed an attack of small-pox which he had had more than twenty years before; but that the affection of the scalp (stearrhœa flavescens), for which he consulted me, was only of four or five weeks standing; that, like a preceding attack, it had come on with dyspepsia; that the dyspepsia had resulted from a "moral shock"; and that the dyspepsia was accompanied with a wretched feeling of "misery and despondency".

Case VIII. *Leucanæmia; Ephelis Faciei; Extreme Nervous Depression.* A lady, aged 40, is the subject of ephelis, dispersed in patches of a dirty black colour upon the forehead, face, and neck, down to the level of the clavicles. The stains have existed for about two years. Her complexion is pallid and bloated; the eye pale, bright, and watery (leucanæmia); she is weak, languid, and extremely depressed in spirits; her appetite is bad, and digestion deranged. She is a native of the West Indies, and has visited London to see the International Exhibition; but she hardly feels that she has energy enough to go there; her sole desire and constant want is to return home by the first mail.

I endeavoured in vain to obtain some distraction for this poor lady, and I succeeded in detaining her a week only. Upon my frequent inquiry as to the cause of her restlessness and misery, she gave me a very inadequate one—the want of success of a relative. Her case was a marked illustration of the mental and nervous prostration that so frequently accompanies the anæmia associated with melasma—melanæmia.

Case IX. *Ephelis Dorsi Manûs; Exhaustion of Nervous Powers from Overgrowth of the Body; Dyspepsia; Deep-seated Neuralgia of the Lower Limbs.* A gentleman, aged 38, very tall and thin, is the subject of ephelis fusca of the backs of the hands and in the popliteal regions. He complains also of severe neuralgic pains in the legs. He suffers from dyspepsia; has a melanæmic eye; his complexion is swarthy; he feels weak, and he is easily exhausted by exertion. These symptoms appear to be the consequence of nervous debility induced by overgrowth of the body; and, although growth has now ceased for some years, the powers of the system, and especially of the nerves, have not as yet been recovered. There is nothing to excite suspicion of an organic lesion.

King's College Hospital. In consequence of Mr. Bowman's retirement from King's College Hospital, some beds were transferred into other hands. The six which fell to the share of Mr. Fergusson and Mr. Partridge, were by them liberally placed at the disposal of the two assistant-surgeons, Mr. Wood and Mr. Smith.

CASES OF IMPERFORATE BOWEL.

By Henry Duncalfe, Esq., West Bromwich.

[*Read before the Midland Medical Society, Birmingham.*]

During a period of twelve years, five cases of abnormal states of the colon and rectum have been brought under my notice, and these cases illustrate three varieties of imperforate bowel. In two instances, the external opening was closed; in two, the bowel ended in a *cul-de-sac* an inch or more above the anus; and in the remaining case the bowel was not discovered.

The affection in any of its forms is rare, and it is a curious fact that all these cases occurred in my own practice out of about 3,000 births, whilst Dr. Collins observed only one instance in 16,654 children born in the Dublin Lying-in Hospital, and Dr. Zohrer of Vienna records two cases out of 50,000 new-born children. It may, however, be true, as suggested by Dr. West, that many instances of simple closure of the anus may have passed unrecorded, whilst all the instances of more serious malformation have been described.

In two cases, where the obstruction was situated at the orifice of the anus, the conditions were pointed out to me by the nurses, who noticed the defect when the children were first washed. In both those cases I waited till the collection of meconium caused the parts to be distended, and I then made a crucial incision, snipping off the angles afterwards. These cases gave no further trouble. I directed the round end of an ordinary "dip" candle to be passed into the bowel night and morning, and the children recovered without any other treatment.

The following case, though more interesting, is less satisfactory in its results.

A lady residing near my house, was attended by the late Mr. W. of Birmingham. The child, a male, was healthy and well nourished. I was called in on the third day after its birth. The friends became anxious, as the infant had not voided any stool, whilst the stomach rejected both food and castor oil, which had been administered according to instructions given by Mr. W. I visited the child in the forenoon; it appeared to be in a state of constant discomfort; vomited frequently, and made continued violent straining efforts to defœcate. I passed a soap suppository into the rectum, which was immediately returned with a little mucus tinged with blood; then, having oiled my finger, I passed it into the rectum and found that the bowel terminated in a pouch. I communicated the fact to the friends, and Mr. W. met me in consultation in the evening of the same day. He recommended an opiate mixture to be administered and the operation delayed till the pouch should become distended, and then for a trocar and cannula to be passed through the projecting part. Of course the symptoms of strangulated bowel continued, and with increased severity. The stomach and bowels were distended, and the child made a continual moaning cry, except when interrupted by vomiting and retching. The following day, Mr. W. again saw the little sufferer, and again postponed any operative proceeding, alleging that such cases usually terminated fatally, and the lower the bowel descended, the greater hope there would be of success. On the fifth day, I passed a trocar into the projecting bowel; some thick meconium passed, and water was injected through the cannula to favour the discharge; very little relief was given by this operation. The symptoms continued as before, the child getting perceptibly weaker. After the cannula was withdrawn no more meconium passed, and the child lingered on for forty-eight hours, when death happily removed it from further suffering. An examination was allowed after death. The rectum was perfect and the colon ended in a blind pouch. The trocar had passed through the centre of the membrane, but the collection of the meconium above prevented any escape through so small an aperture With all respect to Mrs. W.'s great experience and sound judgment, there can be no doubt but that we fall into two errors in the treatment of this case. In the first, blinded by the belief that the lower the bowel was protruded the greater hope there would be, the child was permitted to sink into that feeble state, that had the operation been successful, I am convinced the child would not have rallied; indeed, the bowel from distention, had become so paralysed, that very feeble expulsive efforts were made at the time of the operation, though previously very violent strainings had tended very much to exhaust the little patient. In the second place, the opening by means of the trocar, was a useless operation. Even the water injected through the cannula did not return, and though Mr. W. tried to coax down the meconium by passing a long probe into the bowel, very little indeed escaped. The pressure of such a quantity of thick fluid would, of course, prevent any escape, and a bottle filled with any thick fluid having a narrow neck, will clearly demonstrate how useless was that operation.

The existence of an anus and rectum, although a decidedly favourable feature, does not warrant quite so hopeful a prognosis as might at first sight seem apparent; but after those cases where the anus is merely covered by integument, these must offer the second best chance of recovery. The operation usually advised in these cases is to introduce a narrow straight bistoury upon the forefinger of the left hand, or upon a director through the closing membrane, and the opening thus made enlarged with the button-ended bistoury. It seems to me, though I have never performed the operation, that, simple as it reads, it will in practice be difficult. The gut is not so resistant as to be cut easily with a bistoury, and the finger becoming covered with the slimy meconium must lose a great deal of that sensitiveness which is necessary to guide the knife; then the expanded part of the rectum may be hit upon, and the bistoury passed behind the bowel into the pelvis. The pharyngotome and trocar are also advised by some medical writers. I have already stated my reasons why I would not use the trocar.

A case similar in every respect to the one I have just recorded, occurred in my practice in the year 1859. I adopted an operation different from any I had read or heard of, and I had the satisfaction of seeing the child live till the bowel acted perfectly, and the operation proved a success. The child died some time afterwards from pneumonia, followed by abscesses in different parts of the body.

I delivered a dissenting minister's lady of her fourth child on October 4th, 1859, and the following day my attention was directed to the child's having refused food and the breast, whilst vomiting and hiccough had been noticed at times since its birth. Having found the anus perfect, I ordered a teaspoonful of castor oil to be administered. I was told the next morning that the oil was returned as soon as swallowed, and that there had been no evacuation. She still moaned as if in pain, but the face was not indicative of distress. Vomiting occurred now and then, chiefly when the child strained. Having oiled my forefinger I passed it into the rectum, and at about an inch or inch and a half, I found the bowel terminating in a pouch.

Remembering the fatal termination of a similar case which presented itself some years previously, I determined that this child should not die from exhaustion before the operation, and with the help of an assistant I performed the following operation with great ease. Seizing a slightly curved needle (armed with a double ligature) with a pair of forceps, I passed it up to the protruding bowel, and guided by the index finger of the left hand, thrust it through the centre of the pouch, withdrawing it by the forceps. My assistant then drew down the ligature, whilst I introduced a pair of sharp pointed scissors up the rectum; the pouch being put

on the stretch and steadied by the traction of the ligature. I separated the blades of the scissors and pushed them through the gut, then by closing the handles I made a good opening into the fore part of the bowel. I slipped my finger into the opening, and changing my scissors for button ended ones, I snipped through the tight edges, the ligature being gently pulled down during the whole time. By this means I opened two thirds of the closed bowel, and the posterior flap was brought through the sphincter. I passed a suture through it to the verge of the anus, and on withdrawing my finger a quantity of meconium was expelled by the straining efforts of the child. An India-rubber bottle full of warm water was injected and returned by the child's efforts, and soon afterwards the little patient fell asleep. I passed up a candle bougie twice daily for three or four days, and about the fifth day I took out the stitch from the bowel and snipped off the flap at a distance higher than the ligature, which I had left protruding through the anus. I do not know whether there would have been any risk of the bowel receding had it not been confined by the suture, but it gave no trouble after its removal. A warm water injection was given daily; the bowels acted well, and the child lived long enough to have the bowels brought into the normal condition. I should certainly adopt the same treatment in a similar state. The ligature answers several purposes; it draws down the pouch, it tightens the membrane so that the bowel does not recede before the scissors, and after the incision has been made, it makes tense the edges and permits the opening to be enlarged with ease and safety.

I have related these cases in succession, as the abnormal condition was so much alike in both, but the following case occurred about June 1856, between the two cases cited. The parents were innkeepers, and after the child had been born a few hours, the attendant noticed that no stool passed, though the child made some straining efforts. On examination, it was found that the anus was closed. I waited over two days, and as there was no protrusion or resistance when the finger was pressed against the perinæum, I advised an exploratory incision. This I did with my lancet to the extent of half an inch, and passed my finger through the wound, hoping to come into contact with the globular distended bowel, but I failed to discover any fulness or anything indicating the presence of the lower bowel. I allowed the case to go on for a day or two longer, and I then advised Amussat's operation in the left loin to relieve the child's suffering. Either from absence of the descending colon, or from the incorrect performance of this operation, I did not succeed in finding the bowel, and I closed the wound without being able to give the child the relief I had hoped for. The parents would not allow a *post mortem* inspection, and I can only mention this as a case where the bowel was defective for some distance from the anus.

RARE CASES IN MIDWIFERY.

By Edward Copeman, M.D., Physician to the Norfolk and Norwich Hospital.

[*Continued from page 664 of last volume.*]

Case xxii. *Cerebral Affection after Labour.* I was summoned in the middle of the night on September 16th, a distance of eighteen miles, to Mrs.— (who had been confined about ten days) in consequence of a severe attack of illness after labour, with a threatening of puerperal convulsions. She was of middle age, and the mother of several chidren, one, if not more, born in China, where she had once suffered from cerebral disturbance, subdued at length by large doses of opium; of which drug she was said to be at the time so tolerant that not less than five or six grains produced any effect. The night before I saw her, she had been suddenly seized with pain in the head, intolerance of light and noise, and confusion of mind, so that she scarcely knew where she was, and believed herself to be dying. She was very faint, and when her surgeon arrived, he ordered turpentine in drachm doses, several of which had been taken before I got there, and from which she expressed the greatest comfort, saying she felt at once that it would save her life Before taking it, her pulse was 140. I found it a little under 100: and hearing she had been unable to sleep for several nights, I advised a full opiate enema. The lochia had not stopped, neither were there any decided uterine symptoms; but I considered that her brain, naturally susceptible, had become irritable and exhausted from want of sleep.

The enema produced a very good effect, being followed by seven hours' sleep; and a few days afterwards I was informed that all was going on perfectly well.

Her husband told me she made a very good recovery.

Case xxiii. *Puerperal Disease.* I was summoned to a distance, late on the evening of Saturday, October 4th, to visit a delicate lady, about 35 years of age, and mother of a large family, coming in rapid succession. She had been confined ten or twelve days, and there was some difficulty with the placenta. There was no distinct history of a chill, but the nurse said the lochial discharge had been offensive for a day or two, and paler than it ought to have been, but this was only mentioned after putting the question to her. I found her very much depressed, with rapid pulse, confused sensorium, and great loss of power, both nervous and muscular; and yet there were no decided uterine or abdominal symptoms. However, we applied turpentine stupes to the abdomen as a precaution, washed out the vagina, gave a strong opiate enema to quiet the nervous system and procure sleep; and prescribed frequent small doses of quinine and chloric æther, with wine and good nourishment to support her strength.

I did not see the patient again, but have since been informed by her surgeon, that after a rather severe struggle, she ultimately recovered. She could not take the quinine, but continued the chloric æther, and turpentine stupes. After my visit, she exhibited more decided puerperal symptoms; her body becoming prominent, her mind more disturbed; she had no sleep but what was produced by medicine, and thirty or forty minim doses of chlorodyne answered the purpose well. The turpentine greatly relieved the tympanitic condition of the abdomen; but after this had subsided, she was attacked with phlegmasia dolens. In spite of this complication, however, the result was favourable, and the patient is now downstairs and resuming her family duties.

Case xxiv. *Puerperal Disease: Fatal.* Mrs.—, aged 28 years, a delicate lady and very deaf, had been confined about a fortnight, when I was called to see her on October 1st. The history given me was as follows. Before her confinement she had an attack of bronchitis, which much reduced her strength; her labour soon followed, and the placenta required artificial removal on account of hæmorrhage, which for the moment was severe, and made her very faint. She went on pretty well for a day or two, and then had an attack of pleuro-pneumonia of the left side, accompanied by very acute pain, and relieved by antimony, blistering, calomel and opium etc. When this gave way to treatment, she complained of slight abdominal pain, the abdomen was found to be tumid, and there was commencing phlegmasia dolens in the right leg. The secretion of milk had ceased, and the lochia had changed colour. These latter symptoms made their appearance two days before I saw her; and I found her in a very serious condition, suffering from most threatening puerperal mischief, which had been masked by the more acute disease in the chest, and for a day or two escaped observation. Her pulse was 140 or more, and her respiration hurried and whistling. The sensorium was not much disturbed, but on dozing she

felt rather confused. The chest-affection was apparently cured. The abdomen was not tender, but very tympanitic and conical; and I discovered uterine tenderness on deep pressure above the right groin. She had no sickness nor diarrhœa. The lochia were muco-purulent and very offensive: and the nurse told me she had noticed the bad smell four or five days, but had not mentioned it. Muscular power was at a very low ebb, and her general condition most unfavourable. Turpentine was applied to the abdomen this morning, and we now gave her a drachm dose internally; we also enveloped the whole limb affected by phlegmasia dolens, the right leg, in moist flannel sprinkled with turpentine; an application which I have found of much more service in that disease than any other treatment whatever. All other medicines were discontinued; frequent vaginal washings ordered, and a turpentine enema the next morning, should there be no relief from the bowels; the turpentine to be also repeated internally twice in the night, and mild nourishment administered. I left her at 8 P.M., without a hope of recovery from such a frightful complication of illness, the only circumstances at all in her favour being that her manner was not very unfavourable, and her brain but little disturbed.

On the 2nd, her surgeon sent me the following report: "I have seen Mrs. — this morning. She has had a restless night, bowels very much relaxed, tympanitis not so much, mind quite intact, pulse not so quick. She expresses herself as unable to take any more turpentine, but we go on with the external application. I have given her a chalk mixture with a little opium, catechu, cascarilla, and chloric æther. It is a very bad case, yet there are some favourable symptoms. It is remarkable how during the chest-affection, this disease was masked; in fact, there appeared no symptoms of such until the other was removed."

On the 4th, I heard she was still alive, and in some respects better. The body was much less swelled; the diarrhœa was stopped; the leg not painful; but her pulse was still rapid and she was very weak.

On the 6th, I received a letter requesting another consultation, but stating that in many respects the patient had been going on favourably. On my arrival in the afternoon, I was told a serious change had taken place in the morning, and she was fast sinking. I found her quite sensible, without pain either in the abdomen or leg, and with scarcely any swelling in either. But she was so exhausted and feeble, and her pulse small and very rapid, with a corresponding frequency of respiration, that it was clear she must die. However, she lingered on without any other symptoms than extreme exhaustion until the 9th, and then quietly sank.

[*To be continued.*]

DEATH OF A SURGEON FROM AN OVERDOSE OF PRUSSIC ACID. The following particulars are from the *Waterford Mail*:—"We regret to have to announce the sudden and premature death of Joseph Sawyers, Esq., surgeon of the 86th Regiment, which occurred on Friday evening. Mr. Sawyers had been in the habit of taking small doses of prussic acid, and on Friday evening he felt unwell, and mentioned to his servant that he would not go to dinner; the servant laid a bottle containing prussic acid and one containing essence of peppermint on the table, and it is surmised that he took the prussic acid in mistake. A coroner's inquest was held on Saturday, and a verdict was found that the death was caused by an overdose of prussic acid. The remains wese interred with military honours, at the Abbey Church, this (Monday) morning, and were accompanied by all the officers—some having come from a considerable distance to pay this mark of respect to their deceased comrade, who was much beloved and is sincerely regretted by them."

British Medical Journal.

SATURDAY, JANUARY 10TH, 1863.

SCIENCE AT HOME AND ABROAD.

THE truth of the old adage, that no man is a prophet in his own country, is very strikingly exemplified by the manner in which we in this country are too apt to treat the contributions to science of foreigners, and the contributions of our own countrymen. We have more than once taken occasion to call attention to this act of unpatriotic partiality; and, in fact, have recommended those of our scientific workers, who wish their observations to be duly appreciated by their own countrymen, to have them transferred into a foreign dress, and brought out, in the first instance, in a foreign country, under a foreign name. We verily believe that the translation "from the German," for example, into English of such productions would ensure for them a far better chance of attentive and serious consideration than they would obtain if their British authors had produced them originally in their mother tongue and country.

Our remarks have called forth the following pertinent observations from the pen of one of our most accomplished scientific observers:—

"English observations are not epitomised in the same way as foreign, and the result is, that a most erroneous impression exists amongst practitioners, viz., that the scientific work performed in this country is exceedingly small, and bears no comparison, either in quantity or quality, with that produced on the continent. Sometimes papers seem to be selected for translation in consequence of the number of letters in their authors' names—sometimes, because the author boldly reiterates statements, the truth of which was disproved half a century ago. Thus, recently, we have had the subject of spontaneous generation re-opened, and the most unsatisfactory experiments of certain French observers reported at some length. If these gentlemen still remain uninfluenced by the multitude of facts which have for years been accumulating against their pet theory, it seems scarcely desirable to encumber English journals with their dogmatic assertions. There are, and probably there will always be, people who will maintain that living beings result from the accidental approximation of certain inanimate particles to each other, but it is surely unnecessary to give very wide publicity to such untenable vagaries.

"There is just now a fashion in this country of giving very undue prominence to the work of foreigners, while that of our own countrymen is underrated. Foreigners are themselves surprised at the sort of articles which are sometimes translated into English journals.

We desire in these, as in other matters, to treat foreign observers with the utmost generosity and liberality; but we cannot conceive that any good can result from this mode of discouraging the younger men of our profession in this country, who, under difficulties of which foreigners have no conception, are trying their best to advance medical knowledge. We have seen on several occasions indications of a desire on the part of some who have, perhaps by accident rather than by real work of their own, attained influential positions, to make the utmost of foreign work, and almost to ignore that of their energetic juniors. It seems to us but natural, that men occupying high positions, but who are no longer engaged in scientific labours, should encourage in every possible way the advances of their juniors; but we fear that the generosity and encouragement, which would certainly produce valuable fruit if dispensed on this side the channel, too often assumes the miserable form of patronage on the other. The only result is disappointment here and a considerable amount of contempt and ridicule there. Individuals in high position ought to know that a man may allow himself to accept the patronage but laugh at his patron. We trust, however, that the younger men in this country, who are now contributing so much to the real advance of many departments of science, will continue their labours with earnestness, and that their ranks will be recruited and their cause strengthened until the merits of British science are acknowledged by Englishmen, when those whose duty it is to satisfy the scientific craving of the members of our profession will soon make the discovery that scientific work is being carried on here as well as in France or Germany, and that the British medical public takes as much interest in that which is done by their countrymen as by foreigners."

GRATUITOUS MEDICAL SERVICES.

A STRIKING illustration of the correctness of the views concerning the abuses of London hospitals so often referred to in this JOURNAL, may be found in a letter in the *Times* of the 1st of this month. A writer calls upon the benevolent to give their alms to a London hospital which has done acts of mercy to our Commissionaires. The voice comes from the barracks of the commissionaires, and is the voice of gratitude for services received. It details the immense good done by the hospital, its £7000 spent *per annum*, its 1400 in-patients, and its 38,000 out-patients *per annum*. It then goes on to make the following instructive statement:—

"As some people may wish to know how far we carry out our principles of 'self-help,' I may state that our sick-fund contributions for the present year are about £20—a rate which, if equalled by all other patients, would increase the income of the hospital by nearly £3000."

From this we find that these commissionaires actually pay £20 towards the funds of the hospital. Now, is it not clear that, of these 38,000 out-patients, a very large portion must be of a class who receive wages as large as and much larger than these commissionaires? If this be the case, why should this business of charity be carried on to this lamentable extent, after such indiscriminate fashion, demoralising the working classes, and unfairly taxing the benevolence of the benevolent? Why! if these 38,000 patients come from the neighbourhood of the hospital, we must conclude that the whole sick of the parish pass through the doors of the hospital during the year!

We seriously again ask the profession, must there not be something radically defective in a charitable system which throws (at one single hospital) 38,000 patients on the hands of the medical men during one year, for the reception from them of gratuitous medical services? Must there not be something radically defective in a charitable system, which is ever crying out, in the most imploring terms, for money and help, notwithstanding the gift of their immense services by the medical profession? The medical profession, it appears, gives its gratuitous advice to 38,000 patients (at one single hospital, be it remembered); and so deeply does a discriminating public appreciate the value of the golden and gratuitous advice (medical and surgical)—of these immense services—that it will scarcely furnish the obolus required for the purchase of physic for the sick and bandages for the wounded. How long will our profession consent to play a part in this gross act of suicidal injustice?

TYPHUS IN LANCASHIRE.

WE have now unfortunately the best authority for saying, that the scourge which ever follows in the track of war, misery, and famine, is now claiming its victims in the manufacturing districts. Protracted low diet—sufficient to sustain life, but not sufficient for vigorous life—is beginning to tell its tale upon the bodies of the working classes there. Our profession has, as usual, been prodigal of its money and its services in this terrible conjuncture; but never more than now is it able to do great service by enforcing upon the public at large the all-important fact—that it is not by physic, but by food only, that this plague can be stayed; and, what is of still greater importance, its attacks anticipated. The profession should, therefore, urge the necessity of still great and greater exertions being made in this work of charity; for here comes the scourge, typhus fever, whose steps can only be arrested by the outpourings of public benevolence.

"Dr. Buchanan," we read, "physician to the London Fever Hospital, and one of the London Medical Officers

of Health, has been engaged, since the middle of October, in an official inquiry into the sanitary condition of the principal manufacturing towns under their present exceptional circumstances. He has reported the results of his observations from day to day to the Privy Council Office, and has now presented a summary of his experience in the places he has visited, embodied in a document of painful interest.

"This medical report, unhappily, leaves no doubt that 'one of the most lamentable consequences of extreme destitution has made its appearance.' Typhus fever has broken out among the population of Lancashire for the first time since 1847. It has appeared in the track of want, of which Dr. Buchanan well says it is the 'steady follower.' In Preston and Manchester, typhus fever has now assumed an epidemic form. In Preston, there were 227 cases between Midsummer and the end of November; and those attacked died at the rate of 23 per cent. In Manchester, there have been 100 cases of the disease in the same period, with nearly the same high rate of mortality among its victims.

"The existence of this disease, remarks Dr. Buchanan, 'by itself suggests doubts as to the complete success of the measures that have been adopted for the relief of the distress.' In twelve of the chief manufacturing towns, including Manchester, Preston, Stockport, and Bolton, the following external signs have been noticed among the population, and they all indicate a readiness to sink under the first attack of disease:—Among the cotton-workers, as a body, there is an evident loss of strength, colour, and flesh. There is a wan and haggard look about the people that is not habitual to them. Medical men assert that the parents have lost their health in a much greater degree than the children, and of the parents the mothers suffer most. Between the permanent paupers of the Manchester Union and the recently thriving workmen of Ancoats the experienced medical eye can now draw no distinction in the apparent ability of the two classes to resist disease. From the whole tenour of the report it is evident that, while the cases of death from actual want have been very few, there exists an immense amount of what may be termed mild starvation. It is the impending, gradual deterioration of the sanitary condition of the people that is now the great danger. Privation will make itself more and more felt with every week of its continuance. The allowance that is not sufficient now will be less so as the cold of the winter sharpens. Warmth now becomes a necessity of life, only second to food. To secure it the poor will alway sacrifice many of the conditions of health. They close doors and windows, and paper up the fireplaces, to exclude every draught of air. The report notices this want of ventilation as of itself a dangerous source of disease."

THE PATHOLOGY OF TERTIARY SYPHILIS.

Tertiary syphilis (writes M. Diday) must not be considered as one of the stages of evolution of a disease. It is a distinct pathological condition, distinguished from secondary syphilis by its clinical character, its prognosis, and its treatment.

Secondary syphilis may be produced at will—excepting the case of immunity due to previous syphilis; its radical cure is its ordinary termination; and its lesions are contagious.

But tertiary syphilis cannot be produced at will; nor can its accession be anticipated; spite of all remedies, it is a persistent disease; and its lesions are not contagious.

Comparing these two groups of characters, we find that those of secondary syphilis belong to the class of virulent affections, or poisoning by morbid secretion; whilst those of tertiary syphilis belong to the class of diathetic diseases.

Tertiary syphilis is, in fact, syphilis-poisoning which has passed into the stage of diathesis; from being essentially transitory, it has become essentially permanent.

To what cause is this transformation (which does not occur in all cases) due?

It is certainly not due to long duration of the secondary stage of syphilis. Secondary lesions may last for three or four years, and yet produce not tertiary syphilis.

Neither is it due to the neglect of any specific treatment; for observation shows us that tertiary syphilis arises as often whether specifics have been used or omitted.

The true agent of tertiarism is doubtless the varying degree of power of the virus; and above all the varying degree of resistance offered by the system to its action. Persons of weak vitality, or who are enfeebled by age, or dyscrasiæ, etc., are they in whom the syphilis becomes tertiary and permanent.

Experience, as shown by the powerlessness of medicine, confirms these views. Mercury almost invariably fails; iodine, an admirable palliative, is only a palliative. To cure a diathesis, a radical and permanent change of food, of residence, of profession even, in a word, of all social and moral habits, are required. Hereby alone can we hope to obtain a cure. This is what few patients can be made to understand; and why, therefore, the radical cure of tertiary syphilis is so rare.

THE WEEK.

Mr. Bond, a sporting gentleman, some years since, endeavoured to persuade the Jockey Club that the winners of great racing stakes should be called upon to give a small percentage of their winnings to hospitals. The Jockey Club would not, however, listen to this charitable proposal. Last year, Mr. Bond made another effort in the same direction. He promised to give 1000 guineas for the purposes indicated, if the winners of the Derby and Oaks would also each give 10 per cent. of their gains for the same. The 10 per cent. has not been forthcoming; nevertheless, Mr. Bond will not be baulked of his benevolent purpose. He, therefore, gives his 1000 guineas to be divided amongst the following hospitals; namely, 100 guineas each to the Westminster, King's College, St. Mary's, the Cancer, the London, and St. George's Hospitals; to the Royal Free Hospital, £157 : 10; and for the establishment of a drinking-fountain in St. Clement's Danes, £316.

It will seem surprising to the profession, that at this far advanced day of chemical and sanitary science and scientific agriculture, a proposal should have been made, by the engineer of the Metropolitan Board of Works, to discharge the sewage of the Western division of the metropolis into the Thames, above London—at Cremorne. The metropolitan medical officers of health have, we are glad to see, taken up the subject and entered their protest against it. Of course, the Board of Works has but one grand object in view, viz., to get rid of the sewage. It has nothing to do with a polluted river, or with sanitary or agricultural science. Its business is simply to collect and discharge the sewage out of a given district. The duty, therefore, of determining where and how the sewage shall be discharged out of the district naturally falls upon others. Indeed, after all that has been said and done in reference to this pollution of our rivers by sewage, it does seem surprising that the engineer should have ventured to make such a proposal. That it will be defeated by the vigilance of the Metropolitan Health Officers we doubt not for a moment. Certainly, it is no business of these gentlemen to say how the sewage should be otherwise disposed of. It is for the engineer to overcome engineering difficulties. Of this, however, we may be very sure: let the public only insist that under no circumstances shall sewage be discharged into rivers, and plenty of schemes will be found for its disposal otherwise. Incidentally, also, this prohibition will act as an immense benefit to the community; for it will, naturally, lead to the utilisation of all the riches of sewage, and thus be the means of returning to the soil the essence and virtue which is won from it in the shape of food.

Dr. Lee of Philadelphia, who is now visiting the different medical institutions of England and the Continent, makes the following comparison between English, French, and American lunatic asylums.

"I have also visited the most noted institutions of this kind in England and France; and, with the exception of the agricultural colony at Clermont, I have seen nothing deserving of special commendation which is not also found in our own country. Indeed, I think, as a general rule, we are considerably in advance of the old world in the successful treatment of the insane; and our statistics will show a larger percentage of cures than can be found in the large majority of European asylums. And it is very natural that it should be so. Americans are the most practical people in the world; they are not easily led to adopt novelties merely because they are novelties, but which have nothing else to recommend them; but they speedily introduce every improvement which is founded in reason and common sense, and which promises any practical benefits, wherever it may have originated. The unreasonable and obstinate prejudice which exists in Great Britain against adopting anything new from foreign countries, fortunately does not exist among us; and hence we are never found lagging far behind in the race of improvement and the march of civilisation. Hence Professor Acland, M.D., of Oxford, who accompanied the Prince of Wales in his recent visit to the United States, expressed surprise that American physicians should visit Europe to examine lunatic asylums, for they would find better ones at home, as at Philadelphia, under the charge of Dr. Kirkbride (and, I may also add, at Bloomingdale, under the charge of Dr. Brown), than can be found in Europe. Such I know to be the opinion of the most enlightened physicians of England, Germany, and France, who have made themselves acquainted, by personal observation, with such institutions on both sides of the Atlantic. In England I visited, among others, the great establishments of Hanwell, Colney Hatch, Bethlehem Hospital, etc.; also the private asylums of Dr. Conolly and others; but I saw nothing which is not well known and carried out in the United States."

The French Academy of Sciences has been more fortunate in the satisfactory disposal of its grand prize than the Academy of Medicine. The question proposed for the grand prize in the physical sciences was, "The Comparative Anatomy of the Nervous System of Fishes". No worthy competitor appeared; but 1,500 *francs* were allotted to MM. Philipeaux and Vulpian for the treatise entitled "Researches for the Determination of the Parts which constitute the Encephalon in Fishes". The first prize (1,800 *francs*) in experimental physiology was accorded to M. Balbiani for his treatise on the Sexual Phenomena of the Infusoria; and the second to MM. Chauveau and Marey, for the Study of the Cardiac Circulation. The prizes in medicine and surgery were distributed as follows:—To M. Cruveilhier, 2,500 *francs*, for his works on Pathological Anatomy; to M. Lebert of Breslau, 2,000 *francs*, for his treatise on Micrography; to M. Frerichs of Berlin, 2,000 *francs*, for his treatise on Diseases of the Liver; to M. Larcher, honourable mention and 1,500 *francs*, for his work on Normal Hypertrophy of the Heart during Pregnancy; to M. Cohn the same, for his work called "Clinical History of Embolic Affections, studied from a Practical Point of View". MM. Dolbeau and Luys also touch 800 *francs* and an honourable mention—the first for his work on Epispadias, and the second for his work on the Structure of the Brain properly so called. MM. Ollier, Fonssangrive, and Bourgeois, get only a simple mention. The prize Alhumbert—"To endeavour, by well-conducted Experiments, to throw new Light on the Question of Generation called Spontaneous"—was accorded to M. Pasteur. Another prize Alhumbert—"The Experimental Study of the Modifications which may be determined by External Agents in the Development of a Vertebral Animal"—was divided between MM. Lereboullet and Dareste. To M. Barallier, who has demonstrated the non-identity of typhus and typhoid fever, 2,000 *francs*. (Some of our readers will, we suspect, question this adjudication.) M. Cass received the Barbier prize for his works on Glycerine. The following are the prize-questions proposed by this body for the next year's meeting:—Natural Philosophy: On the Comparative Anatomy of the

Nervous System of Fish (3,000 *francs*, Sept. 1st, 1864). To study the Changes effected during Germination in the Constitution of the Tissues of the Embryo and Perisperm (3,300 *francs*, April 1st, 1864). On the Production of Hybrid Animals by Means of Artificial Fecundation (3,300 *francs*, Sept. 31st, 1863).—Medicine: To trace the History of Pellagra (5,000 *francs*, April 1st, 1864) —Medicine and Surgery: On the Application of Electricity to Therapeutics (5,000 *francs*, April 1st, 1866).—Surgery: On the Preservation of Members by Preserving the Periosteum (the Academy offers 10,000 *francs*, the Emperor also 10,000 *francs*, April 1st, 1866.)—Bordin Prizes of 3,000 *francs* each, to be sent in before December 31st, 1863: On the Distribution of the Vessels of the Latex in the Organs of Plants. On the Anatomical History of Coral and other Zoophytes of the same Family. On the Structure of the Stems of Plants, with a View to determine their respective Families.

The following testimonial to the *value* of "Lane's Indian Remedy for Small-pox" is worthy attention at the present moment.

"Indian Remedy in Small-pox. Eruptive Fever General Hospital, Kalorama, Washington, D.C., November 26th, 1862. Surgeon-General W. A. Hammond, Washington, D.C.:—Sir,—Acting in accordance with instructions received from the Surgeon-General's Office to test the efficacy of 'Lane's Indian Remedy for Small-pox', and report thereon, I have the honour to state that I have used the box of 'remedy' in the treatment of cases of small-pox in this hospital; and in no case, used either as a gargle, eye-wash, or internal remedy, have I been able to detect any effect produced upon the patient or the disease, except that in one case the patient, after taking it several days in succession, complained of its producing nausea. In every other case I have found it inert, and as useless as I should expect a decoction of sawdust to be, administered in similar cases. Your, etc., R. J. Thomas, Act. Assist.-Surgeon U.S.A., in charge."

Tartuffe has commenced the present as he finished his last journalist year, with abuse flung at the British Medical Association and its Journal. We are always anxious that our readers should be fully apprised of these exacerbations of his, because they are the most certain certificates and testimonials to the successful progress of our Association which we could lay before them. That Tartuffe should be excessively violent at the present moment is explicable enough to us. At this season of the year, the demonstration of our success is painfully impressed upon our adversary's senses by the unanswerable logic of figures. Here is the last diatribe of the *Lancet*, under the head of the Fever Controversy, couched in its usual elegant diction, and drawn from its ordinary sources of truth and honesty:—

"This has attracted attention, and has produced a literary *bévue* of errors and improprieties, in which some of our medical contemporaries have distinguished themselves by more than ordinary incapacity and rashness. The unhappy organ of the British Medical Association seized eagerly the opportunity of distinguishing itself by a terrific onslaught on Dr. Tweedie. Of course, that experienced physician had explanations to offer, and next week the fierce attack was followed by an abject apology. If possible, the apology was more dangerous than the attack, for it is more full of errors, and this week the Journal must again eat humble pie."

All we will remark upon this performance of Mr. Tartuffe's is, that, true to the specific characters of his prototype, he has not the courage to express any opinion of his own on the subject of this Fever Controversy. Here, as on so many other occasions when moral courage is required for the delivery of an honest opinion, he quietly turns tail, and suggests a reference to arbitration—falling foul-mouthed on those whose literary honesty he has not the courage to imitate. We will add that, we trust, and would willingly believe for the credit of our cloth, that the conductors and instigators of these unseemly attacks of the *Lancet* are not members of the medical profession.

An interesting point of medical ethics is undergoing a warm discussion amongst our French friends. The question is, what ought a doctor to do if consulted about the physical eligibility for marriage of one of his patients? Two societies have had their say upon it, and have concluded: "That the medical men should abstain from giving any information respecting the health of a client on the occasion of his or her marriage." This view of the case is not, however, accepted by the press, which declares, on the other side, that in its opinion: "Circumstances may occur in which the medical man is bound, both by honour and morality, to enlighten families as to the state of their patient's health." It strikes us that this is just one of those questions, about which learned men like to discourse and make difficulties, but which practically has never been a source of serious difficulty to anyone.

Dr. Sichel, the oculist, describes, in *L'Union Medicale*, a peculiar kind of senile delirium, of a non-febrile character, which he has observed seven or eight times, after extraction of cataract in old people. He attributes it solely to the occlusion of the eyes consequent to the operation. Some of his patients might have suffered from commencing delirium tremens; but others again had been most abstemious all their lives. The patients get up in the night, walk about, gesticulate, tear off the bandages, insult and menace those about them, etc., and so as to require restraint. He relates a case in which all the symptoms of delirium disappeared when the bandage over the eyes was removed. He has never observed it in persons under sixty years of age; nor in any cases except those in which the operation for cataract was practised by extraction.

The number of inscriptions at the School of Medicine and Pharmacy at Bordeaux for the ensuing session is 102.

CONSERVATIVE MEDICINE.

Dr. Flint, Professor of Medicine in the Bellevue Hospital Medical College, New York, makes the following remarks in the *American Medical Monthly* :—

"The meaning of *conservative surgery* is well understood. The conservative surgeon aims to preserve the integrity of the body. He spares diseased or wounded members whenever there are good grounds for believing that by skilful management they may be saved. He resorts to mutilations only when they are clearly necessary. He weighs carefully the dangers of operations, so as not to incur too much risk of shortening life by resorting to the scalpel. By conservative medicine, I mean an analogous line of conduct in the management of maladies which are not surgical. The conservative physician shrinks from employing potential remedies whenever there are good grounds for believing that diseases will pursue a favourable course without active interference. He resorts to therapeutical measures which must be hurtful if not useful, only when they are clearly indicated. During the last quarter of a century a change has taken place in medical sentiment as regards surgical operations. New and grand achievements in surgery seemed formerly to be the leading objects of personal ambition. Boldness in the use of the knife was the trait in the character of the surgeon which was most highly admired. It was customary to speak of them as brilliant, and the daring surgeon enjoyed somewhat of the *éclat* which belongs to the hero of the battle-field. This analogy was implied when one of the greatest of our American surgeons, wishing to distinguish his most brilliant exploit, styled it his Waterloo operation. The change that has taken place is marked. What would once have been considered as a degree of courage to be admired, is now stigmatised as rashness. It is an equivocal compliment to say of a practitioner that he is a bold surgeon.

"An analogous change within the same period has taken place in medical practice. Formerly, boldness was a distinction coveted by the medical as well as by the surgical practitioner. "Heroic practice" was a favourite expression, consisting in the employment of powerful remedies, or in pushing them to an enormous extent. The physician emulated the surgeon in daring. The change is not less marked in medicine than in surgery. We hear now oftener of diseases managed with little or no medication, than of cases illustrating the abuse of remedies. We desire to preserve the vital forces, to avoid the perturbations and damaging effects of potential therapeutic agencies.

"Physicians have acted on the presumption that most diseases do not pursue a favourable course without treatment more or less efficient. This has been, to a still greater extent, the popular belief. The apparent proof of the success of the Hahnemannic treatment rests on this belief. What are the facts already ascertained with respect to the intrinsic tendencies of different diseases? Take, as examples, pneumonia limited to a single lobe, and acute pleurisy. It is sufficiently settled that these diseases involve very little danger in themselves, proving fatal only in consequence of complications. The practitioner, therefore, no longer feels obliged to employ blood-letting, mercurialisation, cathartics, blisters, etc., in these diseases, with reference to the saving of life. The only question is, do patients pass through these diseases as well without as with such measures of treatment?

"Our acquaintance with the natural history of the great majority of diseases is as yet very incomplete. We cannot conscientiously withhold remedies which we have reason to believe may prove useful. Cases are therefore to be slowly accumulated in which, from circumstances not under our control, diseases have been uninfluenced by therapeutic interference. This knowledge, it is evident, is the true point of departure for the study of the effects of remedies as regards the termination and duration of diseases. The information already obtained has rendered the use of powerful therapeutic agencies far less common than they were a few years since.

"In defining conservative medicine, we have seen that it expresses a characteristic of the improvements in medical practice during the last twenty-five years.

"If we turn from remedial measures to dietetics, we find that the improvement which has taken place in practice contributes to the illustration of conservative medicine. In fact, conservatism is, perhaps, not less conspicuous in the contrast as respects the diet of the sick than in any other point of view. In cases of fever and all acute diseases, twenty-five years ago, it was generally deemed an essential part of the treatment to withhold alimentary supplies. In chronic affections, too, the diet was usually much restricted. Physicians seemed to lose sight of the plain fact that the vital powers must languish in proportion as the alimentary supplies fall below the wants of the system, and that death may be produced by starvation in disease as well as in health. At the present time, a nutritious diet is considered as highly important in the management of fevers, as well as in diseases which tend to destroy life by exhaustion, and most physicians appreciate the importance of keeping the body well nourished in chronic affections.

"Clinical experience has rendered it doubtful whether the antiphlogistic treatment exerts much effect on the intensity of inflammation, its results, or its duration. Conservatism, therefore dictates a careful weighing of the evils of the treatment against the chances of its usefulness as regards these objects."

DR. STOKES ON EPIDEMICS.

In his introductory address at Meath Hospital, Dr. Stokes says:—

"What is it that causes an epidemic is one of the most difficult of questions. Why, in the pressure of an epidemic, one man sickens while another escapes—why essential maladies observe laws of periodicity, we cannot tell—why locality affects their general characters and organic results is yet unexplained—nor why, on the other hand, after travelling their tens of thousands of miles, destroying their victims under the most varied conditions of climate, soil, food, temperature, they yet preserve much, if not all, of the original character—remains an open question. Many discussions have arisen on this point, and a fierce controversy has raged between the contagionists and non-contagionists. The advocates on both sides can bring forward plenty of isolated facts in support of their theories; but the argument from isolated cases is of little value. That there is an origin for epidemic disease, besides contagion, is self-evident; that it is propagated by contact is another question. I have been in the habit of referring to the mode of settling this matter. It was to compute against the occurrence of a certain circumstance—namely, if there was no such thing as contagion. My father, when Professor of the Practice of Medicine in the Royal College of Surgeons, directed his attention very much to the subject of contagion. He was a strong advocate of the doctrine of contagion. Perhaps he went too far in his belief in the exclusiveness of the doctrine of contagion. He thought that in looking at the general circumstances which attended the spread of an epidemic in this country, the probabilities for or against the doctrine of contagion

might be submitted to calculation. One of his most intimate friends was the late celebrated Dr. Brinkley, Bishop of Cloyne, who was at one time the Astronomer Royal of Ireland. He was admittedly one of the very first mathematicians of his day, and was especially skilled in that difficult part of mathematical investigation, the doctrine of chances. Now, in the progress of an epidemic in Ireland, in a family of twelve persons, the disease has been known to attack eleven out of the twelve. In some cases the passing of the fever through so large a proportion as eleven individuals out of twelve has taken a very considerable period of time, as you may readily understand. It has taken about three months to go through them all. Now, my father proposed these two problems to the Bishop of Cloyne for solution:—'An epidemic prevails so severely that one person out of seven sinks. A family of twelve is selected in a particular district before the epidemic has visited it. What is the chance that eleven out of the family shall take the disease, supposing the sickness of one of the family does not promote the sickening of another—that is, supposing the disease not to be contagious, and supposing the family to be not unusually liable to the disease?' The answer furnished by Dr. Brinkley is, that the probability against such an event is 189,600,000 to 1. That is a very singular and extraordinary result. The whole subject is yet to be worked out. It is interesting to observe that Humboldt, in his Cosmos, speaking of epidemic diseases, says that their origin and nature is among the most difficult of problems, and he suggests that some light may be thrown on the matter, when the laws of terrestrial magnetism are fully determined. What we do know of these mysterious phenomena may be thus stated:—That although having certain characteristics which are common to all, they exhibit marked and special differences. Thus the plague differs from cholera, cholera from typhus, and so on. That they are in a greater or less degree propagated by contagion. That epidemics of the same disease have not always the same characters. That their mortality is greater on their first outbreak in any locality. That they travel over vast distances, and although they may arise in warm latitudes they preserve their characters in cold ones; the cholera of Central India and of St. Petersburg was the same disease. That their advent and disappearance are often sudden. That they are not symptomatic of any known anatomical change, but they often induce local diseases which are secondary to the general malady. That their symptoms are, to a great degree, under the laws of periodicity. That, as far as we know, the disease is not to be met by any specific cure. That, as yet, all explanations of their origin are insufficient or obviously erroneous. Lastly, that anatomy only throws a negative light upon their nature, telling us rather what they are not than what they are. The plague of the Levant, which has preserved its character since the time of Thucydides; the black death; the sweating sickness; the typhus and yellow fevers, and the Asiatic cholera—in a word, the great causes of the wholesale destruction of man, act by some influence not yet discovered even by microscopic anatomy; so that we come to the strange conclusion that the diseases most fatal to man are those least connected with organic change which, when it is met with, is secondary, inconstant, and insufficient to explain their symptoms. Such is the present state of our knowledge."

Imperial Court Doctors. The following is the position assigned by high etiquette to the French court doctors on great state *levée* occasions:—In the Salon of Apollo, a crowd of inferior officers of the various households, not on duty, with the physicians and surgeons, ordinary and extraordinary, consulting and non-consulting of the Imperial family.

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the Journal cannot be sent to them.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 10th, 1862.

LANCASHIRE AND CHESHIRE BRANCH.

REGISTRATION OF DISEASE.

Sir,—In the letter sent to you last week, I omitted to enclose a form for the return of new cases of disease, coming, each week, under the care of those gentlemen who should consent to help forward our scheme for the Registration of Disease. I beg now to supply a form, which may serve as a specimen of what would be required. The disease-list is made as short as possible, so that the trouble of filling it up may be very light; but it has been judged sufficient for our purpose. We should, however, be glad to receive suggestions from any of your readers. I am, etc.,

Arthur Ransome.

1, St. Peter's Square, Manchester, Dec. 31st, 1862.

..... District.

Return of new cases of disease, coming under treatment in your public practice, during the week ending Saturday, the day of , 186 , at .

	Diseases.	Deaths.	Remarks.
Small-pox			
Measles			
Scarlatina			
Diphtheria			
Whooping-cough			
Croup			
Diarrhœa			
Dysentery			
Continued Fever			
Bronchitis, Influenza, and Catarrh			
Pleurisy and Pneumonia			
Other diseases not classified			
Total			

Signature, ...

The Lyons Hotel Dieu. The great civil hospital, *Hôtel Dieu*, is the oldest hospital in France, having been founded in the sixth century, by Childebert, son of king Clovis. It contains twelve hundred beds, mostly free; there are 150 patients who pay 25 cents per day, (1 f. 25c.) There are nine surgeons and physicians, besides a large number of internes connected with it. The nursing is done by a society numbering one hundred and fifty *hospital sisters*, so-called, aided by a band of *hospital brothers*. The building fronts on the Quai du Rhone, and extends 1,055 feet. It is crowned with a magnificent dome, built in 1737, but not completed till 1842. In one part of the building are rooms for a secondary school of medicine and pharmacy, which is here carried on. There is a similar dome situated in the middle of four spacious wards, constructed of a Grecian cruciform shape, and under the centre of it is an octagonal altar, visible to all the patients in the wards. The front is ornamented with statues of Childebert and his wife Ultrogothe, also of the Rhone and Saone, the arms of the village, etc. This hospital appears to be admirably conducted, is clean and well ventilated. (*Dr. Lee of Philadelphia.*)

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

the course of last month, the first of the proposed arterly meetings of the Lancashire and Cheshire anch of the Association was held in the board-room the Chester Infirmary, when, considering the present sy season and the short days, the attendance was good, pecially of members from a distance. In the un-oidable absence of the President, the chair was ken by Dr. Callon, one of the Vice-Presidents of the anch. The proceedings at these meetings are to be nited to the reading of papers, and on this occasion re initiated by Dr. Waters of Chester, who gave a suc-act and graphic sketch of two cases of Volvulus suc-ssfully treated by the Tobacco-clyster. The first case is that of a gentleman, aged 36, in perfect health and temperate habits, who, in lifting a heavy stone, sud-nly felt a peculiar sensation, as if something had given ay internally, which was followed by constipation and miting, and the ordinary symptoms of obstruction of e bowels. When first seen by Dr. Waters, the symp-ms had continued for four days, unrelieved by the dicious and cautious use of leeches, fomentations, stor-oil, the warm bath, enemas, and other remedies. he patient had a very anxious look; the tongue was an; pulse 80. He complained of a twisting pain in e bowels, and a constant desire to go to stool. There as slight soreness a little below the umbilicus on the ght side, but no general abdominal tenderness nor tolerance of pressure. An infusion, made with half ounce of tobacco, was given by the rectum, which oduced decided syncope, vomiting, cold perspirations, d feeble pulse, and was followed by a speedy action of e bowels and the complete recovery of the patient.

The other case was that of a dairymaid, who, in the t of churning, overreached herself, and suffered in a nilar way; the constipation continued for three days, d was at once relieved by the tobacco-clyster.

Dr. Waters observed, that he was induced to bring rward these instances of the successful use of tobacco, iefly because, although much had been lately written the JOURNAL on the subject of obstruction of the wels, no allusion whatever had been made to this re-dy. He strongly urged the importance of resorting the tobacco sufficiently early, instead of postponing it, was sometimes done, until the patient was moribund, if it happened to be a case of *intussusceptio*, until the aginated intestine had become adherent. He thought lesirable, as a guide to the treatment, in cases of this d, to endeavour to arrive at a definite conclusion as the cause of the obstruction; and although it was en confessedly difficult, if not impossible, to deter-ne this point during life, still he considered in many tances, of which these two cases were examples, a erably certain conclusion might be formed. When constipation was not preceded by diarrhœa, but ne on suddenly after violent exertion, and was unac-panied by symptoms of peritonitis or enteritis, it might be assumed that it was caused by a simple twist of the bowel, and treated accordingly.

In the brief discussion which followed, Dr. Waters of Liverpool, referring to the extreme interest connected with the subject of obstruction of the bowels, indicated the following as important points to be kept in view in the treatment of these cases; viz., to avoid purgatives, to give opium in the early stages, and a fair trial of simple copious enemata. These failing, he would certainly resort to the tobacco, as recommended by his namesake, the author of the paper; or perhaps to belladonna, as an allied remedy, and one which would probably cause less severe depression, and of the success of which he had heard a most favourable report given from an eminent London physician; but he had no experience of its use in his own practice. Dr. Williams of Wrexham said he had seen the tobacco clyster successfully used, some years ago, in several cases in the wards of the institution in which they were now assembled; and he could particularly call to mind two instances in which a strangulated hernia was reduced under its influence.

The revival of the use of the tobacco enema, if it should really follow this favourable and encouraging report of its employment, would be a curious illustration of the tendency in medical, as in other matters, to move in cycles; for those of us who can look back some quarter of a century will remember that this mode of treatment was then regarded as one of the expedients to be adopted as a matter of course in cases of intestinal obstruction, and especially in strangulated hernia; but which fell into disuse from the supposed uncertainty of its action, and from the alarming and even fatal results which occasionally followed its administration.

The next paper, entitled Facts and Observations in Obstetrics, was read by Dr. Watson of Chester, and in it he dwelt strongly upon the extreme value of "fresh air and pure water as aids in the management of the parturient process"; and expressed his belief that the importance of these natural remedies had not hitherto been adequately appreciated; and to this he attributed a large amount of the mortality which occurs in childbed. This was followed by the exhibition of a specimen of Thoracic Aneurism by Dr. Wilkinson of Manchester, which was taken from the body of a patient under his care in the Manchester Infirmary. There was some uncertainty as to the precise origin of the aneurism. Dr. Wilkinson described it as arising from the upper part of the arch of the aorta, between the origins of the left carotid and the *arteria innominata;* both of those vessels becoming implicated in the gradual enlargement of the sac. Dr. Roberts, however, was inclined to view this as an instance of abnormal distribution, described by Quain as of frequent occurrence, in which the carotid and arteria innominata arose from the aorta by a short common trunk, from which he believed the tumour had taken its origin. In the specimen now shown, the tumour had pressed upon the left carotid, obliterating that vessel; and also upon the pneumogastric nerve of the corresponding side, so as almost entirely to destroy its continuity: this had given rise to gangrene of the left lung, which was the immediate cause of death. The history and symptoms corresponded with those usually

observed in thoracic aneurism. Some interesting and important observations were made by Dr. Roberts on the use of iodide of potassium in aneurism. In several cases, some under his own observation, and others which had been reported to him, the administration of the iodide in full doses, commencing with five grains up to twenty grains three times a day, had been followed by very striking and beneficial effects upon the aneurismal tumour itself, as well as upon the general symptoms. The bulging and impulse were sensibly diminished, and the sac in some cases became more or less solidified; while the pain, dyspnœa, and general distress and suffering of the patients, were materially relieved. Without venturing to generalise from a limited number of cases, he thought, after all he had heard and observed, that this mode of treatment was deserving of a further trial.

A short paper, of much practical interest, was then read by Dr. Nevins of Liverpool, on the Treatment of Ascites and Anasarca, in which he illustrated, by the relation of three or four cases of ascites followed by recovery, the advantage of resorting to tapping or acupuncture respectively, in the treatment of these two forms of dropsy, in a much earlier stage of these affections than is ordinarily practised. As I believe the paper will shortly be published *in extenso* in the JOURNAL, it is not necessary to enter into further particulars here. This concluded the business of the meeting; and the members present, about twenty-five in number, dined together at the Albion Hotel.

Since the foregoing report was written, a case has occurred which deserves notice, especially in connection with the subject of volvulus, with which it may be said to have some affinity. A gentleman aged 36, a member of our own profession, tall and stout, inclining to corpulency, and of previous good health, having gone to bed quite well, after a hard day's work and eating a hearty meal, was seized with severe epigastric pain and violent vomiting, accompanied with constipation and considerable distension of the abdomen. These symptoms were relieved by opium, rest, and purgatives; and in a few days he was considered convalescent. But, on the subsidence of the abdominal distension, there was detected a large, firm, well-defined tumour, below the epigastrium, the nature of which could not be ascertained with certainty; but the impression on the minds of his medical attendants was that it was a case of impaction of fæces in the colon, and the treatment was directed in accordance with that view. Purgatives and injections never failed to bring away copious solid evacuations, free from scybalæ or hardened fæces; and for some time the patient seemed to be progressing favourably, the tumour apparently becoming diminished in size. In about a fortnight from the first seizure, vomiting returned with increased violence, and continued more or less constantly for the subsequent two weeks, during which, in spite of stimulants in large quantities and all other suitable means, he became delirious, and sank. A *post mortem* examination revealed the following somewhat unusual pathological condition. A large tumour as big as two fists, composed of cheesy, scrofulous deposit, was found resting upon and arising from the anterior surface of the mesentery. It appeared t have been originally hard, and to have undergone soften ing from recent inflammation. There were only sligh traces of recent peritonitis; but the intestines were i many places glued together by old adhesions, and i some parts their calibre was greatly diminished by th unnatural twists and turns given to the bowels by thei agglutination. The case appears to have been one c chronic tubercular peritonitis, differing, however, fro the usual course of that disease so graphically describe by Dr. Barron, chiefly from the circumstance that th tubercular deposit, instead of being generally diffuse throughout the peritoneum, was accumulated in on large solid mass. The cause of death appeared to be ex haustion consequent upon excessive vomiting and con stitutional irritation.

Before leaving this subject, I cannot refrain from men tioning a case which happened many years ago in th practice of the celebrated Dr. Carson of this town, an which, so far as I know has not been published; but is so instructive and interesting as to deserve to b rescued from oblivion. A man who was under treatme with a fracture of the lower extremity, and consequentl confined in the supine position, suffered from obstina constipation, a condition which, he told his attendan had always occurred when he was kept on his back fo any length of time. "Oh," said the surgeon, "we w soon put that to rights"; and to work they went wi castor-oil injections, and the usual routine, but still th obstruction continued, and gradually passed through th usual phases of ileus, and the patient died. On openi the abdomen, a large, hard, moveable tumour was di covered, which, in the supine position, had pressed upo some portion of the intestinal canal, producing comple obstruction, which, it was evident, would have be easily removed by a change of position, if the conditio could have been ascertained or guessed at during life.

Your readers, especially those unacquainted with th locality, will probably be surprised to learn that, no withstanding the close proximity of Liverpool to the se of the cotton famine, neither the social nor the sanita condition of the town has, at present, to any appreciab extent, participated in the injurious consequences that calamity. There is not more distress here than usual at this season of the year; and although the deat rate of Liverpool, especially from zymotic diseases, h risen considerably above the average, chiefly from th prevalence of scarlatina, and from a remarkable increa of continued fever, neither of these epidemics can referred to a state of unusual destitution; nor can th be traced to any special defect in the sanitary conditi of the town; which is in the same state of efficien which for several years past has kept down the zymo death-rate below that of most other large towns in th country. From this it may, I think, be inferred th although sanitary measures undoubtedly exert a pow ful and vitally important influence over the progress a extension of zymotic diseases, still, in spite of eve practicable precaution, these epidemics from time to tim originate, and are propagated, under conditions, and obedience to hidden laws, which our present state knowledge does not enable us to explain.

The present epidemic of scarlatina here has prevailed ongst all classes, rich as well as poor. It has been a considerable extent of a very grave type, putting in the severer cases, especially in children, that for-idable and rapidly fatal complication graphically de-ribed as "the bull neck"; but more scientifically known diffuse indurated cellulitis of the throat. The milder ses have been more than usually prone to be followed albuminuria and anasarca. Some interesting practical marks on this epidemic have already appeared in your port of the proceedings of our Medical Institution; to ich I must refer those who wish to pursue the bject.

As to the epidemic of continued fever, the prevailing pe is typhus. I am informed by Dr. Gee, physician to e Fever Hospital, that of the cases admitted into that stitution, typhus predominates over typhoid in the pro-rtion of about ninety-six in one hundred cases, and at with regard to the general mortality, the age of the tient proves the principal modifying condition; those a moderate age, neither very young nor very old, are e most likely to recover; the greatest number of aths occurring in the extreme ages on either side.

The highly contagious nature of fever has been abun-ntly demonstrated during the present epidemic. Those o have had the opportunity of observing its progress, anot fail to have noticed that close communication th infected persons is the cause to which the extension the disease can be most frequently and most clearly ced. We have, I regret to say, witnessed a melan-oly instance of this in the lamented death of Richard tes Ackerley, Esq., a much and deservedly esteemed mber of our profession, and I believe one of our lest associates, who, in the full vigour of mature man-od, and in the active pursuit of his profession, was uck down by fever, and died in eight days, leaving a dow and young family to mourn his loss.

One of the Roman Catholic priests in attendance on e inmates of the Fever Hospital, has also fallen a tim to typhoid fever, contracted, no doubt, during the se personal intercourse with the sick, and especially h the dying, which characterises the religious minis-tions of that church.

As a further proof of this view, we had the outbreak fever brought into Liverpool by the crew of an yptian frigate, which your readers can scarcely have gotten, and which might be further corroborated by ent facts which have come under my notice in the rse of this visitation; but time and space are no ger available, and I must at once bring my communi-ion to a close.

SMALL-POX IN SUNDERLAND. The report of the medi- commissioner of the Privy Council to Sunderland, on small-pox epidemic in that quarter, was read at a eting of the board of guardians on Wednesday. It bodied statistics showing that while the disease had ched its greatest intensity in Sunderland during last rter, it has been worse in Bishopwearmouth and nkwearmouth during the quarter just elapsed. Every-re, however, it seems to be now declining, though t the commissioner calls "epidemic influence" is still nifest. Vaccination of children, revaccination of lts, and general sanitary expedients are recommended he report of Dr. Seaton.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 3RD, 1862.

W. TYLER SMITH, M.D., President, in the Chair.

TEN gentlemen were duly elected Fellows of the Society.

A Case of Multiple Medullary Cancer, Complicated with Pregnancy. By THOMAS TANNER, M.D. The patient was a woman, aged 39, five months advanced in her third pregnancy. In the abdominal parietes, just to the right of the umbilicus, there was a well defined tumour, of about the size of a large walnut. Adjoining the lower part of the ensiform cartilage of the sternum there was a more extensive mass, also seated in the abdominal wall. In the left groin there was likewise a flattened growth, about two inches and a half in diameter. On examining *per vaginam*, a very firm growth was discovered projecting into the canal, feeling as if it had its origin from the lower part of the sacrum, though in reality it was entirely seated in the recto-vaginal septum. The uterine souffle and the fœtal heart could be plainly distinguished. The liver was much enlarged, and this enlargement, combined with the size of the uterus, occasioned a wearying feeling of distension, as well as some dyspnœa. The propriety of waiting and ultimately effecting delivery by the Cæsarean section was discussed; but such a plan of treatment was regarded as not applicable to the present instance. Consequently, on the 30th of July the membranes were punctured, and about half a pint of liquor amnii withdrawn. On August 1st, labour pains of fair severity set in; but the os uteri was still very rigid on the following afternoon, and as the patient was getting tired and exhausted, and moreover, as the mass of cancer in the recto-vaginal septum reached to within almost an inch of the pubes, it was evident that nothing could be gained by further delay. Dr. Tanner, therefore, slowly tried to dilate the os uteri; and this being partially effected, the fœtus was broken up with a pair of forceps, and removed piecemeal. No difficulty was experienced with the placenta; the discharge of blood was very slight; no injury was done to the uterus or vaginal walls; and the woman was left tolerably comfortable. For some few days she continued to progress favourably; but on August 10th a severe attack of diarrhœa set in, apthæ formed on the tongue and gums, and for the first time in her life she became jaundiced; and, on the morning of August 26th, death took place from exhaustion.

At the autopsy, fourteen hours afterwards, the body was found greatly emaciated. In the abdominal parietes, to the right of the umbilicus, there was a deposit of firm medullary cancer of the size of a walnut, together with a larger growth just below the ensiform cartilage. The liver was enlarged to about three times its natural size, and studded with medullary masses, varying in size from a pea to a small orange. There was likewise several deposits of cancer in the great omentum, in the spleen, in the walls of the colon, and one large mass binding the sigmoid flexure of the colon to the tissues of the pelvis. In the pelvic cavity there was a separate deposit, extending chiefly down the recto-vaginal septum, and completely blocking up the vagina. The inguinal glands on both sides were enlarged and infiltrated with medullary cancer. The uterus, considering the time which had elapsed since delivery, was of its normal size, and healthy. At the apex of the left lung there was a small deposit of tubercle, which had undergone calcareous degeneration, while at the same part of the right lung there were several small tubercles. The heart was healthy, but its walls were flabby. The kidneys were healthy.

The paper concluded with observations as to the different modes of treatment which might be resorted to in such a case as that detailed, together with the reasons which led to the adoption of that practised.

Retention of the Catamenia, for more than two years, in a Married Woman. By WALTER CHAPMAN, Esq. The history of this case, prior to its coming under the care of the author, was reported as the *fifth* case of cure of vesico-vaginal fistula, in the *Lancet* of November 24th, 1860, by Mr. I. B. Brown. This lady, in her third confinement, was delivered with instruments of a still-born child, and soon afterwards was found to be the subject of a vesico-vaginal fistula. She was operated on twice, and was cured; the last operation being in the middle of June, 1860. This patient was first seen by Mr. Chapman on September 26th, 1862. She was sitting up, able to superintend her domestic affairs and walk about, and presented the aspect of health. She was robust, rather short, with a superabundance of fat, and 40 years old. She complained of great irritability of the bladder and stomach, and of severe pain in the lumbar and sacral regions. When she was in bed, on external examination of her abdomen, no difficulty was experienced in determining the existence of a large tumour, resembling the gravid uterus at about the sixth month. She had no reason for supposing herself to be pregnant, but said she had not menstruated since the operation. On a vaginal examination it was found that the cervix was lost in a general enlargement of the uterus, the mouth of which could not be detected. The speculum revealed the spot where the os uteri had existed, but it was now hermetically sealed. Mr. Chapman stated his opinion that the symptoms resulted from a retention of catamenia. Dr. Tyler Smith examined the patient, and confirmed the diagnosis. It was agreed that an opening should be made into the uterus for the evacuation of the fluid. This was done by the author, on October 5th (assisted by his friend Mr. T. Trent), by passing the index finger of the right hand through the spot which could be detected by the touch as having been the site of the os uteri. Its withdrawal was instantly followed by the escape of ten or twelve ounces of a treacly fluid, of a dark claret colour, perfectly free from any unpleasant odour; and much more gradually flowed away. She was kept in bed, but became very ill on the third day, the symptoms resembling those of peritonitis. From this attack she appeared to recover, and went on tolerably well for some days; but on the morning of October 16th, after a night of sickness, she became prostrated, and died at two P.M. No *post mortem* inspection could be obtained.

Mr. OWEN thought that the cause of death might be attributed to the admission of air into the uterus, in its relaxed and enlarged condition. After the gravid uterus is emptied of the fœtus and secundines it immediately contracts to nearly its natural size; but here that reaction was not likely to follow, whilst the daily injection of water which had been employed exposed the organ afresh to contact with the air through the artificial opening, which latter presented no obstruction like that of the os and cervix uteri.

Dr. GRAILY HEWITT remarked that the chief question to be determined was the cause of the fatal result in this interesting case. He considered that it was probably due, as suggested by Mr. Owen, to pyæmia. At the last meeting of the Society, he had alluded to the occasional circumstance of a fatal result following the evacuation of the uterine contents in cases of menstrual retention by subsequent passage of some of the blood into the peritoneal cavity. The explanation of this curious circumstance he had then attempted he still thought the most probable one, and that it was due to the contractions of the uterus becoming more forcible as its bulk diminished. However that might be, it did not seem that in the case now before the Society any such occurrence had taken place. He considered that the best course to adopt in treating such cases would be to make a minute opening, and to allow the fluid to escape as it had collected—gradually; further, that it was decidedly expedient to avoid anything, such as the use of injections of water into the uterus, likely to be the means of conveying air into the cavity of that organ.

Case of Monstrosity. By A. MEADOWS, M.D. The two lower extremities were absent, and a caudal appendage about four inches long was substituted; the body, gradually tapering off, ended in this pointed process; there were no external genital organs, and no anus. Dissection showed that the bowel ended abruptly at the sigmoid flexure of the colon. There were no kidneys or bladder, nor any trace whatever of any urinary apparatus. The suprarenal capsules were present, and were of large size, but there was very little proper structure in them, being chiefly two membranous sacs. An ovary and a somewhat convoluted Fallopian tube lay on either side of the pelvis, but there was no trace of a uterus or vagina. The liver, spleen, and other abdominal organs were normal, as were all the thoracic viscera.

Mr. SQUIRE noticed the absence of the kidneys as of more interest than the external deformity. That intra-uterine life and growth should go on to the degree here seen without those organs was very remarkable, especially as they are not inactive during the fœtal state, as was shown by the occurrence of concretions of uric acid in the kidneys before birth; and he related the case of a still-born male child that he had had the opportunity of examining, where the calyces and pelvis of the kidneys were filled with numerous uric-acid calculi, some of the size of small peas. The parents of the child were known to him; the father had been operated on for stone, and was then passing uric-acid calculi by the urethra. He was a continual sufferer from marked symptoms of the uric-acid diathesis.

Mr. OWEN, many years ago, delivered the wife of a respectable farmer in Essex of a well-formed female child, in which the os coccygis was prolonged into a caudal appendix about three or four inches in length tapering off, and in every respect resembling the tail of an animal, being curled up on the back when at rest, and frequently moved in other directions. The mother attributed this growth to a strong impression made on her mind during pregnancy, for three or four months of which period she had fed a young pig, the beauty of whose tail she constantly admired. Mr. Owen, by the express desire of the mother, removed it by a ligature gradually tightened for a week. The child lived (but never walked without the aid of crutches) for nine years, when she died of hæmoptysis. The parents would not allow an examination. The tail, along with a minute description, was placed in the museum of Guy's Hospital by the late Mr. Bransby Cooper.

ON THE INFLUENCE OF THE MOTHER'S HEALTH IN THE PRODUCTION OF RICKETS.

BY W. TILBURY FOX, M.D.

THE paper commenced with an analysis of the pathological changes in the rickety subject, from which it appeared that the leading feature of the disease is simply a deficiency of lime-salt in the early nutrition of the child; and the object of the paper was to point out what appeared to be a tangible cause for such a deficiency—viz. the occurrence of menstruation during the greater period of lactation. A table of examples was given, as exhibiting the matter in its several details and aspects; and in most of the cases which came under the author's observation, it was noticed that whenever mothers had freely and repeatedly menstruated during lactation, the child was rickety, unless the latter had been artificially fed with food, (such as milk), and thus furnished with bone-forming material; and the degree of rachitis appeared to be in direct ratio to the amount and degr

both as regards frequency and duration) of this condition, exceptional cases being accounted for in the fact that the mother not wholly suckling her infant. The *modus operandi* of the influence of menstruation upon the composition of the milk was discussed briefly, and though little is known upon the matter, yet it appeared, on comparing together the analyses of Simon on the one hand, and Becquerel and Vernois on the other, that the percentage of salts is much lessened in nurses who menstruate during lactation, and hence the child wholly fed upon the milk of the latter would probably become rachitic. The author thought it likely that rickets is produced in the majority of cases in this way. The paper then contained some remarks upon the use of certain kinds of food in very general use which conduced to the production or evolution of the disease—for example, Brown and Polson's, the Oswego, and the Maizena so-called corn flours, these being oftentimes merely starch, contrasting them with such as the semola of Bullock and Reynolds, which was rich in gluten or flesh-forming substance; and attention was drawn to a new preparation—the saccharated wheat-phosphates, which might take the place of sugar in the food of children, especially those who are rickety. In conclusion, the author stated that he had introduced the subject as a provocative, rather than as a certainty of opinion.

Dr. Graily Hewitt believed that there was a very general impression amongst the profession, and he thought also amongst the public at large, as to the indivisability of allowing lactation and menstruation to go on in the same individual. The theory now propounded by Dr. Tilbury Fox would give an explanation as to the reasonableness of this impression. The subject was so novel that it would hardly be expected that the Fellows of the Society could properly discuss the paper so as to do it justice. Each must observe and collect facts on which to decide *pro* or *con.* in reference to the matter. He would ask Dr. Fox one question: How are those cases to be explained where children, the subjects of rickets, do often, after being apparently successfully treated, relapse long after any evil connected with lactation has ceased to be in operation? Such relapses were, he had observed, by no means uncommon.

Dr. Gervis wished to ask the author of the paper how, on his theory, the occurrence of rickets in children wholly brought up by hand, or in children whose mothers did *not* menstruate during lactation, was to be explained? The fact also of the children of mothers who menstruate during lactation in many cases certainly not proving rickety, would appear to militate against Dr. Fox's views. Dr. Gervis was inclined to consider that the occurrence of menstruation during lactation was not *par excellence* the cause of rickets, though possibly influential in its production just so far as it proved injurious to the mother's health.

Dr. Fox, in reply, begged the Society to remember that the matter had been brought before them, not because the observations were conclusive, but for the purpose of courting inquiry. The mode of causation pointed out was not the *sole* one; for, as Dr. Graily Hewitt had observed, rickets might ensue after the weaning of the child. In this case the disease was due to, or the tendency to it worked out by, the use of foods deficient in certain constituents. So far, however, as his (Dr. Fox's) observation went, it appeared that most rickety children belonged to mothers who had menstruated during lactation; and if the paper should appear in print, the Fellows would find in the list of cases instances of rickets affecting one member only of a family, all the concomitants of the rearing of the children being the same, with the exception that the mother menstruated regularly and freely when nursing the rickety child, and then only. In reference to Dr. Druitt's remarks, it might be observed that the leading pathologists held that all that is necessary to the production of rickets is a deficiency of lime; and this conclusion seems inevitable if we glance at the intimate structure of the rickety bone, in which all the cellular components are fully developed, and in which the only unusual condition is an absence of calcareous matter. Dr. Gervis may possibly find in the exceptional cases mentioned by him, where children are not rickety, though nursed by mothers menstruating, that some such cause as artificial feeding explains the apparent contradiction. In reply to a question from the President, as to how rickets occurring during intra-uterine life could be accounted for, Dr. Fox remarked that the worst case he had met with was that of a child whose mother menstruated during pregnancy.

WESTERN MEDICAL AND SURGICAL SOCIETY.

December 19th, 1862.

A. W. Barclay, M.D., in the Chair.

ON CONTINUED FEVER, AS IT HAS APPEARED IN ST. GEORGE'S HOSPITAL DURING THE LAST SEVEN MONTHS. BY EDWARD R. HARVEY, M.D.

The author began by remarking that, since the time of Jenner, no better opportunity than the present outbreak of fever had occurred for studying its symptoms and treatment. What is fever? That no *rash* need accompany it was quite admitted, other organs manifesting its characteristics; and, as a disordered organ of the body might produce symptoms quite those of fever, great should be the care to examine those organs, otherwise a false report of the case is registered. The statistics of the Fever Hospital and of St. George's differed materially for the years 1855 and 1859. Could this be because an epidemic differs widely in different parts of the town? The *post mortem* book at St. George's showed that, from 1852 to 1861, the deaths from fever averaged 9 a year; 15 being the highest, 3 the lowest. In 1862, 16 had already died. The state of the intestines in these 16 cases had been thus: 4 cases were not examined; 3 of those that were examined had ulcerated bowels; 3 had patches of congestion, the glands being natural; 6 were healthy. One-fourth of those examined had ulcerated bowels: in the previous year it was 70 per cent. (not 25, as this year).

The symptoms of the patients of this year were the following. One of the three bodies with ulcerated intestines had no *skin-eruption;* 2 had rose-spots, going away on pressure; the 6 with healthy intestines had mulberry or measly eruption; of the 3 with patches of congestion, 2 had mulberry spots, and 1 only petechiæ. The distinction was clearly seen—mulberry eruption and healthy intestines, rose-spots and ulceration. As to the *bowels:* during life, ulceration and diarrhœa coexisted. Of those who died with ulcerated bowels, 2 had severe diarrhœa, 2 mild; in 7 the bowels were well open, in 1 costive. In the 8 cases of typhus fever, diarrhœa occurred this year both at St. George's and at the Fever Hospital, contrary to former experience. The *brain-symptoms* marked the distinction between typhus and typhoid; the mulberry eruptions always coexisted with delirium or stupor; the rose-spots and ulcerated bowels with restlessness, but no delirium.

Including the fatal ones, 58 cases of fever had been at St. George's Hospital during the last seven months; 9, or 15.5 per cent., had died, being less than 1 in 6. At the Fever Hospital, the average is about 1 in 5; whilst at St. George's during the last nine years, to the end of 1859, it has been 11.4 per cent. Of the 58 cases lately in St. George's, 41 had an eruption, 10 rose, and 31 mulberry or measly. Of those without eruption, 2 were cases of typhoid, 3 typhus, and the rest febricula. Thus there were of typhus 34 cases, of typhoid 12, and febriculæ 12. All the *typhoid* patients had confusion of thought, but no active delirium; 10 out of 12 had diarrhœa; and one-fourth of those who died had typhoid

fever. Of the typhus, in 5 the brain was clear; 11 were slightly delirious, and 18 severely so. The bowels were costive in 11, quiet in 10, relaxed in 8, and subject to diarrhœa in 5. Of the 58, 26 patients came from the neighbourhood of the hospital; 6 were affected in the hospital. In no case did a case of each type come from the same house. From May to December 1st, most cases were admitted in July, fewest in August.

The treatment, for the most part, had been simple; namely, to support the patient by beef-tea, wine, brandy, etc., as indicated, with opiate or astringent injection for the bowels, ice to the head, and opiates for the delirium, and for stupor a blister; in typhus, purgatives if needful, but with care.

Dr. Fuller's treatment differed from that of the other physicians. He gave an emetic at once, and a scruple of quinine every hour for three doses, wine and brandy if necessary; afterwards quinine, in two-grain doses every four hours. This treatment caused 6 out of 8 cases to be painfully affected by the quinine, as to deafness and more prostration; and in one case increased delirium. On an average, Dr. Fuller's patients mended on the ninth day; whilst those who had other treatment mended upon the seventh. Three of Dr. Fuller's cases were of a low, destitute class; two were assistant-nurses in the hospital; and the rest ordinary cases.

LIVERPOOL MEDICAL INSTITUTION.

December 11, 1862.

James Hakes, Esq., Vice-President, in the Chair.

Imperforate Rectum Operated on with Success. Mr. Steele related the following case. A female child, three days old, was brought to him on November 21st; and on exploring the rectum by the little finger, it was found to terminate in a *cul-de-sac* about an inch above the anal orifice. Nothing could be felt to give any indication of the presence of the gut above. The parents were very anxious that something should be done; and Mr. Steele obtained the assistance of Mr. Bickersteth, who succeeded in passing a grooved probe, without force, a considerable distance upwards towards the abdomen, and made a cautious incision with a bistoury in the direction in which the rectum would, in its natural condition, extend. This was followed by pretty free arterial hæmorrhage, but no meconium appeared. No further incision was made, and the rectum was plugged, and a compress applied. The following morning, on removing the compress and plug, Mr. Steele was delighted and surprised to observe a slight oozing of meconium; this gradually increased; and from that time, the child continued to pass its motions freely, and appeared to have completely recovered. On the fourteenth day after the operation, the child was brought again, with the information that no evacuation had appeared for five days. By means of a director carefully introduced, the bowels were relieved of a copious fluid motion, and the child has gone on quite well since.

Mr. Steele remarked that this case encouraged us to operate; and it also showed that the child ought to be watched for some time after the operation. These operations are not often successful; not one in ten recover. Another case he had had proved fatal.

Mr. Higginson said it seemed desirable, when possible, to drag down the mucous membrane to the anal orifice, and fix it there.

Mr. Steele explained that in this case it was not very near the orifice, but higher up the canal, that the malformation existed.

The Chairman said he had known a child live twelve or thirteen weeks with an imperforate anus.

Placentæ of Triplets. Dr. Grimsdale shewed a specimen of placentæ of triplets. All the three children are now alive. Two of them measured each eighteen inches in length, and the other seventeen, and they were strong children. The placentæ were by no means small; t of them were connected together, the third was qui separate.

Ovarian Tumour. Dr. Grimsdale showed a specime removed from a woman aged 28, who died on the six day from peritonitis. The tumour consisted of o large cyst, with one or two small ones near its ba The peduncle was very short, and there was a portion bowel closely adherent to that part of it that was l within the abdomen. The patient went on well for t first forty-eight hours; then the pulse began to rise, a there seemed to be great tension about the pedunc One of the pins transfixing this was removed; and the third day, the other, giving vent to pus from t lower part of the wound, which gave great relief; b the patient gradually sank. At the *post mortem* ex mination, general peritonitis was found to have tak place, and there was great purulent effusion.

Dr. Grimsdale observed that to bring forward an u successful case was an unpleasant duty; but one fro which he believed no honourable man can desist, in spi of taunts made at other societies. He believed that t instances in which unsuccessful cases are held back fro the knowledge of the profession are very rare. In th case, he attributed the fatal result to the tension on t peduncle. This had not been short enough to dete mine him to leave it in the abdomen, and not lon enough to fasten in the wound without risk of tension.

The Chairman was also of opinion that cases that h a fatal result were not often held back.

Dr. Nottingham read a case in which he had pe formed ovariotomy with success at the Liverpool Sout ern Hospital.

Mr. Fletcher said that the two cases just brough forward were very similar in many respects; and t question arose how it was that one should fail, and t other be successful. The state of the peduncle seeme to afford the only explanation. How far is it safe, a under what conditions, to leave the peduncle in the a domen. A former case, which he himself had reporte of removal of an uterine tumour, showed that metall ligatures may safely be left even in the substance of t uterus. In Dr. Grimsdale's case, the tension on t peduncle made it necessary to take out the pins; an perhaps some pus had then escaped into the peritoneu and caused the fatal result.

Mr. Steele said that in the present state of thi question, any suggestion that could at all lessen t danger of the operation was worthy of great attentio He wished to draw the notice of this society to a mod fication of the operation that had been tried with su cess some years ago at the Southern Hospital in th town by Mr. Minshull. An incision of the usual kin was made, and the sac exposed; then nothing more wa done for some days, during which time adhesions too place; the tumour was then tapped, and allowed to drai out slowly, and then, after an interval, extracted. Th case did well. Perhaps the delay might allow the part in the abdomen to accommodate themselves to th gradual shrinking of the cyst; perhaps the condition the peduncle might become modified. He thought thi was worth the attention of ovariotomists.

Mr. Higginson thought it possible to relieve the ten sion on the peduncle by introducing an India-rubbe distensible pessary, to raise the uterus towards th wound in the abdomen. With regard to Mr. Steele' case, much could not be built on one successful case in volving such an operation.

Dr. Nottingham showed that the modification allude to by Mr. Steele would add very much to the danger an the difficulties of the operation. Supposing for a mo ment that the tumour was partly fluid and partly solid and that the first incision had been made, and the prope amount of peritonitis had taken place, then we are t tap the cyst, then to wait again, and then, through th

ginal opening, which is now girt round with adhe-
a, to remove the tumour. He could imagine nothing
re dangerous or more difficult.

Dr. Gee thought that the mortality in operations of
riotomy must depend more on the condition of the
ient than on the skill of the operator. We often see
ious consequences follow slight injuries, and *vice*
sâ.

The Chairman said the mode of procedure spoken of
Mr. Steele could not facilitate the operation. As to
safety, could we hope for another successful case?

Dr. Grimsdale thought the chief danger would be
m pyæmia during the time when the cyst is left drain-
away. He thought the whole proceeding most ob-
tionable. With regard to leaving the ligatured
duncle in the abdomen in Mr. Fletcher's case, he
ly tied the vessels; whereas we should have to tie a
ge portion of tissue which must either slough or sup-
rate. If we could tie the separate vessels, and then
urn the peduncle into the abdomen, it might be well;
t he did not think it practicable.

Mr. Steele read the case he had mentioned at length
m the British Medical Journal.

Mr. Higginson asked if we could always tell on which
le the peduncle was to be found? He had met with
case where a pelvic tumour existed for some time,
d always obstructed labour; it used to become flat-
ned, and so let labour proceed. After death it was
und to be a tumour of the right ovary that had lain
the left side of the uterus, and was full of hair and
nes.

Mr. Fletcher thought the small vessels of the
duncle might be tied separately, and the peritoneal
ges of the divided peritoneal edges of the divided
duncle stitched together. Secondary hæmorrhage is a
re thing, and not much to be apprehended.

Dr. Nottingham suggested that if the peduncle be
g enough, we might cut out a triangular portion of it,
d bring the cut edges together and place them in the
und. This operation of Mr. Minshull's was said to
ve been performed in 1853, and was only recently pub-
hed. Was it from notes taken at the time, or from
emory? He thought there must be some mistake
out the case.

Mr. Steele had seen Mr. Minshull's notes of the case.

Dr. Grimsdale said, with regard to diagnosing which
ary is affected, that if the right ovary, for example, is
volved, we can push the tumour to the right side much
ore easily than from it. Out of eight cases operated
since the revival of the operation in Liverpool, five
tients have recovered and three have died.

General Butler and Dr. Warren Stone. A "re-
rned prisoner" is contributing sketches to the *Missis-
ppian* of life in New Orleans under "Butler's rule."
his last he writes:—"All the world knows old Dr.
arren Stone. He is celebrated for his great surgical
ill, as well as for his greatness of heart, independence
character, and devotion to the South. This truly
eat man was selected by Brute Butler as 'a shining
ark' upon which to cast his venom. He was accordingly
rested and brought into the presence of the tyrant.
he doctor walked up to Butler without waiting to be
ked, and said in an abrupt curt manner, 'Here I am,
eneral, and I want to know what I was arrested for.'
utler looked at the doctor from head to foot, and said
ntemptuously, 'I had you arrested because you are a
eat rebel, and the influence of such a man as you are
dangerous to the community. I shall send you to Fort
ckson to get you out of my way.' The old doctor
oked steadily into the repulsive, crooked eyes of his
cked enemy as he indignantly replied, 'Great rebel,
! You'll send me to Fort Jackson, eh! I glory in being
rebel. You can send me to Fort Jackson, and be
mned."

Correspondence.

DR. SEMPLE'S CASE.

Drs. J. and W. Bullar present their compliments to the editor of the British Medical Journal; and, in the entire belief that Dr. Semple acted "purely from conscientious motives," and as an expression "of sympathy on the part of the profession towards a most upright and conscientious member of it," they beg to second the suggestion of an anonymous correspondent of last week, and to enclose a cheque for £5 to the subscription he has suggested and commenced.

Southampton, December 25, 1862.

[The cheque received from Drs. J. and W. Bullar has been passed into the hands of the gentlemen who are making a collection for the purposes indicated in the note. Editor.]

ANÆSTHESIA IN LABOUR.

Letter from F. T. Poncia, Esq.

Sir,—Allow me to acknowledge the courtesy with which "C. de Cinq Maisons" replied, in your Journal of December 20th, to some remarks that I offered on the above subject.

He states that his own experience gives a result not in accordance with Dr. Simpson's statistics, which I quoted, since in his own obstetric practice more fatal results have followed "what might be fairly termed easy labours", than protracted, difficult, and instrumental labours. It would be futile to cite statistics showing that other practitioners have not obtained these same results, for that would not alter the facts educed from his individual experience; but, seeing that protracted and instrumental labours are the exception, I submit that the only fair way of determining the question at issue is to take the same number of ordinary cases (say a hundred) and of protracted and instrumental labours, and so ascertain whether the number of deaths to mother and child preponderate in the former or in the latter class of cases. Then it would be seen which of the two doctrines be the true one; viz., "the easier the labour, the greater the danger;" or, "the longer and more difficult the labour, the greater the danger." For my part, I conceive that the statistics of Dr. Simpson, collected from various sources, prove the latter proposition; and to these I would refer, in order to save space. I am aware that high obstetric authority of the past and present generation has sanctioned a different sentiment; that it has been asserted that "neither the violence nor the continuance of parturient pains is productive of injury to the constitution;" and again by another, that "labour pains are endured without any detriment;" but statistics yield a different result; and on these, rather than on mere dicta, I would fain base a conclusion—especially, too, when I find that writers, whose works are text-books, speak complacently of the harmlessness of labour pains in one place, and in another demonstrate that exhaustion will result from their long continuance; and that the uterus, like any other muscular structure, cannot sustain an unlimited amount of exertion. I am of opinion, therefore, that my idea of the pain and process of labour is neither exaggerated nor erroneous; that the "pangs" and "agony" of parturition have as legitimate a right to be annulled as the pain arising from a surgical operation; and, since the exhibition of chloroform does not impede the parturient process, nor prove fatal to mother or child, when *judiciously* administered, I esteem it as a boon, and its originator—Dr. Simpson—as a benefactor to humanity. The objections at present urged against its employment

are the same in substance as have ever been directed against great and important discoveries, not only in medicine, but in science generally. Prejudice, however, is doomed to die; and *mere objections* cannot withstand the evidence of facts, the test of experiment, and the force of truth.

Hoping that your correspondent will view all that I have said in a friendly spirit, and with all deference to his superior experience,

I am, etc., F. T. Poncia.

Hockley, Birmingham, December 1862.

COTTAGE HOSPITALS.

Letter from Albert Napper, Esq.

Sir,—Pray accept our acknowledgments and thanks for the favourable notice of our village hospital in the Journal of the 3rd inst. Your concluding remark, however, demands for me a reply, for the insertion of which I shall feel obliged.

As may be well supposed, in soliciting funds for the establishment of a normal institution, many little difficulties have to be encountered; and in carrying the project into execution, it is most essential to avoid the risk of failure through undue expenditure. It was with this view that I followed in the wake of the rector, to whose liberality and active assistance the hospital is mainly due for its existence, as well as to deprive it of the least pretence of having been started for my own private gain.

I have pleasure in stating that the trustees, both this and the preceding year, liberally offered to reimburse my expenses for drugs, etc. I fully appreciate the justice of your remarks; and recommend those establishing similar institutions to follow your advice, so far as regards the cost of medicines, etc.; but I more than doubt the propriety of medical officers to public charities receiving salaries for their services; which would not only endanger their tenure of office by making it one of competition, but would destroy the independence and freedom of action so essential to a due performance of their duties.

There is, however, a class of men, for the most part retired practitioners, who, in the prostituted name of charity, give advice gratis to the families of substantial tradesmen, farmers, aye, and even gentlemen, who are well able to pay the usual compensation to the practitioner of the neighbourhood. To these your strictures cannot be too strongly applied; and I am sure I may venture, in the name of the general practitioners, to thank you for your endeavour to mitigate the evil.

I am, etc., Albert Napper.

Cranley, near Guildford, January 6, 1863.

A Teetotal Confederate, General Stuart. There have been many English officers, particularly in the East Indian service, whose endurance in the saddle has been regarded as unequalled, but I doubt whether any Englishman ever exhibited such superiority to bodily fatigue as is almost nightly evinced by the gay cavalier who knows every hospitable roof within a dozen miles of his headquarters (and what roof is not hospitable?), and, accompanied by his banjoplayer, visits them by turns night after night, returning usually to his hard-earned rest long after the midnight hour has flown. With the earliest dawn of morning, the first voice, calling gaily for breakfast, is that of the midnight merrymaker, who rises the picture of health, good-humour, and strength. It may be noticed *en passant* that to the circumstance that he has never touched tobacco in any form, or any wine or other liquor, General Stuart attributes much of his health and vigour.

Medical News.

Apothecaries' Hall. On January 1st, the following Licentiates were admitted:—

Churton, Thomas, Poole, near Otley
Hope, Edmund, Eastern Dispensary, Leman St., Whitechapel
Sargent, George Pearse, Albany Road, Walworth

At the same Court, the following passed the first examination:—

Stubbs, Henry, General Hospital, Birmingham

APPOINTMENTS.

Borthwick, Alexander, M.D., appointed Consulting Physician to the Crichton Institution, Dumfries, in the room of the late James Grieve, M.D.

Clarke, Alfred, Esq., appointed Medical Attendant to the Gloucester Municipal Charities, in the room of the late W. M. Meyler, Esq.

Dickson, John, M.D., appointed Physician to the Dumfries and Galloway Royal Infirmary, in the room of the late J. Grieve, M.D.

Poor-Law Medical Service.

Bothwell, George G., Esq., Medical Officer for the Rathmelton District of the Milford Union, county Donegal.

Hunter, Charles, Esq., Medical Officer to the Aberlemno District and Forfar Workhouse.

Jeynes, William, Esq., Medical Officer to the East Croydon District of the Croydon Union.

Lansdown, Joseph R., L.R.C.P.Ed., Medical Officer to Workhouse and District No. 1 of the Newcastle-under-Lyne Union.

Royal Navy.

Bolster, George, Esq., Assistant-Surgeon, to the *Egmont*.
Borrows, Robert, M.D., Surgeon, to the *Ariel*.
Rolston, George, Esq., Assistant-Surgeon, to the *Egmont*.
Willes, George J., Esq., Surgeon, to the *Egmont*.
Wilson, Daniel, Esq., Surgeon, to the *Osprey*.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Stephenson, J., M.D., to be Surgeon 1st Norfolk A.V.

To be Honorary Assistant-Surgeon:—

Walker, H., Esq., 15th Staffordshire R.V.

MARRIAGE.

Barber, Henry, M.D., of Ulverstone, Lancashire, to Frances, daughter of George Stunt, Esq., of Tottenham, London, on January 5th, at Holy Trinity Church, Tottenham.

DEATHS.

Braun, Carl, M.D., at Wiesbaden, on December 9, 1862.
Cadenhead, John, M.D., at Aberdeen, aged 64, on Dec. 31st, 1862.
Chase. On December 29th, 1862, at Tottenham, Sarah, widow of Edward Chase, Esq., Surgeon, of Luton.
Cooper, James, Esq., Surgeon, at Liverpool, aged 60, on Jan. 6.
Harris. On December 20th, 1862, at Wandsworth, aged 2 years and 10 months, Ida F. E, daughter of William Harris, Esq., Surgeon.
Rymer. On December 30th, 1862, at Ramsgate, aged 68, Elizabeth, wife of James Rymer, Esq., Surgeon.

Another Medical Coroner. Mr. J. S. Davies has been elected by the Town Council of Shrewsbury, coroner for the borough.

Westminster Hospital. Mrs. Chadwick (whose late husband made a munificent donation to the Westminster Hospital), has invested £700 in consols, to produce an annual sum of £21, which is to be given in prizes to students. The following resolution has been passed by the lecturers, in whose names the sum is vested:—"The lecturers of the Westminster Hospital School of Medicine, desire to convey to Mrs. Chadwick the expression of their deep obligation to her for the munificent endowment she has made for the purpose of promoting the education of the students of the medical school. They entertain a firm belief that the rewards offered by this endowment to industry and intelligence, will afford the most efficient means for stimulating the best energies of those who are being educated at the hospital for the medical profession."

Wounds in Battle. The medical report of the wounded in Reynold's corps, Gibbons's division, at Fredericksburg, gives an account of 859 cases. No less than 498 were hit in the leg or foot, 45 in the hips, 10 in the abdomen, 42 in the chest, 48 in the head and neck, 145 in the arm or shoulder, 61 in the hand and forearm, and 10 contrived somehow to get shot in the back. Chloroform was administered to 186 with complete success.

Strychnine Poisoning. A man named Heimsath, in the employment of Messrs. Hopkins and Williams, wholesale druggists, of New Cavendish Street, has died from poisoning by strychnine. On Christmas-eve he and three of his fellow-servants had some beer at their place of employment, and a quantity of it being left, it was put by one of the men into a glass bottle. On the Friday following Heimsath drank some of the beer, immediately fell on the floor in convulsions, and shortly afterwards died. A *post mortem* examination showed that death had been caused by strychnine; and on the beer in the bottle being analysed, it was found to contain a large quantity of that poison. There was some suspicion of foul treatment. The jury at the inquest on the body returned an open verdict.

Pathological Society of London. The seventeenth annual meeting of this society was held on January 6th. The Council reported that the career of the society continued to be marked by unabated prosperity. Notwithstanding circumstances, the influence of which had tended in some degree to limit the rapid rate of progress which the Society had maintained since its origin in 1846, its numerical strength had never been greater than at the present time. The interest of the meetings had rather increased than otherwise; and the supply of valuable preparations, not only from our own country, but from abroad, had never been at any previous period surpassed. The financial statement exhibited a balance in the hands of the treasurer of £187 : 18 : 5½. A portion of this will be added, according to the usual custom, to the Society's funded property, which now amounts to £129 : 6 : 7. The following officers and council were elected for the ensuing year:—*President*, Prescott G. Hewett, Esq.; *Vice-Presidents*—W. Jenner, M.D.; Sir John Liddell, M.D., C.B., F.R.S.; A. B. Garrod, M.D., F.R.S.; G. Johnson, M.D.; Wm. Coulson, Esq.; J. E. Erichsen, Esq.; John Hilton, Esq.; G. D. Pollock, Esq. *Treasurer*—R. Quain, M.D. *Council*—T. A. Barker, M.D.; G. Budd, M.D., F.R.S.; A. Clark, M.D.; W. D. Chowne, M.D.; G. Harley, M.D.; S. J. Goodfellow, M.D.; T. W. Ogle, M.D.; J. E. Pollock, M.D.; G. D. Gibb, M.D.; R. Barwell, Esq.; B. E. Brodhurst, Esq.; W. White Cooper, Esq.; W. H. Flower, Esq.; J. G. Forbes, Esq.; T. Holmes, Esq.; J. Pyle, Esq.; S. J. A. Salter, Esq.; T. Bryant, Esq.; J. W. Hulke, Esq.; E. Ray, Esq. *Honorary Secretaries*, J. S. Bristowe, M.D.; Henry Thompson, Esq.

Irish Medical Association. The Irish Medical Association held a meeting last week, at the Limerick Junction Hotel, to consider matters which Dr. Jacob, of Maryborough, their chairman, said, "were of vast importance to the public generally, as well as to their own profession in particular." The subject which he wished to bring under their notice was the registration of births and deaths in Ireland. At present no legal provision was made for such registration, and consequently the vital statistics of the country are very imperfect. Besides the chairman, the president of the College of Surgeons, Dr. Mackesy, Dr. Harvey, Dr. Ryan, Dr. Elliott, and many others addressed the meeting, in order to prove that only highly qualified medical practitioners were fit to preside over the collection and arrangement of those vital statistics, and that only in such hands could there be a safe and trustworthy registration. The meeting was quite unanimous on these matters. They also complained of the paltry remuneration granted to medical officers for their important and laborious services, and resolved to get a more suitable recognition of the value of their services. They agreed that the *minimum* salary of a dispensary medical officer should be £100 a year.

A Mild December. Mr. T. L. Plant of Birmingham writes to the *Times*: "The month just closing has been so remarkably mild that a few particulars, compared with former seasons, may be interesting to some of your readers. On the morning of the 22nd the *minimum* register stood at 29°, which was the only occasion when the temperature declined below freezing point. This is extraordinary for December. The following are the mean values of temperature for this month for the last four years, compared with the average for ten years:—December mean temperature.—1859, 34°; 1860, 34°; 1861, 38°; 1862, 43°; average of ten years, 36°. It will thus be seen that the present month commanded a mean of seven degrees over the average for December from ten years observations. December 1837, was mild. Frost set in on the 1st of January following, and lasted eight weeks. The Thames was partially frozen over. December 1854, was also mild, and frost commenced on the 16th of January and continued five weeks. The Severn was frozen over at Worcester, and the Thames was again partially frozen over. Both the above seasons were remarkable for weather of a similar character to the present month before the frost commenced—namely, open, mild, and with frequent high winds."

Pollution of the Thames. The medical officers of heath of the metropolis met lately to consider a proposal of the engineer of the Metropolitan Board of Works to discharge the sewage of the western district of the metropolis into the Thames near Cremorne Gardens; Dr. Thompson of Marylebone in the chair. Dr. Burge of Fulham read an elaborate report on the subject, whereby it appeared that the Metropolitan Board intends to deodorise the sewage of the metropolis west of the Ranelagh sewer, and afterwards to discharge the same into the river near Cremorne. The area extends seven miles west of Chelsea Hospital, as far as Brentford, embracing one-third of the metropolitan area, and one of the most increasing in population. In the opinion of Dr. Burge and various eminent scientific men, quoted by him, the discharge of such a large amount of poisonous matter into the river would have a most deleterious effect upon the metropolitan population. Dr. Thomson read a report of a preparatory committee convened to consider the question, showing that the area included twenty-one square miles and a half, or one eleventh part of the metropolitan sewage, amounting to about 10,000,000 gallons daily, which would be collected into a reservoir two acres in extent, near Cremorne, for deodorisation, previous to discharge into the river, by perchloride of iron. The committee considered the perchloride of iron was useful only in the reservoir itself, and not as tending in any way to disinfect the river. The meeting, on the motion of Dr. Liddle and Dr. Aldis, adopted the report, which was entered on the minutes. Dr. Burge moved, "That, in the opinion of the Association of Medical Officers, the proposed deodorisation of the sewage of the western district of the metropolis, and its subsequent discharge into the River Thames, will be ineffectual in its operation, pernicious in its effect upon the river, and subversive of the principle upon which the interceptive scheme was originally based." The motion was carried, and a copy directed to be forwarded to all the vestries and local boards. It was also agreed that a deputation of the Association wait upon the Metropolitan Board to oppose the proposed scheme.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion. Mr. Bishop, "On the Artificial Hand of Seigr. Gallegos"; and other Cases.—Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. John Dix (of Hull), "On the Wire Compress, a substitute for the Ligature"; Dr. A. B. Buchanan (of Glasgow), "Case of White Fibro-Serous Discharge from the Thigh."—Zoological.

WEDNESDAY. Microscopical.—Society of Arts.—North London Medical.

THURSDAY. Royal.—Antiquarian.—Linnæan.—Chemical.—Harveian.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M. Mr. Jones, "Some Points in connection with Cerebral Hæmorrhage."

SATURDAY. Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JANUARY 3, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	{ Boys..1099 / Girls..1047 }	2146	1553
Average of corresponding weeks 1853-62		1918	1454

Barometer:
Highest (Wed.) 30.011; lowest (Mon.) 29.348; mean, 29.607.

Thermometer:
Highest in sun—extremes (Sun.) 78.5 degs.; (Sat.) 52 degs.
In shade—highest (Th.) 52.3 degs.; lowest (Wed.) 33.5 degs.
Mean—43.8 degrees; difference from mean of 43 yrs.+6.9 degs.
Range—during week, 18.8 degrees; mean daily, 8.3 degrees.
Mean humidity of air (*saturation*=100), 89.
Mean direction of wind, S.W. & N.W.—Rain in inches, 0.57.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. MAYNE AND Dr. FOWLER.—SIR: On a suggestion, that notification should have been made in the journals of the reference, to professional gentlemen, of the dispute between Dr. Robert Fowler and me having been entered into, I beg leave to state that Dr. T. B. Peacock, 20, Finsbury Circus, has been named by Dr. Fowler as his referee; and Dr. A. Meadows, 9, Cavendish Place, Cavendish Square, has kindly consented to act as such for

Leeds, Jan. 6th, 1863. Yours, etc., R. G. MAYNE.

MR. LOCKE.—The late celebrated engineer was a strong opponent of the Netley Hospital. In a review of his life, we read as follows:—"His opposition to the Netley Hospital job was tenacious, though not very effectual."

AN APPEAL.—SIR: I would venture through your columns to make an appeal to the medical profession on behalf of the widow of the late Mr. Henry Baker Armstrong, of Pembridge, Herefordshire, and Fryers Town, Australia. Mrs. Armstrong has just returned from Australia, where her husband died, leaving her destitute, with three small children. Her passage home was paid by several of the residents and medical men on the Bendigo district. She is anxious to obtain a situation as mistress of a school, or to engage in some way of business. Having known her late husband and Mrs. Armstrong, both in Australia and in England, I can recommend the case to the profession and to the public. There may be some of Mr. Armstrong's friends who knew him at Bartholomew's Hospital. May I ask them to send some donations for the benefit of his widow and children? J. Paget, Esq., of Bartholomew's, and Joseph Toynbee, Esq., both knew the case, and will, I am sure, recommend it. I shall be very happy to give further, and, if necessary, more minute and painful particulars, by letter, to any inquirer; and will also gladly receive and acknowledge subscriptions, large or small, for Mrs. Armstrong.

I am, etc., J. C. DENNY,

Dec. 31st, 1862. Senior Curate of Wellington, Salop.

ANÆSTHESIA IN FEMALE DISEASES.—SIR: Several correspondents of late have addressed the JOURNAL as to the necessity of an inquiry into the usefulness of chloroform in female diseases and midwifery: but there is scarcely one department of practice in which the report of the use of anæsthetics is so favourable, or the advantage so generally acknowledged. The late outburst of cases of ovariotomy has been indirectly due to the soothing and beneficial assistance of anæsthetic agents; for we cannot believe that, if we had no chloroform, poor women would submit to this truly terrible cutting and mutilating operation. I am anxious at present to say that, having administered chloroform or ether in something like thirty of these cases, and having studied its action in another large number, I have been remarkably struck with the "law of tolerance" of chloroform in ovariotomy. One is sometimes asked if in such cases chloroform is to be recommended. I believe this very remarkable tolerance is partly due to the fact that there is very little hæmorrhage in ovariotomy; and, I know now from experience, that there is not much, if any, tendency to syncope in the tapping the ovarian cyst (the early part of the operation), as was at one time so strongly laid down in books, and still believed to follow the tapping of ascites. I find that some persons shake their heads at chloroform, from fear of this tapping or syncope of books; but the dread is purely ideal; and if asked if I recommend chloroform in ovariotomy, I usually say, I do so with more probability of safety than in a minor or trivial operation, such as tooth-drawing. At any rate, one can seldom go wrong as to syncope, if he has some ether also near him when using the chloroform, and administers them alternately. The ether, I find, acts very well in preventing faintness or syncope. With regard to the formula of tartarised antimony of Mr. de Cinq Maisons, as he admits his experience is limited as to chloroform, I would offer him a hint; viz., never to go from tartarised antimony to chloroform too quickly, or he may have syncope—in midwifery, a rather alarming thing, if one is administering chloroform with one hand to a poor woman, usually the left, and supporting the perinæum, as the child is entering the world, with the right. I would only say further, that there is probably not a single well attested fatal accident from chloroform in midwifery.

I am, etc., CHARLES KIDD, M.D.

25, Sackville Street, December 23rd, 1862.

P. S.—The cost of the last volume of the Pathological Society's *Transactions* was increased in consequence of the American war. The binding of each volume was this year dearer in consequence of the rise in the price of cotton.

COMMUNICATIONS have been received from:—Mr. ERASMUS WILSON; Dr. P. M. LATHAM; Mr. A. B. STEELE; THE HONORARY SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; Mr. A. NAPPER; Dr. TOOGOOD; Mr. W. WEBBER; Dr. T. K. CHAMBERS; Dr. LIONEL BEALE; Mr. F. T. PONCIA; THE HON. SEC. OF THE ROYAL MED. AND CHIR. SOCIETY; Mr. J. VOSS SOLOMON: Mr. W. M. BAKER; Mr. PAGET; Mr. E. WRIGHT; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. HENRY BARBER; Dr. MAYNE; Mr. R. W. COE; Mr. W. W. HOWARD; Mr. A. RANSOME; Dr. G. WYSE; Dr. H. MARSHALL; Mr. THOMAS HORNBY; Mr. COOPER; Dr. E. A. PARKES; Dr. J. W. OGLE; Mr. E. BARTLEET; JUDEX; Mr. F. DUNN; EN!; Mr. W. BAKER; Mr. H. THOMPSON; Dr. SKINNER; Mr. G. KING; Dr. DAY; and Mr. T. M. STONE.

General Remarks
ON THE
PRACTICE OF MEDICINE.

BY
P. M. LATHAM, M.D.

THE HEART AND ITS AFFECTIONS, NOT ORGANIC. (*Continued.*)

III.—*The Frequent Pulse at its Highest Degree of Significance. Cases.*

THERE are things which, as they ordinarily present themselves in nature, are so beset with collaterals that, but for their sometimes appearing in simple forms, they could never be fairly understood. Such, among the symptoms of disease, is often the frequent pulse. It is one of a crowd, and is lost in a crowd. It is not duly attended to among many as urgent and as pressing for notice as itself. But then it sometimes stands almost or altogether alone. There is the disease; and all that can be reckoned as belonging to it in the nature of a symptom, all that can serve to direct its treatment and prognosticate its event, is a very rapid pulse.

Such cases are rare; but still they occur often enough to afford us opportunities of seeing and noting this symptom of the frequent pulse in its simplest, its most elementary, and yet most prominent form, and the fittest and best to develope its true pathological meaning.

I was called one Friday, at midnight, to visit a young married lady, aged 21, whose state had given just alarm to her medical attendants. Her pulse was too rapid to be counted, and so feeble that it could only just be felt. She made no complaint of pain; and no questioning, no examination by pressure of the abdomen especially, could elicit the least expression of it. The abdomen was soft, and very slightly distended. The tongue was quite clear and moist; the extremities quite warm. Moreover, there was perfect consciousness; and she expressed surprise at the apparent anxiety of those around her.

Here the only present symptom was the pulse countless from rapidity, and scarcely perceptible from feebleness. But there had been another symptom. On the previous Wednesday, at 3 P.M., suddenly and without warning, there had been a long and severe rigor. No reaction followed, when it passed away; the pulse became extraordinarily rapid and feeble, and it had so continued ever since.

At 10 A.M. the next day (Saturday), the state of things was still the same, except that the abdomen had become flattened in consequence of evacuations which had taken place in the course of the night. There was still no positive symptom, but the pulse most rapid and feeble. At 10 P.M. this symptom no longer remained. The pulse was imperceptible at the wrist. The hands were cold. Consciousness remained, and even intelligence; and there was evidently no feeling on the part of the patient that she was going to die. She died in the night; I did not learn at what time.

Observe: of this rapidly fatal disease (if disease it was) there were only two symptoms—the long and severe rigor, and the rapid, feeble pulse. But they were not, either one or the other, symptoms in the strict pathognomonic sense, being common to twenty diseases different in kind, and diagnostic of none. But symptoms they were, and both alike, of things incident to all diseases, and terrible when they occur. The inceptive rigor denoted the shock suddenly given to the powers of life; and the countless feeble flutterings of the heart, which followed it, denoted their surrender.

Now, as to the nature of the disease in this case, we must seek it in things prior to the inceptive rigor, since it certainly did not appear in what occurred afterwards. This lady had been confined eight days. The labour was favourable. But the placenta was retained, and had to be torn away. Still she had gone on favourably in every respect until the rigor. There was nothing more to be told of previous history; and this, and experience of the like, were enough to show the nature of the disease, and that it was puerperal fever. But shall I say "that it was", or rather "that it would have been?" The morbid element was taken up, and became a quick-working poison to the powers of life. The disease had either only just emerged and was cut short, or it never emerged at all. The disease, so to speak, killed itself; it killed itself in the birth. Its first impression was a fatal shock; and there followed, not the symptoms proper to its own nature, but the one symptom of coming death—this countless fluttering of the heart.

I was suddenly summoned to a lady, about 40 years of age, who was to all appearance brought at once within the grasp of death. She was pale and cold, and her lips were livid; and her pulse was of a countless frequency, and just perceptible, and no more. Her mind was clear; and she could just be heard to whisper a few articulate words, telling me that she saw all things in a mist, and did not well distinguish one object from another; and that she seemed as if she were going to be suffocated. This looked awfully like dying. And into this condition she had passed in the course of two hours.

I had no other expectation than that she would die immediately. But hour after hour passed away, and she still lived. Days and nights, even five days and five nights, between Tuesday and Sunday, passed away, and she still lived. She lived, but without the slightest appearance of rallying, and without the least token of any positive disease. The countless, scarcely perceptible pulse, comprised all the symptoms. Brandy, ammonia, ether, anything and all things that could stimulate, were given (for the power of swallowing remained), every ten, or every five, or every three or two minutes, night and day. But they produced no reaction. They kept the heart just moving, and that was all. The pulse was sometimes perceptible, and sometimes not; and several times, when it was actually gone, and all was over, as it seemed, life and a pulse were brought back again by a larger supply of brandy.

After five days and five nights thus spent, a change took place; and it was all at once. It was within a certain half-hour. As I sat by her bedside, I found her pulse had for the first time become dis-

tinct enough to allow me to count it. Instead of a confused flutter, it gave 120 distinguishable beats in a minute. It continued perceptibly constant to this number for one half-hour, without the help of brandy. Presently what was dusky became red, what was cold became warm; and so much of reaction brought so much of hope.

But how did this frightful mystery end? How did it clear itself up? The tongue became red, then intensely red, then papillated; and then a rash diffused itself over the neck and chest, then over the whole body. And all was consummated in a regular attack of scarlatina, which went through its course without any unusual or unfavourable incident, and the patient got well.

In the first of these two cases, there was the highest presumption *à priori* (perhaps the proof), that the puerperal poison had gained access to the blood, and had entered into deadly conflict with the powers of life. Had the conflict been less than deadly, it would have had its natural issue in some authentic form of puerperal fever, which would have had its own perils. In the second case, there was the positive proof, *à posteriori*, that the scarlatina poison, gaining access to the blood, did for five days and five nights keep up an all but deadly conflict with the powers of life. But life holding out, the disease appeared as the natural consummation at last.

Now these two cases have the force of crucial instances. They are experiments of Nature's own contriving, and exclude all fallacy in the result. They prove the true significance of the frequent pulse; viz., that it is not a thing of disease as belonging to its essence, but a thing of disease and of all that concerns disease only as being a sign and a measure of the degree in which life and the powers of life are then brought to feel and to suffer, and to languish and fail. And this is the interpretation which the frequent pulse will be found to bear in the whole range of diseases in which it occurs, and in all the conditions, few or many, simple or complex, with which it is combined.

Further Commentary on the Foregoing Cases.

But, in these two remarkable cases, everything was uncommon and extreme. They furnished full-drawn representations of the rapid pulse, and, as such, well suited for studying its meaning; not, however, *exaggerated* representations, but strictly those which Nature offered. Yet it is startling to be told that the meaning found to belong to the rapid pulse in these two cases is the same *in kind* which it has in all diseases whatever. The difference between great and small, or of mere magnitude, in things of the same kind, is often so considerable, that practically it is difficult to look upon them and believe them to be of the same kind in fact. But, in the things pertaining to diseases, identity of kind, when it is real, ought to be carefully preserved, for the sake of doctrine and of truth. Mere magnitude, however, forces itself into notice. And so it ought; for life and death continually depend upon it, and it cannot be ignored with safety to practice.

In the two cases which have been cited, we have spoken of *life* and the *powers* of life, and of the rapid fluttering pulse bearing sole and infallible witness to their utter prostration and failure. But these expressions denote the truth popularly, rather than pathologically. Nevertheless, they *do* denote it. Still they are expressions which, being employed about diseases, are suited only to things of the greatest magnitude in their kind. Accordingly, it would be too much to speak of *life* and the *powers* of *life* being reached and implicated in every case of disease wherein the pulse was frequent beyond the standard of health. But it would be neither too much nor beyond the truth to speak of something being reached and implicated which holds peculiar relations with life—something, belonging to our organisation, which communes with life more nearly and at once than through the circle of our grosser and more intelligible functions. And this is the nervous system.

Now the nervous system has the heart for its gnomon or finger of the clock. This notes, by the rate of its movement, the various degrees in which the nervous system is affected, from the least to the greatest. It is the greatest which must still engage our attention, and the rapid pulse the index of them. And the cases which have been just cited will help to explain them. To press the language of our analogy a little further, for the sake of illustration, we have already seen in these two cases the index hurrying rapidly round the dial-plate, and telling that, from some cause or other, the mechanism within was running down, and, if it were not arrested, that it would quickly stop. Even prior to any outward presentments to give assurance of disease, even earlier than its known beginning, we have seen the countless fluttering of the heart and arteries give token of the nervous system already under trial of mortal suffering, and ready to let life go for ever. But there is no reason in the nature of things (as far as I know) why a morbid poison, or any other element of disease, should not affect the nervous system soonest of all, and sooner than the blood and blood-vessels, to which it properly belongs to work out disease into its cognisable products and realities. Only experience says that it is rare, very rare.

Frequent Pulse still at a very high Degree of Significance. To what Conditions of Disease it belongs.

Not until disease is shaped and realised into something which can be seen or heard or touched, and can be called by a name, is it wont to engage the nervous system perilously; and should the particular disease, according to its nature, have to go through a stated course to a certain end, and so admit a probable measure of its duration, it will not commonly be until towards its decline that extreme peril to life is indexed by extreme frequency of the pulse. But the time is often anticipated. This sign of fearful significance—this countless fluttering of the pulse—may break in upon the disease at any stage of its progress, either early, even very early, or in its midcourse. And when it does, some notable thing has often preceded it, well capable of giving a shock to the nervous system. Sometimes a sudden profuse diarrhœa has been enough to account for it; sometimes a hæmorrhage; sometimes an unhappy error of treatment by larger depletion than the patient could bear; sometimes pain—severe, long, uninterrupted pain; sometimes loss of sleep; sometimes the solution of some organic texture within, as the rupture and perforation of a bowel. Sometimes, however, and oftenest, nothing incidental or casual

can be found to bear the blame, but only the malignant nature of the disease itself.

Still there is a hope for these cases; but it is small. Yet small hope is made much of by the hopeful, and often serves them for a great encouragement. And so it must and had need do now, or there will be no saving of life.

And there is a treatment of these cases. Death is inevitable, if they are left to themselves. None ever recovered but by known, palpable, and adequate means. The treatment is simple enough. A single symptom has absorbed all other indications of treatment into itself, and remains our sole infallible guide what to do. The countless fluttering pulse now stands for everything. Watch must be kept upon it and its meaning. And its meaning is, that the nervous system is ready to sink into death. Accordingly, stimulus is to be given so *often* and so *much* as will keep it going and prevent it from coming to a stop. All this is simple enough in the telling. I wish it were so in the doing. As much, perhaps, has been told as can be told. But the "how often" and the "how much" are the things upon which life now hangs, and a judgment has to be exercised upon them every hour or many times every hour. Therefore the sick man has a poor chance, unless he can now have the services of one intelligent nurse at least entirely to himself. To have also one intelligent physician constantly within reach would not be at all beyond his needs. But it is useless to insist upon what is generally impracticable. Nevertheless, many cases within my experience, in which life has been rescued contrary to all probable calculation, have had this unspeakable advantage; and some of them have occurred in the family of physicians.

But be it borne in mind that we have now to do with a part only of a very great subject. The nervous system, and its actings and sufferings under disease, this is the great subject; and our small part of it is the frequent pulse. Nevertheless, small though it be, it is the part which especially offers itself as a handle to the whole. The part, by which we can best lay hold of it, and apprehend it, and study it, and turn our little knowledge of it to practical uses and benefit.

I wish still to keep hold of this handle that I may show the share the nervous system has in the graver diseases, and how it often determines their form, their course, and their event.

It is only in the most chronic diseases that the nervous system does not sensibly participate. All which show an appreciable progress from day to day; all to which fever in any measure belongs, either essentially or as an accident; these cannot exist without the nervous system feeling them and showing that it feels them. Now, almost all such diseases have, in respect of their essence, a due course to run and an end to reach. Phlebitis has its mixture of pus with the blood, and its deposit in abscesses within and without; erysipelas has its diffused redness and swelling; scarlatina one form of rash, and measles another; small-pox has its pustules; typhus has its petechial maculæ of the skin, and the typhoid malady has its tumescence and ulcers and sloughs of the intestinal glands. And these several conditions represent the essence of the several diseases, and show it to be different in each. But there are other things belonging to them all in common, which have great force in guiding their treatment and ruling all concerning them. It is, indeed, by the essential element of these diseases, and by its mode of working, whether diffused through the veins, or collected in abscesses, or sprinkled over the skin, or scattered through the bowels, that each fulfils its course and accomplishes its end. But it is the great vascular system and the great nervous system that are most conspicuously engaged, and acting, and suffering all the time and in all of them, and the sum of their acting and suffering is called fever. The number of the pulse is our chief handle for apprehending the part specially borne by the nervous system.

If the fever be small, with moderate sympathy of the nervous system, there will be moderate frequency of the pulse, with moderate increase of its power, and thus much is natural and perhaps needful. If the fever be greater, with more sympathy of the nervous system, the pulse will rise both in frequency and force. And still all is natural and all is in harmony.

But, as the sympathy of the nervous system continues to increase, and the frequency of the pulse to increase along with it, anxiety begins to arise; yet the strength of the pulse will still be the vital safeguard. Let, however, the sympathy of the nervous system increase more and more, and the number of the pulse run on to greater and greater frequency, then assuredly its strength will languish; and if the balance be not soon redressed, it will become a countless fluttering. And to such extremity is the man now reduced, that this countless fluttering of the pulse will represent all that is vital in him, and all that can be treated in the disease. Gradually or abruptly, in any of the diseases mentioned, this may become the condition of the patient. It is often witnessed in the typhus and typhoid fevers of late years.

This deadly sinking of the nervous system, represented by the countless fluttering of the pulse, this most terrible incident of febrile diseases; coming on at their beginning, or middle, or end, sometimes abruptly, sometimes gradually, not absolutely hopeless, and not absolutely beyond reach of a remedy, deserves to have all told of it that observation has learnt. Well, then, having once begun, it may continue many days or nights (three or four) uninterruptedly. And during all that time, the pulse will continue countless and almost imperceptible; abating nothing of its frequency and gaining nothing of power for all the wine and spirits administered, but only just kept going and prevented from coming to a standstill. And thus the quantity even of spirits given in twenty-four hours has amounted to pints. And after these three or four fearful days and nights, the pulse may become of a calculable number again and of an appreciable power, and maintain itself at the less number and the greater power with a less amount of stimulus, and henceforth the disease will pursue its course exempt from the alarm of this particular symptom, which is the sure expression of the nervous system collapsing into death. But that the pulse should go on fluttering, and the nervous system go on collapsing into actual death, is the more common event.

Or this terrible incident of febrile diseases may occur after a different manner. The pulse will be countless and fluttering for a few hours, and then, under the use of stimulus, it will recover power and a

calculable number for a few hours ; and then become countless and fluttering again. And after the nervous system has thus gone on to sink and to rally alternately for a few days, it will rally permanently, and the pulse become slower and steadier, and the disease will proceed free from this peculiar peril. But more often the nervous system will sink irrecoverably, and the pulse flutter and flutter on, and the patient die.

There is a very curious and interesting circumstance well worth our notice, to which my observation, if it do not deceive me, has often borne witness as a matter of fact. It is that the nervous system having reached the degree of collapse, indexed by the countless fluttering pulse, carries with it the pathological consequence of suspending for the time the course of the disease. Whatever be the disease which it attends, whether scarlatina, or measles, or erysipelas, or small-pox, and whatever be the stage it has reached, at that stage it will stop, and all specific morbid actions come to a suspense and standstill ; perhaps to be resumed, perhaps not. To be resumed, when (if ever) the pulse comes within some clearly calculable number, and remains steadily within it, notifying the steady recovery of the nervous system. Not to be resumed, if the pulse goes on fluttering, although many days have yet to pass before the nervous system has collapsed into death. It is curious how disease thus under the all-subduing constraint of the nervous system, and halting for one, two, three, or four days, will, when that constraint is taken off, take up its course again from the stage at which it was arrested, and duly proceed to its end.

What took place in the remarkable case before cited is a specimen of the same thing in kind as that which now engages our attention ; only there the disease was latent in its state of incubation ; here the disease is manifest and already formed. There the disease had not yet begun, and the failing nervous system still withheld it from beginning during several days ; here the disease being already formed, the failing nervous system withholds it from proceeding during several days.

Milk. Milk has been so often analysed, that it would seem no further facts could be elicited regarding this important liquid. Professor Boedecker, however, has just completed a series of experiments conducted on quite a new principle. The question he proposed to himself was whether milk obtained at any hour of the day always presented the same chemical composition or not; and he has arrived at the result that the milk of the evening is richer by 3 per cent. than that of the morning, the latter containing only 10 per cent. of solid matter, and the former 13 per cent. On the other hand, the water contained in milk diminishes by 3 per cent. in the course of the day ; in the morning it contains 89 per cent. of water, and only 86 per cent. in the evening. The fatty particles increase gradually as the day wears on. In the morning they amount to 2·17 per cent. ; at noon, to 2·63, and in the evening to 3·42 per cent. This circumstance, if true, would be very important in a practical point of view. Let us suppose a kilogramme of milk to yield only the sixth part of its weight of butter; then the milk of the evening may yield double that quantity. The caseous particles are also more abundant in the evening than in the morning—from 2·24 they increase to 2·70 per cent., but the quantity of albumen diminishes from 0·44 to 0·31. The serum is less abundant at midnight than at noon, being 4·19 per cent. in the former case and 4·72 in the last.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

DISEASE OF THE EYELID IN CHILDREN.

Under the care of J. Vose Solomon, Esq., F.R.C.S.

Case I. *Phlegmonous Inflammation of the Eyelids, excited by Alveolar Irritation.* An Irish girl, 2½ years of age, came under the care of Mr. Solomon, on the 18th of November, 1852, with phlegmonous inflammation of the left eyelids ; they were red, tense, and very tumid. The conjunctiva, of a bright red colour, afforded a discharge of purulent colour. The cheek on the same side was swelled. On examination of the mouth, the right canine tooth was found just above, and the left nearly through, the gum, which was much inflamed. The two upper incisors were carious; and, on taking hold of the left one with a pair of forceps, it proved to be loose, and from its side (fang ?) a quantity of pus was discharged. This examination indicated the nature of the case, and the treatment of the alveolar abscess by removal of the dead and loose bone.

Several points of practical and physiological interest are presented by the above narrative. It shows the importance of examining the mouth where the cause of an ophthalmic disease is not apparent. The cases are by no means very exceptional where irritation of the dental branches of the fifth pair has, by reflex action, caused retinal blindness, or paralysis of the motor oculi nerve, with its attendant vertigo, diplopia, inability to judge of the distance of objects, and consequent uncertainty in the walk of the patient while both eyes are maintained open. When investigating such cases, we must not allow the absence of pain in a carious tooth to deceive us; as, although it may never have ached, yet, according to Mr. Solomon's experience, it may be the sole cause of reflex mischief.

As to whether the phlegmonous inflammation of the lids and the purulent conjunctivitis were referrible to reflex action, or to the extension of inflammation by the continuity of a mucous surface, is a fair question for debate. The reporter is disposed to refer the symptoms to the former.

Another point deserving of notice is the late period to which the projection through the gum of the canine teeth was delayed ; namely, the *thirtieth* month of the patient's age. Bell fixes their eruption as occurring between the sixteenth and twentieth month ; Hunter, so late as from the twentieth to the twenty-fourth ; and Tomes, at from the sixteenth to the twentieth month.

The late development of the canine and the premature decay of the superior incisors are suggestive of the presence of an hereditary syphilitic taint. As regards the periostitis, which led to the formation of an abscess at the fang of the left incisor, it was an eliminative act on the part of Nature to get rid of the dead bone, which had become a foreign body in the mouth.

Case II. A delicate child, 7 years of age, was attacked with catarrhal ophthalmia on December 14th, 1852. On the 15th, the upper eyelids were swollen ; and on the 16th they were red. The swelling gradually increased until the 21st of December, the right suffering the most, when the patient was brought to the Eye Hospital, and the preceding description obtained from the mother. At this time, infantile purulent ophthalmia was prevalent.

On admission, there was enormous swelling of the

upper eyelids, which were of a livid red colour. They overlapped the lower lids, and projected considerably beyond them. The tumescence arched up the lid from one canthus to the other, and extended from the brow to the tarsal margin. There was considerable mucopurulent discharge. The eyelids, when everted (which was effected with difficulty), presented a concaved semicircle. The conjunctiva was of a dirty light red colour, eroded, and covered at points by false membrane (?). The sclerotic conjunctiva was slightly congested. The inferior eyelids were healthy.

The patient's constitutional power was below par. Dyspepsia and constipation were present.

The appropriate treatment of this class of cases consists in the application of collodion to the skin of the lid, injections of nitrate of silver to the conjunctiva, and the administration of tonics, etc.

Case III. A fat infant, 2 months old, was brought to the Eye Hospital on November 18th, 1852. The upper lids were much swollen and *indurated* from infiltration. On eversion, which was performed with difficulty, the conjunctiva presented a jaundiced hue and patchy redness; it was covered by a film of lymph, which was removed with some difficulty. The surface was excoriated in places, and exuded a straw-coloured serum. The cornea of the worst eye, which had been affected seven days, was slightly turbid—opalescent. The other eye was only attacked the day before the patient's admission.

In answer to questions, the mother said she was now, as previously to her confinement, suffering from a vaginal discharge, and scalding during micturition. She had no reason for believing that any of the discharge had come into contact with her infant's eyes.

The palpebral conjunctiva was brushed over with a ten-grain solution of nitrate of silver, and small doses of calomel with quinine were ordered to be taken twice a day. Under this treatment the case did well.

Original Communications.

A QUESTION AS TO PATHOLOGICAL DISTINCTIONS IN CASES OF DIABETES.

By Daniel Noble, M.A., M.D., Manchester.

The ordinary pathological distinctions recognised in cases of what is called diabetes, rest upon the presence or absence of sugar in the urine, when this excretion happens to be unusually abundant; and whilst the so-called *diabetes mellitus* has always been regarded as a formidable malady, *diabetes insipidus* has been considered a comparatively unimportant ailment. And, thus, the detection of sugar to any extent in the urine commonly gives rise to the most serious apprehensions. Up to within the last few years, this was unavoidably the case; because, generally, it was but when the graver constitutional symptoms of a severe form of diabetes revealed themselves, that the urine was at all tested for sugar, the presence of which was looked for as giving a definite certainty to a previous diagnosis. And as, sooner or later, excessive discharges of urine, accompanied by thirst, voracity, dry skin, emaciation and debility, were ordinarily followed by dissolution; and as these conditions of imminent danger were so often associated with the renal excretion of sugar; saccharine urine became, not unreasonably, regarded as a most formidable feature of the disease, and as one threatening death at no very distant period.

But in these days, when an examination of the urine is so universally practised in the diagnosis of disease, the presence of sugar is discovered at much earlier stages of diabetes than was formerly the case; and this circumstance, I apprehend, should lead to a more accurate appreciation of its true pathology than when the earlier phenomena so often eluded observation. I have, myself, been induced to think that saccharine urine does not necessarily constitute that very formidable symptom in disease which it was formerly considered to be; and that, in fact, it need not be regarded as the sure precursor of that particular diabetic condition which almost invariably has a fatal termination. I will illustrate my meaning, however, by narratives of certain facts somewhat incomplete, but nevertheless showing a contrast which supplies the grounds upon which I submit a question as to a probable pathological distinction, and which at the same time furnishes an occasion for suggesting a direction to the inquiries of those whose aptitude and opportunities more especially qualify them for investigations of this kind. In this view of things, I subjoin a brief account of two cases of diabetes, representing a well-known class; and then some account of two others, the pathological significance of which, I suspect, is essentially different.

A young Greek, about 17 years of age, was brought to me some years ago, by the proprietor of a boarding school in the neighbourhood of Alderly. The complaint was that the patient had become gradually listless and weak, incompetent alike for physical exertion and mental application; and that this state of things had, for a few weeks, been almost imperceptibly making its way. On inquiry, I ascertained the existence of thirst, voracious appetite, dry skin, and large discharges of urine—symptoms which, of course, suggested the diagnosis of diabetes. I directed that the young man should not return to school, but should remain with relatives who resided in the immediate neighbourhood, intimating at the same time to the gentleman who accompanied him, that I regarded his case as very serious, and that he ought to go to bed and have constant and systematic attendance; that, if my own services were further demanded, I must be informed, and, in that case, should visit him on the following day, and would wish to see the quantity of urine voided after a given hour. It was soon afterwards intimated that I was to render him such attendance and aid as the circumstances might require, and I called upon him accordingly on the following day. I found the poor youth much weaker than on the previous day even, and ascertained that he had parted with immense quantities of urine possessing an odour and other characteristics rendering the presence of sugar very probable. I took some of it away with me, and submitted it to simple tests; it may suffice to say that the urinometer manifested a very high specific gravity, and Trommer's copper test exhibited a very large proportion of sugar. On the succeeding morning, the debility and exhaustion had very alarmingly progressed, and I gave the worst prognosis, stating that it would be agreeable to myself if they should wish to call in some other assistance—a suggestion which, it was said, should be considered. I paid an evening visit on the same day, and was told, without seeing the patient, that, in consequence of my opinion expressed in the morning, I had been superseded; that my successor, moreover, should be replaced in like manner, if he did not speedily effect an improvement; and that, in fact, doctor after doctor should be tried upon this principle. Early the following morning, however, the patient died.

Now, in this instance, there was obviously a collapse of so speedy and decided a character, that little can be said of its specific nature; the peculiar perversion of function indicative of diabetes mellitus so rapidly carried with it a destruction of all vital energy as to preclude the attempt at any special ascription of its origin and cause.

In the course of last year, a lady consulted me on account of her daughter, who for some weeks had been

losing flesh and strength; she was not more than about thirteen years of age, and had been under the care of a well-known homœopathic practitioner in this city, who did not appear to have made any definite diagnosis. On directing my attentiou to the young lady, my first impression was that she was labouring under some obscure form of phthisis, but a physical examination of the chest and a quiet pulse, excluded the idea; I next thought, on learning that her appetite was unusually good, of possible mesenteric disease, but I could obtain no corroboration of this notion on extending the inquiry; it was when excessive thirst was mentioned, that I thought of diabetes. The skin was dry, the appetite voracious, and the urine extraordinarily abundant; I had brought to me the same day a specimen of the urine, and found it of high specific gravity, and containing large proportions of sugar; the nature of the case was thus put beyond doubt. For about a week I saw this patient on alternate days at my own house, and she was seen once also by Sir James Bardsley. After some seeming improvement, which did not continue for more than a day or two, she began rapidly to decline, and was unable to leave her room; therefore I attended her at home, and in three days she expired—ten days from the period when she was first brought to me.

In this case, the invasion of the malady could be traced to no particular cause; it appeared that the decline in strength had shown itself slowly and insidiously; and it was only the persistence and augmentation of the debility with notable emaciation, that led the parents to regard the illness in any serious light; for, indeed, they had been encouraged by the homœopath, they said, to feel every confidence that time and his own treatment would bring about recovery. This instance, like the preceding one, constitutes a fair illustration of a class of cases familiar to practitioners and dependent upon conditions of the system but little understood,—cases which alone, probably, at no very remote date, would have had their diabetic character made out, and the general symptoms of which would alone have suggested the importance of testing the urine for sugar in order to settle the diagnosis.

But there is another class, which I proceed very briefly to exemplify. A gentleman between fifty and sixty years of age, of great mental endowment, one who had through life pursued a thoughtful and laborious career, had, for upwards of twenty years been accustomed to consult me when requiring medical aid; his ailments having generally been some feverish cold, or a slight degree of gastro-enteric irritation that rendered his digestion habitually weak. For four or five years prior to the summer of 1860, he had been deeply engaged in labours demanding much brain-work, of a kind, moreover, that involved considerable worry and anxiety. About the period just specified, he became troubled with neuralgic pains about the head, with broken sleep and gastric irritation to an unwonted extent. I was constantly urging detachment from business-cares and labours, but this recommendation was but imperfectly carried out; yet, to the extent to which it was so, the symptoms were always relieved. Late in the autumn the ailment assumed severer features; for great debility and some emaciation ensued. At this stage of affairs the patient, having a demand for his presence in London, asked if I would advise him whilst there to consult any one and whom, and I named to him a physician of well-earned distinction for his successful labours in pathological chemistry; my recommendation was acted upon, and the physician in question was seen; and, immediately on the patient's return home, my attendance was again requested. On inquiring if he had seen the London physician, and if he had, what had been said, I was told that he had done so and was glad of it, for the ailment had been found to be diabetes. I must confess, that upon hearing this statement I was somewhat startled, for there neither was nor had been any excessive discharge of urine, nor any dryness of skin, nor any voracity; neither had the urine exhibited that greenish straw colour so often suggestive of diabetes, but, on the contrary, had displayed the same superficial characters which I had noticed for years in connexion with disordered digestion—a somewhat higher colour than usual, and lithic deposits on cooling. However, I could not doubt, after what had been said, that the urine at this time contained sugar, and, having procured a specimen, I took it to an analytical chemist, that it might be quantitatively as well as qualitatively examined. It was found to contain about eight per cent of sugar, and the specific gravity was 1,031. I had already said to the patient that, although the urine should contain sugar, I did not think it quite correct that the case should be designated diabetes, if by the term was understood that grave form of it, which, undermining by degrees the forces of life, terminated in death by a sort of gradual decline; and that, indeed, I wished him to rid his mind of such a notion, as being, at least in my judgment, not only not true, but calculated in itself to do him serious physical mischief. I had explained to him, moreover, that it had of late years been discovered that mental irritation, by its action on the brain, might give rise to saccharine urine, and that this phenomenon was not always of that momentous and fatal significance which the popular estimation of diabetes might lead him to think. However, he had received from his metropolitan adviser both medicinal and dietetic prescriptions—all *secundum artem*, and these, I said, he must in fairness carry out *au pied de la lettre;* I let him understand, nevertheless, that I gave preference to my own practical views, which involved detachment from harassing occupation and thoughts, change of air and recreative amusement, with such medicines and diet as his own particular experience might suggest to be the best calculated to restore the integrity of his digestive functions. After a trial of what I will call the systematic treatment for about a fortnight, he was obliged to give it up alike in its medicinal and dietetic items, for both appetite and digestion became still weaker; and, altogether, he was put more and more out of order; but, all this time neither the skin nor the quantity of urine gave any of the usual indications of advance in the direction of diabetes as ordinarily understood. Early in 1861, all *system* of treatment was laid aside, my own more general views were carried out, and he began to improve; the quantity of sugar in the urine and the specific gravity also were diminished, varying however from time to time. In a few weeks the percentage of sugar was reduced to five when, for what I deemed to be good and sufficient reasons, the urine ceased to be examined; the patient had possessed himself of an urinometer and was in the habit of using it himself; and in this way, I thought, he was exercising a prejudicial influence upon his physical condition by unduly fixing his attention upon it; therefore, subordinating my scientific interest in the case to anxiety for the patient's recovery, I urged that he no longer notice the urine, that he forget it, and, so long as he continued to improve, neither make nor have made any more examinations of this excretion. Through the spring the improvement went gradually on, appetite and digestion better, and the strength increased; by the summer, he might almost be regarded as well. In the month of July, however, he had a most serious attack of summer cholera which, after some days very severe suffering abated; I only saw him once during this illness as it occurred upwards of forty miles from Manchester; but from what I did see, and from the account furnished by the local surgeon, I am enabled to describe it as most enervating in its effects, and he was for some time much shattered by it; still, neither at the time, nor during the ensuing convalescence, was there any manifestation of the constitutional symptoms of diabetes. This gentleman when sufficiently well during the autumn went to M-

vern, sanguine from what he had been told that the water-treatment would invigorate him and perfect his cure; and, for my own part, recognising the benefit to arise from this very mental prepossession, I raised no objection; and, certainly, on his return home, towards the end of the year, he appeared quite well. For reasons, however, already stated, I neither made nor procured any chemical examination of the urine. During the spring of the present year, the patient had another very severe break-down, in the old way and from the old causes,—head-ache and functional disturbance of the stomach from excessive brain-work and irregular diet; still no suppression of perspiration, no excess in the quantity of urine, no voracity. Perfect recovery followed. At this time the gentleman is in excellent condition, looking perfectly well and cheerful, and is said by his friends to have a more healthful appearance than he has presented for some years.

A gentleman of my acquaintance, of high intellectual endowment, and, moreover, of great sensitiveness of disposition, has for the last seven or eight years had saccharine urine—a symptom which ensued upon much anxious mental effort. As he is a resident at a considerable distance, I cannot exactly speak of this gentleman as my patient, although on several occasions I have had conversations with him on the subject of this particular derangement of his health. I think it was about the year 1854 or 1855 that sugar was first discovered in the urine, but he had for many years had an imperfect digestion, evidenced very often by lithic deposits, and he had been a bad sleeper. In this case, there has been none of that steady progress in a downward direction so commonly happening when there is saccharine urine. From the time of its detection to the present there have been several attacks of illness, and on two occasions the patient had been all but given over. I saw him about three years ago labouring under irritable heart as the chief malady; he was in bed and much exhausted, so much so, indeed, that his friends, having regard to the diabetes, scarcely expected that he would rally; yet, at this time the specific gravity of the urine was not high, below 1,030 I think. The gloomy forebodings were not realised, and recovery took place, enabling him to fulfil important and responsible duties. In this instance, there was, for the most part, a somewhat inordinate appetite, but not any particular dryness of skin nor any great excess of urine. I select for illustration a case, with which I am but imperfectly acquainted however, mainly because the connexion in degree between mental wear and tear and saccharine urine was on several occasions quite notable; for example, about four months ago, the patient was abroad accompanied by an intimate friend, from whom I had shortly afterwards the information that, during this absence from home, circumstances occurred to produce great stress of mind, breaking down the health for a brief period; that, apparently in consequence, the diabetic symptoms became very much aggravated, the specific gravity of the urine running up to 1,051 from 1,025. On the enjoyment of quiet and the restoration of mental calm, the *status quo* was very speedily recovered; and, since this occurrence, the patient has been better than for a long time before. Indeed, a gentleman well acquainted with him, writing about a month ago to me on another subject, refers to our common friend as follows: "He keeps well; I suppose there never was known such a case."

I think there can be no doubt that the class of facts, very imperfectly exemplified by the preceding accounts, demand the inference that some causal relation subsists between certain pathological states of the brain and the excretion of sugar by the kidneys; showing, as it would appear, that mental perturbation is one of the first links in the chain of diabetic phenomena, and showing, moreover, that the degree of mischief exhibits some correspondence with the intensity of the presumed cause. Indeed, so obvious is the relation in question, that it has been suggested by some, that diabetes mellitus is essentially of encephalic origin; and, certainly, if pathological distinctions cannot be established, there is much evidence that may be cited in maintenance of some such thesis. The well-known experiments of Claude Bernard, repeated and confirmed by Dr. Pavy in this country, furnish no little plausibility to the doctrine; they shew that saccharine urine can be artificially produced by mechanical irritation of the floor of the fourth cerebral ventricle. And other experimental lesions of the nervous system, moreover, have been found to produce diabetic symptoms since the one first practised by M. Bernard. Ordinary brain-disease will sometimes develope for a time a saccharine condition of the urine. The case of the late Mr. Hopwood, which attained so much notoriety in the year 1855, on a trial affecting the validity of a will, supplies an excellent illustration of this position. In 1849, five years before this gentleman's death, it appeared from the evidence given on the trial by his very intelligent medical attendant, Mr. Abraham Wood, of Rochdale, that at the period mentioned he began to suffer in his head, complaining of pain, somnolence, and intolerance of light—symptoms attributed by Mr. Wood to congestion of the brain, and which later on were followed by paralysis and dementia; "he had also another ailment", said Mr. Wood, "an affection of the kidneys". On cross-examination, he was told to say what this affection was, and he stated that it was "diabetes mellitus", and then that this was recovered from in ten days or a fortnight. Hereupon, Sir Fred. Thesiger, the cross-examining counsel, seemed to think that he had got hold of a good point for weakening the force of Mr. Wood's evidence, for, echoing the general popular impression concerning the necessary fatality of diabetes, he observed: "That (diabetes *mellitus*) is the incurable kind, is it not?" To this interrogatory Mr. Wood very sensibly replied, "It depends upon the cause." Sir Frederick, however, pursued the topic, resting upon the position that the ailment in question could never be recovered from, and that Mr. Wood did not know what he was about; but that gentleman was quite a match for the clever counsel, stating that he had not merely been led to the diagnosis by the general symptoms, but that he had tested the urine and detected the presence of sugar.

Now, the question which I would propose for this evening's discussion, and the question to which all that has preceded is introductory, is this: Is it possible to establish pathological distinctions in cases of diabetes, according to their *origin*, the *course of the symptoms*, and their *curability*—characteristics which, under many circumstances, supply the basis of such distinctions? In all these particulars, there would seem to be a wide difference between such instances as those last cited and those which I sketched in an earlier portion of this paper, the presence of sugar in the urine being almost the only phenomenon common to the two sets. May we not expect that, in further prosecution of our investigations in this direction, we may be enabled to determine distinctions in cases exhibiting sugar in the urine, just as now we can and do, but could not formerly, in the analogous instances of albumen in the urine? When Dr. Bright demonstrated the pathological connection between granular kidney and albuminuria, it was for some time afterwards regarded as constant; and albuminous urine was consequently regarded as possessing a much graver significance in all cases than it is now known to have in many; for, at the present day, this symptom is known to be expressive of pathological states various in their kind, and involving great differences alike in their origin, course, and curability; hence, we estimate the general character of albuminuria, not by the amount of albumen in the urine, but by the morbid causes which have brought this irregular excretion about. Is it not practicable, then, to establish, or to discover, in like manner, scientific as

well as practical distinctions in cases of diabetes? I would venture, myself, to express the conviction that modern researches are tending in this direction; and it is to stimulate attention to this view of the subject, that I have brought forward the question upon the present occasion, not, I need hardly say, in the form of a clinical contribution scientifically complete, but rather in that of an exposition of a course of thought initiated by the incidents of a casual experience.

Transactions of Branches.

SOUTH MIDLAND BRANCH.

CHRONIC INFLAMMATION OF THE OS AND CERVIX UTERI.

By George P. Goldsmith, Esq., Bedford.

[*Read October 23rd*, 1862.]

Chronic inflammation of the os and cervix uteri is one of a group of disorders, very common, indeed, in their occurrence, but to which comparatively few, I think, pay much attention during the time in which they are attending the medical practice of the hospitals. One reason for this neglect is, perhaps, to be found in the fact that, although it entails severe and long continued suffering, this is not a fatal disease, and we do not therefore frequently have an opportunity of examining the morbid changes produced by it; and, as it does not generally wholly incapacitate the patient from following her usual avocations, we do not often see her as "in-patient".

I must here, at the outset, state that the few observations I have to offer will be far from forming anything like a complete thesis upon this subject, but will merely embody the most prominent impressions made upon my own mind, while daily witnessing the complaint in a considerable number of cases. When I first undertook the duties of my position in the hospital, I had heard and read of the disease, but imagined it to be a rare affection, with which I should probably hardly ever meet; and I confess I was both astonished at, and unprepared for, the frequency with which it presented itself.

When we consider the important part played by the uterine functions, their periodic recurrence after intervals of comparative inactivity, and the complicated character of the structures by which they are maintained, namely, an organ comprising a serous, parenchymatous or muscular, mucous and glandular or follicular apparatus, we shall neither be surprised at the frequency with which some of these functions are liable to disturbance, nor at the gravity of the results attending it. The greater frequency of congestive diseases of the cervix uteri over those of the fundus, may be partly explained by the anatomical difference of the vascular return of the venous blood in these parts; the blood from the body and fundus uteri being conveyed back chiefly through the ovarian veins, passing directly to the vena cava, or a primary branch of it; while the blood from the cervix is returned by the uterine and hypogastric plexuses, branches contributing to form the internal iliac, and more liable to congestion from their proximity to the rectum and bladder, organs continually becoming distended, and thus, to some extent at least, exercising pressure on the cervix.

A patient, during the period of life when the sexual functions are active, comes complaining of general ill health and exhaustion; the complexion being pale, and, as is frequently the case, of a peculiar dusky hue, quite distinct from the cachectic sallowness of carcinoma, looking more smoky, if the expression may be allowed, and often presenting well marked dark areolæ round the eyes, so expressive of an exhausted and tried condition of the system. The pulse is generally of low power and increased in frequency; while the patient's whole manner is often nervous, excited, or irritable, the depression of spirits being sometimes extreme, and the ordinary symptoms of chronic hysteria more or less present. The patient seems bereft of the feminine fortitude we so much admire in her sex when suffering from disease in general, and readily enters into a long and emphatic description of her sufferings, finishing it by a shower of tears, and evincing much fretfulness and impatience at one's close questions. There is not, as a general rule, much disturbance of stomach; we do not meet with that distressing nausea and vomiting so commonly accompanying the earlier stages of schirrus; but there is frequently dyspepsia and flatulence; the bowels being for the most part costive, and often refusing altogether to act without the continual use of purgatives.

Leucorrhœa is generally of early occurrence; and this discharge, so commonly present in most uterine ailments, presents in this disorder somewhat peculiar characters, arising from the anatomical structure of the part in which it is situated. In the cervical canal, the mucous membrane is thrown into longitudinal *rugæ*, an appearance forming the "arbor vitæ uterina"; in these folds the membrane is studded with large mucous crypts, called the *glandulæ nabothi*; these being stimulated to undue action, secrete a thick gelatinous mucus, as after the stimulus of impregnation; but, instead of remaining in the cervix and closing the canal, these pledgets are ever and anon discharged with the other matters thrown off by the uterus. I have had these masses shown me by patients, who have regarded this symptom with alarm. Of course the thin white vaginal discharge often accompanies; but, as far as I am aware, the above mentioned secretion is characteristic of this affection.

An almost constant and important symptom, also, is *menorrhagia*. The patient complains that the menstrual periods are accompanied by a more profuse discharge than natural, and that the interval between each period becomes gradually shorter, so that, in the worst cases, they say that there is an almost constant draining.

But the symptom most prominent, and that which, with the last mentioned, especially leads the patient to apply for relief, is *pain* of a peculiar heavy, dull, aching character, referred to the upper part of the sacrum, sometimes extending round the pelvis and into the groins. This I have found, in the cases I have treated, to be almost continually present; not always in the same degree, but generally amounting to a settled uneasiness, subject to occasional exacerbations, especially upon exertion.

The *internal examination* reveals an enlarged, tumified, and hypertrophied state of the os; the lips of which are frequently everted, leaving the aperture large and gaping, so as easily to admit of the introduction of the tip of the finger, while the body of the uterus is slightly increased in size and weight, as may be estimated by poising it on the finger. The engorgement of the os varies much in extent and character. Sometimes there is so much hardness and irregularity, that the diagnosis between this condition and the first change produced by carcinoma is attended at first with some doubt. To this point, as being one of great practical importance, I shall again presently revert.

The frequency of ulceration as an attendant upon this disease has been attested by so many observers of undoubted character and authority, that, although it is still disputed by some, for whom we entertain all respect, yet we cannot entertain any doubt as to the fact. These ulcerations are often mere excoriations of the epithelial layer, and can hardly be detected without the aid of the speculum, even by those most skilled in digital examinations: that these do exist, however, and that they are the proximate causes of many of the symptoms such as leucorrhœa and menorrhagia, which attract

he patient's notice, and compel her to apply for advice, re cannot but be satisfied.

Another kind of ulcer, perhaps not so common, but nore easily detected by the simple touch, is that which presents a granular surface, more or less rough, and attended by much the same symptoms as the former variety; the great difference being, that these are really erosions or ulcerations in the substance of the lips, which are granulating, and they therefore readily bleed upon being touched.

I have no doubt that this condition has existed in many more cases than those wherin I have been able to satisfy myself as to its presence; having frequently suspected it, from the pain produced at a certain circumscribed spot by the pressure of the finger.

As to the *causes* of this affection, they are very obscure, and I cannot say much about them. Sometimes, I have no doubt, it is primarily induced by the abuse of the sexual functions, the uterus being kept in a constantly irritated and congested state, which the constant repetition of the exciting cause maintains, and prevents the organ from righting itself. This is a condition very commonly observable among prostitutes, and occasionally also among married women.

It is a question that I have often revolved in my own mind, whether abortion is more frequently a cause or a consequence of this disease. Certain it is that, in not a few of the cases that have come under my notice, the patients have referred their first appreciable loss of health to a miscarriage, from which they have never entirely recovered. It is also equally beyond a doubt that, while this condition of cervix does not absolutely prevent conception from taking place, it nevertheless renders it highly improbable; and should it notwithstanding transpire, almost certainly ensures the premature expulsion of the fœtus.

One important point, to which I would draw special attention, is, with what other morbid states we are likely to confound that which we have been considering. It is a matter of every day observation that, when the processes are normal, the uterus after parturition should contract, so as to render the organ about the size of an infant's head, after which it gradually undergoes a process of interstitial degeneration and absorption, coincidently with a discharge from the lining membrane, whereby, after a few weeks, it assumes nearly the same bulk and dimensions as before impregnation.

Now it sometimes happens that, from some cause or other, this process of disintegration and removal is arrested or retarded; so that, if an examination be made, the lips and cervix are found in a condition very similar in many respects to that which I have been attempting to describe.

The distinction, however, lies in the fact, that in defective involution of the recently gravid uterus, the *body* of the organ is also enlarged considerably beyond the natural size, while in chronic inflammation of the cervix, the body is generally the subject of only trifling enlargement.

There is a condition sometimes to be met with, in which the cervix uteri is the seat of constant uneasiness, but which at periodic intervals, gives place to paroxysms of excruciating pain; this is the "irritable uterus," described in a monograph by Dr. Gooch, which occurs chiefly in young women, and consists of nothing more or less than neuralgia of the organ; a rare affection, which from the constant wearing uneasiness, might possibly at first be confounded with this chronic inflammation. It is, however, distinguished by several marks; for instance, in the "irritable uterus," there is no appreciable change of structure, while the suddenness, violence, and, above above all, the periodic recurrence of the exacerbations without inflammatory symptoms, render the disease easy of diagnosis.

But the most frequent source of error arises from the extreme similarity which often exists between the condition of uterus presented by the disease we are considering, and that which we so frequently meet with in the early stage of scirrhus, before the occurrence of ulceration or much disorganisation, when the cervix is infiltrated by the dense, hard, unyielding tissue, but too familiar to us; and perhaps the best means of illustrating the difficulty which sometimes exists in arriving at once at a satisfactory decision, will be to read a brief abstract from the histories of two cases which were under observation about the same time.

M. D., aged 28, was admitted into the Burton Ward, July 10th, 1861. She was a strong and tolerably healthy looking person, but with depressed manner and dusky complexion. She was a servant, and unmarried, and had a child nine years since. The catamenia always recurred at the regular periods, and she always enjoyed good health until six months ago, when she suffered from pain in the right inguinal region; this was relieved by treatment, and she continued pretty well until two months ago, at which time she began to suffer from a hot burning pain, referred to the sacral region, and passing round the pelvis. She had had a yellow inodorous discharge, not so profuse at present as it had been. She had been under treatment at the Brixton Dispensary, the diagnosis of the case being written on the dispensary paper, "scirrhus uteri." She had been examined with the speculum by a leading surgeon-accoucheur, who said that she had ulcerated womb.

Dr. Robert Lee examined, and found the anterior lip of the os uteri hard, enlarged, and irregular; he said that he could not at present decide whether this was due to carcinoma or not. A few days afterwards, on repeating the examination, he found that much of the hardness previously noticed, had disappeared. She soon left the hospital, continuing for some time under my care as outpatient, and improved so much that she soon asked permission to marry; the symptoms being all relieved.

The second case is that of A. M., aged 42, married fifteen years, and having had three children. The patient though stout and in good condition, bore a pale and unhealthy appearance, with intensely dark areolæ round the eyes. She enjoyed good health until two years ago, when the catamenia, which had hitherto been regular, gave place to profuse menorrhagia, accompanied with severe pain all round the pelvis. She recovered partially for a time, but the symptoms continued in a mitigated degree until three weeks before her admission, when they returned with all their former severity. She was seen by a physician-accoucheur of much experience, and he pronounced her to be labouring under carcinoma uteri. When, however, Dr. Robert Lee examined, he found the os hard and irregular, but decided at once that the disease was not malignant. She improved much while in the hospital, and soon left it convalescent.

In these cases (and many similar ones might be quoted), the only symptom wanting to complete the history of scirrhus, was the offensive discharge which almost invariably marks the progress of that terrible scourge; but there were in each case, circumstances that might have excited doubts of the correctness of the diagnosis which had been formed. The age of the first patient, only 28 years, made it unlikely that she should be the subject of scirrhus uteri, although while she was under treatment another patient of mine died of it at the age of 32. And, in the second case, the long period during which the symptoms had existed, induced the suspicion that had the disease been malignant it would have run its course more speedily.

Whatever doubt we may entertain as to the nature of the case when we first see it, is however soon dispelled when the patient has been a little while under observation. Rest and treatment generally make so much improvement in the case of chronic inflammation as to enable us quickly to determine its nature. The unnatural

hardness of the os gradually disappears; the pain in the back is relieved; the engorged and infiltrated tissue of the cervix is relieved by the absorption and removal of the morbid matter to which its enlargement was due, and it shows evident signs of responding to treatment, though to get rid of it altogether is a task tedious enough.

The carcinomatous cervix, on the other hand, gets perhaps slowly, but surely worse; hæmorrhage and ulceration, destruction of tissue, pain, and the cancerous cachexia, pursue their too well known and fatal course.

It is with considerable diffidence that, so young as I am in my subject, I venture to say a few words on that which is the object of all our observation and research, namely the *treatment* of this troublesome malady.

In the first place, *absolute repose* of the inflamed tissue is one of the first principles of our ordinary rules of treatment in diseases of other parts; and therefore, everything tending to promote or provoke irritation and congestion is to be carefully avoided, when possible; it is expedient to enjoin "change of air," in other words, separation from the husband's society. Sometimes, however, intercourse is so painful that it has been already discontinued, and in one well marked case, it was this symptom which led the patient to apply for advice.

As the bowels are generally costive, I have found it serviceable to commence the treatment by a dose of blue pill or calomel, with an active vegetable cathartic, as colocynth; and subsequently give, two or three times a a week, a gentle stimulant to the sluggish intestine in the shape of ten grains of the aloes and myrrh pill, or the compound rhubarb pill. If there be no febrile disturbance of the system, and the induration be considerable, I generally prescribe a drachm of solution of bichloride (*Pharmacopœia*) of mercury, in an ounce and a half of decoction of cinchona twice a day; or four grains of iodide of potassium, in an ounce and a half of decoction of cinchona or infusion of gentian three times a day.

If there be any hardness about the pulse, I generally set the kidneys acting by salines and mild alkaline remedies, before commencing with the more active constitutional sorbefacients. Sooner or later, however, tonics, in some form or other, will be found necessary.

But as the chief anxiety on the patient's part is to get relief for the symptom which distresses her most, viz., the pain in the back, we must do something for this; and I have for this purpose, extensively and successfully used a liniment, at once simple and efficacious, and really valuable. I got it from Dr. West's book on the *Diseases of Women*. It is formed of a drachm of croton oil and eleven drachms of camphor liniment. The relief afforded by this application is in many cases truly surprising. I have been told that as soon as the skin became sore, the deep-seated wearing pain disappeared; and when the cuticle is renewed, another slight dabbing of the surface continues the effect. With regard to local applications to the ulcers of the cervix I can say nothing, having had no experience of them; but astringent and soothing injections, such as the lead lotion, the liquor aluminis compositis, and the decoction of oak-bark, are of the greatest use in toning and bracing up the diseased parts; checking the leucorrhœa: correcting and removing irritating discharges, and promoting the healing of the ulcers where they exist.

The most severe, however, of these means are mild indeed by the side of the heroic and dashing treatment introduced by some of our energetic brethren across the Atlantic.

I some time ago came across a pamphlet by Dr. Marion Sims, surgeon to the Women's Hospital, at New York. He cuts the Gordian knot literally enough, and removes the disease root and branch by "amputation of the cervix uteri," which is the title of his little brochure. According to his account, the operation appears to be productive of but little constitutional disturbance, and his process is, to cut straight through the cervix with a pair of scissors, as producing less hæmorrhage than the knife, in a kind of écraseur fashion; and then covering the cut surface of the stump, if I may call it such, with vaginal tissue, which is retained in position by sutures, until union by first intention has taken place; this is Dr. Sims' improvement; as previously the wound used to be left to heal by granulation, a process occupying several months, and attended by a good deal of suffering and inconvenience. Dr Sims speaks very favourably of the good results which he has been able to obtain by this operation, which, however, will hardly gain ground in British practice, as it would be reprobated by the heads of the profession, and could hardly be submitted to by English ladies.

BATH AND BRISTOL BRANCH.

ON DISEASE OF THE ASTRAGALO-CALCANEAL JOINT PRODUCED BY INJURY.

By R. W. Coe, F.R.C.S.E., Senior Surgeon to the Bristol General Hospital.

[*Read April 29th*, 1862.]

The diseases of the larger joints have been successfully studied by some of our best surgeons; whilst those of the smaller ones, as of the foot and hand, have met with less attention; and but little care has been bestowed, in the discrimination of the particular joint or bone affected.

Indeed, up to the present time, it has appeared sufficiently accurate for practical purposes, to characterise all the affections of the tarsal and carpal bones and joints, however various their origin, course, and termination, by the generic term, disease of the tarsus or carpus; occasionally, however, qualifying the vague appellation by the use of the words strumous, syphilitic, gouty, etc.

From my observation, during the last ten years, of the diseases of the tarsus, more especially of those following upon slight blows or strains, I may safely assert that the astragalo-calcaneal joint is more frequently affected than either of the other tarsal joints; that, from the functions and anatomical character of the astragalo-calcaneal articulation, the bones entering into its composition very frequently and early participate in its diseases; that from its proximity to the ankle-joint, the latter articulation is generally looked upon as the seat of the mischief, which is really situated in the astragalo-calcaneal joint; that the signs of the beginning of mischief in the astragalo-calcaneal joint are very early to be appreciated; that a careful attention to the history of the cases I shall relate, and the results of the treatment had recourse to, point out what course should be adopted in their management; and finally, that a consideration of the anatomy and function of the astragalo-calcaneal joint, more especially when compared with those of the ankle-joint, renders it very probable that the view I shall bring before you of the affections of the former is a correct one.

The following cases are related not in their chronological order, but in the one best fitted to illustrate the history of the disease.

Case 1. (From the notes of my dresser, Mr. James.) Elizabeth Brown, aged 23, married, was admitted into Ladies' Ward of the Bristol General Hospital, on November 2nd, 1861.

History. Up to July 1861, she was servant at a public house, where she had to walk a great deal, and was in the habit, in the performance of her duties, of frequently jumping from a height of three steps; she had had weakness of the right foot for about eight months, also swelling, and a very slight aching pain sometimes.

Present Appearance and Condition. There was a good deal of swelling and puffiness on both sides of the foot,

ist over the line of junction of the astragalus and calcaneum, accompanied with increase of temperature; much pain on pressure of the swelling; great pain on seizing the astragalus firmly in one hand, and moving the calcaneum with the other; or on striking the heel sharply with the hand, so as to press the calcaneum against the astragalus. She had no pain on moving the ankle-joint; nor was there any swelling except over the line mentioned.

The treatment consisted in perfect rest from November 2nd, 1861, to February 10th, 1862.

December 14th, 1861. The increase of temperature and swelling still continuing, two leeches were applied below each malleolus, and iodide of potassium was given internally.

December 16th. The leeches were repeated.

December 24th. The swelling was very much diminished. The leeches were again applied.

February 10th, 1862. No discomfort remained; the swelling and increased temperature were entirely gone. The foot and leg were strapped with soap plaster from the toes to the knee, and bandaged. She was made an out-patient; and requested, when desirous of walking, to do so either with the knee resting on a wooden leg, or with the help of crutches, and not on any account to rest the weight of the body on the affected foot.

I have seen her recently, and am enabled to report her well.

This case was specially interesting to me, because it gave an illustration of a condition, which I felt pretty certain, must have preceded those states of the joint with which I was more familiar. I would beg to point out the line of swelling immediately beneath the malleoli, yet nearer the outer than inner one; the extension of the outer swelling forwards to the hollow beneath the neck of the astragalus; the extension of the inner swelling backwards, so as to bulge out the spine in front of the tendo Achillis; the pain produced by attempting to move the calcaneum on the astragalus; or by pressing on the heel, and the entire freedom from swelling and pain in the ankle-joint.

Case II. John Bilby, aged 32, collier, was admitted into Eaton Ward of Bristol General Hospital, February 24th, 1859.

History. He sprained his left foot about three years since, by slipping off a metal rail underground. He worked up to seventeen weeks since. He had not any treatment for his foot until November 5th, 1858, when he went into the infirmary, which he left in seven weeks (on account of his wife's illness), his foot being then worse.

Present Appearance. He was thin and pale. The left ankle was swollen. The swelling was not in the ankle-joint, but in a line corresponding to the astragalo-calcaneal articulation; it projected on each side below the corresponding malleoli, also posteriorly above the projecting part of the calcaneum, thrusting out the tendo Achillis. On grasping the calcaneum and attempting to move it on the astragalus, a grating was felt, as if the bones were rough; there was sufficient motion to give the idea of weakening, if not entire destruction of the interosseous astragalo-calcaneal ligament. He could move his ankle-joint without pain; but he felt pain when he put his foot to the ground. The pain complained of was exactly in the situation of the astragalo-calcaneal joint.

March 2nd, 1859. I made an incision, beginning a little below and in front of the external malleolus, carried it under the external malleolus at the distance of an inch, and brought it up to the inside of the tendo Achillis, an inch above the insertion of the latter. A depôt of pus in the neighbourhood of the tendon was opened; a probe could be passed deep into the astragalo-calcaneal joint and rough bone felt. I dissected on, and exposed the joint, and found it clearly diseased; and determined, if possible, to remove the articular surface of the os calcis. I made a second incision, one inch and a half in length, across the dorsum of the foot, which fell on the anterior extremity of the first, so as to enable me to divide any fibres of the interosseous ligament that might be remaining.

I dissected up the side flap for a short distance, and opened into the articulation without injuring the peroneal tendons. I found the articular surface, especially of the calcis roughened, and a number of white soft granulations between the bones; these were seen especially in front. I succeeded, partly with Hey's saw and partly with the chisel and gouge, in removing the articular surface of the calcis, and eventually obtained a moderately smooth surface. The bones were drawn into position by the tendons; the flap was fastened down by sutures; and the limb laid upon its outer side.

For some time the case promised fairly; indeed, I think might eventually have recovered; but the man became impatient, as his wife and child depended solely on himself, and he begged to have his foot removed; to which, much to my annoyance, I was obliged to accede.

I removed his foot at the ankle-joint; he quickly made a good recovery.

When this man came under treatment, I had determined that anchylosis of the joint was the termination to be sought for in this disease, when the mischief had advanced to suppuration; and that in the majority of cases this result was hindered or prevented by the difficulties in the way of the escape of the products of inflammation, and of the *débris* of the broken down tissues.

I thought that if I gave free exit to those products, and in addition a new surface to the bones, I might possibly succeed in bringing about this desirable result. In the present instance, I now believe, that too much was attempted; it would have been better merely to have made free openings into the articulation for the escape of morbid products, leaving to nature the preparation of the bony surfaces, especially as they were smoothed with so much difficulty.

Case III. The succeeding case, which was admitted into the Bristol General Hospital, under the care of my colleague Mr. Marshall, is important as shewing what should be sought for in the treatment of the disease.

I am indebted to Mr. Marshall for notes of this patient. "John Daniel, aged 22, was admitted into the Bristol General Hospital, November 25, 1861, with disease of the ankle-joint of the left leg. He stated that he had been more or less troubled with his ankle since he was 8 years old, when he was a patient at the Infirmary; the ankle being then swollen and painful; that he remained there several weeks; leaving unrelieved for Clevedon, when he continued to get worse; that an abscess ultimately formed in the neighbourhood of the joint, which broke, and after discharging freely for some weeks, healed up; and that then he felt much better. The improvement did not, however, continue long; and some months subsequently, he was again admitted into the Infirmary, when he remained several weeks, and then left relieved and able to return to work. Ever since this period, he had been compelled to lay up at frequent intervals, on account of abscesses forming and breaking about the ankle. For five months previously to his admission into the hospital, he had suffered an unusual amount of pain, and the discharge had been very profuse. When he was admitted there was considerable swelling on both sides of the joint, but little or none over its anterior aspect. There were two sinuses on the inner side of the joint, one a little below, and the other below and posterior to the internal malleolus. A probe passed into either of the two sinuses, and readily reached diseased bone."

Thus far Mr. Marshall's report. I saw the case with him in the hospital; and stated that I believed it origin-

ally to have been disease of the astragalo-calcaneal joint, for the following reasons: from the form of the swelling; from the sinuses leading to bone in the situation of the joint itself; and finally, from the fact of the true ankle-joint having been free from disease up to a very late period.

It was thought advisable to remove the limb at the ankle, which was done by Mr. Marshall, on November 28th, 1861. He kindly allowed me to examine the amputated foot. I found the astragalus and calcis nearly everywhere firmly anchylosed, and the strong interosseous membrane absorbed; and thus an almost perfect cure of the original disease accomplished; but, unfortunately, a small portion of the joint in front of the inner malleolus had not been able to free itself easily of its purulent secretion. This diseased part was in close relation with the synovial membrane of the ankle-joint, which at last became affected, though nature had been struggling manfully on for fourteen years for a successful result, which, in truth, was just within its reach.

The history of this case extending over so long a period of time; the ankle-joint, though so near the disease, remaining so long unaffected, taken in connection with the appearance of the amputated part, must shew clearly where the seat of the disease had been.

Had the case been my own, I confess I should have been inclined to have tried some measure short of amputation of the foot, bearing in mind the reason of the failure in the last case read.

Case iv. I am obliged to give this case from memory, being unable to find the written notes. Mary Ann Browning, a middle-aged woman, was admitted under my care at the Old Guinea Street Hospital, for disease of the right astragalo-calcaneal articulation and of the bones forming the joint, the ankle-joint not being affected. There was the same character of swelling as in the former cases; the same pain on moving the calcis on the astragalus; the same uneasiness on pressing up the heel, with sinuses leading into the joint and on to the exposed and diseased surfaces of the adjoining bones, which were involved, apparently, to a considerable extent.

I removed from this patient both the astragalus and the os calcis; and though she was a long time recovering, from her health having become seriously affected in consequence of a large chronic abscess which formed in the opposite thigh some time after the operation, she ultimately did get well with an useful and shapely foot.

I received a letter of thanks from her last November, telling me how well able she was to perform her household duties. Before preparing this communication, a friend kindly saw her for me and reported very favourably of her condition. This is only the second recorded case in which both these bones have been removed. The appearance of the removed part confirmed the above diagnosis.

Remarks. I have chosen the four foregoing cases to bring under your notice, because they appeared to me to well illustrate the symptoms and natural progress of the disease, and to afford hints for a more successful treatment than that hitherto adopted; a treatment not new in the management of diseased joints, but to a certain extent new in its application to the particular articulation I have been speaking of. It admits of division into five degrees of severity, according to the advances made by the disease.

1. Whilst the joint (and by the term joint is meant, not only the two synovial sacs between the bones, but also the interosseous ligament) is simply irritated or inflamed, compel perfect rest through a long period of time—say months—and the occasional application of leeches or warm soothing applications; and when the recovery is sufficiently advanced to allow the patient to leave the bed, insist upon the foot being relieved from the weight of the body for many weeks or months, as by the use of a wooden leg or of crutches. This plan is to be used in every case.

2. When there is evidence of the presence of pus in the articulation without any external opening, or when an external opening exists leading down to the joint or bare bone, but not affording a free exit to the discharge, then open the joint by as free incisions as possible, in hope that, by relieving the parts from all irritation, they may recover. The great probability of this occurring being demonstrated by Case iii.

3. When the disease has made still further progress, and the bones become so involved as to render it unlikely that the last plan would answer; or after the failure of that treatment; then I would very strongly advocate the propriety of removing the os calcis; thus giving the under surface of the astragalus the best chance of recovery, and preserving to the patient a most useful and shapely foot.

4. When both bones are apparently immediately affected, I would advise their removal, as also that of the projecting malleoli of the ankle-joint. So far as regards the disease, this proceeding is as completely eliminative as amputation at the ankle-joint itself, but has the great advantage of preserving a very useful and assuredly a more sightly extremity than the stump of an amputation.

5. When, from the long continuance of the disease, many of the neighbouring joints and bones are affected, as the ankle-joint and bones and joints of the tarsus; or when, superadded to the original disease, there is a well marked constitutional or scrofulous diathesis, of such a nature or to such an extent as to render it probable that the restorative powers of the patient would not be able to bring to a favourable result the designs of the surgeons in some of the foregoing plans; then, and not till then, do I think amputation of the ankle is justified.

As regards the frequency of the disease, it is accounted for by the accidents to which the joint is liable, taken in connection with its structure and functions. Flexion and extension of the foot are performed at the ankle-joint, which admits of no other motion; the strong ligaments which connect the tibia and fibula with the bones of the foot, pass on the inside from the tibia almost entirely to the astragalus and scaphoid bones, and on the outside from the fibula to the astragalus, though it is true that some fibres pass down from each malleolus to the os calcis; but they are few in number, though sufficiently strong to assist to hold the os calcis in position. The movements of abduction and adduction of the foot are performed entirely at the astragalo-calcaneal articulation.

The structure of the joint may be briefly stated as consisting of two synovial sacs covering opposed surfaces of bone so shaped as to admit of the movements of adduction and abduction; and also of two strong interosseous ligaments placed diagonally between the bones and separating the two synovial sacs from one another, the articulation being further strengthened by those portions of the internal and external lateral ligaments of the ankle-joint which pass between the malleoli and os calcis.

Now, what happens in forcible adduction of the foot? The interosseous ligament is put on the stretch, the astragalus is thrust against the outer malleolus; the ligaments of the ankle-joint are not then affected, but the shaft of the fibula is; and if the adduction be continued, or if it have taken place forcibly and suddenly, the fibula breaks; the tension, up to the time of the snapping of the fibula, is entirely borne by the interosseous ligament.

The same order of events occurs in forcible and quick abduction; when, however, the inner malleolus, as well as the fibula, is liable to be broken.

But if, in this class of accident, the fibula should not

ive way, then the whole or greater part of the strain alls upon the interosseous ligament between the os alcis and astragalus, causing stretching or partial rupure of the ligament.

Thus are sown the seeds of the future irritation and nflammation of the joint, which bring about the grave onsequences that so frequently necessitate operative interference; consequences all the more likely to occur rom the sufferer thinking he has only had a strain vhich need not require any great care.

I have purposely left out of consideration in this communication all reference to constitutional predisposition, hinking to simplify the matter, by treating only of those ases in which the local ailment has throughout required he greatest attention.

Since the foregoing paper was read, I have seen two similar cases.

I subjoin brief histories of them, as one well illustrates he earlier stages of the disease, the other its slow progress.

Case v. On October 14th, 1862, I was consulted by Miss ——, a very stout lady, but with small bones, for n injury of the left foot, occasioned on the previous night by stepping on the outside of the foot from a railway carriage to a station platform, the floor of the platform being much lower than she imagined.

The whole foot was swollen and painful; but the principal pain was caused by pressure upon the heel, or by firmly grasping the astragalus and slightly moving the calcis, or by thrusting the finger against the front of the nterosseous ligament. She remaining only three days n bed; the treatment, she being of a very gouty habit and requiring a good deal of fresh air, was a compromise; I obtaining for the foot as much rest as I could. In exact proportion to the rest was the improvement in the joint.

The case went slowly but favourably on till after extra exertion, when the peculiar swelling I have attempted to describe made its appearance, but was subdued by rest for a day or two and leeches, leaving behind it only the general swelling of the outer tissues caused by the strain.

On December 24th, she left this for London, unable to bear the weight of the body on the foot; that is suffering from pain when the joint was used. Her treatment now, under advice, is to be "hot douches and shampooing."

This case was under my care from Oct. 14 to Dec. 24, with but slight improvement; in fact, it is a condition which must have time for its recovery, as witness the next case.

Case vi. Joseph Needorm, aged 55, was kindly brought under my notice by my friend, Mr. Henry Grace of Kingswood. Twenty-nine weeks since, the patient stumbled over a man laying on the floor, and struck the ground sharply with the outer edge of his right foot; he strained his foot, was in bed a month, felt so much better after this time that he attempted to walk; but on his return home found his foot as bad as it had been at all. For these last twenty-five weeks he has not been fully resting the foot, getting up every day, and using external application, but without any benefit.

Dec. 27th. I saw him for the first time. He had pain on pressing the heel bone upwards, pain on grasping the astragalus and moving the calcis on it, pain on pressing the anterior part of the interosseous ligament, and the peculiar swelling underneath each malleolus; he was unable to bear the weight of his body on the foot, and was obliged to walk with crutches. I recommended rest and patience.

These cases are of importance as confirming the conclusions arrived at in the paper; and, further, as showing how frequently the astragalo-calcaneal joint is affected in apparently slight injuries of the foot.

British Medical Journal.

SATURDAY, JANUARY 17th, 1863.

THE THROES OF HOMŒOPATHY.

We have received, with our other literary new year's gifts, a pamphlet from a practiser of the art of homœopathy. There are things in it worthy of notice, because they exemplify in a very striking manner the benefits which have been bestowed upon the medical profession by the British Medical Association and its Journal in the matter of consultations of medical men with homœopaths.

In this pamphlet is let loose upon the Association and its Journal the excessive wrath of homœopathic fulmination, because, as is asserted, through its influence has the determined stand against these homœopathic consultations been made and effected. The pamphlet is entitled *Remarks upon Archbishop Whately's Letter on Medical Trades' Unions*, and is from the pen of a gentleman who writes himself "M.D. (Hon.)". On referring to the *Directory* for the explanation of this ambiguous title, "M.D. (Hon.)", we find that our author was dubbed "M.D." by his Grace the Archbishop of Canterbury in 1850. No wonder, therefore, that having passed an examination necessarily so homœopathic in its scientific and medical qualities, he should feel himself bound to defend the vagaries of homœopathic practisers and of all eccentric archbishops.

We need not again refer to the archiepiscopal epistle of logical Whately, which this gentleman defends, having only a week or two back said our few words about it. What we wish is, that the Association should have the satisfaction of knowing what grave charges the homœopath lays to its door.

"The *persecuting* policy of the *British Medical Association* goes further than this. It not only deters *the heads of the profession* from the investigation of homœopathy, by threatening to deprive them of their well-earned honours, if their investigation should end in the acknowledgment that *homœopathy is medical truth;* but it forbids the heads of the profession to consult with members of the homœopathic school, or to extend to them their *professional aid*. The British Medical Association is not content, like the *Irish College*, with *ordaining* that its *members* shall not consult with homœopaths; but by recent enactments it forbids its members to consult with those *heads of the profession* who give homœopathic physicians and surgeons their aid."

The homœopathic pamphleteer then goes on to show how the Association "has intimidated the boldest surgeons"; and laments over the fatal conclusion that surgeons of the highest grade one after the other have found themselves forced to "succumb" to this professional, or, as he calls it, "unprofessional" opinion. He relates how they were "compelled either to give way or to suffer continued

annoyance, vexation, and pecuniary loss"; and he relates how they have given way, rather than subject themselves to such loss and annoyance. Could any greater praise be given to our Association? Could any greater homage be paid to the power and integrity of this Association? The homœopath knows well enough, and by his silence recognises the fact, that, so far as the *Lancet* was concerned, he might to this day have enjoyed his consultations with the "boldest" surgeons in the profession. He has, therefore, not one word to say against that journal for the part it played in the memorable struggle. The disgrace or the credit of arresting the commercial union of surgeon and homœopath lies solely to the account of the will of the British Medical Association, as expressed through its JOURNAL.

We think we may venture to rest for a moment with complacency upon this immense service done to the profession by the Association—this strangling, at a most critical period of its growth, of the produce of the hybrid conjunction which was then coming into vigorous life.

One word to the homœopaths. We would gladly, if it were possible, make them understand how little there really is of any "medical terrorism" or of "trades-unionism" in our method of dealing with the golden image which they have set up for their own especial worship. We never interfere with homœopaths or homœopathy. We never interfere between the victim and the victimiser, as we regard his patient and him. We never attempt to persuade an admirer of homœopathy not to consult a homœopath. We leave homœopaths, adviser and advised, to their own unlimited inclinations. The reason is obvious. Every man of experience knows well enough that to argue with any one on a point of credulity is simply to confirm him in his credulity. When a man believes in homœopathy, he believes in that which is beyond the reach of reason. He believes first, and finds his reasons afterwards. And the natural consequence is, that in all matters of credulity, the more absurd—*i. e.*, contrary to reason—the thing believed in is, the more firmly does it take hold on the credulous mind. To argue, therefore, with the credulous is, as we have said, first of all utter waste of time, and secondly only makes the credulous more deeply dyed in his incredulity. But what we do is simply this: we affirm that no medical man can honestly consort with homœopaths, because, homœopathy being acknowledged by all medical men to be a delusion and a gross evil, he who does so consort with homœopaths indirectly and *knowingly*, by his presence and countenance assists in the propagation of the delusion and the evil. We, therefore (and, as it seems to us, according to the plainest rules of medical morality), are forced to affirm that such consultations are acts of high professional immorality, and demand the stringent censure of professional opinion. We affirm that no professional man has a right to play fast and loose with the art of medicine. Let him choose to stand by his calling, by his Hippocratic art; or let him choose to fall away with those who practise a mockery of it. But far off may the day be when the profession will sanction the indirect patronage of homœopathy, or of any other quackery, by any of its members; when the profession will stand unmoved while men, of high position it may be, for the love of gain, meet in consultation those whom they know and admit are victims of and practisers of a dangerous delusion. To call upon the profession at large to withdraw their confidence from such men is plainly the inevitable duty of the Association; and to call upon the men themselves to abstain from such practice is plainly to recall to their minds the duty which they owe to themselves and to their profession.

THE REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES IN IRELAND.

THE following remarks on this subject have appeared in the *Dublin Medical Press*. The subject, as many of our readers are aware, is one which is at present exciting particular attention, and which, for many obvious reasons, demands an early and definite settlement:—

"It must be evident to all, from the fact that within the last three years three measures for the registration of births and deaths in Ireland have been presented to the House of Commons for their acceptance, and also from the strong expressions of opinion which have been recorded through the *Press*, and more recently at the meeting of the Irish Medical Association at the Limerick Junction, that a general system of registration is peremptorily demanded by the public. It is plainly the opinion of most persons that none of the three measures which have been already before Parliament would be likely to afford a satisfactory mechanism for the carrying out of such registration, and we have therefore endeavoured, profiting by the arguments adduced by speakers at the late meeting of the Association, and after a careful analysis of the Registration Bills of Lord Naas, Mr. Cardwell, and Sir Robert Peel, to frame a measure which may effectually carry out the desired objects without imposing unremunerated labours or vexatious duties on the medical profession. The first point, one in which the three Bills coincide, and to which we take the strongest exception, is the injudicious course proposed to be adopted of combining the registion of births and deaths and that of marriages in one central office and under one administration. Now one of the most important features of the measure is the registration of causes of death. Is the whole machinery of the Bill to be rendered nugatory by compelling the results to pass through the hands of a non-professional man? We propose, instead of raising the present Registrar-General of Marriages' salary to £1000 a year, to appoint a Medical Registrar-General of Births, Deaths, and Causes of Deaths, whose knowledge and experience may enable him to turn the valuable statistics which will pass through his hands to the public good. We propose, secondly, to dispense entirely with the services of the Superintendent-Registrars. Thirdly, we propose

remunerate the medical profession at large for the disagreeable duties which this measure must entail on them, by awarding every medical man who may be called on to register a birth or death the fee of one shilling. We need not say that we consider such a fee as entirely inadequate; but bearing in mind the number of deaths, the depressed state of the country, and the fact that such fee must be paid out of the union funds, it would only defeat our object to demand a larger one. Under the provisions of the draft Bill, the fees paid to the medical practitioners of the district would correspond in amount to those paid to the registrar, and one would check the other; the profession would be remunerated for their labours, and the registry would be efficiently carried out."

THE EXAMINATION IN SURGERY AT THE LONDON COLLEGE OF PHYSICIANS.

THE announcement that the London College of Physicians has appointed an Examiner in Surgery may fall strangely on the ears of those who were not prepared for the fact; but the fact is, in reality, only a necessary accompaniment of the part which the College has played of late years in medical affairs. The College has, and most properly, assumed its ancient position as the leading examining body of the medical practitioners of this country. It has proved itself equal to the occasion. Emerging from the condition of demi-clubism into which it had previously lapsed, it has opened its doors to the whole profession, and invited them to enter. One of its most particular privileges, which it had allowed to become obsolete, was the power of examining in surgery. This privilege and right it now once again assumes. It examines in surgery; and we may fairly infer that all the privileges at present accorded by various governing bodies, and in the army and navy, etc., to members of Colleges of Surgeons, will be equally granted to those who have passed the examination in surgery of the College of Physicians.

We would, however, suggest that the College, in this matter of electing an Examiner, has not gone far enough. The importance of the proceeding is such, that the position requires the presence of at least two Examiners in surgery, for the more dignified and solemn carrying out of such examination. We have no doubt that the College will eventually recognise this, and supply the deficiency in their present arrangement.

It may be asked, What will be the effect produced generally, in the practice of the profession, by this novel proceeding? Will it have any influence over the future relations between what are at present called the different classes of the profession? Will it tend more to their unity, or to their further separation? We believe it will have a very important influence, much greater than might be supposed from a mere superficial view of the matter. It seems to us that it cannot fail in promoting the tendency to one general scheme of professional examination, which is visible at the present time; and, above all, that it will have a powerful influence in removing the unnatural barriers which at present exist in high places between the practice of medicine and the practice of surgery.

It must be remembered that all professional men licensed by the College of Physicians to practise are, *de facto*, physicians; and, therefore, the College issues its licenses to those who, it admits by the fact of its examination, are capable of practising surgery. The London College of Physicians, then, distinctly admits that its Licentiates (who pass the surgical examination) are fit and proper persons to practise surgery; and hence we may fairly conclude that the College does not see anything morally or ethically out of order in the fact of a physician performing surgical manœuvres. We must say we are glad to find things regarded by so high an authority from this point of view. Surely the time has gone by when a President of the College of Physicians could rather allow a friend to depart quietly from life than attempt to save him by condescending to the indignity of performing venesection.

The position which hitherto physicians have taken up, in this matter of surgical interference with disease, has always struck us as a very great absurdity. We have never yet been able to fathom the reason of the thing; nor could we ever understand wherein lay the ethical crime of the man who, having studied surgery as a student, ventures, for example, to pass a catheter as a physician. We all know how our colleagues the surgeons respond to this extreme delicacy and niceness on the part of the physician. Surgeons refuse the treatment of nothing in the way of diseases; all is fish which falls into their hands. Half (we dare say two-thirds would be nearer the mark) the practice of what are called pure surgeons is purely medical practice. The pure surgeon, who has passed no medical examination whatever, does not hesitate to undertake the cure of any disease that falls on mortal flesh; whilst, on the other hand, the physician, who has usually passed through the very same routine of education as the surgeon, and in addition gone through a severe medical examination, is deemed by fashion incapable of performing the most trivial surgical operation! Really, it is time that this absurdity was fully exposed and practically put an end to; and especially so when we come to consider the immense importance which now attaches to the *medical* treatment of surgical diseases. Conservative surgery means nothing but this—it is the medical treatment of surgical diseases. Every day operations and mutilations are becoming less frequent in constitutional affections; and solely because it has been discovered that medical treatment can cure where surgery once mutilated. All this is the great boast of modern surgery, as Mr.

Paget so eloquently explained in his Address in Surgery delivered before the British Medical Association. We believe that there is no class of surgical diseases to which these remarks are not applicable. We would ask the oculist, for example, whether a large percentage of his patients are not of those whose defect of vision depends, not upon any local, but solely upon constitutional causes; and, therefore, solely require medical treatment. We would ask the same question of the aurist, in his department. In uterine diseases, again, the constitutional, the medical treatment—with all respect to the speculum-worshipper be it said—is of as great if not greater importance than the local. In that large class of strumous affections, again, which fall under the surgeon's hands, is not the constitutional the all-important treatment? Has not constitutional treatment saved, for example, many a joint which the surgeon had condemned to the knife?

If, then, as is a fact, medical treatment plays so large a part in the cure of surgical diseases, why is the physician to be excluded from giving his services to their cure? And why, again, what degradation is there, or impropriety, in the physician performing those operations in surgery which he knows he has the skill and the power of performing as well as his surgical neighbour? The pure surgeon, having, it may be, no proof to give of his medical knowledge, is considered capable, and by custom permitted, to cure every disease under the sun; and yet the physician, who may be an excellent anatomist, who may be deeply versed and practised in pathology, who may have had great practice in the use of the scalpel, is to be told that there is a sort of custom (as strong as law) which forbids his performing the most trivial operation on the living body. But, still further to show the absurdity of our customs, we find that a pure physician, if he be an accoucheur, may perform the most formidable operation *in parte obstetricâ;* and that he may become and practise as a first-rate surgeon, if only he keep to the uterus and its appendages!

Let us hope that this new proceeding of the London College may tend to remove the absurd anomaly which now distinguishes our professional relations; and the fact is, that physicians have, indeed, already begun to do surgery in a small way, and we know what may result from such beginnings. Physicians of the most orthodox position may, for instance, "mop out" a throat with nitrate of silver. Physicians may employ the laryngoscope; and we suppose, when they have got the knack of using it, will (without permission from the College of Surgeons) not hesitate to remove growths or "tumours" from the vocal chords, should an opportunity offer for their so doing. We believe, again, that there are *pure* physicians who do not hesitate to apply caustic to a chancre, for example; and we have even known physicians to pass a catheter (at a pinch), and to do it as well as the rest of the world. We are certain, moreover, that there are physicians, pure ones, we mean (nominally, at least), who would not hesitate to reduce a dislocated shoulder, if suffering humanity required it at their hands.

All this shows that the College has stepped in at the right moment, and has now tacitly said that it will no longer be a party to this absurd division of the body into medical and surgical departments. It now declares (as we read the matter) that medicine comprises surgery, midwifery, etc.; and that, as the major includes the minor, so the physician may consider himself, when properly qualified, justified in treating all diseases that fall under his hands, according to his conscience and his powers. We sincerely trust that the time has now come when a pure physician, not being an accoucheur, may attend a woman in labour if he choose, or perform any other operation, medical or surgical, which he is equal to, without infringing the ethical or other rules of the profession.

THE VINEGAR-EEL AND QUACKS.

An interesting paper on the Vinegar-Eel, from the pen of Mr. Jabez Hogg, appears in the last number of the *Popular Science Review*. After giving the natural history of these curious animals, Mr. Hogg points out the uses to which these animals are put by the rascality of our modern quacks:—

"This minute and curious eel is not unfrequently made the means of practising upon the unwary a gross but very characteristic imposition by the advertising quacks who infest this great metropolis. A victim offering himself to be fleeced is usually received in a well made-up room, lined by book-cases and illuminated diagrams of the organic structures in the human body, healthy and unhealthy. Instead of the old-fashioned stuffed alligators suspended from the ceiling, the Paracelsus of modern times ostentatiously parades the most showy and expensive microscope obtainable, in closest consultation with which he takes care to be found by the patient, just as an ant-lion may be supposed to be studying nature as he reposes at the bottom of his conical trap, the sloping sides of which, made up of the finest sand, prove a very *facilis descensus* to his unsuspecting prey who ventures on the treacherous surface. Proceeding to business, after some preliminary anxious inquiries, the doctor (!) gravely proposes to aid his diagnosis by that crucial test, the microscope. The dismay of the poor victim may be more easily imagined than described, when, on being pressed to see for himself, the state of affairs is revealed to his agitated mind, in a mass of wriggling little worms, disporting themselves in the smallest drop of fluid derived from his natural juices. The doom of Herod—"and he was eaten of worms"—to him needs no more elucidating commentary, and if the conscience smitten patient does not, like the tetrarch, presently give up the ghost, he is in a very apt mood to part with all the cash he may have about him, in order to be kept out of a situation, the horrible nature of which, had it not thus been demonstrated to his senses, he could never have conceived. I have sketched no overdrawn picture, but rather one, I fear, of daily oc-

currence; and the manner all this is effected is exceedingly simple. The smallest particle of *sour paste*, previously placed on a slip of glass, lies imperceptible to the unpractised eye, until a single drop of any fluid secretion from the body supplies the required conditions of moisture; and, accordingly, the little paste-eels are immediately aroused to life and activity, reversing the fable of the frogs and boys, as the lively enjoyment they exhibit is apt to prove a very serious matter to the human being so shamefully victimised."

THE CHLOROFORM COMMITTEE.

We beg to call the special attention of the profession to the following document, which has been forwarded to us for publication. We need hardly say that the inquiry into the effects produced by chloroform is one of deep interest to humanity; and we are satisfied that the profession generally will give their best assistance to the Committee who have undertaken to carry out the investigation.

"The Committee of the Royal Medical and Chirurgical Society, appointed to investigate the effects produced by the administration of chloroform, consider that the cooperation of the profession is necessary to enable the Committee to pursue their investigations in a satisfactory manner; and they are, therefore, desirous it should be generally known that their primary object is to inquire into the use of chloroform by inhalation, and its results (*a*) in the treatment of internal diseases, such as tetanus, delirium tremens, asthma, epilepsy, and infantile convulsions; (*b*) in surgical operations; (*c*) in obstetric practice.

"The points on which the Committee at present especially desire and ask for information are the following:

"1. Reports of any unpublished cases of death during the administration of chloroform, or of any other anæsthetic.

"2. More complete reports of fatal cases already published.

"3. Notes of any accidents with chloroform in which death has been threatened but averted.

"4. Facts as to the effects of chloroform employed by inhalation as a remedial agent in disease; the mode of its administration; the quantity used; and the results, both immediate and subsequent.

"5. Notes as to the comparative results of operations before and since the introduction of anæsthetics.

"Gentlemen who may be disposed to oblige the Committee by furnishing information on these subjects are requested to address their communications to Mr. Calender, Reporter to the Committee, Royal Medical and Chirurgical Society, 53, Berners Street, W."

THE WEEK.

The January number of the *Journal of Mental Science* contains some interesting and valuable papers. Dr. C. L. Robertson (the editor) contributes one on "The Want of a Middle Class Asylum in Sussex". Dr. H. Maudsley treats of "Hereditary Influence". Dr. Kenneth McLeod, in a paper entitled "Practicable Mental Science", examines two important communications from the pens of Dr. Laycock and Dr. J. S. Bushnan, on "The Principles and Method of a Practical Science of Mind", and on "the Practical Use of Mental Science". Dr. J. Crichton Browne concludes his remarks on "Personal Identity and its Morbid Modifications". Dr. Arlidge gives a "Quarterly Report on the Progress of Psychological Medicine", containing a vast amount of very interesting information. Under the head of "Medico-legal Cases", the trial of Hall *v.* Semple is referred to at length by Dr. Harrington Tuke. We are glad to find that the *Journal of Mental Science* takes very much the same view of the case as has been expressed in the British Medical Journal. The following remarks, as to the non-presence of lunacy doctors, are well put, though we cannot say we agree altogether with their purport.

"It is with no spirit of bitterness or sarcasm that we would mark this painful case as one which illustrates the danger the public must incur, if the administration of the Lunacy Law is left solely to medical men, who, however well meaning, are without sufficient experience to decide a doubtful case, and are, through ignorance of technical forms, liable to involve themselves and others in serious legal difficulties. It is but a few months ago that physicians engaged specially in the study of insanity were exclaimed against as theorists, their evidence was to be excluded from courts of justice, it was recommended that their asylums should be handed over to intelligent laymen, and it was gravely asserted that men of common sense and knowledge of the world were equally competent with them to decide as to the existence or non-existence of insanity.

"With certainly no amicable feeling towards 'mad doctors,' an amendment of the Lunacy Act passes through the legislature, and by a sort of poetical justice, the first trial that occurs after this becomes law presents us with the spectacle of an apparently sane man who, upon the informal certificates of two gentlemen who are not 'mad doctors,' is dragged off in the most barbarous manner to an asylum, whose proprietor, again, is not a 'mad doctor,' but who nevertheless keeps the patient, whose sanity he says he recognised, till his discharge by the Commissioners in Lunacy on account of the hopeless invalidity of his certificate. In all these proceedings, from first to last, no 'mad doctor' appears upon the scene, and we are surely justified in expressing an opinion that, if the advice of a physician experienced in cases of insanity and accustomed to weigh evidence, had been sought, a grievous wrong might have been avoided and a great public scandal prevented.

"But this does not seem the view of the public, who, although the lunacy law was in this case broken, and cannot, therefore, be said to have failed—although the Commissioners in Lunacy promptly redressed the wrong that had been committed, for which no 'mad doctor' was responsible—renew their clamour against our profession, and ask angrily for new laws and for vindictive punishments."

We cannot agree with the writer that *special* knowledge is requisite on the part of the examining medical man. No man is forced to give a certificate of lunacy; and we say, let every man abstain from giving such a certificate who has not personal proof of the insanity of the individual the state of whose mind is questioned. We disbelieve in the fine subtleties of psychological pathology, just as we disbelieve in the use of fine-drawn, hair-splitted signs, in stethoscopic diagnosis, as indications of internal diseases. We are inclined to believe that any properly educated medical man can (if not led away by his

feelings or his trust in others) determine whether the words or actions of an individual savour or not of lunacy. At the same time, we willingly admit as, indeed, *primâ facie* evident, that medical men who are constantly dealing with the speciality of lunacy must acquire special and peculiar powers for dealing with its treatment and management. We congratulate the Association of Medical Officers of Asylums and Hospitals on the vigour and life of their journal.

Dr. Arthur Farre has resigned the appointment of Professor of Midwifery in King's College, and of Physician-Accoucheur to King's College Hospital. This is another of the many good examples of resignations of public hospital appointments by senior members of the profession which have of late been recorded.

The *American Medical Times* gives the following summary of medical events during 1862 :—

"The civil war, which rages with undiminished violence, has, during the past year, made still further draughts upon the profession. The addition of another assistant surgeon to each regiment drew largely upon the young practitioners of the country, but the corps was promptly filled with, in general, well qualified surgeons. The subsequent immense increase of the army, demandng three surgeons to each regiment, has called from civil life another, and, we believe, a still more competent class of surgeons.

"During the past year our military hospitals have gradually increased in number and extent, until they form a grand and imposing system such as has never before been witnessed. The aggregate of sick is now never below 50,000, and has reached the enormous figure of 90,000.

"The re-organisation of the Medical Department of the army was happily effected in the early part of the year, and the good results have been incalculable. The important precedent is now firmly established, that its chief officer shall be selected on account of merit and qualifications, and not on the score of his age. The vigour and efficiency which General Hammond has infused into every branch of the medical service are sufficient evidence that this was a vital element of the reform sought. The Medical Staff also gained rank, which has given it a more respectable, as well as commanding position.

"It would be pleasant to extend to our 'Southern brethren' the courtesies of the season, and learn the state of the medical sciences in that tabooed region yclept 'the Southern Confederacy.' But the land and water blockade is so effectual, that we are as ignorant of the medical affairs of C. S. A. as of Japan. Occasionally we see an old familiar name among army news, but it disappears for ever in the impenetrable gloom that overhangs that devoted country. We inquire in vain for its medical periodicals and its medical colleges. A London contemporary has, indeed, noticed the second edition of a work on military surgery, by our former correspondent, Professor Chisholm, of Charleston, S.C., issued at Richmond. This is the only contribution to medical literature in the Southern States, of which we have any knowledge.

"Since the commencement of the rebellion, with the exception of the American Medical Association, the medical societies, State and local, have exhibited commendable activity. They have all had their stated meetings, and the discussions have, in general, been unusually interesting.

"Medical publishing has suffered even greater depression than during the preceding year. Periodical literature has been but poorly sustained, and the pressure which scarcity in paper now produces threatens complete suspension. But few books have been issued, and those, almost without exception, have been small works on military surgery.

"The Medical Schools are very well sustained, and in some instances largely increased classes have been the result of the demands which the army and navy are now constantly making upon the profession."

Oppolzer's numerous students have determined to establish a marble bust of their favourite teacher.

THE SALPETRIERE AND BICETRE.

Dr. Lee of Philadelphia, who has lately visited these establishments, writes as follows on them :—

"The great Hospice *Salpetrière* is both an almshouse and a hospital, chiefly for incurable, epileptic, or lunatic female patients, and patients advanced in age. It contains 5,204 beds, of which 2,917 only are occupied by real patients. It is an immense establishment, consisting of forty-five distinct buildings, extending 1,680 feet in length. The hospital receives, first, the *reposantes*, women who have been in its service thirty years, and who are upwards of sixty; second, indigent old women upwards of ninety, afflicted with incurable maladies; third, insane and epileptic females. The lunatics, of whom three-fourths are considered dangerous, are kept in separate infirmaries and treated with the greatest care. I saw several hundred of them sitting at the supper-table, each with an ample allowance of wine, and a plate of ripe plums and apricots, besides bread, etc. It was a delightful sight to see the cheerfulness of the old ladies, and hear their merry chat as they partook of their evening meal.

"The *Bicêtre* is situated on lofty ground, differing in this respect from the Salpetrière, and enjoys a more salubrious air than most of the Parisian hospitals. It is an asylum for indigent old men and male lunatics, and receives about two thousand patients. It presents a square of nine hundred feet on each side, and contains three courts. The indigent and infirm old men occupy the greater part of the building. They have no private rooms, but there are large rooms with workshops and dormitories, as also several gardens and court-yards for exercise. They are obliged to work three hours a day at their respective trades, or other occupations, and receive in return a share of the profits; the rest goes towards defraying the expenses of the establishment. The daily allowance to the indigent is a portion of soup, a pound and a quarter of bread, four ounces of meat for dinner, vegetables or cheese at night, and a quarter of a pint of wine. The average daily cost of each is nine sous (cents), and the total annual expense about nine hundred thousand francs. The number of lunatics, idiots, and epileptics is about nine hundred, who have the same allowance as paupers, except a larger allowance of bread. Physical restraint, by strait jackets, etc., is very common. Generally, however, the treatment is very mild, and daily employment is given on a model farm and bleaching-ground where there are also sties for breeding swine of superior breeds. This farm not only supplies the establishment but produces sufficient to partly supply the other Parisian hospitals. There are various kinds of schools in the establishment for lunatics of all ages. Instrumental concerts are often given by the patients. Voisin, Delasiauve, and Moreau, are the physicians having charge of the lunatics."

Progress of Medical Science.

Congenital Cervical Fistula. F. Mayr found in a ...le girl, aged 6 years, a double congenital cervical ...tula. On each side of the trachea, symmetrically ...ced at the inner border of the sterno-mastoid, at a ...stance of two *centimètres* from the origin of this ...uscle, was a small depression of the size of a hemp-...ed, in the midst of a circular projection; from this ...int a cord could, especially on the left side, be felt ...der the skin, proceeding towards the hyoid bone. At ...e upper limit of the depression, the skin formed a fal-...orm projection, beneath which a pig's bristle or a fine ...und could be introduced through a scarcely perceptible ...ening into a tolerably roomy canal, and passed along ... the direction of the subcutaneous cord, 2½ German ...ches on the right side, but only 1½ inch on the left. ...he introduction of the sound on the right side to the ...stance of about an inch produced violent coughing, ...hich increased when the instrument was passed fur-...er on, and ceased when it was withdrawn. The com-...unication of the canal on the right side with the ...achea was proved by injecting fluid, which, without ...oducing cough, was either swallowed or spat up. The ...d of the sound could neither be seen nor felt in the ...outh; and it was not possible to use a laryngoscope. ...he matter discharged from the canals at first consisted ... two or four drops daily of a serous fluid; but after-...ards it became more copious, thick, and purulent. ...he presence of a diverticulum of the œsophagus above ...e bifurcation of the trachea was also rendered pro-...able by the fact that the child, who was greatly emaci-...ed, was often unable to swallow anything, and for days ...gether would reject all food, during which time not ...en the finest bougie could be introduced into the sto-...ach; but, at last, this condition would spontaneously ...sappear. Mayr believes that the œsophagus became ...mpressed by the filling of the diverticulum with masses ... food; and that the dysphagia disappeared sponta-...eously when the food, softened by maceration, was dis-...harged into the œsophagus by the movements of the ...arts. (*Jahrb. für Kinderheilkunde;* and *Archiv für ...lin. Chir.*, Band 3, Heft 3, 1862.)

Peripleuritis. Under this name, C. A. Wunderlich ...escribes an affection in which the subserous tissue of ...he costal pleura and the adjoining soft parts become ...he seat of inflammation and suppuration, while the ...erous membrane and its cavity is only secondarily ...ffected. In such cases, a remarkable train of symp-...oms are manifested, which cannot be well understood ...ithout a knowledge of the anatomical origin of the dis-...ase. Wunderlich relates two cases in support of his ...heory. A healthy man, aged 27, had a severe attack of ...me affection of the chest (probably pleuropneumonia), ...hich passed away spontaneously; three months later ...e had peripleuritis. The abscess communicated with ...he lung; there was cutaneous emphysema on the left ...de; the pleural cavity contained no air, but there was ...uid at its lower part; there was also Bright's disease. ...n the other case, a man aged 55, who had bronchial ...latation, was attacked with peripleuritis on the left ...de; a hard swelling also formed in the walls of the ...hest. At first there was fever with prostration, and at ... later period a pseudo-typhoid state without fever; ...onchitic *râles* were heard; and there was slight albu-...inuria. He died at the beginning of the fourth week. ...here was a large peripleuritic abscess, with secondary ...estruction of the costal periosteum and erosion of the ...os; numerous abscesses were found under the left ...stal pleura, one under the right. The serous lining ... the pleural cavity was much injected, and the cavity contained an exudation which agglutinated its walls. There was bronchial dilatation on both sides. The portion of lung lying beneath the peripheric abscess was healthy. There were small purulent deposits beneath the endocardium, and scattered abscesses in the liver. The spleen was large and soft. Both kidneys contained numerous purulent deposits both on the external parts and internally. (*Archiv für Heilkunde;* and *Archiv für Klin. Chir.*, Band 3, Heft 3, 1862.)

Congenital Bifid Bladder: Calculus. M. Angelo Scarenzio relates the case of a cretin lad, aged 19, who had a largely developed penis, with hypospadias in the first stage, and division of the prepuce into two lateral lobes. The patient had been six times submitted to lithotripsy; but, as he still suffered very much from the pieces of stone remaining in the bladder, lithotomy was performed at the end of six months, and three large and two small calculi of phosphate of lime were removed. No other fragments could be discovered by the finger. Three weeks afterwards, a new calculus was discovered; but the patient would not allow it to be removed either through the opening in the perinæum, which was still fistulous, or by lithotripsy. Two months after the operation, he died of peritonitis. On *post mortem* examination, a large quantity of sero-purulent fluid was found in the peritoneal cavity. The bladder was divided into two halves by a deep furrow on the middle line from before backwards; the middle coat was hard and hypertrophied. In the interior were two well-marked cavities, each seven or eight *centimètres* in diameter, communicating by an opening of about three and a half *centimètres*. At the mouth of the right cavity was an oval fragment of calculus, about thirty *millimètres* in diameter. The mucous membrane was livid, and ulcerated in parts; and between it and the muscular coat were several small abscesses. Below the divided part of the bladder, next to the urethra, was a third cavity, oval in form, including the neck of the bladder, and having a long diameter of four or five and a transverse diameter of three *centimètres*. (*Annali Universali di Medicina;* and *Archiv für Klin. Chir.*, Band 3, Heft 3, 1862.)

Statistics of Lithotomy. Dr. Zett has contributed to the statistics of lithotomy the results of his practice, extending over a period of fifty-two years. He has performed the lateral operation 108 times; viz., in 103 men and 1 woman, with a fatal result in three cases only. The operation was performed three times on one man, and twice on each of two others. Seventy-three of the patients were from one to twelve years of age, and of these twenty-two were from two to four years old. Of men between thirty and seventy years old, only ten were operated on. The number of calculi extracted was 199 in 107 operations. In one case, 73 were removed; viz., 23 by extraction through urethra; 43 by incision of the urethra; one large calculus by lithotomy, and five two days later; and in another instance ten were removed. The success of M. Zett is attributed to the following circumstances; the general good health of the people; the youth of most of the patients; the absence of excessive hæmorrhage and urinary infiltration; and his practice of drawing the skin to the right so as to form a covering to the wound. He also kept his patients without drink for some days before and after the operation. (*Wurtemb. Zeitschr. für Wundärzte;* and *Archiv für Klin. Chir.*, Band 3, Heft 3, 1862.)

Fracture of the Spine: Recovery without Paralysis. Dr. J. Stein, in an inaugural dissertation, relates the case of a plasterer who had fallen six times from scaffolds or high beams. On the third occasion, which took place nine years before his death, he fell on his rump from a beam in the third story of a house. He was unable to rise, and showed signs of paralysis of the

lower limbs and of the pelvic organs; at the middle of the back there was an angular projection backwards of the spine, indicating fracture. He, however, improved; and in nineteen weeks was able to walk on crutches, and partially resumed his work in six months. After some years, he was perfectly able to work; but he remained bent, and felt pain in the seat of fracture during changes of the weather. He subsequently had two severe falls, in one of which he dislocated his thigh. At last he fell from a beam thirty feet high, which produced fracture of the ribs and pelvis, and laceration of several internal organs. Death took place in an hour and a half. The *post mortem* examination was made by Kussmaul. At the part corresponding with the seat of fracture, the body alone of the twelfth dorsal vertebra was found to have been broken; its anterior part was narrowed, so that there was an interval of two lines only between the last dorsal and the first lumbar vertebra. The part of the vertebral canal corresponding to the twelfth dorsal vertebra was somewhat narrowed, principally at the upper part, where its diameter was four lines, while at the middle of the eleventh dorsal vertebra the diameter was seven lines. The cord and its coverings appeared quite healthy. (*Archiv für Klin. Chir.*, Band 3, Heft 3, 1862.)

Action of Electricity in the Metamorphosis of Organic Substances. Herr Van Deen has for some time carried on a series of researches with the view of ascertaining whether the chemical changes which take place in the animal body can be produced artificially by subjecting the materials to be changed to the influence of an electrical current. He has therefore submitted to a continuous current various substances which form part of the body or are used as food; viz., serum of blood, milk, urine, albumen of eggs, biliary and urinary acids, glycin, starch, dextrin, sugar, glycerin, etc. He here relates especially the result of his experiments on uric acid. A little uric acid (which is ascertained to be free from urea) is mixed up in a large quantity of water, so that a part is dissolved. The apparatus employed consists of two elements of Bunsen's pile, with platinum electrodes, which are immersed (being separated by a piece of glass) in the vessel containing the substance. In ten or fifteen minutes, even though the current has been weak, urea can be detected. If warm water be added, the action becomes more rapid and intense. The quantity of urea formed is in direct relation to the time during which the current has acted on the uric acid. If the current were continued for a sufficient length of time, he found distinct crystals of urea, the nature of which he confirmed by forming nitrate of urea. He believes that carbonic and oxalic acids are formed with the urea, but is not positive on this point, although he sometimes found crystals resembling those of oxalate of urea. (*Archiv. für die Holland. Beiträge zur Natur-und Heilk.*, Band 3, Heft 2, 1862.)

In the same number is contained a summary of the results of Van Deen's experiments. He has obtained by means of the continuous current—1, from *albumen;* cells resembling cytoid corpuscles; a substance insoluble in water (fibrine?); urea; allantoin; and uric acid (very probably): 2, from *mucus;* morphological elements; uric acid; and urea: 3, from *uric acid;* urea and allantoin: 4, from *glycin;* urea: 5, from *thein*, urea: 6, from *glycerine;* sugar and lactic acid: 7, from *inosite;* lactic acid: 8, from the *lactate, formiate, acetate,* and *butyrate of lime;* carbonate of lime and water: 9, from *tartrate of lime;* carbonate and oxalate of lime: 10, from *gum;* carbonate and oxalate of lime, and water: 11, from *mannite;* sugar: 12, from *amygdalin;* sugar; hydrocyanic acid; and probably volatile oil of almonds: 13, from *tannic acid;* sugar and gallic acid: 14, from *salicin;* sugar and saligenin or saliretin. Electricity has no influence on starch, dextrin, glycogen, or sugar. He has also subjected various substances to the action of ozone, with the following results: 1, from *uric acid* urea and allantoin: 2, from *glycin;* urea: 3, from *glycerine;* sugar, and very probably lactic acid. Ozone appears to have influence on starch. Nitric acid and heat produce sugar from starch, the *corpora amylacea* mannite, and gum. The fresh pancreas of a dog whether the reaction was or was not acid, produced fatty acids, glycerine, and sugar from butter; and sugar from glycerine. At a temperature of 104° Fahr., calves' liver produced glycogen and sugar from glycerine, sugar from starch, and, at the ordinary temperature, sugar from dextrin.

Acetate of Lead in Pneumonia. M. E. Leudet of Rouen gives the results of his experience in the treatment of pneumonia by acetate of lead. He has given this remedy in forty cases, of which thirty-seven recovered and three died. The mean age of the patients was 36½ years. Of those who died, one was 56 and the other 57 years old; the third, whose age was 37, had been previously treated by tartar emetic in large doses and presented symptoms of inflammation of the mouth and pharynx. The mortality has thus been 7 per cent. Five of the patients were from 16 to 20 years old; twelve from 21 to 30; six from 31 to 40; six from 41 to 50; eight from 51 to 60; and two above 60. Of the whole number, thirty-one were males and nine females —a favourable circumstance, according to the statistics of Huss and others. The pneumonia was double in one case only. Of the thirty-nine unilateral cases, the base was affected in twenty-three cases, the apex in ten, the middle of the lung in one, and the entire lung in five cases. The amount of acetate of lead given in twenty-four hours varied from a grain and a half to twelve grains. The total quantity administered in the course of the disease varied in different subjects from seven grains and a half to eighty grains; the average quantity was nearly two scruples. The duration of the use of the medicine varied from one to fifteen days, the average being six days. The medicine was always given in the form of pill. M. Leudet has not observed in his patients any signs of lead-poisoning, nor the "lead-line" on the gums, nor constipation. On the contrary, diarrhœa was observed in more than half of his cases, most of which were taking large doses of the acetate of lead. He gives reasons for believing the diarrhœa to have been a result of the treatment, and not of epidemic influence, or other causes. When the treatment was commenced in the first four days of the disease, a cure was obtained, in thirteen cases out of thirty-seven, before the twelfth day; and when the medicine was first given between the fourth and the eighth days, the average date of cure was the fifteenth day. The effect on the pulse was to diminish the number of pulsations from 100 and upwards (to 120) down to 70, 60, and even 50 or 40, on the fourth day after commencing treatment. In most cases M. Leudet has not found the pain in the side relieved by the acetate of lead, but has been obliged to employ local bloodletting. In twenty-seven cases, the period in which the sputa lost their rusty colour was observed. In twenty cases, the decoloration was complete from the sixth to the ninth day. In one-half of the cases, the returning crepitant rhonchus was heard after the first day of treatment. In nine cases out of thirty, the stethoscopic signs remained stationary for two or three days when resolution manifested itself. In six cases out of thirty, the symptoms increased in intensity after the treatment was commenced; but this state continued one day only in five cases, and two days in another. When once resolution has commenced, it is useless to continue the acetate of lead. In two cases, M. Leudet observed relapses, one of which occurred while the lead was still being given. Convalescence was very rapid; and the appetite returned as soon as the fever disappeared, even

fore the resolution of the disease was well established. *ulletin Génér. de Thérap.*, 15 Nov. 1862.)

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Ordinary.]	Dudley Arms Hotel, Rhyl.	Tuesday, Jan. 27, 1.22 P.M.

NOTICE REGARDING NEW MEMBERS.

r desire of the Committee of Council, the General ecretary requests that the Local Secretaries will be od enough to forward to him the names of all New embers who join the Association through the Branches; otherwise the JOURNAL cannot be sent to them.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, November 10th, 1862.

NORTH WALES BRANCH.

N ordinary meeting of the members of this Branch ill be held on Tuesday, January 27, 1863, at 1.22 P.M., the Dudley Arms Hotel, Rhyl.

Gentlemen having papers or cases to communicate, ill please to give an early intimation of the same to e Secretary. D. K. JONES, *Hon. Sec.*

Beaumaris, January 13th, 1863.

Correspondence.

PUBLIC VACCINATION.

LETTER FROM A. B. STEELE, ESQ.

SIR,—The suggestions for an amended Vaccination ct, contained in Mr. Fletcher's letter in the JOURNAL r January 3, appear to me to be based upon a miscon-eption of the real difficulties of the case; and, as the ubject is of considerable importance, perhaps you will fford me space for a few remarks.

For the purposes of vaccination, the public may be di-ided into two classes. The first comprising those whose ocial position enables them to secure the services of a family doctor," and who for the most part duly appreci-te the benefits of vaccination, and may safely be left to ake care of themselves. The second class consists of hose who are unable to provide medical attendance at heir own cost, and therefore, are necessarily the objects f gratuitous vaccination; and, it is to this class that the peration of the Vaccination Act is almost exclusively mited.

The long and extensive experience of the National accine Establishment has conclusively shown, that the ost certain and successful plan for keeping up efficient accination in a district, is a concentration of the work, o as to secure the establishment of one or more public ations, at which regular periodical vaccination from rm to arm can be continuously maintained, and from hence a constant supply of reliable vaccine lymph can all times be procured. When these conditions are mplied with, it is found that the great mass of the poor ill bring their children to the station where they know ey can be properly vaccinated. The medical practi-oners in the locality can obtain a supply of lymph henever they require it; and on the whole the system orks well. Some, of course, from ignorance, prejudice, d other causes, do not avail themselves of gratuitous ccination; but my experience as a public vaccinator in a densely populated district, leads me to believe that the neglect on the part of the poor to bring their children to be vaccinated arises, in the vast majority of instances, from their habits of indolence, procrastination, and want of foresight, which so much prevail amongst them, rather than from any antipathy or prejudice against the proceeding itself. This difficulty would, in my opinion, be most successfully overcome by the appointment of an officer, whose special duty should be to visit from house to house, and to point out to the people the importance of vaccination, using chiefly persuasive means, and only resorting to the powers of the law in extreme cases, which I believe, would but very rarely be met with. The poor would soon discover that the intention of government is not so much to compel them to be "vaccinated, when, where, and by whom the law says they shall," as to place within their reach the full benefits of free efficient vaccination. At two stations with which I am officially connected, not fewer than 1,200 children in a year are brought weekly for vaccination, and this without recourse to the compulsory powers of the Act. Such a system can, of course, only be carried out efficiently in large towns, but the nearer any scheme approaches to this model, the more successfully it is found to work; in thinly populated districts, it is necessary to modify the arrangements in accordance with the suggestion of the inspector as quoted by your correspondent, and I have personally observed the satisfactory results of such a plan in a rural district.

The proposal of Mr Fletcher, to require under a penalty or imprisonment, that parents should sign certificates of vaccination, is simply impracticable; inasmuch as a large proportion of such people are unable to read and write, and as it is, they often fail to understand, or to make a proper use of the certificate they receive from the Registrar of Births.

The great objection, however, to Mr. Fletcher's scheme is, that it entirely ignores the conditions which have been proved to be essential to the maintenance of efficient public vaccination, namely, regular periodical arm to arm vaccinations by competent operators, and a continuous supply of recent lymph.

In support and confirmation of these views, I would refer your correspondent and others who are interested in the question, to the admirable and comprehensive report of Mr. Simon, in a blue book on Vaccination issued by the General Board of Health in 1857, and also to a paper published in the JOURNAL, March 8, 1862, in which I have drawn attention to the importance of the subject, which is far too comprehensive to be disposed of in a letter.

I must take exception to some of the reasons named by Mr. Fletcher for exemption from penalties, or rather to the terms in which those reasons are stated. For example "(1). Should the child be incapable of taking the vaccine disease"; and again, "(3). Should *they* (?) be unable to procure satisfactory lymph." The latter contingency ought never to occur in a well arranged system of vaccination, and therefore, should not be officially recognised; and, as to the incapacity for taking the vaccine disease, although I will not venture to assert that such a condition may not exist, yet I believe it to be in the practice of competent vaccinators extremely rare, and the suggestion of such an occurrence on every certificate would be better avoided or provided for in some other way. It is very probable that, in a system of what I should designate irregular and promiscuous vaccination, this particular cause of exemption might frequently be assigned, and this is just one of the many disadvantages which would inevitably accompany such a scheme as that involved in the recommendations of your correspondent, who possibly is not aware of a fact abundantly evident from official records, and to which Mr. Simon, in his report emphatically alludes, namely, that the course of education and the medical and surgical qualifications

of the present generation of practitioners in this country do not necessarily imply a practical acquaintance with the subject of vaccination. Under these circumstances, the government having rendered vaccination compulsory, felt that they were bound to take care that it should be performed in the best possible manner, and under the surest guarantees of competence in the operators, as well as of purity and genuineness in the lymph used in the public service; and it is quite evident that neither of these conditions could be secured if vaccination were left entirely on the hands of the profession generally, without any responsible directing body to watch its progress, and to take such steps from time to time as might be necessary to sustain its efficiency.

I am, etc.,

A. B. Steele, *Mem. Nat. Vacc. Estab.*

Liverpool, January 5th, 1863.

AMERICAN AND ENGLISH ASYLUMS.

Letter from John Hitchman, M.D.

Sir,—In prominent type, and in a prominent part of the British Medical Journal, you have placed on record the opinion of Dr. Lee of Philadelphia, on the comparative merits of the English and American asylums. Upon the extravagance of language in which that opinion is couched, I have no desire to comment. It may be, that upon the question, whether the "Americans are the most practical people in the world," and free from "the unreasonable and obstinate prejudice which exists in Great Britain against adopting anything new from foreign countries," neither Dr. Lee nor myself is sufficiently unbiassed to argue fairly. But, perhaps, as the editor of the British Medical Journal, you may not be unwilling to give equal prominence to the following opinion of another American physician on the comparative merits of the asylums of the two countries. Dr. Butler, the Superintendent-Physician of the Hartford Asylum, Connecticutt, thus reports in the Thirtieth Annual Report to the Directors:—

"During the six months vacation which was so kindly granted me by the liberality and indulgence of your Board, I had the pleasure of being able to visit many of the most prominent lunatic hospitals in England and Scotland.

"It is evident, that from a variety of causes, a spirit of improvement is pervading these hospitals. A great impetus has of late years been here given to this department of human effort, and the most beneficial and gratifying results have been attained.

"It is not expedient, in the narrow limits to which I desire to restrict this Report, to go into a consideration of these causes. It is sufficient for my present purpose to say, that notwithstanding a few years since our leading institutions were not surpassed by the best of theirs, *it is very evident to me that we have now none which will compare with some of those lately erected there.*

"In the older hospitals, there was manifest improvement in the buildings, where original defects could never be wholly remedied.

"In the new institutions, those erected within a very few years, or just now going into operation, I found a beauty of structure with a thoroughness and perfection of arrangement which I have never seen equalled elsewhere. Among these it will not, I hope, be invidious to mention the asylums at Prestwich and Cheadle, near Manchester; at Mickleover, near Derby; at Clifton, near York; and the new asylum at Stafford.

"It was evident that in these new asylums no pains or needful expense had been spared to obtain, in the first place, the most unexceptionable plans. The highest authorities were consulted, and their conclusions referred to the scrutiny of other practical men; the errors of preceding structures were avoided, and every improvement as readily adopted, with the single desire to obtain the best. It is evident that generally each succeeding structure contains improvements on its predecessors.

"Once adopted, the plans have been carried out without that curtailment and distortion which sometimes, in this country, has produced such unfortunate results.

"In some instances, it is evident that undue expenditure has been incurred to produce external effect; but in the internal arrangements especially, it is clear that while in county asylums everything is plain and simple and unpretending, that is deemed in all the best and wisest economy which, in the long run, shall best effect the desired object.

"The chief points of excellence were extensive, well laid out, and carefully planted airing-courts and pleasure-grounds, and sufficiency of cultivated land for out-of-door employment. Spacious, airy, and well-ventilated apartments, the extensive application of steam to every available purpose, cooking, pumping, heating, ventilating, etc., and open fire-places in every admissible room. The most important of all was the extensive arrangements made for the manual employment of the inmates both within doors and without. There were workshops for the different trades, in some of which these trades have been successfully taught, and in many the amount of work performed showed that the shops were sources of profit to the institution, as well of beneficial employment to the patients.

"Another feature which struck me most pleasantly was the construction in several hospitals of a large and handsome room expressly for the social gatherings and amusements of the patients. My attendance at some of these festival occasions is among the most pleasant reminiscences of my visit. A large amount of profitable out-of-door labour was insisted upon in many, and the amount accomplished in some instances was highly creditable.

"It is very evident that if the American institutions are to maintain the comparatively high rank to which they have justly heretofore had claim, a more liberal expenditure than has been adopted in most in regard to occupation, both of body and mind, amusement, etc., must be adopted."

From the statements of Dr. Lee in your last number, and from the Report of Dr. Butler, it is pleasant to observe that both these nations have been making great progress in a humane direction; and all good men must earnestly desire a cessation of that civil strife which is now absorbing the attention and resources of the American people. I am, etc., John Hitchman.

Mickleover, near Derby, January, 1863.

TRIPLETS AND THE ROYAL BOUNTY.

Letter from John Walshe, M.D.

Sir,—In the Journal of January 3rd, a paragraph appeared headed "The Royal Triple-Birth Donation," from which it might be inferred that some institution of the kind exists; or, in other words, that any female giving birth to triplets needs only to have that circumstance brought under Her Majesty's notice in order to become the recipient of a bounty for such cases made and provided. This is, indeed, a very wide-spread belief. It is, however, a pure delusion: there is no such Royal Bounty.

On the 4th of May, 1858, I attended Mrs. T., of this city, who on that occasion was confined of triplets. Her friends were very anxious that the honour of the Royal gift should be obtained, and application was made accordingly. The result was a communication from Sir Charles Phipps requesting to be informed if the woman in whose behalf the application had been made, was a person in indigent circumstances, as otherwise the

uld not be submitted to Her Majesty. He also stated at there was no special fund set apart for cases of this nd, and that it was not at all a matter of course that ery such case should receive a gift from the Queen.

This "popular error" having been thus demolished, rhaps you will afford me space for a word or two uching the medical aspects of this case of mine—the cond, by the way, which has fallen within my own exrience, and which may not be uninteresting to some my brother-members.

The triple birth comprised two boys and a girl. The tter weighed, immediately after birth, 7 lbs. avoirdupis; the boys, 6 lbs. and 5 lbs. respectively. The placenta, which was single, weighed 6 lbs. Thus the entire olid contents of the uterus amounted to 24 lbs. This ceeds anything within the knowledge of my friends ere. Even the immense obstetric experience of Mr. oberton cannot fellow it. I should be glad to know if ny of our members could report a similar case, as I eem it an important practical point. Mrs. T. had a ir recovery in this confinement, and has since been onfined of a single birth. The triplets are still living, nd are remarkable in their neighbourhood no less for heir great beauty than for their fine healthy development. The girl, however, maintains her congenital uperiority in this latter respect.

I am, etc., JOHN WALSHE.

42, Oldham Street, Manchester, January 4th, 1863.

Medical News.

UNIVERSITY OF ST. ANDREW'S. List of gentlemen on whom the degree of Doctor of Medicine was conferred, n December 20th and 24th, 1862:—

Adams, Joseph Dixon, M.R.C.S., L.S.A., Martock, Somerset
Allanson, Henry George, M.R.C.S., L.S.A., Sheffield
Angier, George A., M.R.C.S., L.S.A., Ipswich
Ashforth, George Morris, M.R.C.S., L.S.A., Westmill, Herts
Aspray, Charles Owen, L.S.A., London
Aubin, Thomas John, M.R.C.S., St. Clements, Jersey
Bacon, Mackenzie, M.R.C.S., L.S.A., Norfolk
Bangay, Richard, M.R.C.S., Corbridge
Barrow, Thomas Samuel, London
Bate, Abraham, L.R.C.S.I., L.M., Donegal, Ireland
Bennett, James Edward, M.R.C.S., L.S.A., London
Benson, Henry, L.R.C.S.I., Dublin
Beviss, Charles, London
Biddle, Charles Henry, M.R.C.S., L.S.A., Leeds
Bloxam, William, M.R.C.S., L.S.A., London
Bolton, Andrew, M.R.C.S., L.S.A., Newcastle-on-Tyne
Booth, Lionel, M.R.C.S., L.S.A., Greenwich
Booth, Samuel, M.R.C.S., L.S.A., Huddersfield
Brabazon, William Philip, L.R.C.S.I., L.K. & Q.C.P., Liverpool
Brecknell, J., M.R.C.S., L.S.A., Durham
Buckle, William Henry Fleetwood, L.S.A., Royal Mint
Bucknill, Ebenezer, M.R.C.S., L.S.A., London
Campbell, Robert L., F.R.C.S.Lond., L.R.C.P.Lond., Inverness
Chittenden, J. F., M.R.C.S., L.S.A., London
Clarke, A. G., Calcutta
Cooper, Wm., M.R.C.S., L.R.C.P.Ed., L.S.A., Bury St. Edmunds
Costine, David Dunlop, Liverpool
Coulton, Henry Joseph, L.R.C.S.I., L.M., Dublin
Cowan, Robert, L.F.P.S.Glasg., Glasgow
Cross, William, Liverpool
Dale, George C., F.R.C.S.Eng., L.S.A., London
Davis, Robert Alexander, L.R.C.P.Ed., L.S.A., Stafford
Day, Horace, M.R.C.S., H.M. Bombay Army
Dickinson, James Bathgate, M.R.C.S., L.S.A., Howden-on-Tyne
Dillon, Patrick William, M.R.C.S., L.S.A., Ennis, Ireland
Diver, Ebenezer, London
Dow, William B., L.R.C.P.Ed., L.F.P.S.Glasg., Fifeshire
Downie, Thomas, L.R.C.P.Ed., L.F.P.S.Glasg., Blantyre
Dunderdale, Wm., M.R.C.S., L.S.A., L.M., Boulton-le-Fylde
Edwards, John, M.R.C.S., Birmingham
Elias, Daniel, L.S.A., Southport, Lancashire
Elliot, George Stokoe, Southwell, Notts
Elliston, William Alfred, M.R.C.S., L.S.A., London
Erskine, William, L.F.P.S.Glasg. Dunfermline
Ferguson, John, M.R.C.S., Cove Nigg
Fitzgerald, Charles E., M.R.C.S., Folkestone
Foote, Charles Newth, M.R.C.S., L.S.A., Conisbro', Doncaster
Ford, James, M.R.C.S., Barnstaple
Gimblett, John, M.R.C.S., L.S.A., Lydney, Gloucester
Gimson, Wm. Gimson, M.R.C.S., L.S.A., Witham, Essex
Goss, Samuel Day D., L.R.C.S.Ed., L.S.A., London
Great Rex, Adolphus Burnell, L.S.A., Eccleshall
Greenless, Alexander, L.R.C.S.Ed., Glasgow
Griffith, Alfred Leete, M.R.C.S., L.S.A., L.M., Swindon
Grimbly, Owen, L.S.A., Banbury, Oxon
Grove, William R., M.R.C.S., L.S.A., Huntingdon
Harding, Charles Fincham, M.R.C.S., Woolwich
Harrison, Arthur Robert, M.R.C.S., L.S.A., London
Hawkins, Henry Mortimer, M.R.C.S., Peckham, Surrey
Hayward, George, M.R.C.S., L.S.A., Leeds
Hayward, Sidney, M.R.C.S., L.S.A., London
Heath, Edward, M.R.C.S., Arklow, Ireland
Hetley, Frederic, F.R.C.S.Eng., L.S.A., Norwood, Surrey
Hibbert, Edward, M.R.C.S., L.M., Tunbridge Wells
Hicks, Charles C., M.R.C.S., L.S.A., Dunstaple
Hill, John Daniel, M.R.C.S., L.S.A., Market Harborough
Hillyard, Alexander, L.R.C.S.I., L.M., L.S.A., Falcarragh
Hilton, Caleb S., L.S.A., Preston
Holt, Richard, London
Howsin, Edward Arthur, M.R.C.S., Newmark
Hume, Henry, M.R.C.S., L.S.A., London
Hutchinson, William, L.F.P.S.Glasg., Loughborough
Iles, Francis Henry Wilson, M.R.C.S., L.S.A., Watford, Herts
Irvine, George R., M.R.C.S., L.S.A., Portsmouth
Isherwood, Felix Wm., L.R.C.P.Ed., M.R.C.S., L.S.A., Hayes
Jackson, Robert, Newcastle
Johnson, Thomas M., L.S.A., Salford, Lancashire
Kernot, Charles Noyce, M.R.C.S., L.S.A., L.M., Cowes, I. Wight
Kerr, Benjamin C., L.R.C.S., H.M. Service
King, Thomas William, M.R.C.S., London
Lane, John William, L.R.C.S.I., Bellaghay, Ireland
Lee, Matthew, M.R.C.S., Bradford
Loftus, William, L.R.C.S., Glasgow
Long, Charles F., M.R.C.S., L.S.A., Barham, Kent
Longhurst, Arthur E. T., M.R.C.S., L.S.A., Royal Navy
Lynn, Christopher C., M.R.C.S., Newcastle-on-Tyne
Macbirnie, James, L.F.P.S.Glasg., Glasgow
Mackenna, J. William, L.F.P.S.Glasg., London
M'Lean, Hugh, M.R.C.S., L.S.A., Newcastle
Madden, Christopher J., L.R.C.S.Ireland, Bourton-on-Water
Magill, Martin, M.R.C.S., Royal Navy
Masson, Donald Ptolemy, M.A., Edinburgh
Matterson, William, M.R.C.S., L.S.A., York
Maurice, James Blake, M.R.C.S., L.S.A., London
Maxwell, Hustor, M.R.C.S.I., H.M.S. *Pembroke*
Medwin, Aaron George, L.S.A., London
Meller, Charles Matthias, M.R.C.S., L.S.A., London
Milsome, John R., M.R.C.S., L.S.A., London
Mitchell, Robert Nathaniel, M.R.C.S., L.S.A., New Cross, Kent
Moor, William Henry, M.R.C.S., L.S.A., Buntington, Herts
Moore, Edwin, M.R.C.S., L.S.A., Preston
Moore, Francis, M.R.C.S., L.S.A., Hadham
Morley, Edward S., M.R.C.S., L.S.A., Blackburn
Mumford, William L., M.R.C.S., L.S.A., Cornard Parva, Suffolk
Murray, John C., L.R.C.S., Gateshead
Neal, James, M.R.C.S., L.S.A., Birmingham
Needham, Frederick, M.R.C.S., L.M., York
Nicholas, George Edward, M.R.C.S., L.S.A., L.M., Wandsworth
Nichols, Robert Thomas, L.S.A., Rotherhithe
Nightingall, Robert Salisbury, M.R.C.S., L.S.A., London
Noad, George William, M.R.C.S., L.S.A., Wokingham, Berks
Norris, Richard, M.R.C.S., Birmingham
Norton, William Augustus, M.R.C.S., Alderton, Suffolk
Noyce, Elisha, L.S.A., London
O'Conor, Frederick, L.F.P.S.Glasg., Dublin
O'Flanagan, Henry, L.R.C.S., Miltoun, Ireland
O'Ryan, Edmund, L.S.A., L.M., Clonakilty, Ireland
Owens, Henry, M.R.C.S., Croydon
Owles, James Allden, M.R.C.S.Eng., L.S.A., Bungay, Suffolk
Peatson, Joseph C., M.R.C.S., L.F.P.S.Glasg., Manchester
Phillips, Howell Charles, M.R.C.S., L.S.A., London
Picthall, John, L.R.C.P.Lond., L.R.C.S., Bengal Medical Service
Pierpoint, A. Bradford, M.R.C.S., L.S.A., London
Pole, Alexander, M.R.C.S., L.M., Greenbank, Shetland
Popham, Robert, L.F.P.S.Glasg., London
Prichard, John Lewis, London
Prythrech, John, M.R.C.S., L.S.A., Liverpool
Ramsbotham, Joseph Meredith, M.R.C.S., L.S.A., London
Ranson, Wynne Staton, Edinburgh
Ray, Edward, F.R.C.S.Eng., L.S.A., Dulwich
Reckitt, Edward, M.R.C.S., L.S.A., Wainfleet
Remington, Thomas, L.S.A., Brixton, Surrey
Renfrew, Robert, L.F.P S.Glasg., Glasgow
Rhodes, Charles, M.R.C.S., L.S.A., London
Richards, Henry Ebenezer, L.S.A., London
Richardson, Charles S., M.R.C.S., L.S.A., London
Ritchie, William, London
Roberts, John S., L.R.C.P.Ed., M.R.C.S., L.S.A., Sheffield
Roberts, Anthony Tucker, M.R.C.S., London
Robinson, Charles S., M.R.C.S., L.S.A., L.R.C.P.Ed., London
Robinson, Edmund, M.R.C.S., L.A.C., Birmingham
Roche, John, M.R.C.S., L.S.A., Fermoy, Ireland
Roland, John, M.R.C.S., L.S.A., Strata Florida, Wales
Rudyard, Alfred, Macclesfield, Cheshire
Sands, John Lee, L.R.C.S.I., L.M., Royal Navy
Sargeant, David Maurice, M.R.C.S., Ramsay, Huntingdon
Sargent, George Pearse, L.F.P.S.Glasg., London

Saul, William, M.R.C.S., L.S.A., London
Savage, Thomas, L.R.C.P., M.R.C.S., L.S.A., Newport, I. Wight
Savory, Charles T., M.R.C.S., L.S.A., London
Saxby, Henry L., L.M., Ballasound, Shetland
Sayer, William, M.R.C.S., L.S.A., Liverpool
Seccombe, John T., M.R.C.S., L.S.A., London
Semple, Andrew, L.R.C.S., Army
Shaw, William, L.F.P.S.Glasg., L.S.A., Lurgan, Ireland
Sheen, Alfred, London
Sheridan, Michael J., L.R.C.S.I., Wexford, Ireland
Simmons, Benjamin, M.R.C.S., L.S.A., Watchet, Somerset
Skrimshire, George, L.S.A., London
Smith, Charles, L.R.C.S.I., L.M., Derry, Ireland
Smith, Henry, M.R.C.S., L.S.A., Rudgwick, Surrey
Smith, Samuel Wagstaff, M.R.C.S., L.S.A.
Spencer, Lionel Dixon, Newcastle-on-Tyne
Spratley, Samuel, M.R.C.S., L.M., L.S.A., Rock Ferry, Cheshire
Stainthrope, Thomas, M.R.C.S., L.S.A., Hexham
Stewart, Daniel, L.R.C.S. & L.M.Ed., Auchterarder
Stiles, Henry Tournay, M.R.C.S., L.M., L.S.A., Spalding
Stone, William Domett, M.R.C.S., L.S.A., Fulham, London
Strong, Henry J., L.R.C.P.Ed., M.R.C.S., L.S.A., L.M., Croydon
Thompson, John, M.R.C.S., L.S.A., Snaith, Yorkshire
Tiffen, Robert, M.R.C.S., L.S.A., Wigton, Cumberland
Tofts, Henry, M.R.C.S., L.S.A., Cambridge
Trimmer, Henry Beesly, M.R.C.S., Gloucester
Turnour, Henry E., M.R.C.S., L.S.A., Market Rasen, Lincoln
Tuson, John Edward, M.R.C.S., H.M. Bengal Army
Wake, Edward G., M.R.C.S., L.S.A., Collingham, Notts
Wallace, Robert, L.F.P.S.Glasg., Saltcoats
Watchhorn, Isaac, London
White, Arthur Calcutta, M.R.C.S., L.S.A., Rawreth, Essex
White, Edward, M.R.C.S., L.S.A., L.M., Birmingham
Wilkinson, Frederic Eachus, L.R.C.P.Ed., M.R.C.S., L.S.A., Sydenham, Kent
Willett, Matthew, M.R.C.S., Bristol
Williams, W. Rhys, L.R.C.P.Edin., Baldoch
Williamson, James, M.R.C.S., L.S.A., South Shields
Willis, Thomas, M.R.C.S., L.S.A., Dublin
Wilson, John Wyse, M.R.C.S., L.M., L.S.A., London
Wiltshire, Alfred, London
Wimperley, Conrad Christopher, M.R.C.S., Louth
Woods, Henry Charles, M.R.C.S., Godalming, Surrey
Woolridge, Edward, M.R.C.S., L.S.A., London

Examination for Honours.

First Class.

Bloxam, William, London
Ray, Edward, Dulwich
} Equal.

Second Class.

Bright, John M., Forest Hill
Prichard, John L., London
Phillips, Charles H., London
Irvine, John W., Lancaster
Steele, James, Witham

APOTHECARIES' HALL. On January 8th, the following Licentiates were admitted:—

Mann, Allen Græme Cheek, Grenada, West Indiès
Thelwall, William, Farndon, near Chester
Trimmer, Henry B., Gloucester
Waghorn, Frederick, 34, Soho Square

APPOINTMENTS.

ALDRIDGE, Russell, M.D., of Yeovil, appointed Certifying Surgeon under the Factory Act.
GRABHAM, George, Esq., appointed Senior Assistant Medical Officer to the Surrey County Asylum, Wandsworth.
ORANGE, William, Esq., appointed Deputy Superintendent and Surgeon to the Broadmoor Criminal Lunatic Asylum.
WYER, Otho F., Esq., of Nuneaton, appointed Certifying Surgeon under the Factory Act.

POOR-LAW MEDICAL SERVICE.

GROVES, Charles, H., M.B., elected Medical Officer to the Ballyclough District of the Mallow Union, Ireland.
HUGHES, William H., Esq., Resident Medical Officer to the Chorlton Union Workhouse, Manchester.
M'BRIDE, Andrew, L.R.C.P.Ed., Medical Officer to the Poyntzpass District of the Newry Union, Ireland.
NUGENT, Edmund, L.K.Q.P.I., Medical Officer to the Carlingford District of the Dundalk Union, Ireland.

ARMY.

CAY, Assistant-Surgeon C. V., Coldstream Guards, to be Battalion Surgeon, *vice* J. Wyatt.
HENDLEY, Staff-Surgeon J., to be Surgeon 7th Foot, *vice* T. Moorhead, M.D.
JAZDOWSKI, Staff-Assistant-Surgeon B. J., M.D., to be Assistant-Surgeon 93rd Foot, *vice* S. Hope.
KERANS, Staff-Assistant-Surgeon W. R., to be Assistant-Surgeon 99th Foot, *vice* S. H. Macartney, M.D.
MOORHEAD, Surgeon T., M.D., 7th Foot, to be Staff-Surgeon, *vice* J. Hendley.
WYATT, Battalion Surgeon J., Coldstream Guards, to be Surgeon-Major, *vice* J. Monro, M.D.

To be Staff-Assistant-Surgeons:—

ALSTON, Assistant-Surgeon W. E., M.D., 70th Foot.
HOPE, Assistant-Surgeon W. A., M.B., 57th Foot.
MCSHANE, Assistant-Surgeon E., 65th Foot.

ROYAL NAVY.

BAROWING, Benjamin, Esq., Assistant-Surgeon, to the *Cumberland*
BURNETT, Thomas S., Esq., Assistant-Surgeon, to the *Adelaide*, Plymouth Hospital.
GRAHAM, Andrew, Esq., Surgeon, to the *Edinburgh*.
MITCHELL, John T., Esq., Assist.-Surg. (additional), to the *Victory*.
O'TOOLE, R. B., Esq., Assistant-Surgeon (additional), to the *Forte*
SANDS, John L., Esq., Assistant-Surgeon, to Greenwich Hospital.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

GILMOUR, A., Esq., to be Surgeon 1st Administrative Battalion Linlithgowshire R.V.
PYLE, T. T., Esq., to be Assistant-Surgeon 3rd Durham R.V.

To be Honorary Assistant-Surgeon:—

BLAIR, D., Esq., 7th Argyleshire R.V.

DEATHS.

BRISCOE. On January 12th, at the Royal Arsenal, Woolwich, Edith infant daughter of Henry Briscoe, M.D., Surgeon Royal Artillery
GUNNING, John, Esq., C.B., Inspector-General of Hospitals, at Pau aged 89, on January 11.
JONES, George H., M.D., at Hambleden, Hants, aged 72, on Jan.
KINGDON, William, Esq., Surgeon, of Bank Buildings, Lothbury, Abbey Wood, Kent, aged 74, on January 8.
*MOTT, Charles, Esq., at Church Shelton, Shropshire, aged 73, January 11.
NEWINGTON, Charles E. H., M.D., at Ticehurst, aged 50, on Jan. 6
RATCLIFFE, Richard, Esq., Senior Assistant-Surgeon H.M.S. *Pomene*, at sea, off Bermuda, aged 34, on December 8, 1862.

PLYMOUTH MEDICAL SOCIETY. Dr. J. C. Cookworthy has been elected treasurer and secretary, and Dr. C. Prance librarian, of this society.

NORTH STAFFORDSHIRE MEDICAL SOCIETY. The following officers have been appointed:—*President*, John T. Aldridge, M.B.; *Treasurer*, James Yates, Esq.; *Secretary*, W. H. Davis, Esq.

SUNDERLAND MEDICAL SOCIETY. Dr. H. O. Bowman has been elected president, Mr. G. B. Morgan secretary and treasurer, and Mr. E. A. Maling librarian, of the society.

ROYAL COLLEGE OF SURGEONS. At the recent *preliminary* examinations of candidates, on commencing the study of the medical profession, one hundred and fifty gentlemen presented themselves, of which number ninety-five were successful.

DENTISTS AT RIO JANEIRO. The medical college of Rio has lately made arrangements to instruct and graduate dentists, but in a very imperfect manner. The Philadelphia Dental Cosmos, states that there are about twenty dentists in Rio, most of whom are graduates in medicine, and the Americans, adds Dr. Vegas, are considered the best.

VACANCIES. The following appointments are vacant:—Professor of botany in Anderson's University, Glasgow; medical officer to the west district of the parish of Wednesbury, in the West Bromwich Union; resident medical officer to the Leith Hospital; parochial medical officer for the parish of Aboyne, Aberdeenshire; medical officer and public vaccinator for District No. 1 of the Market Harborough Union, Leicestershire.

EXTRAORDINARY SILVER MINE. In the Geological Museum there is a lump of silver—about as much as would make forty shillings—which has been taken from the stomach of a mule in Mexico. It appears to be a common occurrence to find quantities of silver in the stomachs and intestines of the mules working in the Mexican silver mines, and its presence is accounted for by the mules eating mud, which contains much silver for the purpose of obtaining the salt which is mixed up with it also. The silver is said to accumulate to a considerable extent without proving injurious, and the

nishes us with another fact to indicate how living sues tolerate the presence of metallic substances. A respondent of the *Veterinary Review* facetiously sug- ts that the Mexican veterinary surgeons will find ir fees for *post mortem* examinations in the stomachs their patients.

THE HUNTERIAN ORATION. The biennial oration in nour of the immortal genius of John Hunter will be livered in the theatre of the Royal College of Sur- ons, on Saturday, the 14th proximo, by Professor orge Gulliver, F.R.S., a member of the Council of the llege.

INFANTICIDE IN LONDON. Dr. Lankester has again en calling attention to the frequency of infanticide in ndon. He says that of seventy-two inquests which held when he first became coroner, sixteen were on e bodies of murdered infants. Since, then, however, e number had decreased until now he found that there re only twenty-six cases of infanticide in two hundred d fifty-two inquests. This proportion, however, he ry rightly spoke of as being discreditable to the metro- lis, and he expressed an opinion that much of the pre- lence of the crime was owing to the inertness of the lice. They had come to regard cases of child murder things into which it was no use to inquire, and he be- ved the result would be that familiarity with the crime uld soon breed apathy in regard to it so far as the blic are concerned.

DEATH OF JOHN GUNNING, ESQ., C.B. Mr. Gunning, spector-General of Army Hospitals, died on Sunday rning, at his house in the Rue du Colisée, Paris, in e ninetieth year of his age. He was, as was observed the memoir of Sir Benjamin Brodie published in the URNAL of November 15th, 1862, "probably the only rviving pupil of John Hunter. He was in St. George's spital at the time of Hunter's death, and walked at e side of the sedan chair in which Hunter was con- yed to Leicester Square." In 1793, he was elected a ember of the College of Surgeons; and in 1800 was ected surgeon to St. George's Hospital, which office he signed in 1823. He was attached to the medical staff the Duke of York's army so far back as 1792, and re- med active service on the outbreak of the Peninsular r—Sir Benjamin (then Mr.) Brodie doing duty for m at St. George's Hospital in his absence. He was so present at the battle of Waterloo, where he ampu- ted Lord Raglan's arm. The *Express*, in noticing his ath, says:—"His house was a joyous rendezvous for s own countrymen, at which he delighted to mix with ung people and promote their amusement. There as scarcely anything of the old man about him. His ght, hearing, memory—all his faculties, indeed—were rfect to the last; and his friends confidently predicted at he would live to a hundred. On New Year's-day e had a dinner-party; and cards for one of those little iendly dances which he loved to see were issued so tely as last week. An attack of bronchitis prevented m from receiving his friends on the day expected. His edical attendant, Dr. Davison, thought it serious; but got better, and within the last two or three days was nsidered to be out of danger. On Sunday morning, owever, he expired in his armchair without pain, and th scarcely any previous symptoms to denote an ap- oaching end. His daughter, Mrs. Bagshawe (the wife the Queen's counsel), and two of his granddaughters, ere with him at time of his death."

THE BLUE GUM TREE. The *Eucalyptus globulus*, a tive of Australia, where it is known under the name the blue gum tree, was first discovered and described Labillardière in 1792. This tree only bears blossoms its very top, so that to get at its flowers the above tanist was obliged to have one cut down. Its dimen- ons were prodigious, the circumference of the base ing 90 feet, and 65 feet at the height of five feet from the ground; its total altitude was 300 feet English measure, and the section presented upwards of 800 con- centric rings. In 1854 Dr. Mueller described it more minutely, and stated that he had met with specimens upwards of 100 metres in height. Although its growth is extremely rapid, being as much as three feet per month in young subjects and during the summer months, its wood is nevertheless extremely hard, so that at Hobart Town and other places it is used as timber for shipbuild- ing, dykes, piers, etc. Its leaves, moreover, emit a de- lightful perfume, which is considered extremely condu- cive to health, especially in marshy districts. In 1860 Dr. Mueller sent over some seeds of this tree to the French Minister of Marine, who immediately dispatched them to M. Hardy, director of the nursery at Algiers. Some of these seeds were also given to the Jardin des Plantes, where a few good subjects are now being reared from them. There is every reason to believe that this remarkable and beautiful tree will be acclimatised in France, or at least in Algeria.

THE EXTINCTION OF SPECIES. Mr. Owen, in regard to the extinction of animals assigns the chief weight to "gradual changes which must have accompanied the slow alternations of land and sea brought about in the *æons* of geological time." And he explains, by a reason which is as striking as it is obvious when once pointed out, the phonomenon of only small species of animals existing in countries where much larger species of the same natural families formerly existed; which the ancients, and probably many of the moderns, would be disposed to attribute to a degeneration in the powers of growth. If in consequence of any climatic change the due supply of sustenance for animals in a state of nature falls short, the stress falls upon a species very much in proportion to the bulk of the individuals composing it. Thus, if a dry season is prolonged, a large mammal will suffer from the drought sooner than a small one; and if such prolongation become, by the alteration of climate, habitual, and the quantity of vegetable food be in conse- quence diminished, it is the bulky herbivora that will first feel the effects of stinted nourishment. A *Bison priscus* or a *Bos primigenius* would starve where a whole herd of Kerry cows might do very well. Hence the diminutive appearance of living species by the side of the enormous fossils extracted from the very soil over which they are feeding is so far from indicating deteriora- tion, that it is, in fact, the characteristic which consti- tutes their superiority, and has enabled them to accommo- date themselves to changes to which their gigantic congeners have succumbed. Extinction, as the operation of a natural law, implies insufficient self-adjusting power to resist the results of climatic variation. Instances of the gradual disappearance of species occur even in the present time. A peculiar amphibious animal which in- habited the mouths of the great Siberian rivers, and fed on seaweed, is supposed to be now extinct, although it existed in the last century. The Great Auk is on the verge of extinction, if not extinct. The bones of this bird exist in numbers on the shores of Iceland, Green- land, and Denmark, but of late it has only been seen on some rocky islets in the vicinity of the first, and of these one—specially named from this bird "Geirfugla Sker"—sank to the level of the sea during a volcanic disturbance in the year 1830, and thus diminished the already limited extent of the Auk's breeding ground. The *Dodo* and the *Dinornis*, and the hook-billed parrot of Philip's Island, west of New Zealand, are instances of rare species finally extirpated by the hand of man; and Professor Owen seems to believe the same of the fossil elephant and rhinoceros, which formerly inhabited this part of Europe. The primitive race which effected this result are those who fashioned the flint weapons which have been found in the valley of the Somme near Abbeville, near Hoxne in Suffolk, and at Brixham in Devonshire.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Richardson, "Alcoholic Phthisis."—Asiatic.

TUESDAY. Junior Medical Society of London, 8 P.M. (Whittington Club.) Mr. H. Cooper, "On the Treatment of Fever."—Pathological.—Ethnological.—Statistical.

WEDNESDAY. Meteorological.—Geological.—Society of Arts.

THURSDAY. Royal.—Zoological.—Antiquarian.

FRIDAY. Royal Institution.

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JANUARY 10, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys ..1024 / Girls.. 930	1954	1535
Average of corresponding weeks 1853-62		1946	1492

Barometer:
Highest (Tu.) 29.951; lowest (Wed.) 29.134; mean, 29.258.

Thermometer:
Highest in sun—extremes (Th.) 72.3 degs.; (Mon.) 51.0 degs.
In shade—highest (Mon.) 48.6 degs.; lowest (Fri.) 29.9 degs.
Mean—40.1 degrees; difference from mean of 43 yrs.+4.2 degs.
Range—during week, 18.7 degrees; mean daily, 9.5 degrees.

Mean humidity of air (*saturation*=100), 90.

Mean direction of wind, S.W. & S.E.—Rain in inches, 0.77.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—In the number of the JOURNAL for January 3rd, 1863, at p. 11, line 45, in review of Dr. Chambers's work, *Renewal of Life*, etc., for "See if quinine will stop ague", read "See if quinine will produce ague."

T. S.—The remedy referred to in the note of the wiseacre in the *Times* is as old as the hills. We need hardly say that it is as capable of warding off and of curing typhus, as the famous curry-powder of a noble lord is in curing starvation. That the *Times* could admit such nonsense into its pages—nonsense, by the way, which, from its admission there, is sure to have effect—only indicates the ignorance of educated minds on the subject of medicine. The benevolent wiseacre writes:—

"I think it desirable to make generally known a very cheap and simple remedy for typhus or other low fever. The remedy is yeast. A tablespoonful of this administered in a case where life was all but extinct, repeated every ten minutes till the cure was effected, restored the patient to such perfect health that he was at his work in a few days' time. A small quantity, infused in the common drink of those who cannot obtain a sufficiency of nourishing food, might infuse such an amount of vitality in the constitution as might enable it to resist the depressing tendencies to the disease."

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND TITLE OF M.D.—We have been requested to print the following:

[COPY.]

"King and Queen's College of Physicians in Ireland,
"Dublin, Nov. 10, 1862.

"Sir,—In reply to your letter of the 4th of April, I am directed to forward you a copy of the opinion of the Attorney-General for Ireland; from which you will see that as a Licentiate of the College, you are legally entitled to assume the title of 'Doctor'; and am further instructed to inform you that if any authority or individual desire to try the question legally, the College is prepared to defend the privileges of its Licentiates. The College being in possession prevented an earlier reply to your letter. You are at liberty to make any use you please of this communication.

"I am, sir, your obedient servant,
"LOMBE ATTHILL, M.D., *Fellow and Registrar.*

"J. Styrap, Esq., M.D., Shrewsbury."

"King and Queen's College of Physicians in Ireland,
"Dublin, Nov. 24, 1860.

"Sir,—I am instructed by the President and Fellows of the King and Queen's College of Physicians in Ireland to forward to you, for your information, the subjoined copy of the opinion of the Right Hon. Her Majesty's Attorney-General for Ireland as to the power of the King and Queen's College of Physicians to confer the Degree of Doctor of Medicine.

"I have the honour to be, sir, your faithful servant,
"WILLIAM MOORE, M.D., *Fellow and Registrar.*

"The two Charters of the College, and the several Acts of Parliament bearing thereon, having been submitted to the Attorney-General, his opinion was requested on the following query:—

"'Whether the Licentiates, as such, of the King and Queen's College, are entitled to the Degree and Title of Doctors in Medicine, and to use the abbreviation or initial letters M.D. after their names.'

"*Answer.*—'I think the Licentiates and Fellows, as such, of the King and Queen's College of Physicians are entitled to the Degree and Title of Doctors in Medicine, and to use the letters M.D. after their names. (Signed) 'R. DEASY.'

"'November 21, 1860.'"

[We understand, and have always understood, that the King and Queen's College of Physicians in Ireland rests its claim to the power of bestowing the title of M.D. on its Licentiates on some special and peculiar clauses in the charter of the College. We apprehend that our esteemed correspondent Dr. Styrap will agree with us that the charters of the sister Colleges of London and Edinburgh contain no such powers. Certainly, the Colleges of London and Edinburgh claim no such powers. We have already fully explained our reasons for the conclusion which we have arrived at; viz., that a Licentiate of a College of Physicians who demands the courtesy title of Dr. cannot be denied it. Of course we are also equally ready to admit that the King and Queen's College has the peculiar power of granting the degree of M.D., if it be proved and admitted. EDITOR.]

ONE EXAMINATION ONLY.—A correspondent writes:—

"I cannot think the body of the profession have made much advance in their position or standing; and the cause, I am inclined to think, is at home amongst ourselves. It is impossible that anything like unity can take place when the qualifications are so diverse and the examinations so numerous. The man who has gone through his legal curriculum, and obtains his double qualification, is in no better position than with the single; and with the M.R.C.S. and M.D. *Scotch*, looks down on the Hall College man, who is the only legal practitioner, and has gone through a far more searching examination; and then the multiplication of titles by the Colleges only added to the confusion. What more simple than to make it compulsory for all entering the medical profession to enter at one portal, and first obtain a medical and surgical diploma, and then, after some years experience, take the Physicianship or Fellowship of the College of Surgeons to practise as a physician or surgeon, as he may seem to incline?"

[The idea of admission to the profession through one portal has long been entertained by several ardent medical reformers. Our correspondent is in error when he supposes that the "Hall College man" "is the only legal practitioner." According to the Medical Act of 1858, the graduate of a Scotch University who also holds the diploma of a College of Surgeons is as legal a practitioner in any part of the United Kingdom as a Hall and College man. It may also be fairly questioned, whether our correspondent acts in good taste in endeavouring to disparage the Scotch University degrees for the purpose of exalting the Hall license—and whether, indeed, his statement of the relative merits of the examinations is correct.—EDITOR.]

M. BAZIN thus defines a parasite:—"We give the name of parasite to an organised being, vegetable or animal, which, when fixed on another being, draws from it the elements of its subsistence."

General Remarks

ON THE

PRACTICE OF MEDICINE.

BY

P. M. LATHAM, M.D.

THE HEART AND ITS AFFECTIONS, NOT ORGANIC. (*Continued.*)

IV.—*The Frequent Pulse at its Lowest Degree of Significance.*

It is a fallacy to conceive that disease, as represented by its symptoms, is difficult to know and to treat in proportion as it is a thing of more danger and severity and altogether more extreme. The contrary would be nearer the truth. In the cases which have been considered, the symptom of the frequent pulse, as the single representative of the disease and of the vast peril involved in it, and as the single indication of what is to be done to save life, if life can be saved, was comprehended in all its bearings at a glance. But, in the vast majority of cases, this same symptom will be found less salient, and therefore more to be searched after; less standing alone, and more one of a multitude, and therefore needing to be compared, contrasted, and weighed with other symptoms, before its value can be ascertained. For, indeed, it always has a value, small or great, though it be a variable value in different cases of the same disease, and variable, too, in the same case at different times. These are things not to be seen through at a glance, but contain matter for patient thought to work upon.

Now, as we have hitherto dwelt upon the class of cases in which the frequent pulse is at the greatest and highest computation of danger, so we will next touch upon the class in which it is at the least and the lowest, and reserve for our last consideration the class which is intermediate between the two. And this last we shall have a better chance of understanding aright by previously knowing the two extremes.

Take twenty cases, and let the symptoms in each be characteristically different enough to show that they represent twenty several forms of ailment or disease; but let all the twenty have one symptom in common, and let that be the frequent pulse. Such are realities which are presenting themselves day by day to the experience of physicians. Further, let the symptoms differencing the nature of the ailment or disease in each particular case be so little severe in any, and the one symptom common to all—viz., the frequent pulse—be in all so little above the natural standard, that no apprehension is felt about any single case from first to last; and all the twenty go, in fact, according to anticipation, come to a favourable result. And such, too, are happy realities familiar to our experience.

Now what is it which makes the number of the pulse worth the reckoning in such cases as these, that we should take so formal an account of it as we probably should and ought to do in our daily intercourse with the sick? Perhaps some of us might not easily be got to trouble ourselves about the meaning of a symptom which occurred in twenty patients, all of whom got well, as we expected they would, be its meaning what it may. But the frequent pulse, as the accompaniment of disease, is never without a meaning; and, whether it be of great or small degree, whether it denote a great present danger or no danger at all, its meaning is always the same in kind. In all these twenty supposed cases, the pulse, being a little above the standard of health, denoted that the disease was making itself felt by the nervous system. In none did it represent any present peril; but in all it contained the germ capable of possible increase to the greatest magnitude and the greatest danger.

There are other things belonging to feeling and function, in our vital economy, which follow the analogy of the frequent pulse in this respect, that whether they be much or little, or great or small, they preserve the same meaning in *kind;* yet, according to their *degree*, they notify and prepare the way for very different results, even as different as life and death.

Hunger and thirst may amount to nothing more than a little sense of physical impatience, natural, wholesome, and not unpleasant to feel, about dinner-time; or they may reach the fierce craving which is ready "to demolish stone-walls". But they are the same hunger and thirst, after all. The first are the hunger and thirst by which we live; the last the hunger and thirst by which we perish. And it is the chief business of our lives to provide that the first become not the last; and every day we are acknowledging practically the possibility, though we have neither thought nor fear about its being realised. Nevertheless, we do sometimes find it realised in single instances of shocking notoriety. And the fate of large armies in war, and of some smaller "armies of martyrs", missionaries for man's enlightenment or for God's truth, shows that hunger and thirst should be the care of nations and governments, and that they who put human life to its hardest uses should study to preserve it.

The same may be said of pain. There is the pain which scarcely disturbs the equanimity of a child, and there is the pain which kills; and the first contains the germ of the last.

The Frequent Pulse of Acute Inflammation in the Strong and previously Healthy.

There are diseases, then, almost too much for medicine to combat with, and diseases almost too little for medicine to care about; and the frequent pulse is an ingredient of both. In the former, it is the one ingredient which is the very gauge of their formidable character; in the latter, it is that which should at least always prevent us from regarding them with indifference. But there are many diseases far less appalling than the one class, and less trivial than the other, which hold their place between the two, and have a greater practical interest than either. They are uncertain enough in their event to keep both hopes and fears alive during their progress, and amenable enough to remedies to encourage and reward the study of a whole life how to use those remedies aright. These many diseases

have still the pulse, and its qualities and number, to present as chief objects upon which such practical study can be profitably bestowed.

Let the patient be in the prime of life and health, and let his disease have nothing specific or malignant in it, but proceed from some common accidental cause, such as exposure to cold, or mechanical injury, or a blow; also let the inceptive rigor or chilliness be past, and the disease have now plainly declared itself, both what it is and where it is—in fact, that it is acute inflammation in some vital organ. And now, before the disease has had any treatment to interfere with it for good or for evil, or to alter it in any way, the pulse will denote the morbid action in which the blood and blood-vessels are engaged by its new quality of hardness, and the sympathy of the nervous system by the increased number of its beats.

Recollect, it is assumed that the patient was previously in perfect health and the prime of life. At this stage, when the great trial of the constitution from the disease and its treatment is yet to come, the pulse will be more or less frequent from a given amount of inflammation, according as it occupy a part more or less nearly allied with the nervous system by sympathy. To speak generally, the pulse will from the first be more frequent when the inflammation is of the organs within the abdomen, than when it is of the organs within the thorax. Moreover, the inflammation, though just emerged, will produce a greater frequency of the pulse according *to its extent;* and if its extent be very great, and the part it seizes upon be in close sympathy with the nervous system, the coincidence may even be fatal. Strange events occur in the course of a long experience, taking one by surprise at the time, but, when duly considered, finding their place in the order of things to which they naturally belong. I have seen, in the young and robust, inflammation (apparently common inflammation) seizing upon the peritoneum, and the pulse at once becoming countless and almost imperceptible, and rapidly sinking into death; and examination has disclosed the disease pervading the entire surface and every flexure and fold of the membrane. And still it has been in its earliest stage. The membrane has been entirely injected with red; but scarcely a trace of fluid or of lymph—the proper products of inflammation—has appeared upon any part of its surface or in its cavity.

But to what order of things does such an event as this naturally belong? Truly it belongs to the same order with those two remarkable cases already cited. *There* the disease was in its germ or first development; but already the nervous system felt it, and was overwhelmed by it. *Here* the same event is brought to pass in the same way. *There* the disease partook of a specific poisonous quality, pus-poison in the one, scarlatina-poison in the other mingling with the blood. *Here* it is of the nature of common inflammation; but its vast extent and the part it occupies are equivalent for evil with a malignant quality. It is no figure of speech, but a literal expression of the fact, to say that the disease destroys itself and destroys life at the same time.

This is a most rare event of inflammation, yet much too interesting not to fix our attention for a moment. Well, but suppose the inflammation acute, and the reaction complete and vigorous, there will be found wrapt up together in the same pulse these two cardinal symptoms—a quality of hardness, representing the disease; and a more frequent beat, representing how the constitution bears it. Such an inflammation will require remedies of much force; and, at every stage and step of the treatment, the pulse will still denote by its quality the need of the remedy, and by its number the power of bearing it. Let *venesection* be the remedy. Upon every use of it, a very strict judgment must be held upon its immediate effects; and that judgment is still to be concentred upon the pulse. What *now* of its hardness, which called for the venesection? What *now* of its number, which said that the constitution would bear it? If, an hour or two afterwards, the pulse has lost much of its hardness and many of its number, then assuredly the venesection has told remedially upon the disease, and not hurtfully upon the constitution; and, should it return to its former hardness and its former number, venesection may be employed again. After the second venesection, the like strict judgment must be directed to the same points; and, should the pulse again show an abatement of its hardness and its number diminished, then has the venesection again fulfilled its immediate purpose of good, with no contingent evil.

I cannot determine how often venesection may be safely repeated as a remedy for acute inflammation, the hardness and the number of the pulse thus rising and falling in constant harmony with each other. But as soon as that harmony ceases to be maintained, or is much disturbed; as soon as, whether it be after a first or second or third venesection, the pulse, while it has lost its unwonted hardness, is found to retain its unwonted number, or to have it increased, even greatly increased,—henceforth venesection will become a very doubtful or an absolutely forbidden remedy. Thus far it has exercised a salutary check upon the inflammation. And the hard pulse reduced to softness testifies as much. But it is now beginning to have, or it has had already, some hurtful influence upon the powers of life, or upon the nervous system; and the pulse, remaining as frequent as it was, or becoming still more frequent, is sponsor for the fact.

Now at this point the inflammation may cease altogether; and there may be no further need of remedies properly antiphlogistic, either great or small. The last depletion brought it to an end, and so did its work *upon the disease* well, very well. But it would have done it work, *upon the whole*, better, much better, if, in carrying off the disease, it had not left the pulse as frequent or more frequent than when the inflammation was present and progressive. The thing may be of no consequence when we have constitutions naturally vigorous and healthy to deal with; only, in now reviewing the treatment, our just judgment of it must be, that we have pushed our great remedy a little further than the necessity of the case required. But the inflammation may not cease at this point; it may still call for treatment. And the treatment of the inflammation now making progress, with a pulse of more frequency and less power, is no easy task. Of this something may be said hereafter. At present, let it be further remarked, that not only when we use venesection, but when we take blood in any way, whether by venesection, or cupping, or leeches; and, moreover, not

only when we bleed, but when we seek to arrest a rapidly progressive inflammation by a rapidly impressive remedy, be that remedy what it may, whether mercury, or tartar emetic, or colchicum,—the number of the pulse still mediates between how much is needed and how much can be borne. It balances between the force of treatment, as bearing salutarily upon the disease on the one hand, and as bearing hurtfully upon the nervous system and the powers of life on the other. And yet it is not the number of the pulse taken absolutely. It is not any certain number; but its number as it is increased, or is diminished, or remains the same, day by day, under the working of means and agencies powerful alike for good and for evil.

The Frequent Pulse of Acute Inflammation in the Weak and Cachectic.

But inflammation does not befall the young and trong exclusively; it is much oftener found in the eak and cachectic. In them, too, it is more geneally incident to all periods of life, and comes from lighter provocations of injury and accident from ithout. Indeed, its connexion with any external xciting cause at all is, in the weak and cachectic, requently so slight, so uncertain and unapparent, hat we are led sometimes to deem it altogether pontaneous and engendered from within, and coming irect from the pravity of the constitution itself.

Now it is a general truth that, in these weak, ese cachectic and often seemingly spontaneous inammations, the frequency of pulse begins earlier nd abides longer, and runs up to higher degrees, an in the strong and healthy; or (to look through e sign to the thing signified) the sympathy of the ervous system and the trial to the powers of life e now felt sooner and more constantly, and are rried to greater extremity.

Now, for brevity's sake, let us use the terms "inammation of strength" and "inflammation of eakness"; for a little more must yet be said of th in their contrast with each other, if we are to t at the true meaning of the frequent pulse in nnexion with either, and gain from it all the help can give us in their treatment.

In all that anatomy discloses after death, and, if e part affected be within reach of the ear, in all at auscultation teaches during life, the inflammaon of strength and the inflammation of weakness e the same thing; no mere anatomist or auscultor can tell which is which. But the same treatent which saves in the one case will kill in the her; for their treatment is determined, not by the nditions in which they agree, but by those in ich they differ. Now they agree in all that is ganic; they differ in all that is vital. What is ganic consists in what can be seen, heard, or dised. What is vital consists in what is felt and ed, and in modes and degrees of feeling and ac—preeminently in pain; preeminently in fever l its attributes of cold and heat and perspiration; l preeminently, and above all, in the movements the heart and arteries, the qualities and number he pulse.

t is remarkable how health and strength can ertain inflammation, and go through with it, and show few or no signs of being vitally hurt by it. ve seen a few cases of inflammation requiring dletting, and giving its characteristic hardness to the pulse, where the number has not been increased a single beat beyond the ordinary standard. Indeed, where there are health and strength, while the inflammation denotes its severity by the force of the remedies needed, the number commonly falls short of 100, and seldom exceeds it. But where there are cachexy and weakness, though the inflammation appertain to no part in strict alliance with the nervous system, the number of the pulse is commonly very frequent throughout. It often rises at once to 120, and in the end it often exceeds it.

Thus strength seems to answer the stimulus of inflammation vigorously, but temperately. It puts its characteristic hardness into the pulse, without greatly multiplying the movements of the heart and arteries. It feels the disease, and bears it well. But weakness seems to answer it with (at most) only a show of vigour, and impatiently. It may give something like its characteristic hardness to the pulse, but not without multiplying exorbitantly the movements of the heart and arteries. It feels the disease, and bears it ill.

But the inflammation of strength and the inflammation of weakness, albeit they are by nature the same things organically and different things vitally, may, by force of accident and circumstances, become *vitally* equalised and the same.

The inflammation of strength is very liable to mischance in respect of its treatment. Opportunity is lost; and when a severe and rapidly progressive disease needs a severe and rapidly impressive remedy, opportunity is very precious, and the loss of it may be the loss of everything. Many a fine robust fellow have I seen who has suffered acute inflammation of an internal organ two or three days without seeking or without being able to procure medical aid; and then, when he has procured it, his disease and its treatment have become a puzzle, from the conflicting indications which have arisen in the meanwhile. Three days ago, a venesection would probably have arrested the inflammation, and the patient have been safe by this time, and in a fair way of recovery; but now, if venesection be adopted, it has been because present symptoms have made us rather afraid to omit it than ready to use it. There has still been an inflammatory hardness in the pulse; but, to set over against it, there has been great frequency. There has been enough of heat and enough of seemingly vigorous action still remaining; but, to set over against them, there has been too much of nervous sympathy, too manifest a trial of the powers of life already begun.

Well, venesection has been adopted; and, happily, it has been just in time. It has abated the hardness and diminished the frequency of the pulse, and raised the nervous system and the powers of life. And thus the inflammation has reclaimed the characteristics of the constitution to which it belongs, and been still the inflammation of *strength*.

Or venesection has been adopted; and, unhappily, it has been just too late. It has taken the hardness out of the pulse, but it has greatly augmented its number. Also it has sunk the nervous system and the powers of life. The inflammation has lost the characteristics of the constitution to which it belongs, and become the inflammation of weakness.

But the inflammation of strength has been turned into the inflammation of weakness in other ways than by unavoidable mischance. Among the perils

of disease we must not refuse to reckon the errors of physicians. And this truth has had its instances and its proofs when inflammation was to be treated by venesection or some sort of bloodletting. The choice of the remedy, and its time, and its measure, and its iteration, whether often or seldom, or not at all, are confessedly among the difficult things of medical practice; and he must be either very self-complacent or very oblivious who cannot call to mind that herein he has ever fallen into mistake. Amid many possibilities of error, it would be strange indeed to be always in the right. Nor among the perils of disease must we refuse to reckon the interference of friends with its treatment; and this, too, has been seen when inflammation has had to be treated. And, in charity to human feelings, it is hard to blame them. They see a perilous disease and a perilous remedy. They cannot restrain their anxiety. But it is unfortunate when they show it by distrustful questionings at every turn of the disease and on the use of every remedy; thus always aggravating to the physician his sense of responsibility, at the hazard of overruling his judgment, and of withholding him from doing the full measure of what is right. And too often this has been the sad result. What might have been wholly remedied has been only half remedied; and what has remained has been far less tractable now that it is allied with weakness instead of strength. In truth, there is nothing in practical medicine harder to deal with than this inflammation of weakness, whether it be natural weakness, or the weakness of circumstances and accident, or strength abused into weakness by the fault or mischance of medical treatment. It is all practically the same thing, however it come to pass.

Let it be remembered, however, that our subject is not inflammation and its treatment, but frequency of the pulse. Yet this frequency of the pulse was not to be understood in its pathological significance, otherwise than by our becoming acquainted with it in those diseases which display it most conspicuously. Such are fevers and inflammations. For in them the nervous system is most largely engaged. And the nervous system, for the share that it has and the part that it plays, has its surest index and measure in the number of the pulse.

Already, as to the inflammation of strength, we have gone so far into its treatment as was needed to show the number of the pulse guiding and regulating it. And just thus far, and with the same intent, we will now touch upon the treatment of the inflammation of weakness.

In the inflammation of strength and its treatment, we showed the number of the pulse arbitrating between the curative and hurtful effects of great remedies, sanctioning their use up to a certain point and no further, and thenceforth forbidding them. We followed the treatment so far as, under this safeguard, the operation of these remedies was successful. But we ceased to follow it, when the inflammation was found still to continue, and the pulse becoming more frequent no longer sanctioned the use of the same remedies for its cure; when, in truth, the inflammation has assumed the characteristics of weakness, and required another treatment, but still under the same safeguard. For in the inflammation of weakness, as in the inflammation of strength, the number of the pulse does not directly suggest the use of any remedy or any mode of treatment; but here as there it still serves for an arbiter. Here as there, when other indications have pointed directly to the remedy or mode of treatment, then it sanctions, or forbids, or moderates their use.

Let it always be borne in mind that the progress of inflammation within the part from one stage to another, until it reaches irreparable disorganisation, need not be less rapid when allied with weakness than when allied with strength. It does not move slower, because it moves with less force. And thus it calls as much as ever for a remedy and requires as much as ever that the remedy should be seasonably applied. Only the direct and immediate aim of the remedy is now different.

The ultimate aim of all treatment is indeed the same. Whether the disease be one of weakness or of strength, be acute or chronic, be common or specific, the end and aim is to cure it. But intermediately treatment has to do with many an aim which is not the end itself, but only conducive to the end.

When there is much and unremitting heat of skin, and the pulse is hard and yet but moderately frequent, and the vascular system and the nervous system are strongly and steadily reacting, and all that moves and all that feels within the man are (so to speak) doubly alive, then, the fact and the seat of the internal inflammation being once ascertained, it is less absolutely necessary for the success of our treatment to go into its particulars. It is enough, for the present to take the inflammation in its largest sense, without noting its stages and its consecutive phenomena from day to day or from hour to hour. For now the remedy has a less concentrated aim. The indications of treatment are more diffusive and general.

But in proportion as the heat of skin is less sustained and less in degree; and the vascular system, and the nervous system, and all that moves, and all that feels, show less of reaction and less of life, and the pulse is less hard and more frequent, then we have the more need to be acquainted with the exact seat and stage of the inflammation and all its organic conditions; and its shiftings and movements from day to day; its advancing, or receding, or standing still. For now the treatment is more and more drawn towards the part, and more concentrated in its aim.

Between no display of strength in the constitution at large and extreme weakness; between no notable sympathetic reaction and vital surrender and collapse there are many states and degrees; and the progress, the rapid progress, of inflammation in the part is compatible with them all.

Vacancies. The following appointments are vacant:— medical officer and public vaccinator for the Clonmel Dispensary district of the Clonmel Union; medical officers for the Newcastle-under-Lyme district; for the Hanbury district of the Droitwich Union; for the parish of Kirkowan, Wigtonshire; for the Colbridge Dispensary district of the Colbridge Union; for the Clifden Dispensary district of the Clifden Union, county Galway; for the Claudy Dispensary district of the Londonderry Union; ophthalmic surgeon to the Aberdeen Royal Infirmary; to the Bellaghy Dispensary district of the Magerafelt Union, county Londonderry; for the Cleveheaton district, North Brierly Union, Yorkshire.

Clinical Lecture

ON

THE SUCCESSFUL USE OF IODIDE OF POTASSIUM IN THE TREATMENT OF ANEURISM.

BY

WILLIAM ROBERTS, M.D.,

PHYSICIAN TO THE MANCHESTER ROYAL INFIRMARY.

[*Reported by* Mr. E. Dawson, *Clinical Clerk.*]

Gentlemen,—I propose to draw your attention to-day to a case of thoracic aneurism, which has been under my care, in No. 68 Ward, for the last six weeks.

The case affords an advantageous example for the illustration of the various points of importance in the diagnosis of aortic aneurism; but I shall pass over these with only a brief recital, in order to bring before you at length certain points of interest bearing on the use of iodide of potassium in the treatment of aneurism.

J. P., a collier, aged 39, unmarried, was admitted into the Royal Infirmary, on October 6th, 1862, complaining of pain in the chest, a troublesome cough, and difficulty of breathing at night. He stated that about four months ago, when in a state of intoxication, he was kicked in the chest by a policeman. From that time he has been subject to paroxysms of excessively severe pain, persisting for several hours at a time, in the back, neck, and running up to the left side of the head and left shoulder. He compared the pain in the latter situation to having pieces of his flesh torn out. There has not been hæmoptysis at any time. About two months after the above occurrence, he observed an unnatural prominence of the upper part of the sternum.

When admitted, the patient had the appearance of good health; the pulse was 96, and the respirations were 22 per minute. The superficial veins of the upper arms, and the external jugulars were somewhat distended; the right radial pulse was slightly feebler than the left. The speaking voice was unaltered, but the cough-voice possessed the peculiar stridulous character distinctive of interference with the function of the recurrent laryngeal nerves.

The pupil of the left eye was motionless from previous accident, the right pupil was natural. There was some dysphagia—when the chest was uncovered, the first bone of the sternum and its immediate vicinities were observed to be bulged out, and to be the seat of a heaving pulsation. On the left side of this prominence, in the second intercostal space, close to the sternum, there was a soft pulsating elevation standing out about a quarter of an inch above the surrounding level. This elevation was conical in shape, and had a base about the size of a shilling. The heart's apex beat in the fifth interspace within the nipple line.

Percussion revealed a considerable area of diminished resonance over the bulging parts. Transversely, in the level of the second interspaces, the dulness measured four inches and a half, extending more to the left than the right of the middle line; vertically, there was dulness for three inches and a half below the sternal notch. There was no fulness or pulsation in the last named spot. The cardiac sounds were normal over the precordial region; they were loudly audible over the seat of dulness above described.

The first sound was faintly murmurish over the soft elevation; and a distinct though faint systolic murmur existed in the course of the innominate artery; this was intensified over the right carotid and in the acromial angle. No murmur existed over the left carotid and subclavian. With such an array of symptoms and physical signs, the diagnosis could not remain for a moment doubtful. The case was one of aneurism of the arch of the aorta making its way forward through the parietes of the chest.

On October 10th, the patient was ordered to take five grains of iodide of potassium three times a day; to keep his bed; and to restrain as much as possible the quantity of liquids taken in the way of drink. Three days later the iodide was increased to seven grains and a half three times a day. Six days after the commencement of the treatment, the patient reported himself a great deal better; the paroxysms of pain no longer recurred; the cough and difficulty of breathing were less troublesome; and the soft pulsating elevation was slightly less prominent. The physical signs remained otherwise unchanged. The iodide was now increased to ten grains three times a day.

From this date (October 16th), to October 27th (a period of eleven days) the patient went on favourably. He continued free from pain, difficulty of breathing, and dysphagia; and the soft elevation had almost altogether subsided to the level of the surrounding parts.

He was now allowed to get up, and the restrictions as to fluids were relaxed. The iodide was increased to fifteen grains three times a day.

On November 4th (twenty-fifth day of treatment), the dulness measured four inches across, and two inches and three-quarters vertically. The dose was now raised to twenty grains.

On November 18th (thirty-ninth day of treatment), the area of dulness was carefully measured again. It had now contracted to three inches and three quarters transversely, and two inches and a half vertically; so that from the commencement of the treatment, it had diminished three-quarters of an inch in one direction, and one inch in the other. The soft elevation had sunk to the level of the surrounding parts, and had become wholly inappreciable to the eye. Pulsation was still felt over the spot. The patient was free from pain and difficulty of breathing, and felt himself exceedingly well. The cough was still stridulous in character, and the veins of the neck and upper arms were not perceptibly less distended. The inequality of the radial pulses had not disappeared.

This is the sum of the improvement after a treatment of six weeks; and it is certainly a striking result in so unmanageable a disorder as a protruding aneurism of the arch of the aorta.

[Since the delivery of this lecture the patient has continued the use of the iodide of potassium up to the present time (Dec. 23). An obstinate diarrhœa necessitated the diminution of the iodide to five grains three times a day. The bulging of the first bone of the sternum is conspicuously less, and the limits of dulness correspond to the following dimensions: transversely, three inches and a half; vertically, two inches and a quarter.

The state of the radial pulses, and of the superficial veins of the neck and arms, together with the character of the voice, remain unaltered; and there is decided emaciation.]

I will now relate to you the history of two other cases, within my knowledge, of aneurism treated with iodide of potassium.

About a twelvemonth ago, I saw in consultation with Mr. T. Windsor, who first called my attention to this mode of treating aneurism, a lady, 29 years of age, suffering from an undoubted aneurism of the arch of the

aorta, implicating the commencement of the arteria innominata. There were violent pains on the right side of the head, paroxysmal dyspnœa, excessive pulsation at the root of the neck on the right side, and sleeplessness. A dull space extended from a little to the inside of the right sterno-clavicular articulation for a distance of two inches outward. Over this space there was a heaving pulsation. No murmur existed with either sound; but the sounds were intensified over the arch, and towards the clavicle. Repeated slight hæmoptysis had been observed.

For an account of the further progress of the case, and the treatment, I am indebted to Mr. Windsor.

In the succeeding six months the condition of the patient become steadily aggravated in spite of a persevering observance of the recumbent posture and a regulated diet. On several occasions the voice was temporarily lost; in addition to some dysphagia, there was constant troublesome cough, with tenacious scanty expectoration, and occasionally severe paroxysms. The difficulty of breathing and pains were often so severe, that the patient was forced to quit her bed, and to walk about. She had become considerably emaciated, and so weak as to be unable to leave her room. The clavicle also began to project, and at length stood out half an inch beyond its natural level. The pulsation at the root of the neck increased; and the right eye became the seat of a severe congestion.

The iodide of potassium was first administered in April last in the hope of diminishing the pains in the head. The desired effect was speedily produced; and the medicine was discontinued after it had been used a week. In July, the patient growing daily worse, and a fatal termination appearing not to be very far off, Mr. Windsor again administered iodide of potassium in doses of five grains three times a day. This quantity was shortly after increased to ten grains; but owing to the occurrence of violent salivation, the dose was again brought down to five grains. This quantity agreed; and the patient has been taking it until the present time, with great benefit, as you shall hear. The general symptoms subsided quickly; the cough, pain, dyspnœa, and dysphagia, disappeared; the occasional hæmoptysis ceased to recur; the patient gained flesh and strength, and two months ago she was able to walk six miles; and, more important than all, the projection of the clavicle progressively receded, until it has now almost gone back to its natural position.

The third case which has come under my personal notice is a patient of my colleague Dr. Wilkinson.

This man was admitted into the infirmary on October 20th, with a thoracic aneurism coming forward in the neck. In a few days, it formed a tumour as large as a child's head, extending on the left side from the clavicle almost to the angle of the jaw, causing very great distress; and passing on to what appeared a speedy termination by rupture. This man was put under gradually increasing doses of the iodide of potassium until the quantity attained was fifteen grains three times a day. No positive amelioration can be said to have taken place in the condition of the aneurism; but the distress is scarcely so great as it was, and the rapid growth of the tumour seems to have been stayed.

[Seventeen days after the delivery of the lecture, Dr. Wilkinson's patient died. Death took place from pressure of the tumour on the left pneumogastric nerve, and consequent pulmonary mischief. The vagus trunk was flattened out and atrophied for the space of an inch and a half in the neck. Only a few nerve-tubules could be discovered in this part by the microscope. The left lung was the seat of several patches of gangrene as large as hen's eggs, surrounded by areas of consolidation. The pulmonary gangrene had been detected a week before death. The sac of the aneurism was lined with thick layers of coagulated fibrine; and a large firm blanched clot attached by a somewhat broad pedicle to the upper parts of the parietes, floated freely in the sac.]

So far as I know, the first notice of the use of iodide of potassium in aneurism occurs in a clinical lecture of Professor Nélaton (*Clinique Européenne*, July 1859). M. Nélaton had been consulted by a Pole on account of a tumour in the lower part of the neck. Several physicians of eminence, Bouillland, Andral, Beau, had previously seen the case, and had diagnosticated an aneurism of the innominate artery or of the aorta. The patient stated that while residing in Warsaw, iodide of potassium had been administered to him with great relief. Nélaton took the hint, and prescribed the same. To his astonishment, a very notable amelioration followed, which went on almost to complete disappearance of the tumour, and the patient returned to his country in a satisfactory state of health.

In a late number of the same journal (Aug. 27th, 1859), you may find a very brief account of a number of cases by Bouillaud. One was a woman with aneurism of the carotid artery. Iodide of potassium was administered in *gramme* doses; then in two-*gramme* doses for two months. At the end of that time, the tumour, previously as large as a pigeon's egg, had diminished almost to disappearance. The second was an aneurism of the aorta and innominate in a man. The tumour, which had a very considerable volume, had suffered displacement and very great diminution of size under iodide of potassium. The case was under treatment when reported.

A third instance related to a large aneurism at the point of origin of the carotid and subclavian. The tumour had diminished considerably in a few weeks under the iodide.

A colonel with an aneurism of the carotid furnishes a fourth case in which Bouillaud saw the tumour almost wholly disappear after taking the same drug.

The next reference to the subject comes from a wholly independent source, and is, for that reason, of additional value. It occurs in a paper by Dr. Chuckerbutty of Calcutta, published in the British Medical Journal for July 1862. He gives an account of four cases.

The first of these was an aneurism of the innominate artery growing steadily upward into the neck. The growth ceased on the administration of iodide of potassium in decoction of cinchona, and the sac gradually solidified. The patient, however, was carried off, some months afterwards, by an attack of bronchitis. The autopsy revealed a sac as large as a pear, filled with dense coagula, leaving merely a narrow channel on the outer aspect, through which the right carotid and subclavian arteries communicated with the aorta.

In a second case, marked temporary relief followed the administration of the iodide in an immense aneurism of the aorta. The aneurism finally destroyed the patient by rupture. A *post mortem* examination three hours after death showed the sac to be filled with dense, solid coagula.

In a third case of large aortic aneurism, temporary amendment took place so far that the patient left the hospital, considering himself cured. Three months later, he returned, with intense aggravation of all his symptoms, and died in a few days.

In the fourth example, an aortic aneurism which formed a dome-shaped tumour two inches in diameter, coming forward through the sternum, had been treated in vain by turpentine, sulphuric acid, and other remedies. After the administration of iodide of potassium internally, and the application of the tincture of iodine externally, the patient steadily improved in every respect; the thoracic pain disappeared, the swelling diminished, the hæmoptysis ceased, and the patient ate and slept like any other man. He was still under treatment.

I do not wish to make too much of these facts. The erratic course of aneurismal tumours, and the occasional occurrence of spontaneous consolidation of their sacs are well known. Nevertheless, the twelve cases here brought together form a very remarkable series. In all of them, save one, striking relief of suffering followed the use of the drug; in eight, an undoubted diminution of the size of the sac took place; and in a few, complete subsidence of the swelling seems to have occurred.

The cases of Dr. Chuckerbutty would appear to indicate that the beneficial effect of the iodide was owing to its power (hitherto wholly unsuspected) of increasing the coagulability of the blood. Dr. Wilkinson's case lends support to this view; for not only was the sac lined with layers of fibrine, but a very firm, decolorised, fibrinous mass, attached on one side, floated in the cavity of the aneurism. The value of the above observations, as bearing on the conclusion inferred, is greatly increased by the circumstance that they are derived from two distinct and wholly independent sources.

Enough has certainly been advanced to encourage an inquiry into the power of iodide of potassium as a general hæmostatic; and to demand a fuller trial of its effects in internal and external aneurisms; in the treatment of which no internal remedy hitherto employed has succeeded in gaining even a temporary footing.

Use of Compressed Sponge in the Prevention of Lacteal Secretion. Dr. P. Stewart of Peekskill, New York, states that three years ago, he reported in the *New York Journal of Medicine* a case of suppression of the lacteal secretion, in the breast of a lady recently confined, by means of compressed sponge and bandage. Since the report of this case, he has several times had occasion to adopt the same practice, and uniformly with the same happy result. If others have used the method it has failed to come to his knowledge, and as the remedy is easily applied, and the results in his hands, at least, uniformly successful, it may be of some little service, he thinks, to call the attention of the profession once more very briefly to the subject. A flat soft sponge, carefully freed from all foreign substances, large enough to cover the entire breast, with a small hole or depression cut out in the centre for the nipple, is subjected to a pressure of a few pounds for a couple of days, and then applied over the breast; a compress is laid over this, and the whole secured by a bandage passed over the shoulders, and around the waist, so as to produce equal and uniform pressure over the entire surface. The bandage should be tightened sufficiently often to maintain a constant pressure for twelve or fourteen days. The best time to begin the treatment is within twelve hours after the birth, when the sponge is best applied dry; but if it is delayed from any cause until the breast becomes tender, and the milk begins to be secreted, Dr. Stewart's custom is to dip it in warm vinegar once or twice a day. (*American Medical Times.*)

Addresses and Papers

READ AT

THE THIRTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LONDON, AUGUST 5th, 6th, 7th, and 8th*, 1862.]

OBSERVATIONS ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND: ILLUSTRATED BY NUMEROUS FATAL CASES.

By WILLIAM BUDD, M.D., Clifton; Honorary and Consulting Physician to the Bristol Royal Infirmary.

"Le médecin doit, dans ses premières études, jeter un coup d'œil sur les animaux qui se rapprochent le plus de l'homme."—*Chaussier.* (Adopted from Régnier.)

In France, Germany, Russia, Lapland, Sweden, Italy, and other parts of Europe, under the characteristic name of Malignant Pustule, a disease has long been familiarly known and described, which proves fatal every year to a large number of persons.

Beginning as a minute vesicle, which is seated always on some uncovered part, its special character is to excite a peculiar form of gangrenous inflammation, which, spreading rapidly from the point first affected to the neighbouring tissues, gives rise to local changes of very uncommon aspect, and finally destroys life by general infection.

A disease calculated, by so much that is striking, to arrest attention, has, naturally, been made an object of inquiry by many eminent observers.

Among other distinguished men, Vallisneri, Solander, Pallas, Fournier, Thomassin, Chabert, Kausch, Malacarne, Linnæus,* Glanström, Enaux and Chaussier, Leuret, Delpech, Rayer, Bourgeois, Salmon and Maunory, Hoffmann, and Heusinger, may be specially mentioned as having each contributed something to its history.†

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* Linnæus, who was himself attacked by the disease, but happily recovered, was the first to give authentic evidence of the existence of malignant pustule in Lapland.

† *Vallisneri.* Lettere spettanti alla storia medica é naturale. Padova (1713). Also, Nuova idea del mal contagioso de buoi. (1714.) *Solander, D. Chr.* Furia infernalis. Nov. Act. Upsal. Tom. i, p. 113. (1773.) *Pallas, P. F.* Vergleichnung einiger in Schweden, Russland, und Siberien, und den daran grenzenden Wüsteneien bemerkten tödlichen Krankheiten, die man füglich unter den Namen, Brandbeulen, zusammenfassen kann. Neue nordische Breitr. B. 1, p. 113. *Fournier.* Observations et experiences sur les Charbons malins. Dijon: 1769. *Thomassin.* Dissertation sur le Charbon malin de la Bourgogne, ou de la pustule maligne. Dijon: 1780 *Chabert.* Description et traitement du Charbon. Paris: 1780 *Kausch.* Die in Königreich Preussen. und besonders in Herzogthum Warschau endemische, schwarze, Blatter. Hufeland's Journal. B. xxxiii, c. p. 38, d. p. 49. 1811. *Malacarne.* Del Carbonchio de Buoi e della febbre carbonchiosa nel Bestiamie e negli uomini. Bassano: 1797. *Linnæus.* Amœnitates Academicæ. Vol. iii, p. 322. *Glanström.* Dissertatio de pustula livida. Regiomonti: 1824. *Enaux et Chaussier.* Methode de traiter les morsures des animaux enrages, et de la vipère, suivi d'un précis sur la pustule maligne. Dijon: 1785. *Rayer.* Traité des Maladies de la Peau. Article, Pustule Maligne. *Bourgeois.* Memoire sur la Pustule Maligne. (*Archives Générales de la Médecine.* 4me series, t. 1, p. 172.) *Salmon et Maunory.* Memoire sur l'inoculation de la pustule maligne. (*Gazette Médicale*, 1857.) P. 184. *Hoffmann.* Der Milzbrand oder contagiöse Karfunkel der Menschen. Stuttgart: 1827. *Heusinger.* Die Milzbrand-Krankheiten der Thiere und des Menschen. Erlangen: 1850. Some of these authorities I have studied in the

The following important points appear to be established by the investigations of these and other writers:—

1. That the malignant pustule in man is identical with, and derived from, the eminently contagious disease which, under the name of "charbon" (*Germanicé*, "milzbrand", spleen-gangrene) or (in sheep) "sang", has prevailed from time immemorial in various continental countries, in oxen, sheep, horses, and other animals.*

2. That the disease may be communicated to man from the animal in the following ways:—

a. By direct inoculation, as in the case of butchers, farriers, skinners, herdsmen, drovers, and others, in whom accidental inoculation with it appears to be an event of no uncommon occurrence in the countries where "charbon" is most rife.

b. By means of the skin, or simply by the hair of diseased beasts; modes of communication of which many decisive examples are on record. Also, through contact with the bones, the hoofs, and horns, and the fat and tallow of animals dead of "charbon."

c. By eating the flesh of animals killed while affected with it, as also by using the milk and butter of infected cows.+

d. And, lastly, by insects which have been in contact with the bodies or carcases of diseased cattle; a mode of communication obviously difficult to demonstrate, but in proof of which numerous cases—some, apparently, entirely free from ambiguity—are recorded.

3. That in the countries where "charbon" prevails, concurrently with the cases of malignant pustule which are the observed result of direct inoculation, other cases occur in which the vehicle of the poison cannot be identified.

4. That these cases have, in common with the rest, this significant peculiarity: that the disease is always seated *on some part of the person which is habitually uncovered.*‡

5. That in animals, and in oxen especially, the action of the specific poison by which the malady is caused is even more virulent than in man; as shown, in the first place, by a more speedy death; and, in the next, by the more rapid spread of gangrene, and by the extrication on a large scale, while the animal is yet living, of fœtid gases in the tissues of the part affected.

6. That the contagious property is possessed in the highest degree by the lymph of the characteristic vesicles; and, next to this, by a peculiar exudation (the so-called "humor anthracicus") which occurs in the cellular tissue of the affected part, in that of various parenchymatous organs, and sometimes, also, in the serous cavities of the chest and abdomen.*

7. That the malignant pustule, when contracted by man, may be communicated by contagion to other men, or back to the animal by inoculation.

It would be out of place here to give, in detail, the evidence on which these conclusions are founded. I may, however, state that the identity of the malignant pustule with the "charbon" of cattle—already, perhaps, sufficiently established by the countless cases of accidental direct communication, has lately received its crowning proof, in the reinoculation of the disease, with all its specific characters (including the power of indefinite propagation by the same process) from man back to the animal. (*Gazette Médicale*, 1857, p. 684, Salmon and Maunory.)

Some of the facts which show that the virus may be conveyed by the hair of beasts are very striking.

Trousseau, for example, relates that in two factories for working up horsehair imported from Buenos Ayres, and in which only six or eight hands were employed, twenty persons died in the course of ten years from malignant pustule. This distinguished teacher had himself the charge of three cases from the same establishments, in which life was only saved by severe cauterisation. (*Gazette Médicale*, Fevrier, 1847, No. 4.)

Rayer states that in the course of three years, while he was attached to the Hospital of St. Louis, he had to treat eight cases of malignant pustule; and adds that all eight came from an establishment in the immediate neighbourhood for the manufacture of Russian hair. (*Traité des Maladies de la Peau.* Article, Pustule Maligne.)

I think it is the same writer who records the still more remarkable case of three persons who were all attacked by the disease after cleaning some hair that had for many years served as the stuffing of an easy chair.

Two other facts may be mentioned here, in addition to these, which tend to show that this virus, like the other contagious poisons, when once in the dried state, may retain its powers for indefinite periods of time.

It is stated by Gerlach that some straw on which, three years before, some beasts dead of "charbon" had been flayed, on being brought into a shippen, in-

original. For my knowledge of the rest I am indebted to Heusinger's elaborate and comprehensive treatise. The three works whose titles are subjoined, and which stand among the first in Heusinger's catalogue, also deserve special mention, as showing how far back the records of this malady go, and at what an early period the disease in man was identified with that in the animal. *Tossi a Serra.* De anthracce seu carbunculo tractatus. Venet.: 1576. *Chr. Perez de Herrera.* De carbunculis animadversiones. Pintiæ: 1604. *Troilo.* Lancetta di Pestilenza commune ai bruti e di contagio mortale, dell' uomo. Venezia: 1632. Fol.

* Indications of the occurrence of this epizootic extend back to a remote antiquity. Not to mention the murrain described in the ninth chapter of Exodus, by which Pharaoh's cattle, horses, asses, and sheep, were destroyed, and which by most writers is thought to be identical with "charbon" or "milzbrand," Heusinger considers it almost certain that the disease described in the first book of the *Iliad* (l. 43—52), that referred to by Ovid in his seventh *Metamorphosis* (l. 523—660), various epizootics mentioned by Livy and Dionysius Halicarnassus, and lastly that delineated by Virgil in the first and third *Georgics* (l. 464—470) respectively, were of the same nature.

+ A remarkable example of the communication of the disease by the milk of an infected cow was related by Chisholm in his account of the epidemic which occurred in Barbadoes in 1795. The malady was rife on the plantation of Mr. Cummin, and carried off more than fifty head of cattle, beside a considerable number of negroes who had partaken of their flesh. While the epidemic was at its height, one of Mr. Cummin's children, a little girl three years old, took one morning for breakfast so much milk that scarcely any was left for the rest. Unfortunately, this milk was furnished by a cow which at the time was suffering from the murrain. Four days afterwards, the child was seized with all the symptoms of the prevailing malady, including malignant carbuncles identical with those exhibited by the negroes who had eaten the diseased meat. Her life was saved with difficulty; and a deep scar on her left arm remained to mark the nature of her illness. (Chisholm, on Lues Bovina Introtropica, *Edinburgh Medical and Surgical Journal*, vol. vi, p. 36.) It is remarked by more than one writer, as a curious fact, that, in milch cows, the secretion of milk often continues for a considerable time after the onset of the malady.

‡ The few exceptions to this rule which do occur only add to its significance. Such, for instance, is the interesting case lately recorded in the *Lancet*, by Mr. Harper of Holbeach, in which a man who was tending diseased sheep inoculated the prepuce with his soiled hands. Many instances of this particular accident are recorded by foreign writers. Heusinger relates a case of maliguant pustule in the instep, but it occurred in a boy who always went barefoot. In the epidemics which have occurred in the West Indies, when the disease attacked the blacks, who were, indeed, its chief victims, the pustule appeared in the most various parts of the body.

* Greve believes the virulence of this exudation or carbuncle juice to be much greater while it is yet warm, and immediately after the death of the animal. On this point, he makes the following remarkable statement:—

"Ich sah eine grosse Menge am Milzbrand abgestandener Kühe und Ochsen von Abdeckern abledern, ohne übler Folgen für diese; aber sie lederten die Cadaver *erkaltet* ab und ihre Hände und Arme *waren ohne Verwundungen.* Sobald sie mit verwundeten Händen die *noch warmen* Cadaver behandelten, trugen sie allemal die gefahrdrohendsten Carbunkeln davon. *Furchterlich wirkte das noch warme, gelbe, jauchige, und stinkige wasser in der Bauchhole des krepirten Viehes.* Alle Hunde die davon aufleckten *krepirten fast auf der stelle.* Ich sprüzte ein paar Tropfen dieser warmen Jauch in das Auge einer Taube, und 3 Stunden nachher war sie todt, ebenso ei ne Ente welcher ich ungefähr einen Théelöffel davon in den Halseerguss. (Greve, *Erfahrungen und Beobachtungen*, i, s. 48.)

fected with the same disease the sheep that were folded in it.*

In Caspar's *Wochenschrift*, Nicolai gives the history of a tanner who died of malignant pustule of the face. After full three months, the daughter of this man; and then her brother died of malignant pustule also. (Caspar's *Wochenschrift*, 1833, p. 268.)

The propagation of the disease by flies which have previously been in contact with animals affected with charbon appears to be equally well established. As this, however, is a point to which I shall have to return, I will not dwell further on it here.

Whatever the way in which the pustule may have been contracted, one thing appears certain, and that is, that in man, in the immense majority of cases, it is at the onset local only; the general poisoning which ensues being due to the after diffusion of the morbid changes and products engendered in the part first affected.†

This capital point in its pathology may be inferred not only from the order in which the morbid phenomena succeed one another, but still more clearly from the decisive fact that the early destruction of the diseased part by caustic not only often prevents the development of the constitutional disorder, but in many cases issues in perfect and immediate cure.‡

The history is, in short, that of a specific animal virus, which, implanted by inoculation in a given part, sets up there a series of malignant zymotic changes, which are propagated thence to the whole system.

From this summary it will be seen that this remarkable disease has not only been closely studied by a great number of continental naturalists and physicians; but that their published observations upon it amount to a considerable body of medical literature.§ This being the case, it is certainly a very curious fact, whatever the explanation, that the profession in England are almost entirely silent on the subject.

Among systematic writers, Dr. Craigie, in his *Practice of Physic*, Mr. Druitt, in his *Vade Mecum*, and Dr. Copland, in his *Medical Dictionary*, are, as far as I have been able to ascertain, the only English authors who have treated of the disease at all. All three speak of it as being all but unknown in England; and all three professedly derive their account of it from the French.‖ In the long list of writers on malignant pustule which are appended by two of these authors to their respective articles on it, no English name appears.

With the exception of two cases of which Mr. Lawrence gave an account in a clinical lecture published some twenty years ago; and of a valuable series since related by Mr. Harvey Ludlow, there is, I believe, no description of the disease, drawn from actual observation, by any British practitioner.¶

From this one of two things is clear; either that a malady which is unlike any other, and which, in all respects, is one of the most remarkable to which man is liable, has hitherto escaped general recognition here; or that, as Mr. Druitt and Dr. Copland suppose, malignant pustule (except, perhaps, as a thing of extremest rarity) is never met with in England. This last alternative, if true, would be very difficult to explain, inasmuch as the epizootic from which malignant pustule is derived, so far from being unknown here, has, from a very remote period, caused every year a large mortality in English live stock.*

The "joint murrain," "black quarter," or "quarter evil," and the "blood" (the name by which the malady is known in the sheep), are the same diseases as the "charbon," "quartier," and "sang" of the French, and the "milzbrand" of the German writers.

That a disease which is known to be communicable to man should prevail in this country, and yet never be communicated to him, would be a strange, if not an unaccountable thing.

The fact, I believe, is not so. If my own experience may be trusted, the only reason why malignant pustule has been so rarely noticed by English writers is that, except by one or two observers, it has hitherto been confounded with other maladies which offer some points of analogy with it.

In the month of October 1856, I saw a case which presented all its characteristics in the highest degree, and which ended fatally on the seventh day. Since then I have been informed of twenty-three other instances of it. Of these twenty-three, two were seen by myself, and six others by intimate friends who have kindly favoured me with their notes.

That so many cases should have come, within so short a period, to the knowledge of a single practitioner, shows, at any rate, that it is high time we should all take serious note of the presence of this disease among us, and prepare ourselves to deal with its terrible emergencies.

[*To be continued.*]

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* Gerlach, Die Blutseuche der Schafe in Rücksicht der Ursachen. *Magazin f. Thierheilk.* B. xi und xii. See Heusinger, p. 62.

† I say "in the immense majority of cases," because in some few instances in which the disease is caused by the ingestion of infected flesh or milk, the poison becomes absorbed at once into the blood, and leads to a general infection which precedes any local mischief.

‡ See for evidence of this Bourgeois's able paper in the *Archives Générales de la Médecine* before referred to. The testimony of all the best observers is unanimous as to this point.

§ Heusinger quotes more than four hundred authors who have treated, either of malignant pustule or of the corresponding disease in cattle, or of both.

‖ I do not mention Chelius's *System of Surgery*, because that may be said to be only a German book in an English dress. It contains, however, a brief but clear account of malignant pustule, with some notes added by the translator.

¶ Mr. Ludlow's paper, which appeared, in September 1852, in the *Medical Times and Gazette*, under the title of Carbuncular Inflammation of the Lips and other parts of the Face, and of whose existence I was not aware at the date of the present communication, does not appear to me to have received the attention it deserves. The paper opens with the following passage:—

"The disease which forms the subject of consideration in the following pages belongs to a class whose diffusion has been pretty steadily increasing in this country during the last five years. Before that period, it appears to have occurred quite sporadically, and at have been amenable to ordinary treatment. Hence, our medicol literature offers but few original observations on the subject, the knowledge we possess of it being derived chiefly from continental authorities. Charbon and malignant pustule, indeed—diseases with which French surgeons are so familiar—present broad features of similarity to the affection which the accompanying cases are designed to illustrate; and although some trifling differences exist between them, yet the resemblance of their distinctive characters is evidently so close as to compel us to include them in the same class, and to place them in the same pathological light."

Although Mr. Ludlow hesitates actually to identify the disease he describes with the true malignant pustule, it is plain, from this passage, that he had a strong conviction of the close analogy between them. In the concluding part of his paper, he sums up his views as to the causes of the malady in the following words:—

"From a consideration of all the cases which are recorded in the journals, or have occurred during the last two years at the hospital (St. Bartholomew's), I think the disease may be attributed to three main causes. 1. The direct inoculation of a poison, animal or vegetable. 2. The inspiration of air tainted with such poisons. And 3. Feeding on unhealthy food."

The cases reported by Mr. Ludlow, to the number of six, are all characteristic examples of malignant pustule.

* The epizootic described by Matthew Paris as having been so fatal to cattle in England in 1252, was, probably, an epizootic of the disease in question. He relates that dogs and ravens which fed on the carcases of the infected cattle rapidly died in consequence, and the panic among men was so great that for the time the use of beef was given up. The following is the *verbatim* account:—

"Ejusdemque anni curriculo, post multa æstatis caumata, tempore adveniente autumnali, facta est tanta pestifera armentorum mortalitas pluribus locis in Angliâ, precipué autem in Northfolc et in Mariscos, et partibus Australibus, quantam nullus se meminit previdisse. In quâ peste hoc evenit mirabile, quod de pecorum mortuorum cadaveribus, etiam canes et corvi qui vescebantur, ilicó intumuerunt et infecti obierunt. Unde nullus erat hominum qui carnes bovum comedere auderet, ne fortè ipsæ essent de morticinis memoratis." (*Historia Major* Matthæi Paris. Editore, Willielmo Watts, S.T.D. Londini: 1648. P. 847.)

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

CONGENITAL INGUINAL HERNIA, WITH DOUBLE STRANGULATION.

Clinical Remarks by JAMES PAGET, ESQ.

A MAN, aged 31, was admitted into St. Bartholomew's Hospital, November 30th, 1862, under Mr. Paget's care, for strangulated inguinal hernia on the right side. He was a waiter, generally healthy and strong; and, so far as he knew, never had any swelling in the groin until a few days before his admission. On the 24th, six days before he was admitted, he slipped off some steps, and fell astride on them. He felt little or no pain from the accident, a slight and transient feeling of nausea being the only discomfort; and he soon thought no more of the matter. At 6 A.M., however, on the following morning, he began to vomit, and all the food and drink that he took were returned almost immediately. This sickness continued throughout this and the following days, up to the time of his admission into the hospital. The bowels were very slightly open four days before admission, and not since; on the same day he first noticed the hernia, but thought little of it, and did not mention its existence to the surgeon who attended him. He had taken a considerable quantity of medicine, probably aperient, before he came to the hospital.

The hernia was flask or pear-shaped, with a long neck, and occupied the right side of the scrotum, and the inguinal canal. It measured about four inches in length, by one inch at the neck, and two at its widest part. It was somewhat tense, but not very tender, and the integuments covering it, though rather red, were otherwise perfectly healthy. At the lower and wide part, the hernia felt soft and elastic, as if containing fluid or fluid and intestine, while the neck was hard and resisting as if entirely or chiefly solid. On coughing or straining a wave of impulse extended down the inguinal canal to the external abdominal ring, but here it stopped short, and no motion was communicated to any part of the swelling beyond this point. The abdomen was not tender, but somewhat distended; and the outlines of distended coils of intestine were very distinct, the appearance being pretty general, and not confined to any particular part of the abdomen.

He looked thin and somewhat pale, but rather like one who is so habitually, than as if he were distressed by the disease. His countenance was tranquil, his voice and manner apparently quite natural, and he complained of no pain. Pulse rather quickened, but of good volume and strength. Breathing about natural. Tongue moist, etc.

After a slight attempt at reduction, under chloroform, Mr. Paget proceeded to operate by making an incision over the upper part of the sac and external ring. The sac was then opened, and found to contain some small intestine, but no fluid. The intestine was of a dim scarlet colour and rather velvety from congestion, but it was nowhere darker than this, and the coats, though very thick, seemed perfectly sound. The walls of the sac were very thick, and its internal surface was of an opaque yellowish white colour, and superficially wrinkled like the internal surface of a large and aneurismal artery. A stricture in its neck was found at the external ring, and divided; but, the intestine being still confined at the lower part, the incision was prolonged downwards through the sac and superficial structures for another inch, and it was then discovered that a second strangulation was caused by an irregular contraction and thickening, about two inches below the external ring—at about the part where the long neck began to expand into the body of the hernia. On dividing this second stricture, a considerable quantity of yellowish and nearly clear fluid gushed out, and the intestine, which had been protruded into this part of the sac, could be readily drawn up. It was, for the most part, in about the same state of congestion with the portion just described; but, at the part which had been gripped by the lower stricture, there was a very distinct "nip" about an inch long, by one-eighth wide, extending transversely across part of the circumference of the bowel. The coats seemed still sound at this part; but close to it was a small round blackish-brown spot, of about the size of a split pea, surrounded by a narrow white areola; the consistence of the bowel was not here, however, evidently impaired. The intestine was therefore returned into the abdomen.

The lower part of the sac proved to be the truncalis vaginalis testis, with healthy texture and condition of its walls, and the upper and thickened portion (forming the neck), the canalis vaginalis—continuous with the peritoneal cavity above, and its communication with the tunica vaginalis below, only partially interrupted by the contraction of its walls at the spot before mentioned, viz., the lower stricture.

After the operation, the edges of the external wound was united by silver sutures, and a pad and bandage then applied.

First Day after Operation. He looked composed and easy, and complained only of slight pain in the abdomen, which he attributed to not being able to pass urine properly, and for which, in the evening of this day, a catheter had to be used. The abdomen was tense and tympanitic, but not tender, and moved in respiration, which was 24. He had had no vomiting since the operation; the bowels had been freely opened five or six times. Pulse 132; full and jerking. He had taken four soap and opium pills at intervals since the operation, and had slept a little.

Second Day. He was not so well. His countenance rather pinched and depressed, and his voice lower and less confident. He had had pain in the left iliac region, but this was now relieved after the application of a linseed poultice. The abdomen was tense and tympanitic as before, but not tender, and moved in respiration, which was 20, and not painful. The bowels had not been open since last note. He had taken, besides beef-tea and milk, an ounce of brandy, and twenty-five minims of laudanum. Pulse 144; small, compressible, and jerking.

Third Day. He was rather better in almost every respect, and he took, besides beef-tea and milk, four ounces of brandy, and soap and opium pills night and morning.

Fourth Day. He again became worse, suffering, however, from but little pain or tenderness in the abdomen; but he began now to vomit a greenish-yellow fluid, besides the small quantities of beef-tea, wine, and brandy, etc., which were given to him at intervals. Respiration was abdominal as well as thoracic, but increased in frequency (36). The bowels acted twice freely. The motions were tolerably healthy. Pulse 140; weak and jerking.

Fifth and Sixth Days. He became still worse; being only partially conscious now and then, though answering questions rationally. His face was pinched and dull, but he complained of but little pain in the abdomen, or elsewhere. The abdomen was moderately distended, and only slightly tender; it continued to move, though not very freely, in respiration, which increased in frequency to 40. The vomiting continued, and nothing could be retained on the stomach for more than a minute

or two. The bowels acted *eight* or *nine* times in those two days, very freely and loosely. The motions had a pale yellow colour. The pulse was frequent and weak. The wound had continued to look tolerably healthy, with only slight suppuration.

He died on the sixth day after the operation.

Post Mortem Examination. Slight general and recent peritonitis was found in the intestines occupying the upper part of the peritoneal cavity; but there was evidence of much more intense and apparently older inflammation (by several days) in the cavity of the pelvis, and in the coils immediately continuous, as well as in contact with the portion of bowel which had been protruded during life. This portion, which proved to be the lowest portion of ileum immediately before its entrance into the cæcum, lay opposite the internal ring. That part of it which had been nipped by the second stricture had undergone a further change, rather of ulceration than of sloughing, by which a rent had been made large enough to admit the tip of the little finger; and through this opening fæces had escaped into the abdominal cavity, though their diffusion had been to some extent prevented by the close adhesion of neighbouring coils, through the medium of thick layers of yellow lymph. Very little loss of substance had occurred; the edges of the rent being brought into nearly even apposition with no difficulty. Immediately around the opening, the coats of the bowel were dark, and at one spot thinned; but their consistence was tolerably firm. No alteration had apparently occurred in the small black spot noticed at the time of operation. In the last eighteen inches or two feet of the ileum, there were evidences of acute inflammation of all the coats of the intestine, which was dark, congested, and thickened; the almost black congestion extending through its whole thickness, and being very distinct on the mucous membrane of its interior. Beyond this part, the colour of the bowel changed abruptly into a much lighter one; and the general signs of inflammation became also much less marked as the upper part of the intestinal canal was approached.

In a clinical lecture on this case, Mr. Paget, after describing the condition of parts to which the term congenital hernia is applied, proceeded to speak of the different ways in which the communication which naturally exists in the later part of fœtal life between the peritoneum and tunica vaginalis, is closed. This closure takes place usually from above downwards, by a gradual contraction of the canal, by which its walls are brought into apposition. But occasionally this process occurs only at both ends of the canal, while the intermediate part remains unobliterated; or there is a partial adhesion at different points in the course of the canal, by which the latter is converted into two or more sacs communicating more or less freely with each other. In such cases, the sacs may become filled with fluid, and then the condition known as hydrocele of the cord is produced. In many cases, again, the canal remains permanently open; or, as in the present case, there is an imperfect contraction of its walls at each extremity.

The frequency of hernia in early life is due to this unclosed state of the processus vaginalis; but it does not follow that a hernia should take place of necessity in all cases in which this patent condition of the canal exists.

Here was a patient thirty-one years old, who, so far as he himself or his mother knew, had had no hernia or other swelling until a few days before his admittance into the hospital. Mr. Paget said that he had operated some time since on a man aged 58, who had had a hernia for only four months, and yet it was "congenital"; and he referred to another case of the same kind in an adult who was under the care of Mr. Lawrence.

We should be very cautious, Mr. Paget said, in promising the cure of congenital hernia occurring in early life. His usual treatment was to order a truss to be worn for five years; and, if no descent occurred in that time, to allow it to be left off. If, however, any descent should take place, he ordered the truss to be worn for four or five years more. But even if this plan has been carefully followed, the patient cannot be quite sure that he is cured. In the cases just related, no truss had been worn; but this was not the cause of the non-closure of the canal. In the case of a student who had congenital hernia in infancy, a truss was worn for five years; and, as no descent occurred in this time, he left it off. Fifteen years passed without any descent, and then the intestine again came down and was strangulated, requiring the administration of chloroform before it could be reduced.

Mr. Paget said he believed there were no dissections showing the effects of the pressure of a truss on the processus vaginalis in congenital hernia. It is generally said to produce adhesion of the walls by causing inflammation of their opposed surfaces; but it is more probable that it merely allows the natural changes of contraction and obliteration, which are not at all like those of adhesive inflammation, to proceed, uninterrupted by any hernial descent. The sooner, therefore, that this treatment—wearing a truss—is begun, the greater is the probability of success. The pressure need not be great; enough to prevent the descent of the hernia will be all that is required.

In the present case there was an unusual condition of the walls of the canal of the tunica vaginalis; they were thickened, corrugated, etc.; not like the ordinary condition in encysted hydrocele of the cord, which they might have been expected somewhat to resemble. There was also an unusual shape of the communication between the canal and the sac of the tunica vaginalis; and it was so completely closed by the piece of intestine which had descended, that the fluid, which had collected in the sac of the tunica vaginalis, was prevented from escaping into the canal, which contained none; and hence the unequal characters of hardness in the long neck of the sac and softness in the lower part of it.

The case served well to show the usual seat of stricture in congenital hernia; viz., in the mouth or neck of the sac. But, as in this patient, there may be also another lower down—at the junction of the canal with the sac of the tunica vaginalis. Mr. Paget remarked, that this was the second case he had operated on in which he found a stricture in the latter situation. In the operation itself there was nothing very worthy of remark; but after it, within a few hours, the patient, had five or six rapid actions of the bowels. This was almost always a bad sign; for it indicated a very morbid state of the intestines, and it disturbed what should be at rest. In this case it apparently added much to the causes of death. It was probably due to the quantity of

physic which the patient had taken previously to his admission into the hospital and before the discovery of the hernia.

In conclusion, Mr. Paget said that in many cases an operation for the relief of strangulated hernia, even when satisfactorily done, leaves the patient in a complicated state from the following conditions:—

1. The necessary effects of the strangulation.
2. Frequently continuance of a disease preceding the strangulation—colic, diarrhœa, dyspepsia, etc.
3. Very frequently the effects of accumulated physic.
4. The effects of chloroform and the operation.

Here, the *post mortem* examination showed the existence of enteritis as well as of peritonitis, but chiefly of perforation occurring late in the progress of the case; though, at the time of the operation, the vitality of the part pressed by the stricture did not seem to be materially impaired. But all these were attended with obscure and somewhat unusual symptoms, which it would be difficult to explain very satisfactorily.

Reviews and Notices.

On Diseases of the Chest, including Diseases of the Heart and Great Vessels: their Pathology, Physical Diagnosis, Symptoms, and Treatment. By Henry William Fuller, M.D.Cantab.; Fellow of the Royal College of Physicians; Physician to St. George's Hospital; etc. Pp. 703. London: 1862.

The announcement of any contribution to medical literature by Dr. Fuller must by this time naturally carry with it the idea of something valuable; nor will those who may study the volume before us, be disappointed in their expectations of gaining instruction. Perhaps, however, this estimate will bear a slight qualification in respect to one important department of the book—we mean those parts in which the author speaks of physical examination, especially by means of the ear. So far as it is possible to describe the sound-signs of thoracic disease on paper, Dr. Fuller has done it well; and all credit is due to him for the plan which he has followed, and which is set forth in the following extract from his preface:—

"My object has been ....to render attainable by men of ordinary capacities and ordinary opportunities a science which is indispensable to every medical practitioner. I have endeavoured to begin at the beginning, to assume nothing, and to explain every auscultatory sign by reference to the morbid condition, and consequent altered mechanism, in which each takes its origin. My wish has been to inculcate the necessity for regarding each physical sign, not as indicative of a certain disease, but rather as the natural consequence of a certain physical alteration in the tissues, the source and true interpretation of which must be determined by concomitant circumstances. I have endeavoured to use the simplest language, so as to obviate the formidable difficulty presented by the confused and varied phraseology made use of by many writers on the subject, to give a definite meaning to each term which is employed, and to present a classification of the various sounds which shall be intelligible even to a novice at auscultation."

While we highly commend the objects which Dr. Fuller sets forth in this extract, we must offer some criticism on the first sentence. We doubt greatly, indeed, whether it is possible to teach the sounds of the chest and their modifications by written description. The Horatian maxim,

"Segniùs irritant animum demissa per aurem,
Quàm quæ sunt oculis subjecta fidelibus,"

is reversed here. Sounds cannot be learned and understood unless they are heard by the learner. We can readily imagine a man having a perfect theoretical knowledge of sound, and of all the *minutiæ* of music, and yet unable to distinguish one musical instrument from another, or even one note or one piece of music from another, unless his ears have also been trained. The student of chest-diseases must gain his knowledge of the sounds from actually hearing them, under the guidance of competent instructors. In this way alone he can learn them. He has not even the imperfect substitute for the object itself, which drawings, or paintings, or models, can afford in the description of things that may be seen.

As means of teaching the sounds, then, not Dr. Fuller's book alone, but all books on the same subject, are defective. But they have their value, in enabling the student and practitioner to arrange and coordinate his ideas of the sounds which he has heard, and to refer each to the condition producing it. In carrying out this object, Dr. Fuller has laboured well, and, it seems to us, with success. As has been already said, his aim is simplicity of description; he avoids the minute distinctions which have been drawn by some writers, at the same time that the terms which he uses are sufficiently explicit. Thus, in speaking of the sounds elicited by percussion, he first classifies them as clear toned and dull toned; full toned and shallow toned; high pitched and low pitched; and also in combinations, as clear and full toned (healthy pulmonary resonance); clear but shallow toned; dull but full toned; dull and shallow toned. Such terms as "tubular," "tracheal," "amphoric," "cracked-pot," etc., he objects to, especially when they imply a theory as to the origin of the sound.

In his descriptions of the several classes of the physical phenomena presented by the chest, Dr. Fuller has arranged the signs in tables, giving his nomenclature of the sounds, their synonyms, characters, mode of production, and seat, and the diseases with which they are usually associated. To any one who knows the sounds or is learning them, these tables, in connection with the more elaborate descriptions which precede them, will be useful.

We observe also, that in describing some of the diseases of the chest—*e.g.*, pleurisy, pneumonia, and bronchitis—Dr. Fuller arranges the symptoms and the physical signs of each stage in parallel columns; so as to show their connection in the most obvious manner short of actual demonstration.

A notice of Dr. Fuller's opinions on certain debated points may be interesting.

One of these points is ægophony. Dr. Fuller regards it as essentially bronchophony, to which is imparted a tremulous bleating character. The agency producing this character

"Must be one of two kinds; either some tenacious secretion vibrating in the bronchial tubes and producing an effect analogous to the vibrating tongue of reed-in-

struments, which possibly may be, though I somewhat doubt it, an occasional cause of ægophonic resonance over hepatised lungs; or, which I believe to be its source in cases of pleuritic effusion, the impulse of the vibrating and partly solidified lung against the costal pleura. .... Under ordinary circumstances, solidified lung lies closely in contact with the costal pleura, and practically, for all purposes of vibration, may be considered as connected with it; consequently, unless some cause of jarring tremulous vibration exists within the lung itself, as in the instance of a vibrating piece of mucus in a bronchus, the vocal resonance will be purely bronchophonic and not ægophonic. But just at the surface of a pleuritic effusion there must be a point at which the lung is barely separated from the chest-walls, and in which the bronchophonic vibrations of the lung must lead to that light jarring impulse of the visceral against the costal pleura, which analogy proves conclusively to be a frequent cause of a peculiarly tremulous bleating sound—the sound which characterises ægophony." (P. 108.)

Dr. Fuller believes that pleuritic effusion, slightly separating the two surfaces of the membranes, is the most common cause of ægophony—the conditions for bronchophony previously existing in the lung; and that this is its invariable source when the sound is well developed and persistent.

In speaking of paracentesis thoracis for the relief of pleuritic effusion, Dr. Fuller differs from those who lay great stress on the importance of the non-admission of air into the pleural cavity. The instruments devised for this purpose are, in his experience, ineffective; for he has found that so long as precautions were taken (by means of cannulæ with valves and stop-cocks) to exclude air, but little fluid escaped; while, as soon as air was admitted, the liquid flowed freely. He does not believe the admission of air to be so dangerous as many think, in the stage when paracentesis is generally performed—when acute inflammatory action has subsided.

"It does not necessarily excite suppurative inflammation of the pleura. This has been proved in many cases in which serous fluid has been drawn off by the cannula without the subsequent occurrence of suppuration. Again, the existence of air in the pleura is not found to interfere with the re-expansion of the lung in the cases now under discussion. The lung is already compressed by the fluid, and in most cases is slow in regaining its due expansion; and, as air is rapidly absorbed from the pleural cavity, its temporary admission in cases of paracentesis is, in this point of view, of little moment." (P. 192.)

Regarding bloodletting in pneumonia, Dr. Fuller places no trust in conclusions either for or against the practice, derived from statistics which overlook various sources of error. He relies more on common sense and experience.

"Common sense points out that what is serviceable in one case will prove mischievous in another, under different conditions of age, sex, constitution, and the like; and experience not only endorses this view, but proves that under certain circumstances bloodletting is a palliative of extreme value.... Phlebotomy should not be resorted to, except when its employment is most clearly indicated; and even then it should be employed very cautiously. In my own practice at St. George's Hospital and elsewhere, I have had recourse to it in pneumonia three times only within the last four years; but I am satisfied, nevertheless, that in each of these cases it was the means of affording great relief, and that cases do occur from time to time in which its employment is absolutely necessary to the well-being of the patient." (P. 235.)

We could go on noticing other points of interest; but we must bring this notice to an end, assuring our readers that while in this book Dr. Fuller exhibits great research and learning in regard to the theory of diseases of the lungs and heart, he at the same time puts forth the results of his experience in a manner calculated to be of practical value in matters therapeutic.

On Diseases of the Skin. By Erasmus Wilson, F.R.S. Fifth Edition. Pp. 784. London: 1863.

A book which has reached its fifth edition does not require much notice from the reviewer; and therefore Mr. Wilson's classical work, with the emendations and additions which he tells us he has introduced, may be safely left to that professional judgment which, it appears, has hitherto given it high and merited approval. The preface to the present edition, however, contains remarks on the general pathology and classification of skin-diseases, which are of some interest in the present age of change and progress. Mr. Wilson tells that, when the first edition of this book appeared, twenty years ago, he constructed a physiological classification of cutaneous diseases; but that, being convinced that "a classification must be sought for that would carry with it the idea and principle on which our curative operations ought to be conducted", he, in his fourth edition, arranged the skin-diseases in an etiological classification, which is followed in the present edition. This classification is, however, applied only to diseases affecting the general structure of the skin; which are divided into those arising from general causes; from special external causes; from special internal causes; from the syphilitic poison; and from animal poisons of unknown origin, giving rise to eruptive fevers. The physiological—or rather, anatomical—classification is still followed in regard to diseases of the special structures of the skin, which are classed as diseases of the vascular structure; of the nervous structure; of the papillary structure; of the pigmentary structure; of the sudoriparous organs; of the hair-follicles and hairs; and of the nail-follicles and nails.

The neuropathic theory of disease, which is gaining ground among practitioners of the present day, and which has been ably advocated in this Journal by Dr. Handfield Jones, receives some support from Mr. Wilson. Accepting the views of neuropathists, he cannot yet abandon the time-honoured humoral theory, though its applicability to practice has been limited.

"Humoralism does not explain all the known phenomena of cutaneous disease; and for the simple reason that humoralism addresses itself only to the fluids of the body; and although it must be admitted that there can be no healthy solids without healthy fluids, yet, on the other hand, the nervous system plays so important a part in the health of the body, and in the health of the blood itself, that we are bound to recognise certain phenomena manifested by diseases of the skin as originating in the nervous system; as being, in fact, neuropathic phenomena. In the treatment of diseases of the skin, we must therefore chasten our humoral views with views drawn from a neurotic source—with dynamic views; and while we bestow our chief attention on the purification of the blood, we must at the same time comprehend the importance and secure the integrity of that governing influence, the nervous power."

Arising naturally out of the recognition of the neuropathic nature of some skin-diseases, is the recognition of their purely local origin in many instances. This has been strongly impressed on Mr. Wilson by the writings of Professor Hebra of Vienna, as well as by several interviews during the last year with that distinguished dermatologist. Professor Hebra would treat by local means alone many diseases which "in this country, and with our humoral tendencies, we should be led to treat by constitutional as well as by local means". At what point between the two extremes the safe medium lies, has yet to be determined. Mr. Wilson believes we shall best learn by giving more attention than before to local treatment, while we do not give less to the constitutional.

CHEMISTRY. By WILLIAM THOMAS BRANDE, D.C.L., F.R.S.L. & E., of Her Majesty's Mint, Member of the Senate of the University of London, and Honorary Professor of Chemistry in the Royal Institution of Great Britain; and ALFRED SWAINE TAYLOR, M.D., F.R.S., Fellow of the Royal College of Physicians of London, and Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. Pp. 892. London: 1863.

THIS book has been written for the express purposes of the student of chemistry by two masters of the science. If ever two writers could claim to know what the student requires in the way of a handbook to help him to a knowledge of the science, Drs. BRANDE and TAYLOR are the men. One of them, we are told, has been engaged in teaching chemistry these forty years; and more than a quarter of a century ago we ourselves had the good fortune to learn chemistry from the teachings of Dr. Taylor, in the lecture-room of Guy's Hospital. To criticise such a manual as this seems, therefore, a matter of superfluity.

Its authors have, doubtless, met successfully the two difficulties which try the powers of all writers on this subject; viz., the avoiding of profuseness—the telling of too much; and the avoiding of brevity and obscurity—the telling of too little. Specimens in this way are before us. At one end of the scale we find Mr. Galloway's "First Step", modestly containing ninety pages; and at the other end of it we find the translated "Handbook" of Gmelin, still unfinished, "filling at the present date fourteen octavo volumes, and covering nearly eight thousand pages"—*scriptus et in tergo, necdum finitus.* We can well imagine how difficult must be the art of condensing even into nine hundred closely printed pages all the details of modern chemistry, which the student expects to find ready to his hand; and yet what a fearful amount of necessary details is comprised in a knowledge of chemistry at the present day! Our authors, we are glad to see, have felt compassion for the medical student, who is called upon to obtain in about four years a knowledge or a smattering of at least eight sciences; and they have well said that "the efforts of those who contribute to the literature of these sciences should be directed to the elucidation of the most important facts and principles, omitting altogether those details which are either of a controversial nature, or are not yet established on a satisfactory basis." This is the spirit in which they have worked in the production of their volume. They have also done well in excluding from their pages those frightful formulæ, symbols, and mystical language, which are enough to strike awe and repulsion into the mind of the ingenuous student. It is, indeed, a great satisfaction to learn upon such authority that all such hazy technicalities and mysterious symbolism are not actually necessary for the acquirement of the modern facts of the science. "Our intention," Drs. Brande and Taylor say, "in the preparation of this volume, has been not to furnish a treatise on the science, but to provide the student and general reader with a plain introduction to the subject."

No space in the book has been sacrificed (as our authors deem it) to the introduction of woodcuts. They tell the students that, if they want to know about retorts, etc., "they will find in the illustrated catalogues of dealers in chemicals more correct representations of apparatus than those which are commonly met with in treatises on chemistry." By devoting the whole of the book to description, our authors have been enabled to condense into one thick and handy volume what might, we suppose, have been very readily expanded into two equally thick and inconvenient volumes.

The volume contains fifty-six chapters, in the first four of which are explained, Matter and its Properties; Crystallisation; Dimorphism; Isomorphism; Chemical Affinity; Solution; Electrolysis; Equivalent Weights and Measures; Nomenclature and Notation. The rest of the chapters are occupied with Metalloids, Metals, and Organic Chemistry. As a specimen of the authors' method of treating their subjects, we will give the reader their account of Dialysis.

"When a liquid will dissolve no more of a solid, it is said to be *saturated;* in other words, its adhesion or affinity for the solid is exhausted. It is a curious fact, however, that water which is saturated with one salt has still the property of dissolving a second and a third salt. Crystals of nitre may be thus freed from impurities, such as chloride of sodium, by washing them with a saturated solution of nitre. A saturated solution of a salt exerts a powerful attraction on water. If a saturated solution of sulphate of copper is enclosed in a funnel tube, secured at the larger end by bladder, and the tube is plunged in a vessel containing water, so that the liquids inside and outside are on a level, in the course of some hours it will be found that, although some of the copper-salt has passed out through the pores of the bladder, a much larger proportion of water has passed in. Solutions of common salt, sugar, and other substances, present this phenomenon, to which the term *endosmosis* (ἔνδον within and ὠθέω to push) has been applied. The diffusion of liquids, or their relative tendency to mix on contact, has been fully examined by Mr. Graham (*Quart. Jour. Chem. Soc.*, vol. iii, p. 60); and the effect of porous membranes in allowing liquids or dissolved solids to traverse them has also been made the subject of experiment by the same chemist. Mineral substances, such as arsenic, may thus be separated from organic matter. He has called this process *dialysis.* (*Proc. R. S.*, 1861, vol. xi, p. 243.)"

BENEVOLENCE. The following extraordinary act of benevolence has been reported by the chaplain to the Middlesex Hospital. A lady, being permitted to visit the wards on the 6th instant, went from bed to bed, and in the most quiet and gracious manner presented half-a sovereign to almost every one of the patients as a New Year's gift, and as a thank-offering for her recovery from a dangerous illness. The number of patients so relieved amounted to nearly 300.

British Medical Journal.

SATURDAY, JANUARY 24TH, 1863.

A PRIVATE CHARGE MADE A PUBLIC SCANDAL.

It is no slight matter to accuse a member of the medical profession of holding medical consultations with homœopaths. The profession has of late, thanks to the initiative action of the British Medical Association, taken an unmistakable stand upon this question. No man can now play fast and loose with medicine and with homœopathy, and do it with impunity. Every member of the profession feels and acknowledges that to be even suspected of such collusion is an evil not to be endured. A member of the profession a short time since, as some of our readers may remember, actually threatened a gentleman with an action-at-law for having asserted that he had met a homœopath in consultation! We need hardly say that we rejoice in this. The fact indicates a healthy and high tone of professional morality.

But if it be so serious a charge to allege against a member of the profession that he has met a homœopath in consultation, evident enough is it that such charge should not be lightly made—in fact, should not be made at all in public, unless the proofs are strong and undeniable. We have always acted on this view of the case, and have never permitted a charge of the kind to appear in these pages so long as it was mere matter of suspicion. Every honourably minded man must feel pained to have his name publicly connected with such a charge, even though perfectly free from the smallest inculpation in it. In our opinion (and, we think, in the opinion of every fair-dealing man), no one is justified, for the mere sake of creating a temporary sensation, or for feeding scandal-loving appetites, in publishing charges of this nature which he is not ready to support and justify from evidence which he holds in his hands. If the charge, privately inquired into, has been met by a clear and explicit answer, and if those who brought the charge are satisfied that they did so under an erroneous impression, nothing, in our opinion, but a love of creating scandal, could, under such circumstances, induce any one to drag the matter before the public. What other purpose, indeed, can such publication serve?

We make these remarks in reference to a charge lately brought against Dr. Burrows, that he has met a homœopath in consultation at Bedford. We ourselves received a letter on the subject; and having, on investigation, found that the charge was made under an utter misunderstanding of the facts of the case; having communicated with Dr. Burrows, and at once received from him the most open and explicit statement, printed below; and finding not a shadow of blame could be justly laid to the charge of our respected and high-minded President in the matter,—we determined, if possible, to avoid all public allusion to it. We forwarded Dr. Burrows's letter to the gentleman who communicated with us, and received from him a satisfactory reply. We also accidentally had an opportunity of personally communicating with some of the leading members of the profession in Bedford; and from them we learnt that, in the first place, the belief that Dr. Burrows had knowingly met a homœopath in consultation was far from general in the town; and secondly, that the explanation contained in his letter (shown by us to them) was perfectly satisfactory. Moreover, we have seen a letter from one of the leading members of the profession there, expressing his indignation at the publication of the charge against Dr. Burrows.

Unless, therefore, the subject had been publicly brought forward by another journal (which states the charge, gives no evidence in proof, produces Dr. Burrows's letter, and yet either is or pretends to be so ignorant of the real merits of the case as to venture no opinion of its own on the subject), we should not have alluded to it in these pages. We trust our antecedents are guarantee enough to the profession that, had there been the slightest grounds for sustaining such a charge, we should have been the very last to let the matter subside into silence.

Having, then, had our attention called to the subject, we at once, as in duty bound, communicated with Dr. Burrows, and from him *immediately* received the following answer, of the date Jan. 9th.

"*To the Editor of the* British Medical Journal.

"Sir,—Your communication has surprised and shocked me very much; and I think the gentleman who wrote to you would have acted in a better spirit if he had first written to me, and made me acquainted with some of the facts on which he supposed that I had consented to meet an homœopath in consultation. It is perfectly true that I was summoned to Bedford last week by electric telegraph, and which stated the case was urgent 'rheumatic fever and affection of the heart.' I went to Bedford as soon as practicable, and met in consultation the physician to the Bedford Infirmary and a gentleman in general practice, who was educated at St. Bartholomew's Hospital, and whom I had known for some years, who had many times sent patients to my house for advice and treatment.

"I found the case as described in the telegram, and that some syncope had occurred more than once. The treatment which had been pursued was, calomel and opium in repeated doses, a large blister over the sternum, and moderate quantities of wine. I prescribed the calomel in smaller doses with the same quantity of opium, a large linseed poultice over the chest, and

brandy instead of wine, and alkaline remedies. The urgency of the symptoms required my attendance on the patient two days afterwards, when I met the same gentleman, and I prescribed ether and ammonia at short intervals; also aromatic confection and tincture of opium to control some irritation of the bowels produced by the calomel. I wrote the prescriptions myself, affixed the signatures of the gentlemen in attendance as well as my own, and the medicines were prepared by the medical man in regular attendance. I saw the patient, at his own strong request, a third time, and prescribed remedies of the same kind.

"I think you and the whole profession will agree with me, that in the antecedents of the case, in the position of the medical attendants on the patient, in the character of the remedies which had been employed before my arrival and of those which were suggested by myself and assented to by the other medical attendants, there was nothing which could for one moment lead me to suspect that I was in consultation with homœopaths. I cannot but in charity suppose there must be some mistake, and that the gentleman who has written to you is misinformed. I cannot conceive why he should suspect me of forgetting my position and belying my principles, so far as to meet homœopaths in consultation. I never did such a thing, and, unless my principles and convictions should be completely changed, I never will do so.

"I am, etc., "GEORGE BURROWS.

"18, Cavendish Square, Jan. 9, 1863."

Such is the explicit answer instantly given by Dr. Burrows to the charge anonymously, as far as he was concerned, preferred against him. The opinions of Dr. Burrows on the subject of homœopathic consultations are well known, and have been often unhesitatingly expressed. Dr. Burrows, as we also well know, strongly sympathises with and cordially supports the views often expressed on this subject in these pages. In accepting the Presidency of this Association, he publicly accepted the position in reference to homœopathy maintained by the Association. Moreover, his whole career, and high standing and reputation give the distinctest *à priori* denial, with those who know him, to the truth of such a charge as applicable to him. For these reasons, as we have already said, to publish the charge, as it lay before us, would have been, in our view, simply the fomenting of a scandal.

But we must do Dr. Burrows full justice in the matter. He has not in the smallest way desired to escape any proper publicity. In our communication with him on the subject, he expressed but one opinion, that "he considered his interests and the interests of the profession were identical," and that whatever was judged best for the good of the profession was the course to be pursued in such a case. We are satisfied that the whole profession will gladly admit that Dr. Burrows has, from first to last, acted in this matter in accordance with the highest principles of professional honour; and we are satisfied that none of his medical brethren will more cordially rejoice at his letter, and sympathise with him for any annoyance he has suffered, than those gentlemen who had imagined it possible, from the facts before them, that Dr. Burrows had knowingly consulted with a homœopath.

OUR SUPPLY OF MEDICAL CHARITIES.

IF it were possible, it would evidently be a most desirable thing that we should make use of any data we possess by which to form something like a reasonable estimate of the amount of hospital accommodation which is required for the people of this metropolis. We have already proposed the question, and we should like much to obtain some answer to it; viz., What is really the estimated number of beds required to meet the medical and surgical necessities of the poor in the neighbourhood of the late St. Thomas's Hospital? Did the supply of beds equal the demand before the removal of the hospital? Was the supply below the demand? or was it just the fit and proper supply for the emergency presenting? Now, if we are not much misinformed, it is a fact that Guy's Hospital, notwithstanding the departure from its immediate vicinity of its late nosocomial neighbour, has not had put upon it, nor has in any way suffered from, any severe strain upon its hospitable powers. Notwithstanding the departure of St. Thomas's Hospital, and the diminished number of beds now afforded by that hospital at the Surrey Gardens, Guy's Hospital is, as we hear, fully equal to all the demands made upon it. If this is an exact statement of the case, would it not be of much instruction for us to learn why the case stands thus? Is it the fact, for example, that in former days the supply of beds in St. Thomas's and Guy's was so large that patients were admitted as in- who are at other hospitals treated as out-patients? Is more discrimination now shown in the class of persons and the class of diseases admitted? Is it the fact that Guy's Hospital is really equal to all the ordinary emergencies of disease in its district? or is it even now more than equal to them? And, if so, of what value is the argument which demands the reinstation of St. Thomas's Hospital on its former site?

Questions of this kind seem to us to be at this moment of the very highest importance. Is it or is it not possible for us to ascertain from hospital statistics something like an estimate of what are the real nosocomial wants of a given district? Like certain articles of commerce, does the supply of hospitals create and increase the demand for them? Are the daily begging petitions in the columns of the *Times*, wherein is detailed the lamentable semi-bankrupt condition of all our hospitals except the royal ones—are they real, actual indications of the demands and wants of sickness and misery? or is the poverty-smitten state of these institutions the

result of the eager demand created by an over generous supply? Seriously, we would ask our medical brethren this question: Is there no proper limit to medical charity? Is there no possible way of estimating what is the real amount of medical charity required for a given population? Will any man believe that a hospital confines itself to its proper business of doing the charitable to those who are worthy and proper objects of its charity, when he learns that, for instance, some forty thousand out-patients have received its medical attentions during one year? Of this we are thoroughly convinced: that it is high time our hospital system underwent a strict investigation. The fervent begging petitions of our medical charities are, we believe and hope, an indication that the charitable public begins to think there ought to be some limit assigned to gratuitous medicine. It is hardly credible that, in this land of bountiful giving, such screams for charitable succour to the miseries of sickness would require daily publication, if there were not doubts in the mind of the public as to the proper disposition of their charity. If the actual and *proper* wants of the metropolis in this particular were laid before the public, no one can doubt but that the want would be soon more than met.

THE WEEK.

Six sites have been mentioned by the grand committee of St. Thomas's Hospital, in a report to the governors, for the new building. The committee think it desirable to rebuild the hospital in a position accessible to the labouring classes of South London, the question of erecting an auxiliary suburban hospital being left for future consideration. The sites are:—1. Bethlehem Hospital; extent, 11 acres; estimated cost, £160,000. As a new Bethlehem Hospital would have to be constructed, five years would probably elapse before St. Thomas's Hospital could be finished on this site. 2. Land belonging to the Fishmongers' Company, on the eastern side of the Walworth Road, about a quarter of a mile beyond the Elephant and Castle; probable extent (provided other adjoining premises are purchased), 15 acres; estimated cost, £104,000 or more. 3. Surrey Gardens, with adjoining premises; area, about 17 acres; estimated cost about £100,500. 4. A tract of open ground at the back of Newington Church. The interests on this ground are reported to be various and complicated, and difficult to be dealt with. 5. A piece of land known as Myatt's ground, close to the Camberwell station of the London, Chatham, and Dover Railway; area, 30 acres; estimated cost, £39,000. 6. A portion of the land to be reclaimed by the proposed southern embankment of the Thames, and the property between it and the Palace New Road, immediately opposite the Houses of Parliament. The part to be reclaimed is about 1½ acre in extent; the remaining portion, 5½ acres; in all, 7 acres. On Tuesday last, a general court of the governors of the hospital was held, under the presidency of Alderman Sir John Musgrove, for the purpose of considering the report of the grand committee. The merits of the several sites were canvassed at some length; but the weight of opinion, so far as it could be collected, seemed to be in favour of that upon which Bethlehem Hospital now stands. It was felt, however, that the question is not yet sufficiently mature to enable the court to decide between conflicting claims; and ultimately, the reports of the surveyors were referred back to the committee, with a view to obtain more particulars and information, and to report thereon on a future day.

Two interesting points of law have been raised by an action tried a few days ago at Nisi Prius: 1. Can a physician, a *Member* of the London College of Physicians, make a legal claim for services rendered? And 2. Is the bye-law of the London College, which prevents *Fellows* of the College from recovering money due for services, a legal bye-law? That is to say: Can the College legally make a bye-law of such a nature, which shall apply to the Fellows only, and not include also the Members? Dr. Gibbon, a *Member* of the London College, brought an action to recover for medical services rendered by him. It was objected that his case was bad; and it was argued that,

"Previous to the passing of the Medical Act, the universal rule was that physicians were assumed to attend gratuitously, for which they expected an *honorarium;* they could not recover the amount of their charges for attendance unless there was a special contract. The Act of Parliament enacted that physicians registered under it might recover reasonable charges, subject to such by-laws as might be passed by the London College of Physicians. Now, the London College of Physicians had passed a by-law which directed that its Fellows should not recover, even if there were a contract. Mr. Baron Bramwell hereupon remarked—'You say that the Act of Parliament has merely put a further difficulty in the way of a physician's recovering the amount of his charges for attendance; I should think that the Act was drawn up by a person who was no lawyer.' On being told that the by-law of the College only referred to the Fellows, and not to the members, and therefore did not apply to the present case, he said—'Does not that give rise to a curious question, whether under the Act the College has a right to make a by-law referring to one portion of their body only. I am sure I don't see any great magic in the word 'physician,' which should distinguish him from the general practitioner, so far as to prevent him recovering the amount of his charges. The Act states that all reasonable charges are to be recovered, which could not relate to charges to be made under a contract, and therefore it must be supposed that the intention of the Act was that the physician was to recover the charges for his attendance like any other professional man. If the statute meant merely to say that if registered you shall have a title to sue in cases where you could otherwise sue, it would have merely said, 'You may sue,'

in place of saying, 'You may recover reasonable charges.' By the word 'reasonable' being used in the place of the word 'fixed' charges, one would think that the Act meant to take away the disability that physicians formerly laboured under. However, I think that there is sufficient difficulty to make it right to reserve the question, the difficulty of which is much increased by the manner in which the Act of Parliament is drawn up.' Eventually, the jury returned a verdict for the plaintiff for the amount claimed, leave being reserved to the defendant to move the Court above as to the construction to be placed upon the Medical Act."

Mr. Prescott Hewett, on taking the chair of President of the Pathological Society, announced that a general index of the Society's *Transactions* was in progress; and that he trusted, before his term of office expired, that the members of the society would be in possession of such a valuable key to the treasures contained in their published volumes.

Mr. Griffin requests us to state that he has received, through the editor of the *Lancet*, from A. Keppel Reed, Esq., Garrison and Civil Surgeon, Attock, India, £22 : 13 : 4, as a subscription towards the Puckett Fund, from the following subscribers:

Assistant Surgeon Baillie, 10 rupees; Mrs. Blackall, Attock, 10 r.; Captain Blackall, 5 r.; Murree Church Offering Fund, 35 r.; Colonel Carleton, Royal Artillery, 5 r.; Major-General Sir S. Cotton, 10 r.; Mr. Dyer, Murree Brewery, 5 r.; Lieut. Drake, 32nd N.I., 5 r.; Captain Elliott, 94th Regiment, 16 r.; Mr. Finn, Public Works, 2 r.; Mrs. Green, Mean Meer, 5 r.; W. Green, Esq., Punjab Police, 5 r.; Captain A. D. C. Heyland, 10 r.; Lieut.-Colonel Kindlerides, R.A., 16 r.; Captain Langmork, Barrack Master, 5 r.; Lieut. March, Sappers and Miners, 5 r.; M. M. R., 3 r.; Mrs. Morrison, 3 r.; Lieut. Morland, Murree, 5 r.; Col. Olpherts, Murree, 5 r.; Mr. Powell, Murree, 3 r.; J. B. C., 5 r.; Assistant-Surgeon A. K. Reed, 21 r.; Assistant-Surgeon J. B. Reade, 5 r.; Rev. Kilbee Stuart, Murree, 15 r.; Major Sandilands, Attock, 10 r.; Captain Urmstone, 5 r.; Captain Ware, 51st K.L.I., 5 r.; Jas. Wright, Esq., C.E., 10 r.; total rupees, 244.

Mr. Griffin wishes us further to state that the list is now closed; £1,074 : 8 : 10 having been received, and the handsome provision of £52 *per annum* made for the widow, the capital ultimately to be divided amongst the children.

It appears that, whilst the farmer in England is energetically active in destroying the small birds on his farm, the farmer of New Zealand is making every effort to obtain a supply of these small birds on his farm, for the purpose of destroying the insects which ravage his crops. We read:

"The Acclimatisation Society of New Zealand are doing all in their power to promote the introduction into this colony of English field-birds. Should their efforts prove successful, they will secure to these islands an inculculable amount of good by destroying the myriads of insects which now enjoy an undisturbed existence upon the growing crops of our farmers. The undermentioned amounts will be paid by the society upon the delivery in Auckland, in a healthy condition, of a cock and hen of the following birds: Blackcock or grouse, cock and hen, £10 : 10; silver pheasants ditto, £5; nightingales ditto, £5; English partridge ditto, £4; cuckoos ditto, £3; missel thrush ditto, £2; common thrush ditto, £2; blackbirds ditto, £2; starlings ditto, £2; skylarks ditto, £2; rooks ditto, £2; crows ditto, £2; jays ditto, £1 : 10; robins ditto, £1 : 10; wrens ditto, £1 : 10; bullfinches ditto, £1; grey linnet ditto, 15*s.*; green linnet ditto, 15*s*; sparrows ditto, 15*s.*; goldfinches ditto, 15*s.*; English quail ditto, £1. The society will also pay £5 for hares per couple, male and female; and £15 for red deer, male and female."

The elevation of M. Velpeau to the Presidency of the French Academy of Sciences will remind the profession of Sir Benjamin Brodie's occupation of the chair of the Royal Society. "M. Velpeau," writes the French journalist, "is about to occupy the highest position which ambition can desire, President of the Academy of Sciences! Can there be any higher title? This eminent distinction is accorded to him for his works, for his long services, and for his well-occupied life. The Academy in its choice, has honoured itself, and at the same time the medical profession."

M. Philips has given to the Société Médicale des Hôpitaux the sum of 5000 *francs* for the foundation of a prize for the best works on "The Treatment and the Curability of Tubercular Meningitis."

The celebrated chemist Lehmann, of Jena, died suddenly of apoplexy the week before last.

The *Wiener Mediz. Wochenschr.* says that Professor Langenbeck, of Berlin, was lately summoned by telegram to Brussels to perform lithotripsy on King Leopold; but the weak state of the patient prevented the operation, and M. Langenbeck returned to Berlin.

MM. Velpeau and Philipeaux have addressed a paper to the French Academy relating their experiments relative to the union of nerves of sensation with nerves of motion. Their experiments have succeeded. The branch, for example, of the fifth pair, which is distributed to the tongue, having been divided, was united to one of the divided branches of the hypoglossal nerve. Continuity was established between the two nerves. The results of this union have not yet been given.

A communication relative to table-turning was lately made to the French Academy.

At the Hôpital des Enfans, we are told, that during the month of December last there were five consecutive cases of cure in five consecutive cases of tracheotomy.

M. Rayer, we read, deposited on the bureau of the Academy of Medicine: 1. In the name of M. le Professeur Wm. Lawrence of St. Bartholomew's Hospital, a volume entitled, *Leçons de Chirurgie;* 2. In the name of Dr. Murchison, a volume on *Typhus and Typhoid Fever.*

M. Velpeau, late Vice-President, has been elected

President of the Academy of Sciences for the year 1863. During the past year the Academy has lost three of its titular members, MM. Biot, Sénarmont, and Gasparin, in whose places have been elected MM. Blanchard, Bonnet, and Pasteur. Of its foreign associates and foreign correspondents, it has lost, amongst others, Sir Benjamin Brodie and M. Bretonneau.

M. Larrey, on taking the President's chair at the Academy of Medicine, complained of the unsuitable position assigned to the Academy at the Tuileries presentations, and of the silence imposed on the President on these occasions, who was thus unable to lay before the Emperor the griefs of the company.

The French Academicians of Medicine have been of late engaged in tearing to rags the subject of drinking waters. They are making every scientific effort to learn what is the best sort—the most hygienic kind of water fitted for man's purposes; and in the meantime half Paris has no water supply at all.

Homœopathic doses of physic have always had, we supposed, certain promising qualities. They were, we were always led to believe, tasteless, and harmless, and neat, and elegant. But we now find that the infinitesimal sugar of milk and oyster-shell powders are no longer sufficiently efficacious. A series of new medicines has been offered to amateurs in this way. Their titles are taken from the work of a Dr. Hagers (1861), *Medicamenta Homœopathica et Isopathica.* By isopathic remedies, the author means the morbid products proper to combat the diseases which furnish them. The reader may judge of the character of these remedial agents from the following specimens of them: *Coryzisium*, the mucus of coryza; *herculisium*, the foam from the lips of an epileptic; *leucorrhisium*, leucorrhœal discharge; *balanorrhisium*, the sebaceous matter of balanitis; *sudorisium pedum*, even; and *humanisium*, human excrements! Whether this learned man's treatise has or has not yet been introduced to the notice of his *confrères* in England we know not.

M. Velpeau inaugurated his functions as President of the Academy of Sciences by cutting short a painful and personal discussion between two astronomers, MM. Faye and Le Verrier. "It is always from the heavens," says the journalist, "that our disturbances come."

The Préfet of Milan has, by a late decree, forbidden the practice of medicine and surgery by any unlicensed individual. The increase of charlatanism, the decree sets forth, is a serious danger to the public health.

The Medico-Chirurgical Society of Paris has chosen M. Ségalas president for the current year.

SIR BENJAMIN BRODIE, BART.

Full of professional honours and well-stricken in years, this eminent surgeon and excellent man rests from his labours. Few have attained to such high distinction. Few have so well merited the position which he so long occupied. The unanimous accord of the medical profession and of the public had for many years placed him above rivalry. Successive sovereigns had conferred upon him the highest dignity awarded to the members of his profession—that of personal attendance on Royalty. His individual amiability confirmed what his genius accomplished. Our pride in him left no room for jealousy of his success. To trace the progress of Sir Benjamin Brodie would be to review the advance of scientific surgery for the last half-century. An experimental philosopher, who regarded the organism as materials for the exercise of life. An analytical inquirer, who traced the operations of life through the molecular constitution of matter. A practical anatomist, familiar with the intricate machinery of the body. A profound physiologist, who interpreted the book of Nature from the writing of her works. An operating surgeon, whose manual dexterity placed the mechanism of his art first amongst the sciences. A practical physician, whose treatment of disease reduced the philosophy of medicine to the noblest of arts. A great man, gifted with an order of intellect, which, in any age, would have accomplished mighty results, and which, in a period remarkable for the boldness and grandeur of its progress, worthily achieved for him a first position amongst the master-minds of the day. Such was Sir Benjamin Brodie. It is not for us to do more than honour his memory and emulate his example. It is ordained for each once to die. His was a placid termination to an honourable and a blameless life. In common with all we express our affectionate respect for the illustrious dead, and indulge our selfish sorrow at his departure from amongst us.

This is not the occasion to review Sir Benjamin Brodie's contributions to that special department of medical science to which this *Journal* has been more particularly directed. It is enough to say that all that he has written he has written well. While the sense of our professional bereavement is yet keen, we forbear from any more lengthened investigation of that brilliant career which our contemporaries have so well placed in detail before the profession. Sir Benjamin Brodie yet lives—lives in the present, and lives for time. His eulogy will ever be perpetuated where suffering succumbs to the treatment his profound perception bequeathed to those who follow him. His epitaph will not be erased from the hearts of any whose privilege it has been to know this great and good man. (*Medical Critic and Psychological Journal*, January 1863.)

PROFESSIONAL PHOTOGRAPHS.

The Council of the Medical and Chirurgical Society have determined to add to their valuable library, a collection of photographs of subjects having professional interest, to be mounted in suitable portfolios, and accompanied by descriptions of the cases or preparations thus illustrated. The Assistant-Librarian of the Society (53 Berners Street) will receive any contributions from members of the profession who can assist towards so valuable and interesting a collection.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Ordinary.]	Dudley Arms Hotel, Rhyl.	Tuesday, Jan. 27, 1.22 P.M.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the Journal cannot be sent to them.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 10th, 1862.

NORTH WALES BRANCH.

An ordinary meeting of the members of this Branch will be held on Tuesday, January 27, 1863, at 1.22 P.M., at the Dudley Arms Hotel, Rhyl.

Gentlemen having papers or cases to communicate, will please to give an early intimation of the same to the Secretary. D. K. Jones, *Hon. Sec.*

Beaumaris, January 13th, 1863.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 13th, 1863.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON THE WIRE COMPRESS: A SUBSTITUTE FOR THE LIGATURE. BY JOHN DIX, ESQ., HULL.

[*Communicated by* John Birkett, F.R.C.S.]

The wire compress—the subject of this paper—is a modification of the method of arresting hæmorrhage devised by Dr. Simpson of Edinburgh, and introduced by him about three years ago as a substitute for the ligature. The "acupressure," as it is called, has been tested by but few surgeons of note; and in London, especially, it is almost unknown and ignored. Although probably a real improvement on the ligature, it undoubtedly labours under certain inherent disadvantages, most or all of which (it is believed) are obviated by the use of a fine wire of iron or of silver, instead of the steel needles of Dr. Simpson.

This idea was first promulgated in a paper on Acupressure published in the *Medical Times and Gazette* of June 2nd, 1860: and first put to the proof in a case of amputation of the finger, September 1860. In this operation two arteries were secured by wire, which was removed on the third day. The case did well: there was no bleeding, and very slight suppuration.

In the next case—Chopart's amputation, performed April 26th, 1861—five wires were applied on as many arteries: four of these were removed in forty-eight hours, and the other on the fourth day. It was found that the wire was easily applied, as easily withdrawn, and entirely effectual for the purpose it was intended to serve—namely, the arrest of the bleeding from the cut vessels. The patient, being the subject of constitutional syphilis, did badly. There was sloughing of the entire surface of the wound, and the flap was totally destroyed; notwithstanding which there was no hæmorrhage; but she died on the thirteenth day after the operation, of pyæmia.

In an amputation of the thigh, done September 21st, 1861, after Mr. Luke's method, there were seven bleeding arteries. Upon five of these the wire was used, and with the femoral artery the femoral vein was intentionally included; two very small branches were treated by torsion. This case did well. Seventy-two hours after the operation four of the "presse-artère" wires were withdrawn with perfect ease and without bleeding. The one on the femoral remained five days, when it, too, was removed without any difficulty and without a trace of blood. There was but little suppuration, and an excellent stump was the ultimate result.

These cases proved that this mode of securing arteries is practicable, efficient, safe, and manageable. It was also believed to possess a certain positive superiority over the ligature, as the following comparison showed.

A ligature in a wound impedes union and induces suppuration. Cure, by primary adhesion, of a large wound—as, for instance, an amputation—is an event of extreme rarity, and this because of the ligatures. A thread of silk is, in fact, a miniature seton, and the whole number required in an operation make up one of considerable size, and can scarcely fail to lead to the formation of pus. Again, the ligature of necessity excites ulceration of the artery upon which it is tied; it cannot in any other way be got rid of. This is another unhealthy process, antagonistic of repair. In applying a ligature, the end of the artery is drawn out from its sheath, by which its natural connexions are disturbed and its vasa vasorum broken up; its coats also are lacerated and bruised. The ligature remains for an indefinite time, long after it is useful or necessary, and it is not unfrequently pulled at by the dresser before it has become detached. Its knot, often deeply buried between the flaps, cannot be withdrawn without tearing through adhesions, or damaging the granulations. All these are serious obstacles to the healing process both in the stump and in the artery itself, and much protract the period of cure. Moreover, the following is an interesting and noteworthy formula: Pyæmia is the offspring of purulent secretion, of which the ligature is an efficient and probable cause. Bleeding arises solely from ulceration of an artery, of which again the *primum mobile* is the ligature.

From one and all of these objections to the ligature, the "wire compress" is almost or altogether free. Thus, in accordance with a well-known pathological law, *it*, being a metallic substance, is freely tolerated by the living body, and has little or no tendency to excite suppuration or irritation. Neither does it cause ulceration of the artery. This is positively affirmed from actual observation of its effect as witnessed in the sloughing stump before alluded to. It is applied without interference with the natural relations and vital connexions of the vessel. It is removed at any time, according to the will and judgment of the surgeon, without disturbance to the reparative action going on in the artery and in the rest of the wound, without futile premature attempts, and almost without pain to the patient. It is not liable to loose its hold, or to become detached too soon, as not unfrequently happens to a ligature applied upon a brittle or sloughing artery. Twigs of nerve accidentally included in the embrace of the wire are not injured and excited as by the tight strangulation of the ligature, and, if thought advisable, the veins are easily and safely occluded, along with the arteries.

Although this has been spoken of merely as a modification of acupressure, yet it is believed to be a decided and important improvement on "Simpson's skewers," as the needles have been irreverently called, and which are fairly open to the following objections. When several of them are required, the stump resents, as it were, being thus pierced through and through in various directions. From the injury thus inflicted, and from the

obstruction to the capillary circulation caused by the pressure of the unyielding steel, arise much tension, œdematous swelling, and great pain; the pain, especially, has been found a very serious evil. Again, their projecting ends, and the puckering they cause in the substance of the flaps, interfere very much with that accurate adjustment of the cut surfaces and edges which so greatly aids the chances of union by adhesion.

The wire is free from all these shortcomings. It is thus applied. Take a piece of surgical wire six or eight inches long, and thread each end thereof upon a straight needle. Seize the bleeding mouth of the artery with forceps, and pass one of the aforesaid needles close on each side of the artery just mentioned, about a line above the points of the forceps, directly down through the substance of the flaps, so that they emerge at the cuticular surface, about half an inch distant from each other. Draw them both through together till the curve of the wire compresses the artery on the face of the flap. Now get rid of the needles by clipping through the wire close above their eyes, and also detach the artery-forceps. Place a piece of cork, cut for the occasion, upon the skin, between the points of exit of the wire, and over this twist the wire tighter and tighter until the bleeding is arrested. Lastly, cut off the superfluous wire. All which is done quicker than described. Two or more arteries lying near together may be embraced by one wire; and, as has been said, the veins may be included or excluded at will.

The wire should be either of silver, or, what is much cheaper and equally manageable, of the finest and softest passive iron. The generality of wire, as used for sutures, is too hard and stiff. The needles are about three inches in length, straight, and three-edged, with an eye adapted for carrying wire. Special care is necessary in threading the wire, that it is kept perfectly free from all twisting. The forceps are used, not to draw out the artery as when a ligature has to be applied (this, indeed, is to be particularly avoided), but merely as a guide to mark the exact position and course of the vessel. The cork is necessary to protect the skin from the pressure of the wire.

The withdrawal of the wire, which at first sight appears an insuperable difficulty, is perfectly simple and easy. It is thus effected. Clip the wire close to the edge of the piece of cork, and straighten out the curve it has formed, at its exit from the skin. Remove the cork, and apply instead the tip of one finger, with which press firmly upon the flap, making traction gently and gradually upon the other end of the wire. If this were roughly and hastily done, it might break up the adhesion which it is presumed has taken place between the surfaces of the flaps, and it is quite possible that a flexure in the wire might lacerate the artery in passing over it; but it is certain that none of these evils need happen with ordinary care and tact.

As to the period of withdrawal, further observations are desirable; but it has been clearly shown in numerous cases of acupressure, that for small vessels a few hours of compression are sufficient, and for the largest arteries a much less time than might be supposed. However, as a general rule, it is not desirable to disturb a wound in any way for from twenty-four to forty-eight hours, at the end of which time all wires commanding the secondary branches may be safely removed, and probably also from the large arteries; but, as a matter of prudence, it is well to keep a check upon such a one as the femoral for three or four days at least.

The descriptions hitherto given apply particularly to amputations; but the wire is equally applicable to many other operations.

In a postscript to this paper was related a case of excision of the testicle, in which it was used most satisfactorily upon the vessels of the cord. Two wires were required, and they were removed on the fourth day. Also a case of excision of the breast, in which three wires were applied, and removed in twenty-four hours. The wound, which was six inches long, healed kindly and rapidly—almost without suppuration.

Suppose the femoral artery needs to be secured for popliteal aneurism. The wire would be passed under the artery by means of a tubular aneurism-needle made for the purpose, brought out through the integument at a convenient situation, and then twisted upon a cork in the usual way. This same artery, cut in amputation, is securely closed in three or four days by the action of metallic pressure; consequently, in three or four days the wire might be removed. Meanwhile, it has not caused suppuration, or impeded the union of the wound, which ought, therefore, by this time to be completely healed; and more important still, the artery is not cut through, as by the ligature, but its coats remain intact, and bleeding is impossible.

It will probably be found that the pedicle in ovariotomy may be conveniently dealt with by this method, the arteries being secured individually, and the entire stump also fixed to the abdominal wall by another wire. This idea has been already promulgated by Mr. Spencer Wells.

The paper was illustrated by models.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 7TH, 1863.

W. TYLER SMITH, M.D., President, in the Chair.

After the ordinary meeting, the business of the annual meeting commenced.

The Report of the Auditors of the accounts of the Treasurer for the year ending December 31st, 1862, was then read, from which it appeared that the balance in the hands of the Treasurer was £204 : 9 : 2, and that during the year a sum of £400 had been invested in the funds in the names of the trustees of the Society. The balance-sheet read by the Secretary showed that the Society had received during the year £478 : 15 as subscriptions from fellows, and £48 : 9 : 3 as proceeds of the sale of the *Transactions* of the Society.

Dr. GREENHALGH, in moving the adoption of the Report of the Auditors, alluded to the satisfactory condition of the funds, and also to the fact that the sum received during the past year in subscriptions exceeded that of any previous year; the respective amounts received during the years 1859, '60, '61, and '62 being £336, £413, £445, and £478; while a total sum of 100 guineas had being paid into the Society's hands in respect to the proceeds of the first three volumes of the Society's *Transactions*. He also congratulated the Society on the promising condition of the library.

Dr. MEADOWS seconded the resolution, which was carried unanimously.

Dr. RICHARDS moved, and Mr. MITCHELL seconded the following resolution, which was carried by acclamation:—

"That the best thanks of the Society be and are hereby given to the President and officers of the Society for their services during the past year. That the best thanks of the Society be in an especial manner given to the retiring President, Dr. Tyler Smith, and to the retiring Honorary Secretary, Dr. Tanner: to Dr. Tyler Smith for the able and efficient manner in which he has presided over the meetings of the Society for the past two years; and to Dr. Tanner for his valuable and zealous services as Honorary Secretary from the commencement of the Society, four years ago, until the present time."

Dr. TYLER SMITH and Dr. TANNER respectively returned thanks.

The list of donations during the past year was read,

from which it appeared that 605 volumes had been presented to the Society by Sir Charles Locock, Bart., Dr. Clay of Manchester, and others.

Officers. The following gentlemen were elected officers of the Society for the year 1863:—

Honorary President—Sir Charles Locock, Bart., M.D.; *President*—H. Oldham, M.D. *Vice-Presidents*—J. Hall Davis, M.D.; R. Druitt, M.R.C.P.; W. Fergusson, Esq.; Robert Hardey, Esq. (Hull); J. G. Swayne, M.D. (Bristol); and T. H. Tanner, M.D. *Treasurer*—R. Barnes, M.D. *Honorary Secretaries*—Graily Hewitt, M.D., and Braxton Hicks, M.D. *Other Members of Council*—H. Woodruffe Bailey, Esq. (Thetford); C. Clay, M.D. (Manchester); Wm. Fred. Cleveland, M.D.; C. Drage, M.D. (Hatfield); G. T. Gream, M.D.; R. Greenhalgh, M.D.; F. Seymour Haden, Esq.; G. Harley, M.D.; Isaac Harrinson, Esq. (Reading); Henry James, Esq.; J. C. Langmore, M.B.; Alfred Meadows, M.D.; H. Madge, M.D.; Joseph T. Mitchell, Esq.; W. Tyler Smith, M.D.; F. Symonds, Esq. (Oxford); Alfred J. Tapson, M.D.; and J. G. Wilson, M.D. (Glasgow).

Annual Address. The first point dwelt upon in the address was the financial and numerical prosperity of the Society. The success of the volume of *Transactions* for 1862 was then briefly referred to. The additions made to the library during the year, the unique value which would attach to a large collection of purely obstetrical works, and the need which existed for appointing a librarian, and making some arrangement which should render the books accessible to the fellows, were next alluded to. The loss of fellows by death during the year was stated to be unusually large, including the names of Dr. Metcalfe Babington, Dr. Waller, Mr. Jessop (of Cheltenham), Mr. Smith (of Crawley), Mr. Rowland (of Wrexham), and others. The trials which had occurred during the year, in which persons practising midwifery were accused of malpraxis, were commented on, and especial notice was taken of the case of Mr. Robinson, convicted of manslaughter at the Central Criminal Court. It was shown that in many of these cases the charge of malpraxis arose out of the attendance of midwives in the first instance; and the anomaly that midwives, without any special training or qualification, are allowed to attend in cases often involving the question of life or death, was commented on. The progress of ovariotomy during the year, and its evident connexion with obstetric practice, were noticed. The recent discussion respecting the genealogy of the Chamberlens and the discovery of the forceps, was alluded to, and reasons were adduced for giving the merit to Mr. Peter Chamberlen, surgeon-accoucheur of the City of London, and the first of the family of whom we have any record. The address was concluded by the retiring President thanking the Society for the kind support which he had received during his tenure of office.

An Abstainer from Meats and Alcohol. At a discussion which lately took place in Dublin, Mr. J. Haughton, who had himself lived in health for eighteen years without animal food or intoxicating drink, protested against the high feeding in prisons, ascribed the greater part of the crime of the country to intemperance, and protested in the strongest terms against capital punishment.

Cause of Said Pasha's Death. It is now known that Said Pasha died of a cancerous affection of the rectum. M. Ricord, who had already attended him, and whom he had consulted during his last visit to Paris, had declared that he would die before he was a year older. His surgeons in ordinary had advised an operation, to which he had at last agreed; and M. Nélaton, who had been summoned to Egypt, was on the point of leaving Paris for that purpose when the news of the viceroy's death was received.

Medical News.

Royal College of Surgeons. The following gentlemen passed their primary examinations in Anatomy and Physiology, at meetings of the Court of Examiners, on January 13th, 14th, and 15th; and, when eligible, will be admitted to the pass examination.

Adams, F. W.
Adcock, C.
Bowie, R.
Brown, I. B.
Bullmore, C. F.
Butcher, H. D. F.
Canny, D. J.
Chambers, F. E.
Charles, A.
Cheatle, E.
Cockerton, C. E.
Demaine, J.
Dowman, J. R.
Drust, J.
Dukes, W. P.
Dwelly, H. J.
Ellis, E. T. C.
Freeman, R. T.
Griffiths, G.
Hardwicke, E. J.
Hay, R.
Henderson, R. W.
Hewley, J. P.
Hughes, W.
Hyde, E.
Jackson, H. W.
Lloyd, T. F.
Loane, J.
Lupton, R. J.
Mackinnon, H. W. A.
McCandlish, W.
Mathews, J.
Morris, J,
Morton, S.
Murray, S. H. L.
Parkes, H. McK.
Pearson, E. B.
Penn, W. C.
Penruddocke, G.
Phillips, G. R. T.
Picard, P. K.
Robinson, J. C.
Ruddock, E. H.
Shackleton, J.
Stedman, J.
Smallhorn, T.
Saffe, W. E.
Sutton, F.
Taylor, F. S.
Tuxford, A.
Walls, A. W.
Weld, C. H.
Whidborne, G. H.
Wigmore, W.
Willmot, R.
Wilson, T.
Woodhams, J. A.
Wright, M.
Wright, G. V.

University of St. Andrew's. List of gentlemen on whom the degree of Doctor of Medicine was conferred, on December 31st, 1862:—

Anderson, John, M.R.C.S., L.A.C., Grantham
Allan, Patrick M., L.R.C.S.Ed., Arbroath
Ball, John J., Dublin
Ballard, William W., M.R.C.S., L.A.C., Tunbridge
Banks, Alfred J. H., M.R.C.S., L.A.C., Stafford
Barker, Edward R., M.R.C.S., Denbigh
Barnes, Thomas H., M.R.C.S., L.M., Clare, Suffolk
Barrett, Barnabas, M.R.C.S., L.A.C., Liverpool
Barrie, John T., L.F.P.S.Glasg., Newarthill, Lanark
Barwise, Joseph, L.A.C., Wigan, Lancashire
Beattie, Henry, M.R.C.S., L.A.C., Waltham Abbey
Beeby, Walter Thomas, London
Belcher, Joseph S., M.R.C.S., L.A.C., London
Blennerhassett, Rowland, L.R.C.S.I., L.C.P.E., co. Kerry, Ireland
Bowen, Josiah A., L.F.P S.Glasg., Bretherton, Lancashire
Bramley, William S., M.R.C.S., L.A.C., St. John, Wakefield
Bright, John M., M.R.C.S., L.A.C., Forest Hill, Kent
Brown, Augustus, M.R.C.S., L.A.C., Islington
Brumwell, John R., M.R.C.S., L.A.C., Burnley
Bury, Edward C., M.R.C.S., L.A.C., Wisbeach
Candy, John, M.R.C.S., L.A.C., Alstonefield, near Ashbourne
Cannell, John, Peel, Isle of Man
Carrick, George L., Edinburgh
Cleghorn, James, Caithness
Creed, Thomas, M.R.C.S., L.A.C., Greenwich
Cresswell, Nathaniel E., M.R.C.S., L.A.C., Canterbury
Crompton, Samuel, M.R.C.S., L.A.C., Manchester
Curgenven, William G., Plymouth
Davies, David, M.R.C.S., L.A.C., London
Douglas, George, M.R.C.S., L.A.C., Gateshead-on-Tyne
Dowson, Edward, M.R.C.S., London
Ellerton, John, M.R.C.S., L.S.A., Wakefield, Yorkshire
Evers, Charles, M.R.C.S., L.A.C., London
Ewing, James, L.R.C.P.Ed., L.F.P.S.Glasg., New Lanark
Fawcus, Henry R., M.R.C.S., L.A.C., S. Charlton, Northumberl.
Fegan, Richard, L.R.C.S.I., L.K.Q.P., Belfast
Ferguson, Alex. J., L.F.P S.Glasg., Perth
Fernie, Edward, M.R.C.S., L.A.C., Macclesfield
Frame, John, L.F.P.S.Glasg., Glasgow
Frankish, John D., Guy's Hospital
Fulham, John, L.R.C.S.I., L.A.C., Drogheda
Furner, Charles, M.R.C.S., L.A.C., Brighton
George, Frederic, M.R.C.S., Cotterham, Surrey
George, Hugh, M.R.C.S., L.A.C., Revesby, Lincolnshire
Goddard, Richard W., M.R.C.S., L.A.C., London
Gramshaw, James H., M.R.C.S., L.A.C., Gravesend
Greene, Michael, L.R.C.S.Ed., L.A.C., Ennis, co. Clare
Griffiths, Francis P., M.R.C.S., L.A.C., Sheffield

Griffith, Griffith H., M.R.C.S., L.A.C., L.R.C.P.Ed. by ex., Folkestone, Kent
Griffith, James, M.R.C.S., L.A.C., Smarden, Kent
Grove, John, M.R.C.S., L.A.C., London
Gwynn, Samuel T., M.R.C.S., L.A.C., Whitechurch, Salop
Harris, Abraham, L.R.C.P.Ed. by ex., M.R.C.S., L.A.C., Camborne, Cornwall
Harris, Walter, M.R.C.S., London
Hodgkinson, Edward Rodolphus, L.A.C., Umballoch, India
Hopton, Abney C., M.R.C.S., London
Hughes, Ebenezer, L.F.P.S.Glasg., Liverpool
Hulme, James D., M.R.C.S., L.A.C., Wigton
Irvine, John W., L.R.C.S.Ed., L.A.C., Lancaster
Jackson, Thomas, M.R.C.S., L.A.C., Scarborough
James, Alfred, M.R.C.S., L.A.C., Forest Hill, Kent
Johnson, James M., L.F.P.S.Glasg., Liverpool
Jones, John E., M.R.C.S., L.A.C., Dolgelly, North Wales
Keogh, Edward A., Dublin
Lambert, Wm. O., L.F.P.S.Glasg., L.R.C.P.Lond., Sunderland
Lawlor, Jeremiah, L.F.P.S.Glasg., Queenstown
Lees, Joseph, L.A.C., London
Levey, John, M.R.C.S.Ed., L.M.
Lloyd, Edwin, M.R.C.S., L.A.C., Worksop, Notts
M'Diarmid, Albert, M.R.C.S., L.A.C., Rochester, Kent
Macdonogh, George V., L.R.C.S.I., Sunderland
Macgown, John, L.F.P.S.Glasg., Millport
M'Kenna, Arthur, L.R.C.S.Edin., H.M.S. *Hogue*
Mackenzie, Wm. J., M.R.C.S., L.R.C.P., Greenwich
Macintyre, Duncan, L.R.C.S.Ed., Fort William
Marshall, John M., L.R.C.S.Ed., Edinburgh
Mason, Thomas E.
Mayou, George, M.R.C.S., L.A.C., Newport, Monmouthshire
Mayer, John, M.R.C.S., L.A.C., Macclesfield
Miles, Edwin J., M.R.C.S., L.A.C., Gillingham, Dorset
Mills, Thomas, M.R.C.S., Tipton, Staffordshire
Mills, Wm. P., M.R.C.S., L.A.C., L.R.C.P.Lond., Ipswich
Miller, John, L.F.P.S.Glasg., Glasgow
Morrison, Peter, L.F.P.S.Glasg., Glasgow
Moss, Edward L., L.R.C.S.I., L.M., Dublin
Mulholland, Patrick, L.F.P.S.Glasg., Glasgow
Murdoch, William, M.R.C.S., London
Murray, Henry A., L.A.C., Evenwood, Durham
Nell, George M., M.R.C.S., L.M.
Nelson, George D., M.R.C.S., L.A.C., Bridlington Quay
Owen, John, M.R.C.S., L.A.C., Bromyard, Hereford
Paterson, Robert, L.F.P.S.Glasg., Galston, Ayrshire
Pullin, Thomas, M.R.C.S., L.A.C., Sidmouth, Devon
Ransom, Robert, F.R.C.S., L.A.C., L.M., Cambridge
Rawlins, William P., M.R.C.S., L.A.C., Kentish Town
Reed, George, M.R.C.S., L.A.C., London
Reed, Samuel C., L.R.C.P.Ed., M.R.C.S., L.A.C., London
Reid, James B., L.F.P.S.Glasg., Ayrshire
Rice, William, L.C.P.E., L.F.P.S.Glasg., Glasgow
Ring, John, L.A.C., 1st ex. M.D., Kettering, Northamptonshire
Roberts, John, M.R.C.S., L.A.C., Talarron, North Wales
Rushton, John L., M.R.C.S., Macclesfield
Samuels, Arthur, M.R.C.S., L.A.C., Liverpool
Sandford, Folliott J., M.R.C.S., L.A.C., Drayton
Scott, David, L.F.P.S.Glasg., Dunoon
Sealy, George J., M.R.C.S., L.A.C., Maidstone, Kent
Selwood, Henry C., M.R.C.S., Birkenhead
Simons, Joseph A., M.R.C.S., L.A.C., Sussex
Skae, Frederick, Edinburgh
Smartt, Francis W., L.R.C.S.I., Lic. K. & Q. Coll., Kilworth, Cork
Smith, Andrew F., Tweedmouth
Smith, James A., L.F.P.S.Glasg., Glasgow
Smith, John, M.R.C.S., L.A.C., Chatham
Smith, Robert C., L.F.P.S.Glasg., Manchester
Spicer, Robert H. S., L.R.C.P.Ed., M.R.C.S., North Molton
Spry, George F., M.R.C.S., L.A.C., Army
Staples, Joseph H. P., M.R.C.S., London
Steel, Richard J. P., M.R.C.S., L.R.C.P.Ed., L.A.C., Blaenavon
Steele, James, L.R.C.S.E., Lanarkshire
Taylor, John W., New Malton, Yorkshire
Teare, Thomas M., M.R.C.S., Ramsay, Isle of Man
Telford, Samuel, L.R.C.S.I., Dublin
Tessier, William H. C., L.A.C., Dublin
Thomas, Richard R. G., L.R.C.P.Ed., L.M., Hartland, Devon
Thompson, Robert Farren, L.R.C.S., L.A.C., Jarrow, Durham
Trotter, Alexander, L.F.P.S.Glasg., Blyth, Northumberland
Trotter, Charles H., M.R.C.S., L.A.C., Sydney
Tyte, Edward C., M.R.C.S., L.A.C., Harrow
Usher, Thomas S., M.R.C.S., L.A.C., Hull
Waddington, E., L.K.Q.C.P., L.R.C.P.Ed., L.R.C.S., Wakefield
Waghorn, Frederick, M.R.C.S., London
Ward, John, Glossop, near Manchester
Warder, Alfred William, M.R.C.S., L.A.C., Ottery, Devon
Warrington, Francis Wm., M.R.C.S., L.A.C., Congleton
Watson, John, M.R.C.S., Manchester
Webster, Joseph, M.R.C.S., L.R.C.P.Ed., Golcar, Huddersfield
Weir, Archibald, F.R.C.S.Ed., Malvern
Whipple, John H. C., Plymouth
Wilson, James, M.R.C.S., L.A.C., Lancashire
Wilson, Thomas, M.R.C.S., Lancashire
Wise, Wm. C., M.R.C.S., L.A.C., Plumstead, Kent
Wood, James, L.R.C.P.Ed., L.R.C.S., Kirkby Overblows
Wood, William P., M.R.C.S., L.R.C.P., L.A.C., Rochdale
Woodman, Frederick, L.R.C.P.Lond., M.R.C.S., Isleworth
Wrangham, John D., M.R.C.S., L.A.C., Wragby, York
Young, Henry J., M.R.C.S., L.A.C., Bath

APOTHECARIES' HALL. On January 15th, the following Licentiates were admitted:—

Elliot, George Stokoe, Southwell, Notts
Leeds, Edward, Stretford, near Manchester
Parker, Benjamin Whitehead, Farrington, near Preston
Reynolds, John, Truro, Cornwall
Selwood, Henry Corpe, The Hospital, Birkenhead
Yarrow, George Eugene, No. 8, Central Street, E.C.

At the same Court, the following passed the first examination:—

Coombs, Carey Pearce, St. Mary's Hospital

APPOINTMENTS.

BELL, Joseph, M.D., appointed Assistant-Surgeon to the Edinburgh Eye Infirmary.
FITZGIBBON, Patrick, L.R.Q.C.P.I., appointed Medical Officer to the Clonmel Constabulary, in the room of the late J. W. Dowsley, M.D.
PALFREY, James, M.D., elected Physician to the Surrey Dispensary, in the room of G. Whitley, M.D.
SPANTON, William D., Esq., appointed Assistant House-Surgeon to the Sheffield Infirmary, in the room of A. E. H. Trotter, Esq.
WRIGHT, F. W., Esq., elected Resident Surgeon to the Birmingham and Midland Counties Lying-in Hospital, in the room of T. H. Hughes, M.D.

ARMY.

GALLWEY, Surgeon-Major M. B., Royal Artillery, to be Staff-Surgeon-Major, *vice* F. L. Fitzgerald.

To be Staff-Assistant-Surgeons:—

MILLAR, Assistant-Surgeon W., 75th Foot, *vice* W. R. Kerans.

ROYAL NAVY.

KEOWN, Thomas H., Esq., Surgeon, to the *Dauntless*.
MANSFIELD, Pierre, M.D., Assistant-Surgeon, to the *Caradoc*.
PRATT, Alfred J., Esq., Assistant-Surgeon, to the *Triton*.
RODGERS, Maxwell, M.D., Assistant-Surgeon, to Plymouth Hospital.

BROWNE, Thomas, Esq.
CARLETON, William, Esq.
FLETCHER, William B., Esq.
MANNING, N., M.D.
STEVENS, William, Esq.
} Acting-Assistant-Surgeons, to the *Victory*, for Haslar Hospital.

CLARKE, John G., Esq.
HAINES, Frederick A. P., M.D.
LAW, E., M.D.
MACDERMOT, William L., Esq.
SHIELD, John, Esq.
} Acting-Assistant-Surgeons, to the *Royal Adelaide*, for Plymouth Hospital.

MILITIA.

GOMPERTZ, W. F. L., Esq., to be Surgeon 6th Royal Lancashire Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BUTTERFIELD, H. H., Esq., Surgeon, to be Ensign 2nd Brecknockshire R.V.

To be Honorary Assistant-Surgeon:—

HOLMAN, C., M.D., 5th Surrey R.V.

BIRTH.

*BRETT. On January 15th, at Watford, Herts, the wife of Alfred T. Brett, M.D., of a son.

DEATHS.

ARMSTRONG. At Peckham, on January 18, aged 2, Charlotte J., eldest daughter of Henry Armstrong, M.D.
DAVIS. On January 15, Mary, wife of George Davis, M.D., Dublin.
GARDNER. Roger, G. C., Esq., Surgeon, at St. Leonard's-on-Sea, aged 50, on January 17.
HEWLETT. On January 9, at St. Leonard's-on-Sea, the Rev. Alfred S Hewlett, eldest son of *Thomas Hewlett, Esq., of Harrow.
LADD. On January 20, at 9, Holland Place, Kennington Park, aged 18 months, Mary Ada, youngest daughter of Theodore E. Ladd, M.D.
STUCKEY, Henry, Esq., Surgeon, at 50, Wellclose Square, aged 36, on January 12.
WARDER. On January 15, at Ottery St. Mary, Devon, Alicia, wife of Alfred Warder, M.D.
WEBBER. On January 14, at 20, Connaught Square, aged 7, Mary F., daughter of Charles Webber, Esq., Surgeon.
WOOLCOMBE. On January 17, at Wooton Rectory, Northamptonshire, aged 72, Anne Elford, widow of William Woolcombe, M.D., of Plymouth.

Hunterian Oration. On February 14th prox. this biennial oration will be delivered by George Gulliver, Esq., in the theatre of the Royal College of Surgeons.

Longevity. The obituary of the *Times* of the 21st inst. records the decease of persons who had attained the following advanced ages; viz., 92, 90, 82, 82, 82, 80, 78, 78, 76, 74, 72, 72, 72, and 70 years respectively.

The Milk-Composition Dispute. The interesting point in the matter is this: that the milk taken from the cow in the evening is richer than that which is obtained in the morning.

Dr. W. T. Gairdner, who lately left Edinburgh to fill the office of Professor of Practice of Medicine in the Glasgow University, has been appointed Medical Officer of Health for that city.

Health of Manchester. Notwithstanding the late dreaded rumours of coming fever, we learn with pleasure, that Manchester was never freer from fever than it is at the present moment.

The Lincolnshire Poisoning Cases. Gamer and his wife have been committed on two charges of wilful murder by arsenic-poisoning. Dr. Taylor showed that death resulted from arsenic; or at least found arsenic in the viscera.

The Military School of St. Cyr has been disbanded in consequence of the presence of typhus fever. Four of the scholars have fallen victims to the epidemic, and sixty are confined to their beds, many of them in a most critical state.

Medical Surveyor of Nuisances. The Town Council of Leeds has been memorialised to appoint a medical man Surveyor of Nuisances. The increase and extent of impurities in the town has led to the demand of the services of such an officer.

The well known Statue of King Edward VI, which once stood in the centre of one of the quadrangles of the late St. Thomas's Hospital, has been removed to the present abode of the hospital. So also has the statue of Sir Robert Clayton.

The Accident to the Princess Alice. Mr. Grove, the young medical student who so opportunely assisted Her Royal Highness the Princess of Hesse, when she was thrown from her carriage in the Isle of Wight a few weeks since, has been presented with a valuable gold pin and a set of shirt studs.

Royal College of Surgeons of England. Professor Huxley, F.R.S., will commence his course of lectures on Comparative Anatomy, in the theatre of the College, on Tuesday, February 17th, at 4 o'clock, when he will deliver an inaugural lecture on the Skeleton of a *Glyptodon* recently presented to the museum of the Royal College of Surgeons by Senor Don Maximo Terrero, the son-in-law of the celebrated General Rosas, who is living in retirement at Southampton. Mr. Waterhouse Hawkins, so well known in connexion with the restoration of certain extinct animals at the Crystal Palace, has been engaged for a considerable time past in making a perfect skeleton of this rare animal, from the innumerable fragments presented to the College by the above named liberal Spaniard. The introductury lecture will be followed by six lectures on the Classification, and on the Characters of the Principal Groups, of the Animal Kingdom; after which Professor Huxley will deliver twelve lectures on the Structure and Development of the Vertebrate Skeleton.

The University of St. Andrew's and its Degree. During December last, 379 candidates presented themselves for the degree of M.D., of which number 336 passed, and 43 were rejected; of the former there were 32 without any qualification; all the others, possessed one, two, and three qualifications. The amount of fees at £26:5 each arising from those who were *capped* amounted to £8820; and if to this sum be added th four guineas forfeited by each of the 43 rejected candidates, making together £180:12, and added to the large sum it gives a total of £9000:12. The governmen stamp of £10 on each diploma produces £3360. In addition to the 43 rejected on their examination, a grea number withdrew without completing their work, an others without even commencing it, deterred from s doing by their antecedents being too well known by th University authorities; to whom great credit is due fo their surveillance exercised on this the last occasion o such a rush, as in future the degree cannot be conferre without residence, except in the case of a few old practi tioners, and then by a fee of fifty guineas instead o twenty-five guineas. (*Dublin Med. Press.*)

A Hospital Physician's Afternoon.—The staff o the great hospitals is utterly insufficient to allow o their performing themselves the work allotted to them ....We discover every now and then a conscientiou physician, who tries to do his work. We once calculate thiis work up in a particular instance. At half-past si in the evening the Esculapian bee was putting on h overcoat to return home; he had taken his seat in wooden-bottomed chair at 1 p.m. For five and a ha hours he had sat there, ringing his bell, calling ou "Come in," examining his patients, and writing pr scriptions, without a break. In the course of that perio he had counted 4,480 strokes of the heart, listened to 8 chests, looked at 190 tongues, asked 1,120 question written 336 separate recipes, 11 certificates for clubs, certificates of deaths, and brief notes in the hospit books of 29 new patients, giving their age, sex, occup tion, duration of illness, residence, and disease. Alt gether he had given advice *gratis* to 224 people, ar remarked that he fell short of his usual number. Sha we describe the man at the end of his day's work? H was so pale that he might have played Ghost to Haml in broad sun-light. He was a little deaf on one si from the frequent use of the stethoscope; one of h fingers was sore from percussing; his eyes were wearie his back ached intensely; his head was heavy, and h voice was hoarse and tremulous. He had a misgivi that at the close of his work he had written a prescripti for one patient on another patient's letter, and w dreadfully put out to find that, right or wrong, th patients had gone off with their medicines. As h passed out of the hospital nine persons whom he h never seen in his life waited to ask him privately h solemn opinion as to cases some of which had not be before him for weeks, and of which he had no more r collection than of Adam. His face of white despa conveyed to the anxious listeners meanings of which h had not the remotest conception. When he got aw from them all there were still three long miles yawni between himself and his dinner. (*Social Science Revie*

On Pain and Anæsthetics. Dr. Valentine Mott, an essay, advances the following propositions:—1. T prevent pain is humane; 2. Pain is useless to the paine 3. Pain is positively injurious to the pained. Passi from the discussion of these propositions, the auth considers the various narcotics used to assuage pain, a finally the use of anæsthetics. It will interest the pr fession to learn that the author prefers chloroform ether. The rules which he gives for the exhibition anæsthetics are excellent, and cannot be too carefu heeded. He concludes as follows:—"For such reaso then as have been recounted, I desire to direct the atte tion of the surgeons of the Army and Navy to the adva tages which would accrue from a more extended use anæsthetics in naval and military practice. I am sat fied that if, in these operations, the pain were mo generally prevented, many lives would be saved whi are now lost from the shock to the nervous system, a

thus in all severe cases, the prospect of recovery is better, and the subsequent inflammation is milder, when an anæsthetic has been used. To this conclusion I have not come hastily. Of so much import have I always regarded the prevention of the pain of operations, and so desirable, if it could be practically effected, that ten years before the introduction of anæsthetic vapour I listened patiently and attentively to the claims of animal magnetism to this power to produce insensibility; but found, and I may say with unalloyed regret, that when fairly brought to the test, its most ardent friends were compelled to admit its utter inefficiency, and even since the invention of anæsthetic inhalation, I have carefully tested the power of other agents, such as nitrous oxyde, to produce insensibility to pain, but still consider none of them deserving of mention when compared with chloroform or ether. In conclusion, perhaps I may say, that these observations and reflections have been made during the intervals taken from a business still pressing, at a time of life when most men desire repose. They are given to the cause of American nationality, and may claim to be at least an old surgeon's offering on the altar of his country. The flag of our Union, the glorious stars and stripes, has repeatedly protected me in foreign lands beneath its broad folds, and if what I have written here shall be in any measure successful in preventing the sufferings and prolonging the lives of that noble army who are now serving under my country's banner, I shall receive my reward."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. W. C. Calthrop, "Spontaneous Closure of the Axillary Artery after Division (by a Gun-shot Wound), with final recovery of the Patient."—Royal Geographical.—Entomological (Anniversary).

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Buchanan (of Glasgow), "On a White Fibro-Serous Discharge from the Thigh"; Dr. J. A. Marston, "On Syphilis as a Constitutional Disease."—Zoological.

WEDNESDAY. Society of Arts.

THURSDAY. Royal.—Antiquarian.

FRIDAY. Royal Institution.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JANUARY 17, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 984 / Girls.. 947	1931	1477
Average of corresponding weeks 1853-62		1934	1475

Barometer:
Highest (Th.) 30.256; lowest (Sun.) 29.667; mean, 29.965.
Thermometer:
Highest in sun—extremes (Th.) 60 degs.; (Sun.) 42 degs.
In shade—highest (Tu.) 46.8 degs.; lowest (Mon.) 27.7 degs.
Mean—38.1 degrees; difference from mean of 43 yrs.+2.5 degs.
Range—during week, 19.1 degrees; mean daily, 8.1 degrees.
Mean humidity of air (*saturation*=100), 89.
Mean direction of wind, N.E.—Rain in inches, 0.74.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. PHILBRICK'S CASE.—We regret to say that it is quite true that an action has been commenced against Dr. Philbrick by the husband of the woman whose death was the subject of the Coroner's Inquest at Leamington, to which we some few weeks ago called especial attention. It is manifest enough to us, that the man has not the slightest shadow of a chance of obtaining a verdict. We have no hesitation in saying, that the medical reasonings upon which was founded the allegation of Dr. Philbrick being in some way responsible for the woman's death, would fall to pieces at once in a Court of Justice. Nevertheless, if the action is brought, Dr. Philbrick will, under any circumstances, be sorely tried in purse as well as in temper. We are, therefore, glad to hear, that already he has received letters of sympathy and promises of pecuniary support from medical friends. We shall keep our readers apprised of the case; and, should the action go into a Court of Justice, shall again bring the facts of it prominently forward, in order to call upon the profession at large and the Association to support a gentleman—one of their own *corps*—who has, in our opinion, been most cruelly used, and especially by members of his own fraternity.

QUALIFICATIONS FOR DRUGGISTS' ASSISTANTS.—W. O. E. sends us the following advertisement from the *Times*:—

"CHEMISTS' ASSISTANTS.—Wanted, a competent Assistant, of *good appearance* and address, accustomed to first-class business, not under 24 years of age. Apply, stating age, *height*, and salary, Mr. Amos, Canterbury."

He remarks upon it:—Can it be that the druggist has an artistic eye, and requires a certain æsthetic conformity between the bottles, counter, and shelves, and the height and form of the dispenser? Does this picturesque aptitude for photographic effects add to the efficacy of the drugs and chemicals? or is it simply a homage to the lust of the eye? If stature is so important an element in the qualification of the retail chemist, it is but fair that a standard height should be declared in the prospectus of the Pharmaceutical Society, in order that all King John's "five foot men" should be thus warned to avoid a painful disappointment.

J. K.—Under the Pauper Lunacy Amendment Act, the following is the qualification of medical officers:—

"The term physician, surgeon, or apothecary, wherever used in the Lunacy Acts, shall mean a person registered under 'The Medical Act', passed in the session holden in the twenty-first and twenty-second years of the reign of her present Majesty, chap. 90."

F. T.—Our attention has been called to the following in a bankruptcy account lately published. It certainly is worthy of attention, and for this reason: that so many members of our profession have been unwarily led into many great difficulties in the same way. We fear that the mischief occurs more frequently than is generally supposed. Naturally enough, the sufferers, under such circumstances, do not care to have their misfortunes blazed about. This is the statement referred to:—

"Of the liabilities, £3,000 are in connection with the State Fire Office, of which bankrupt was the medical officer. He allowed his name to be put down for 3,000 shares, on the understanding that the allotment was to be nominal; but the company now being in course of winding-up, he was called upon for £3,000."

THE REPORTED DECAPITATION BY HANGING.—The account of the execution did not escape us. The incident occurred in the backwoods in Western Canada; and, as we all know, strange things have come from the woods of America—the famous puccoon, for example; and, more lately, a cure for another incurable disease—viz., for small-pox. We do not deny the fact, that a man's head might, in the act of hanging, be separated from his body by the jerk resulting from "plenty of rope"; but we must have better evidence before we believe it. It seems to us, that any rope which would be used for the purpose, would give way before the neck of the man would.

A CORRESPONDENT inquires if we can give him any information respecting the "noble charity" at No. 1, Red Lion Square, referred to in the *Holborn Journal* in the following terms:—

"Last week, a correspondent drew the attention of our readers to one of those noble charities with which our neighbourhood abounds; viz., the Infirmary for Diseases of the Leg, Red Lion Square. Though not strictly a local charity, our district nevertheless greatly benefits by its presence amongst us. Up to the year 1857, there was no institution established for the special treatment of a malady which so frequently afflicts the working classes, as that of disease of the leg. It was in that year that Mr. Thomas Westlake, the eminent surgeon, opened the hospital in our district; and, up to the present time, the expense of maintaining this establishment, including the payment of rent, has been mainly borne by the founder. The committee of the institution have considered it unjust that Mr. Westlake should continue to bear the burden any longer, and have made an appeal to the public to take a share of it upon their own shoulders. To this, we have no doubt there will be an adequate response. An institution whose beneficial results have been so appreciated, that there have been four hundred applicants weekly, and one thousand cures of an almost incurable disease effected, will, we are persuaded, not be permitted to fail for want of funds."

[We were unaware of the existence of this noble charity. We find, on reference to the *Directory*, that 1, Red Lion Square, is the address of T. H. Westlake, Esq. We suppose, therefore, that there must be some mistake on the subject. EDITOR.]

MR. S. E. SMITH.—We have received a printed missile, entitled "Annual Report from the Case-Book of S. E. Smith, Esq., M.R.C.S.L., Cambridge House, Bristol." The Report consists of four lines; and informs us that Mr. Smith has cured 506, and has under treatment 403 patients of various ages. The rest of this cheaply got up document consists of extracts from various papers—*The London Medical Review, The Bristol Gazette, Bristol Mirror, Bristol Mercury, Daily Post,* and so forth; all, of course, to the effect that the aforesaid Mr. Smith is a man of surprising ability, and has performed "successful", "most interesting", "important" operations. What surprises us is, that there would appear to be some person who is envious of Mr. Smith's success; for at the end of his paper we read:—

"To prevent disappointment and imposition, Mr. Smith begs to state that he is not, nor has he ever been, professionally connected with any person whatever, and can only be consulted at his Chambers, Cambridge House, 22, College Green, Bristol, between the hours of eleven to three o'clock daily (Sundays excepted)."

We sincerely, however, trust that Mr. Smith is in error in supposing that any other member of the profession has really attempted to rob him of this fame and practice of his.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member rom his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, January 1863.

COMMUNICATIONS have been received from:—Dr. WILLIAM BUDD; Dr. P. M. LATHAM; Mr. ASHBY G. OSBORN; Mr. JAMES PAGET; Mr. C. F. BROWN; Dr. KIDD; Mr. JOSEPH HINTON; VOX RURE; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. HYDE SALTER; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; L.R.C.P.Ed.; Dr. SAMUEL WILKS; Dr. JOHN LYELL; Dr. J. B. NEVINS; Dr. JONATHAN TOOGOOD; Mr. THOMAS HORNBY; Dr. A. T. BRETT; Mr. PRESCOTT HEWETT; Dr. T. J. WALKER; Mr. H. G. WRIGHT; Mr. RICHARD GRIFFIN; Dr. GRAILY HEWITT; Dr. RENSHAW; Dr. WILLIAM ROBERTS; Δ; and Dr. BEALE.

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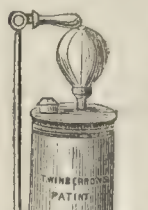
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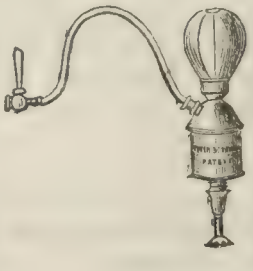
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BY

HYDE SALTER, M.D., F.R.S.,

ELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture V.—On the Stethoscope.

'rincipal Uses of the Stethoscope.—Rules for its Construction: 1, *as to Material;* 2, *Length, Thickness, etc.;* 3, *Shape, etc., of Extremities—Practical Hints for its Manipulation—Method of Applying—Choice of Whereabouts to apply—Determining Limits of Sound—Ausculting Females and Children.*

Gentlemen,—You have made a request to me that would give you a lecture on the stethoscope. To iat request I accede with very great pleasure; irtly because I think I can on that subject give ou some valuable practical hints; and partly be- iuse I think there is no subject on which I could scourse to you, having wider or more important actical bearings, or on which we shall have more equent occasion to fall back in the prosecution of ir clinical studies.

The progression of a science is a *per saltum* pro- ression; at one time making vast strides, at another maining almost stationary. Or it may be compared the course of a river—its bulk increased by sudden crements; flowing on for many miles without any igmentation of its stream, and then receiving an cession to its waters that doubles its volume. hus, in the histories of sciences, times now and ien occur, when a flood of light is poured upon iem from some new source; or when some master ind arises and deciphers the hieroglyphics in which uch that was before unknown was written; or hen some happy accident suggests a new principle, the new application of an old one; or when some w instrument, or aid to investigation, subjects to amination and analysis what before was beyond e ken of our senses. The laws of mathematics are ought to bear upon the movements of the heavenly dies, and suddenly the physics of the universe be- me an affair of *plus* and *minus*, of roots and wers, of equations and logarithms. Or an Aristotle ises, and the science of Logic leaps, like Minerva, ll grown, into existence. Or the motion of the lid a tea-kettle suggests the idea of the steam-engine. the refraction of light by a convex lens serves to alyse the milky way into innumerable suns, or ow teeming nations in a drop of water. Such in- uments as the telescope, the microscope, and such e, may be said to be the representative instruments the sciences they elucidate, for the advanced con- ion of those sciences, to which the instruments ve brought them, is indissolubly connected with eir discovery and employment. Such a represent- ve instrument is the stethoscope. It is the re- sentative instrument of the science of physical gnosis.

But we must beware of exaggerating its powers and results; we must beware of that common error that affects the non-professional world, and even, to some extent, a portion of the professional world as well—that there is some mystery about it, that it is an instrument that *makes* sound; and we shall best assist it in its work by assigning to it its true place, and regarding it as a mere *aid* to auscultation—a medium, and not a power—a convenience, and not a necessity.

The principal value and advantages of the stethoscope appear to me to be the following:—

1. In the way of decency, cleanliness, and convenience.

To *decency* the use of the stethoscope contributes by obviating the necessity for that full exposure of the breast and the application of the bare ear to it, which, in the case of young females, would, through the association of shame with that which is sexual, and the sexual purpose of the mammary gland, amount to immodesty. How the use of the stethoscope would contribute to *cleanliness* on the part of the auscultator, I need not remind those who are familiar with the out-patient, and even the in-patient practice of our hospitals. The foul and sordid condition in which the sick members of "the great unwashed" present themselves to us is such as to render it not only intolerable, but often really almost impossible, to touch them. The stethoscope saves us from absolute contact, and, over and above, gives us the advantage of eight inches, or so, of distance. The employment of the stethoscope contributes to the *convenience* of auscultation by obviating the necessity of stooping so much over the patient, by rendering it unnecessary for him to come so near the edge of the bed, by making us in a great degree independent of the patient's position, and by enabling us to listen to certain parts that the unaided ear could hardly reach, as the axilla, the supra- and subclavicular spaces in thin people, and the hollow sternum in some exceptionally formed chests.

2. The stethoscope enables us to circumscribe and localise the sounds that we hear. In proportion to the smallness of the chest-end of the instrument we are able to tell the precise seat of the greatest intensity of sound. If we work towards the sound and then from it—right and left, up and down—we can soon put our finger on the exact spot, and say "there it is"; and we can determine that spot with the greatest certainty—within a quarter of an inch. With the bare ear we cannot possibly do this; not only because the pinna is so large, and therefore gives such ill-defined information as to locality, but because when the head is applied to the chest the sounds are conducted to the internal ear by the bones of the cranium, so that the sound may be very well heard when the ear is not over the part at all. And not only can we by the use of the stethoscope tell precisely where the sound is, but whether it is circumscribed or extended, whether it covers a large or small space. By working the stethoscope round and round, and gradually contracting the circle, we can ascertain its area, and thus learn whether the morbid condition giving rise to it is distributed or strictly localised.

3. By removing the auscultator's head from the patient's body, the stethoscope often clears away fallacious crepitating or rubbing sounds produced by intervening hair, the friction of the patient's clothes

etc. I have often lost a sound very closely representing pneumonic crepitation on substituting the stethoscope for the direct application of the ear to the chest.

4. By modifying and exaggerating the sounds heard, the stethoscope sometimes elicits characteristics and differences, and even the *existence* of certain auscultatory phenomena, that otherwise might escape detection. This advantage especially applies to certain exceptional forms of stethoscopes, and is not an unqualified advantage, because it implies an alteration as well as an exaggeration of the natural sound.

5. Lastly, shall I enumerate among the uses of the stethoscope that it tends to increase the faith of the patient? It implies that the doctor possesses a means of information not in the possession of the bystander. Not long ago I was amused by hearing a lady, and a not unintelligent lady, gently intimate to one of the most distinguished of living auscultators, who having carefully employed immediate auscultation was pronouncing his opinion on the case, "But you have not used the stethoscope?" implying, as far as her politeness would permit her, that auscultation without the use of that mysterious instrument was to her a thing of nought. Anything that increases our patient's confidence is of value; the strict adoption of the advice given often depends upon it.

I have just given you five kinds of reasons for the usefulness and value of the stethoscope. And now let me express an opinion that may seem in direct contradiction to all I have said; namely, that you will often find the naked ear much better. If I were condemned either never again to use the stethoscope, or never again to apply my bare ear to the chest—to give up the one or the other—I would give up the stethoscope. I have oftener found that I have got more certain and reliable information—that my appreciation of a doubtful sound has been more exact, that a half-heard sound has come into clear existence—by substituting the ear for the stethoscope than the stethoscope for the ear. For all the reasons I have mentioned the stethoscope is not only a valuable, it is an invaluable instrument; and its loss to auscultation would be irreparable. Nevertheless, my opinion is, on the whole, such as I have stated it. My advice, however, is, "Employ both means." By doing so you will correct errors on either side, and clear away the fallacies both of the mediate and intermediate method; and rare indeed will be the case in which you will not find their united testimony give you a more certain and reliable information than either of them alone. As a rule, the front of the chest most requires the stethoscope, while the back, convex and broad and free from *impedimenta*, presents the greatest facilities for the application of the ear.

It is not my purpose in the present lecture to give you the history of the instrument, or to settle the relative claims of Hippocrates, Hook, Bayle, or Laennec, to having given to the world the idea of auscultation; or to expound to you the acoustic principles upon which the stethoscope is constructed. My purpose is a very simple one and a very practical one—to enable you to do two things; first, to choose your stethoscope, and then to use it. I shall, therefore, divide my observations under the two following heads:—

a. Rules for the construction and choice of stethoscope.

b. Practical hints for its manipulation.

And first, with regard to the principles upon which the stethoscope should be constructed, and the qualities which a good stethoscope ought to possess.

There are three principal circumstances that affect the quality of a stethoscope:—

1. Material.
2. Length and thickness.
3. Size and shape of extremities.

1. *Material.* What a stethoscope essentially is, is an instrument which will render audible at a distance from the chest the vibrations of which the thoracic parietes are the seat. What we want to know in using it is, what is going on inside a patient's chest, and the source that we look to for information is the sound or sounds that the healthy or diseased thoracic viscera generate. These sounds are heard, perfectly natural and unmodified, at the surface of the chest; the best stethoscope, therefore, and one that will give the most truthful information, will be that which delivers at its proximal end (*i.e.*, that which is applied to the ear) the sound that the most exactly corresponds with that which it receives at its distal end from the patient's chest-wall; in other words, that stethoscope will be the best, mediate auscultation with which will the most exactly correspond, in the sounds it furnishes, with immediate auscultation. We have, therefore, in this closeness of correspondence, a certain standard of the relative excellence of different stethoscopes.

The material that I believe the best fulfils the conditions, that gives, on the one hand, the smallest amount of loss of sound, and, on the other, the least perversion of sound, is that of which Laennec himself first recognised the value—some porous wood. What is the principle of this? I do not believe it has anything to do, as is often suggested, with the homogeneity of porous wood and lung—with wood being spongy and lung spongy—and a consequent similarity of the vibrating qualities of wood and lung; because we know, in the first place, that the vibrating qualities of healthy spongy lung are almost *nil*, while those of wood are excellent; and, in the second, that the vibrations that the stethoscope receives are not those of the lung, but of the chest-wall. I believe it has to do simply with wood being a good conductor and corroborator of all vibrations; that it depends on the same property in wood which makes it a good substance for fiddles, and for the walls of concert-rooms and speaking-halls.* Deal is the wood in general use, and there cannot be better. Deal is cheaper, and equally beautiful when polished. I always use a deal stethoscope. The denser the wood the more does it modify the sound that it transmits, by its own inherent vibrations; the sound that we hear through an ebony stethoscope, for instance, has a peculiar tone about it, widely

* The principle on which wood conducts the vibrations that it receives, pure and unmodified, without the superaddition of any of its own and without echo, is much the same, I think, as that by which snow reflects pure white light without image. Each crystal of snow reflects, just as each cell of the porous wood vibrates; but the reflection is broken, and the multitudinous reflections give neither an image nor colour, but simple white light; so, each cell of wood, being highly vibratile, and no two vibrating in unison, the aggregate vibration is neutral, and becomes conduction pure and simple, just as the white light of snow is reflection pure and simple.

ferent from that which we should hear from listening to the same sound with the bare ear.

A stethoscope should be made of one piece of wood, turned out of the solid block. The breaking of continuity involved by having it made of several parts, so as to take to pieces, must necessarily impair the perfection of its conducting power. Still more important is it that it should be of one material, and not part ivory and part cedar, as one often sees. There is no end to the absurdities of construction in this respect that stethoscopes exhibit. In some, the ear piece is ivory, and made to screw on and off; the shaft is cut in two in the middle, and each half furnished with an ivory end, the one to screw into the other; the chest-end is covered with an ivory cap, to screw on and off, and in its recesses is contained a little perforated cone of cedar, furnished with a small brass tube projecting some short distance up the centre of the stethoscope. Could anything be less likely to be a good conductor than such a heterogeneous and piecemeal concern? Some stethoscopes break up into as many pieces as a Chinese puzzle, and require as much ingenuity to put them together again. If a striking and compendious illustration were required of the way in which man will, on some occasions, abdicate his reason, I think a table covered with the different forms of stethoscopes would excellently furnish it.

2. *Length and Thickness.* How long should a stethoscope be? Laennec said a foot. His reason for having it so long was that it enabled him to reach the axilla and other remote parts without inconvenience, and to auscultate his patient in bed without stooping much over him. But I think it too long. I think this undoubted advantage more than counterbalanced by the disadvantage of taking about so cumbrous and inconvenient an instrument. At the same time, to make a stethoscope too short robs it of one of its uses. I have a very simple rule as to length; namely, to have my stethoscope just a little bit shorter than the long diameter of the crown of my hat; and for this simple reason, in order that I may carry the one in the other. It happens to be very convenient and usual length, and even if it were not, this method of porterage would reconcile me to it. If the instrument is just the least bit shorter than the crown of one's hat, and after putting it into the top of the hat directly anteroposteriorly a little twist is given to it, it sticks firmly and is safely supported. Some people revile this practice of always carrying about one's stethoscope in one's hat, and call it unprofessional and shoppy; but it has this great advantage, that you and your stethoscope are never far apart; for where your hat is there is your stethoscope, and in this climate a man is as likely to be without his head as without his hat.

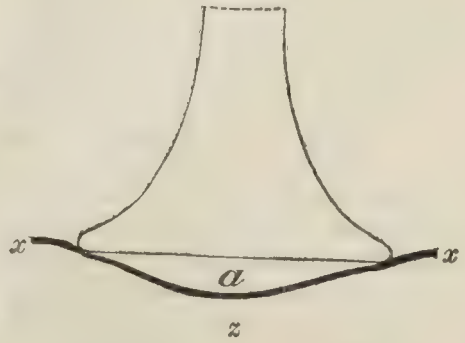
With regard to thickness, extreme thickness and extreme thinness have both their disadvantages. A very thick stethoscope is unnecessarily heavy, and a very thin-walled one is, I think, hypervibratile, and gives a modified tone; while, at the same time, it is an extravagantly fragile instrument.

It has been a subject of debate whether a solid stethoscope is best, or one with a hole bored through it. I think myself it is a matter of indifference. I have carefully examined the relative conducting properties of two cedar stethoscopes, of exactly the same size and shape, but one solid and the other hollow, and have failed to detect any difference between them. Laennec attached great importance to this point. He believed that the central hole was necessary for the conduction of the voice-sounds, while the heart-sounds were conducted best through a solid cylinder, the breath-sounds being audible through both, but best through the hollow instrument. I cannot but think that here this great observer has been guilty of an over-refinement. I find the sounds of the heart conducted as well through a hollow stethoscope as a solid one, and the voice-sounds as well through a solid as a hollow; provided, always, the instrument be of the proper material, and there be no other vice in its construction.

3. *Size and Shape of Extremities, etc.* And now I come to the most important point of all, that upon which the properties of a well- or ill-constructed stethoscope chiefly depend.

First, the chest-end should be small. There is no commoner fault in stethoscopes than having the chest-end too large. There are two reasons why it should be small: in the first place, the smaller it is the greater is the power of circumscription of the instrument, the greater its localising power, the narrower the limits within which it determines the seat of a sound. For it is manifest, if a sound is covered by a stethoscope whose chest-end is two inches in diameter, that the area in any part of which the seat of this sound may possibly be placed is four times as great as if a stethoscope were used whose chest-end was an inch in diameter, and that the smaller the chest-end of the instrument the sooner will the auscultator be aware (in exact proportion to the smallness of the end), in passing to right or left, up or down, that he no longer covers the sound. But a more important reason for the smallness of the chest-end is, that the larger it is the more is its perfect apposition impeded by the inequalities of the chest. It is fatal to auscultation that there should be any chink between the stethoscope and the chest-wall; if there is, and the air within the instrument is not perfectly shut off from communication with the outer air, we get that well known humming noise which we hear on applying a shell to the ear. In a fat chest, or an even chest, or a well fleshed-up chest, a wide-ended stethoscope would not be attended with this special disadvantage; but in a thin chest it would be impossible to maintain perfect apposition, and preclude chinks in the intercostal spaces, the sub- and supra-clavicular regions, and over a very hollow sternum, unless the chest-end of the instrument were quite small.

Fig. 1.

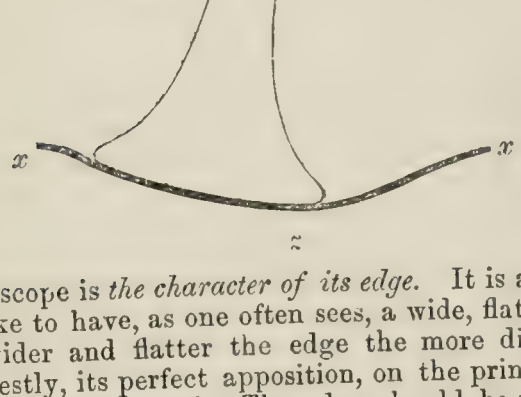


Suppose, for example, that x, x (Fig. 1) represent the prominences of two ribs in a thin

chest, and z the deep intercostal space between them, it is manifest that if the chest-end of the instrument is wide enough to extend from rib to rib it will be so lifted at the edges placed on the ribs (x, x) that in the interval, where the integument sinks in between them, a wide chink will exist (a); just as the *President* steamship, which was lost some years ago, is supposed to have "broken her back," from being so long that her stem and stern rested on two great seas, and so, in the intervening trough, hoisted her out of the water; thus she was unsupported and parted amidships. If she had been half the length this could not have happened, for then she would only have been the length of a single sea, and not two seas, and would have rested in an inclined direction on one or other of them. In the same way, if the chest-end of the stethoscope is so small that it cannot cover two ribs (*i. e.*, not so large that it *must* cover two ribs) it may, by being inclined one way or the other, secure perfect apposition on the most uneven chest; for while one edge is tilted up by the rib the other sinks into the integument in the intercostal space, as shewn in fig. 2.

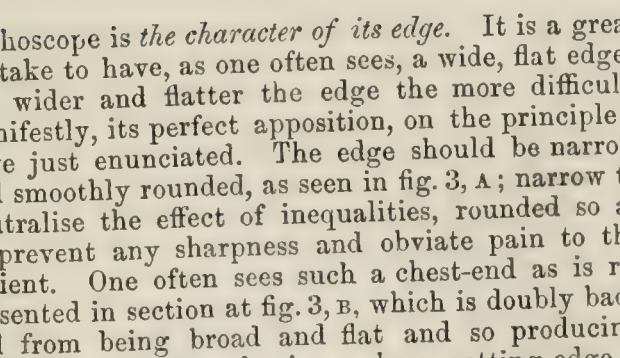
Another important attribute in the chest-end of a

Fig. 2.



stethoscope is *the character of its edge.* It is a great mistake to have, as one often sees, a wide, flat edge; the wider and flatter the edge the more difficult, manifestly, its perfect apposition, on the principle I have just enunciated. The edge should be narrow and smoothly rounded, as seen in fig. 3, A; narrow to neutralise the effect of inequalities, rounded so as to prevent any sharpness and obviate pain to the patient. One often sees such a chest-end as is represented in section at fig. 3, B, which is doubly bad; bad from being broad and flat and so producing chinks, and bad from having a sharp cutting edge.

Fig. 3.



The ear-piece should be *large* for the very same reason that the chest-end should be small—to secure apposition and occlusion; for, the larger it is, the less critically exact and central need the apposition of the ear to it be, in order to prevent chinks and a want of coincidence between them. The smaller the ear-piece, the more are divergencies from exact central application attended with imperfect closure. In fact, it is a very difficult thing so to apply the ear t a very small ear-piece as to produce perfect occl sion.

Moreover, the ear-piece should be *flat.* It is ofte cupped and hollow; this makes perfect appositio of the ear next to impossible. If there is any d vergence from perfect flatness the surface should b rather projecting in the centre than receding; th parts about the centre of the pinna are thus broug into firm apposition with the stethoscope, and perfe occlusion secured. But, on the whole, I prefer th the ear-piece should be perfectly flat.

Fig. 4.

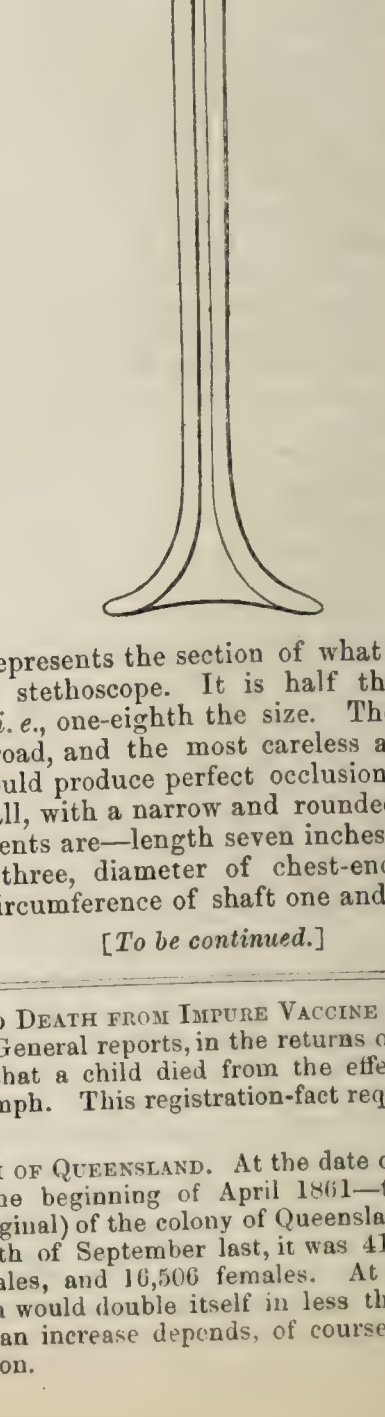


Fig. 4 represents the section of what I consid very good stethoscope. It is half the "natu diameter, *i. e.*, one-eighth the size. The ear-pie flat and broad, and the most careless applicatio the ear would produce perfect occlusion; the ch end is small, with a narrow and rounded edge. measurements are—length seven inches, diamete ear-piece three, diameter of chest-end one ar quarter, circumference of shaft one and a quarte

[*To be continued.*]

Alleged Death from Impure Vaccine Lymph. Registrar-General reports, in the returns of the wee fore last, that a child died from the effects of im vaccine lymph. This registration-fact requires exp tion.

Growth of Queensland. At the date of our ow census—the beginning of April 1861—the popu (not aboriginal) of the colony of Queensland was 30 On the 30th of September last, it was 41,941; na 25,435 males, and 16,506 females. At this rat population would double itself in less than four y but such an increase depends, of course, mainly immigration.

Facts and Arguments

OPPOSED TO

DR. BENNETT'S THEORY OF ORGANISATION.

BY

LIONEL S. BEALE, M.B., F.R.S.,

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THERE are few questions of greater interest to those who are investigating the principles upon which medicine is based, than many now being discussed in the lectures of Professor Bennett of Edinburgh, in course of publication in the *Lancet*. As a fellow labourer in the same field of inquiry, I trust I may be permitted to point out one or two apparent discrepancies or inaccuracies, which seem to me to require further explanation.

Dr. Bennett says that development and growth are owing to the successive formation of *histogenetic and histolytic molecules*. He describes how the first may be formed from the union of two simple organic fluids, or from precipitation occurring in formative fluids holding various substances in solution. Histolytic molecules are distinguished from the histogenetic molecules as follows:—"They are often larger in size than histogenetic molecules, are more purely fatty, and from being sometimes associated with the *débris* of broken down texture, may, in such cases, be readily distinguished." Accordingly, the reader may compare fig. 4, showing "histolytic molecules mingled with *débris* of tissue," with fig. 1, "minute histogenetic molecules." But this very same fig. 1 has been described in other works by Dr. Bennett as "minute molecules frequently seen in disintegrated tubercle." Dr. Bennett describes differences between molecules of formation and molecules of disintegration, and yet makes the very same figure represent both. It is true that Dr. Bennett holds that histolytic molecules may become histogenetic molecules; but surely he will not maintain that lifeless particles become aggregated together, and form a living mass, although he has said, "The physical relations I have pointed out are only necessary preliminary steps for the *addition* of that unknown force we call vitality, which directs the ultimate form these structures assume." (*On Cancerous and Cancroid Growths*, p. 141.)

Dr. Bennett seems to ignore the use of the high powers which are now employed for studying minute points of this kind, and reproduces figures more than ten years old magnified by powers (250 diameters) far lower than those used by observers in the present day for investigating the structure even of fully formed solid tissues.

The molecules "vary in size from the four-thousandth of an inch (a little less than a blood-corpuscle) down to a scarcely visible point, which may be *calculated* at less than the twenty-thousandth of an inch." Objects of the first diameter appear only as molecules under an inch power, while the molecules, one twenty-thousandth of an inch in diameter, are perfectly measurable when examined under high powers. Surely the term molecule can scarcely be properly applied to a body nearly as large as a blood-corpuscle.

There are many independent living organisms less than the twenty-thousandth of an inch in diameter, consisting of an external envelope, with matter within of a different character. These molecules live and grow and multiply; but their growth does not depend upon the union, coalescence, or aggregation of the molecules or particles precipitated from fluids, as can be proved by anyone who will examine, with a power of 700 diameters or more, the organisms developed in a little water in which some dead animal or vegetable matter has been placed for some hours. Dr. Bennett, however, describes the formation of vibriones in putrid fluids, thus:—"A scum composed of molecules collects on the surface; gradually several of them unite in minute filaments more or less long, which assume vibratile or serpentine movements."

Although I have often watched such minute organisms with powers magnifying from 700 to 3000 diameters, I have never been so fortunate as to see even two particles unite. The particles are all separate from the very first, and remain so. They grow, not by coalescence, but each absorbs nutriment from the fluid which surrounds it, reaches a certain size, and divides. Thus in a few hours millions result. The pabulum passes into each living particle The new matter is not added upon its external surface.

As an illustration in favour of his view, Dr. Bennett compares the concentric rings of bone in the Haversian system with the concentric layers of a calculus. "When we compare the concentric rings and laminæ surrounding the Haversian canals with the like arrangement existing in calculi and all concretions, there can be little doubt that the mineral deposits in bone are intimately connected with the molecular law of aggregation"; but the laminæ of the Haversian system are formed layer *within* layer, while the layers of calculous matter are deposited layer *upon*, or *outside*, layer. The outermost lamina, or that *furthest from* the centre, was *first formed* in the one case; the innermost particle, that which becomes *the centre*, was *first precipitated* in the calculus.

There appears to me some confusion in the definition of a molecule; and Dr. Bennett uses the word in many different senses:—

1. The most minute particles of any substance which exhibit no definite form to the highest powers are molecules.

2. Angular or square particles are *molecules*—"angular, square, and of various forms".

3. Spherical particles of the same composition in every part are *molecules*.

4. Particles, the outer part of which possesses properties and composition different to that which is within, are *molecules*.

5. Vibriones, the minute sporules of fungi, etc., are *molecules*.

So that we have large and small molecules, living and dead molecules, simple and compound molecules; molecules of simple, and molecules of complex composition; molecules springing from pre-existing molecules; molecules precipitated from

fluids; molecules which are visible to the histologist, and as large as the 1-4000th of an inch in diameter; and the ultimate molecule, which has "never been reached, even with the highest magnifying powers."

Most of these molecules have totally different properties. Dr. Bennett should therefore state if molecules of the same kind, or molecules of different kinds, become aggregated together.

But, to limit the discussion to one point—the formation of vibriones—Dr. Bennett maintains that several of the molecules forming the scum *unite* to form minute filaments. I do not think that any one has ever seen even two such living molecules together.

Addresses and Papers

READ AT

THE THIRTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LONDON, AUGUST 5th, 6th, 7th, and 8th*, 1862.]

OBSERVATIONS ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND: ILLUSTRATED BY NUMEROUS FATAL CASES.

By WILLIAM BUDD, M.D., Clifton; Honorary and Consulting Physician to the Bristol Royal Infirmary.

"Le médecin doit, dans ses premières études, jeter un coup d'œil sur les animaux qui se rapprochent le plus de l'homme."—*Chaussier.* (Adopted from Régnier.)

[*Continued from page* 87.]

As the malady is generally readily curable by decisive measures in its early stage, but is almost as generally incurable if this stage be allowed to pass without them—as the alternatives of death or recovery, therefore, depend on its early recognition—I have thought it a duty to bring the particulars of these cases (so far as I possess them) before the profession, in order that the attention of medical men may be directed to the subject.*

Case I. On Oct. 21st, 1856, I was summoned by Dr. Robertson, of Terrell Street, in this city, to see a patient whom he had visited for the first time the day before, and whose case had put on a strange and formidable aspect.

The subject was a married man, rather more than thirty years old, who had for some years been employed as compositor in the office of the *Bristol Times*, and who, at the time of his seizure, was in good health. The disease under which he was now labouring had begun six days before, in the form of a pimple surmounted by a small vesicle, and seated on the upper lip. His attention was first called to this pimple by the severe itching it occasioned, and which annoyed him very much by interfering with his work. In his attempts to relieve this sensation by scratching the part, the vesicle was soon broken; a circumstance which led the patient himself to form a very definite theory of his case. The printing office had lately been supplied with a fount of new type, and the notion was that the hand, soiled with the new metal, had, in its frequent contact with the broken surface, poisoned the lip.

The same notion, under some other form, occurred in most of the other cases. The fact is worth noting, as showing that the nature and succession of the morbid changes involuntarily suggest the idea of a poisonous inoculation, even to non-professional persons.

In the course of the day, the swelling and hardness gradually extended; and on the day following, they were so considerable as to cause much disfigurement. It is important to remark, however, that apart from the local discomfort, the patient did not at that time feel ill, but continued to work as before. The malady was still in what the continental writers call the local stage.

On the third day, it had began to spread widely over the face, and the patient was unable to leave the house. From this stage, it passed rapidly to that in which I first saw it, three days afterwards. The aspect of the disease was then very striking, and was unlike anything I had ever seen before. The lips were, at least, four times their natural thickness; of a deep violet, approaching to black; and as hard as brawn. This state of things extended to the whole circumference of the mouth, from the nose to the chin. The closure of the mouth being imperfect, saliva was constantly drivelling from it. On the space between the upper lip and the nose there were three or four small vesicles, containing a little reddish yellow serum. The temperature of the part was considerably below the normal standard. The rest of the face, the forehead, and throat, were also much swelled, and presented very exactly the appearance which these parts have in bad cases of erysipelas. Passing from the mouth to the cheeks, the deep violet of the former gradually shaded away into a dusky red, and the scirrhous hardness gave place to a puffy swelling. The nose participated but little in the morbid change. The enormous prominence of the mouth, its hard and rigid state, and its almost black colour, caused a peculiar and hideous disfigurement, which was in the highest degree characteristic. The general symptoms bespoke rapidly failing powers. The pulse was more than 140 in the minute, and so feeble that it could scarcely be counted. The breathing was rapid; the belly tympanitic; and the body was bathed in a colliquative sweat. The breath exhaled a peculiar and disgusting fœtor, which, to my own sense of smell at least, was entirely new. The mind remained perfectly clear. A deep incision was made through the upper lip and carried into the cheek. The incised tissues were so hard that they creaked under the knife. But little blood flowed from the wound, the local circulation having, apparently, very nearly ceased. There was no trace of pus, but a serous exudation oozed freely from the part. Stimulants were ordered in liberal doses.

On leaving the patient at eleven o'clock at night, I appointed to see him again early in the morning; but he

* In the Twenty-first Annual Report of the Registrar-General, in a table of the causes of death registered in England in each of the nine years from 1850 to 1858 inclusive, the following are the numbers set down to carbuncle: 134, 161, 233, 252, 300, 255, 253, 252, 246. As there is good reason for believing that these numbers may be taken to represent, approximatively at least, the proportion of cases of malignant pustule in each year, they would seem to indicate that the disease is on the increase. It is obvious, however, that these statistics cover too small a period to allow of any general inference being founded upon them. Much greater fluctuations are observed in other zymotic diseases in virtue of the common variations to which the whole group are subject. Unfortunately, no data exist from which the most distant approximation can be made as to the concurrent prevalence of the epizootic from which the malignant pustule is derived. The scientific study of veterinary medicine is too recent in this country to render the necessary records possible. We have already seen that there are good grounds for believing that joint murrain has prevailed in England from a very remote age. If there be some doubt whether in England generally malignant pustule has increased of late years, there seems to be none that in London it has greatly done so. In the Registrar-General's Report of the Health of London in 1858, the following passage occurs:—"The deaths from carbuncle were 61; fewer than in 1856, but ten times as many as the deaths from the disease in the earlier years. This troublesome plague of boils has been prevalent for some time." I shall hereafter give some reasons which render it probable that the flesh of diseased beasts is sent to great towns more largely now than formerly. (See the Report referred to, pages xl and 206.)

died in the course of the night. Decomposition set in very early, and advanced with unusual rapidity in the dead body.*

The rapid way in which life was destroyed by a disease that in its origin appeared so trivial; the peculiar manner in which the deadly influence of the disease was extended from the minute point in which it first appeared; and, lastly, the hideous and very uncommon aspect of the local morbid change, made a deep impression on all who saw the patient. In my own mind, it excited much speculation as to what might be the possible cause of so horrible a death. It was not, however, until I saw a second case, that I identified the malady as the malignant pustule of the French pathologists.

Case II. On the 18th March, 1859, Mr. Exley, the principal of one of the leading schools of this town, called on me to ask me to visit one of his pupils, in consultation with the late Mr. Wilson of Clifton. From the description which Mr. Exley gave me, I at once recognised the disease as the same which had proved fatal to the compositor whose case has just been related.

The subject was a fine young man seventeen years old. Five days before the date of my visit, his attention was first drawn to a small pimple on his upper lip by the uncontrollable itching it occasioned. On examining the spot narrowly the same evening, he observed that the centre of the pimple was occupied by a small vesicle. This vesicle he punctured with a penknife, and a little serum issued from it. On the following morning, the lip, in a circumscribed spot, was swelled and discoloured. There was, at that time, no general disorder of any kind. He dined at the usual hour with the rest of the school, ate heartily, and was in good spirits. In the course of the next day, three or four small vesicles made their appearance in the space between the nose and upper lip. As the swelling had increased, and the part looked inflamed, it was thought prudent that the patient should keep his bed. It was not, however, until the day following that it was considered necessary to send for Mr. Wilson. The whole mouth now was much swelled and of a purple colour, and the lips were hard and tense. From that time the march of the disease was very rapid.

When I saw the patient two days afterwards, it was in appearance, and in almost every other respect, precisely what I had witnessed in the former case. I have never seen two cases of any other disease so absolutely alike. There was the same erysipelatous swelling of the forehead and face; the same enormous thickening, and black and hardened condition of the lips and mouth; giving rise, by the inordinate prominence of this feature —as if by some monstrous exaggeration of the negro type—to the same hideous and characteristic disfigurement. On the space between the upper lip and nose, there was the same crop of three or four small flat vesicles containing a straw-coloured lymph. Saliva was constantly drivelling from the mouth, and the breath had the same peculiar fœtor. The only difference I could detect was, that in this young man, the mouth and lips were, as yet, hot, and that extending from the ramus of the jaw, down the neck on either side, were several dark red streaks, marking the course of inflamed lymphatics; a circumstance which might have existed, but was not noted in the former case.

The pulse was 120 in the minute; the inspirations were forty-four. Rapid breathing was in both cases a leading feature of the disturbance. The belly was tympanitic. The patient had ceased to take much note of things about him; but when he was aroused, the mind seemed to be tolerably clear.

On making a deep incision into the upper lip, no pus issued; but there was a considerable flow of blood, of which as much as eight ounces were lost. The immediate result was a marked diminution of the local turgescence, and a palpable weakening of the pulse. This was at two o'clock in the afternoon. When the patient was seen again, four hours later, he was much worse. The mouth and lips were now cold; the pulse was 140; the inspirations were 64. When questioned, his answers were rational; but when he was left alone the mind wandered. The body was bathed in sweat.

From this time, he sank rapidly, and he died soon after daybreak the next morning, about sixteen hours after I first saw him. Thirty-six hours afterwards, the decomposition of the dead body was already far advanced.

At the time of his death, this young gentleman bore on his left leg the remains of a large boil, which had appeared about a fortnight before. This boil had followed exactly the common course of such things, and had led to none of the peculiar and deadly changes in surrounding textures and in the system at large, which followed the pustule, or, to speak more correctly, the vesicle on the lip.*

Case III. On Sept. 11th, 1861, I was asked to meet Mr. H. Grace of Kingswood in consultation on a case which proved to be one of malignant pustule. The subject of it, a clerk in a provision warehouse in Bristol, was a powerful, robust man, about 30 years old, who had always enjoyed good health.

Six days before the date of my visit, while he was in the act of combing his moustache, the comb stuck in a tender part. On withdrawing it, he found that the teeth of the comb had punctured a small vesicle, giving issue to a little yellowish-looking fluid. This accident was the first intimation he had of the existence of the disease which was so soon to prove fatal to him. The vesicle was situated on the upper border of the moustache, immediately below the left nostril. A slight depression and a small dried pellicle still marked its former place when I first saw the patient.

Immediately after the puncture, the part became the seat of a hot, stinging sensation, which lasted all day, and annoyed him very much, and which he described as being very peculiar. There was no itching strictly so-called.

In the course of the day, the lip began to swell, and towards night became very painful. In the night, the pain was so severe that he could not sleep, and he got up more than once to bathe the lip in the hope of relief.

The next day, the swelling had somewhat increased, and the part had begun to look angry. The uneasiness was so great that he found some difficulty in getting through with his work. On both days, however, he walked to and fro to the warehouse (a distance of rather more than two miles each way) and took his usual food.

On September 7th, the pain had much abated; but the swelling and discoloration had increased; the disfigurement was considerable; and, for the first time, he did not leave the house. Apart from the state of the lip, he did not, however, feel very ill; and, up to that time, neither he nor his friends had the slightest idea that the malady was at all serious.

In the night of the 7th, that is to say, on the third day of the attack, he was seized with severe stitch in the right side, and great difficulty of breathing. On the following morning, Mr. Grace saw him for the first time.

The whole of the upper lip was then much swelled,

* Virchow and many other writers lay great stress on this as one of the characters of malignant pustule. In the animal this tendency to putrescence is manifested even before death by the extrication of stinking gases in the affected part. Virchow also states that, as the disease advances, colourless corpuscles abound in the blood; and he makes the still more remarkable assertion, that numerous vibriones may be seen in that fluid immediately on its withdrawal from the vein of the infected man or animal.

* Bourgeois has very justly remarked that "the malignant vesicle" would be the fitter name for the disease, since one of its most special characteristics is, in all cases, the absence of true pus—at any rate, in the first stage.

hard, and discoloured; the appearances being such as to lead Mr. Grace to suppose that the case was one of carbuncle. The pulse was somewhat frequent and the breathing difficult. The pain in the right side was very acute, and the physical signs of pleurisy were present.

In the course of the day, a new crop of vesicles, to the number of five or six, made their appearance, chiefly on the right half of the lip.

From this time the disease did not make much progress locally, until September 10th, when the swelling rapidly extended to the whole of the face.

When I saw the patient on the day following, the state of things was in the highest degree characteristic. The lips were more than three times their natural thickness, as hard as brawn, cold, and of a deep livid red, verging in parts into purple and black. The mouth projected at least two inches beyond the rest of the face, giving rise to the same hideous and characteristic disfigurement noticed in the two former cases. The lips, from swelling and loss of muscular power, were imperfectly closed, and a viscid saliva constantly drivelled from between them. The rest of the face had exactly the aspect which it presents in severe forms of erysipelas; the hardness, so extreme in the mouth, shading away gradually into swelling of a softer character. The eyelids were bloated and puffy, and the eyes permanently closed. Above the eyebrows there was no diffuse swelling, but four or five broad, dark red streaks, marking the course of inflamed lymphatics, traversed the forehead from the face upwards, and were lost in the hair. Scattered over the upper lip—chiefly in the space between the lip and the nose—were several small, thin scabs, occupying the former seat of so many vesicles. The case was, in all its details, precisely what I had witnessed in the two other cases in which I had been before consulted. The pulse ranged from 132 to 140; the inspirations numbered 44 in the minute. The body was covered with a profuse, clammy sweat, and the vital powers were sinking from hour to hour. The breath had a very peculiar and repulsive odour, which I recognised at once as identical with what I had smelt in the two former cases. The pain in the right side had nearly ceased, but there was severe stitch in the left, and the patient complained of great difficulty of breathing. He was not in a state to admit of a complete examination; but I ascertained that air penetrated the lower half of the right lung very imperfectly. An obscure rubbing sound was audible over a small space on the left side, below the precordial region. As in the two former cases, I had no opportunity of examining the urine. The mind was quite clear; and the patient took freely and willingly strong beef-tea, brandy, and eggs, and other stimulants.

A stick of potassa fusa was held firmly on the upper lip at four different points where vesicles had existed, until the tissues were destroyed to a considerable depth. A long, deep furrow was produced on the lower lip by the same means. There was a slight oozing of serum from all these parts, but no single drop of blood appeared. The circulation in them had apparently entirely ceased.

The patient continued to sink rapidly and died on the 12th of September; twenty-six hours after my visit, and eight days from the first discovery of the vesicle.

The inflamed lymphatics, the double pleurisy, and the rapid and terrible death, all occurring as the consequence of an affection which, a few days before, was nothing more than a vesicle so minute and insignificant as even to be discovered by accident, are circumstances which sufficiently mark the nature of the disease, and are of deep import in relation to its pathology. If I do not misinterpret the phenomena, they testify at once to an inoculation by a malignant poison, and to the intensely virulent nature of the morbific agent.

A circumstance deserves to be mentioned in connection with this case as bearing on its possible origin. About a week after the death of this young man, I was informed by his friends that he himself had a settled conviction that the pustule was caused by the use of a new pomatum which he had bought about a week before his illness, and had rubbed very freely into his moustache. As tallow-chandlers and soap-boilers have long been known to be frequent sufferers from malignant pustule in the countries where the corresponding epizootic is rife, it is quite possible that this view might be the true one.* As the patient was employed in a provision warehouse, it is equally possible, however, that he may have become infected in the exercise of his calling.

For the particulars of the next case, I am indebted to my friend, Mr. Green, senior surgeon to the Bristol Royal Infirmary. The facts are related in his own words.

Case iv. On May 4th, 1854, I was sent for to see Master E., who was said to be suffering from swelled face. He was a tall, delicate youth, 17 years old, and had been for some months out of health, having come to Bristol for change of air.

I found the entire right side of the face much swollen. The lips, in particular, were very large and projecting and of a purple hue. On the margin of the upper lip there was a small pimple covered with a scab. The parts were very hard, especially immediately around the pimple. The right eye was closed by the swelling. The pulse was quick, and the surface hot; the tongue brown and moist.

The disease had begun three days before with a small vesicle on the upper lip, which the patient had broken by scratching. The day before I saw him, the swelling which was before confined to the lip, had extended to the face; and as it went on increasing, the friends decided on having medical aid. From the aspect of the face, as well as of the patient himself, I looked upon the case as something different from ordinary inflammation.

On the day following, the disease had made great progress. The swelling had extended, and the affected parts, especially in the neighbourhood of the original pimple, were very dark in colour, and much indurated. The prostration was great.

At this visit, the real nature of the disease first occurred to my mind. I remembered once having seen a similar case in the wards of La Charité in Paris which was made the subject of some clinical remarks by Roux, and I at once recognised the malady as the "pustule maligne" of Delpech and the French writers.

I told the friends the serious nature of the case, and recommended a consultation, which they wished deferred until the morrow, when the patient's father was expected. As the danger to life did not then appear to be great, I consented to this arrangement.

I made a deep incision through the indurated part which was evidently losing its vitality, as very little blood flowed in consequence. Tincture of muriate of iron was applied to the wound. I saw the patient late at night and found his condition but little altered.

About 4 A.M., he became very much worse, and at 8 A.M., I was sent for to see him. The entire face was then of a livid colour, approaching to black; the pul

* Es ist eine alte Beobachtung (writes Heusinger) dass Seifensieder und Lichterzicher oft am Milzbrand-Karbunkel erkrank wenn sie Talg von am Milzbrand krepirten Thieren erhalten. erzählt denn auch Hildebrand einen merkwürdigen Fall; zwei Sch ferweiber erkrankten dadurch, dass ihnen beim Ausbraten des Ta von an der Blutseuche krepirten Schafen dieses Fett in das Gesi spritzte. Aehnliches berichtet Wagner. Als man den gewonnen Talg (von einer milzbrandkranken Kuh) ausgebraten hatte, wur die Griefen dazu benutzt zwei Schweine, zwei Hunde, und e Katze damit zu laben, drei Thiere starben bald nacher, und z die Katze unter herum Wälzen auf kühlem Rasen. (P. 400, u. s.) these statements can be relied on the temperature to which tal is raised in being melted would appear to have no power to dest the virus. I have ascertained that in making certain varietie pomatum, and particularly those in which trotter oil is used, the gredients are mixed at a comparatively low heat.

was hardly perceptible; the body was bathed in sweat. It was evident to all that he was fast sinking; and he died at about 11 o'clock, five days after the first appearance of the vesicle.

The general treatment consisted chiefly in the liberal administration of good beef-tea, brandy, and ammonia.

[*To be continued.*]

Original Communications.

DISLOCATION OF THE KNEE-JOINT.

By T. Ogier Ward, M.D., Cowbridge.

As dislocations of the knee-joint are rare, I send an account of one in which reduction was effected by flexion instead of extension, the latter having completely failed.

A young gentleman, aged 15, riding a velocipede down a steep hill, was thrown off, and fell on his left knee. He walked home, and four hours afterwards came to me, when I found the knee very much swelled from effusion into the joint, the patella projecting about an inch, and half an inch lower than the right from the tension of the ligament. The limb was straight, and could not be flexed without pain, though painless when quiet and extended. A side view of the limb showed little difference between the left and right behind; but in front the prominence of the patella clearly proved that the tibia was dislocated backwards. There was a bruise and abrasion of the skin over the internal condyle. The limb was not shortened; indeed, if at all, it was longer than the other.

Thinking that, with so little change in the form of the limb, the reduction by extension would not be difficult, I first tried that plan; but, though I put the patient under the influence of chloroform, and gave him several half-grain doses of tartar emetic, and had two strong men making extension with a roller-towel round the ankle, at the same time that I was trying to push the head of the tibia forwards, not the least effect was produced. I then recollected that I had formerly reduced a similar case, where the patella was fractured, by flexion of the joint over the knee of an assistant; so, taking the towel off the ankle, and thus diverting the attention of the patient, I suddenly pushed the heel backwards till it touched the thigh, when the reduction was completed, and the power of flexion was restored. I then bound a slight splint round the extended limb; and, with the aid of cold lotions, in a few days the effusion was absorbed; and in three weeks the cure was completed, and the bandage was removed.

The rarity of this form of dislocation, and other peculiarities in the symptoms and treatment, suggest a few remarks. I have before me the descriptions of two of the most recent writers on this subject, Mr. Erichsen and Mr. Lane. The former states (*Science and Art of Surgery*, 3rd edition, pp. 290-291): "The dislocation backwards (of the tibia) may be complete or incomplete. When it is complete, the posterior ligament of the joint is torn, the muscles of the ham are stretched, the limb is shortened to the extent of an inch and a half or two inches, and is semiflexed; the head of the tibia can be felt in the ham, and there is a deep transverse depression in front of the joint immediately below the patella. . . . The antero-posterior dislocations are very commonly incomplete. When this is the case, they present the same symptoms, but in a less marked degree, that characterise the complete displacements." In treatment of dislocations of the knee, Erichsen recommends "extension from the ankle while the thigh is fixed in a semiflexed position".

In this account, the possibility of the limb being lengthened is overlooked; and the treatment is the same as has been recommended by all previous writers—viz., extension of the affected limb.

Mr. J. Lane also (Cooper's *Surgical Dictionary*, 1861, article Dislocations), quoting Malgaigne, omits all mention of the lengthening of the limb; but to the recommendation of extension, Lane adds: "Should any difficulty occur after the necessary extension has been made, the effect of flexing the knee may be tried; or the knee may be bent round the bedpost, or over the left arm or knee of the operator." He makes, however, no distinction as to the class in which flexion is best.

In describing the incomplete luxation backwards, Mr. Lane, or Malgaigne, asserts that "the limb is sometimes extended, sometimes slightly flexed," which latter position seems impossible, unless the ligamentum patellæ be ruptured; and therefore, I think, in this respect he has confounded the dislocation of the semilunar cartilages (of which, slight flexion with inability to extend the knee, is the pathognomonic symptom) with incomplete luxation of the tibia backwards. Sir Astley Cooper's description, omitting the shortening of the limb, is most characteristic—"a projection of the condyles of the femur, a depression of the ligamentum patellæ, and a bending of the leg forwards"; but he also recommends only extension for the reduction.

My own case agreed with Sir A. Cooper's description, except as regards the *shortening* of the limb and *depression* of the patella; which, however, might be said to be depressed at its lower end under the extremity of the femur, while the upper part was raised by the effusion beneath and the tilting up produced by the depression of the other end. In this, as in the former case I have alluded to, the nature of the injury was evident from the bending of the leg forward; and yet in neither instance could reduction be made by extension, though it was readily effected by flexion of the limb. How are these discrepancies in the treatment and the shortening of the limb to be reconciled? Only, I think, by considering the cases requiring flexion for their reduction as incomplete luxations, and those reduced by extension as complete luxations attended with rupture of the ligaments. This view will explain the facility of the reduction of the latter (for, the ligaments being ruptured, there would be less power of resistance to the extension); and, *vice versâ*, the very great difficulty, if not impossibility, of the reduction by extension when the luxation was slight and the ligaments uninjured. In proof of this difficulty, I recollect seeing a boy of 15, who had dislocated the similunar cartilages, resist with ease the united efforts of six persons to straighten his knee, which, as usual in that accident, was bent, though the power to straighten it returned after a few days rest.* In the last case of execution in France by the victim being torn asunder by four horses, each attached to a limb, the utmost efforts of the animals failed, until the ligaments had been divided.

It is hardly necessary to state that luxations not attended with rupture of the ligaments would require very little treatment after reduction. Again, the reduction of any case by flexion necessarily implies only a slight displacement of the ends of the bones; for, if the head of the tibia were pushed far backwards, flexion could not be effected without fracture of the patella or rupture of its ligament. The slight displacement may also explain the absence of shortening of the limb, and account for its being lengthened; for, if the condyles of the femur were thrown upon, and rested on the anterior tuberosities of the tibia, instead of on the hollow sur-

* Though Sir A. Cooper recommends flexion of the knee in dislocation of the semilunar cartilages, reduction will take place spontaneously in a few days by the gradual stretching of the tissue connecting them with the capsular ligament, and thus a painful operation may be avoided.

faces behind them, the limb must necessarily be lengthened.

If these statements and arguments are correct, it seems to be proved that, in incomplete luxations of the tibia backwards, flexion, and not extension, is the easiest mode of reduction, and that in such cases the limb may be lengthened.

P.S. As there seems to be a question respecting the influence of bleeding or loss of blood in the production of softening of the brain, I may mention that I was recently called in to a woman who had a "fit" on the ninth day after *a very easy labour, with very little loss of blood*. I found her slightly paralysed in the right hand and arm, but unable to speak plainly, or to find the right word to express her meaning. The left pupil was natural, perhaps a little dilated; but the right was very much contracted. Since the attack the previous night, she had vomited, and had diarrhœa, the last motion being bloody mucus. I ordered her a chalk mixture with laudanum, the first dose of which stopped the vomiting and diarrhœa. The next (third) day she complained of pain in the left side of her head; and I ordered four leeches, which were not applied till the night of the fourth day, when only two drew blood, at the outer angle of the eye, about six o'clock. At 11 P.M. she had another fit, became insensible, and remained so till her death, twenty-four hours after the attack, with occasional convulsive movements of the affected arm. I saw her twelve hours after the attack, when the eyes presented the same appearance. I did not examine the head; but the symptoms clearly point to softening of the brain, rather than apoplexy; and I cannot believe that the small quantity of blood drawn by two leeches could have caused a recurrence of the "fit". Her eldest son has epileptic fits; and I am disposed to attribute the mother's disease to perhaps a tendency to disease of the brain, increased by grief at the recent death of her father, and brought to a climax by the straining of even an easy labour. The absence of pain till after the fit is accounted for by the insensibility of the cerebral substance.

CASE OF PELLAGRA.

By Samuel Wilks, M.D.

The observations of Dr. Peacock on pellagra, contained in the last number of the *Medico-Chirurgical Review*, have again brought before my mind a case which I witnessed last autumn, and which I suggested might be an example of an affection which is almost peculiar to the north of Italy. No English author that I am aware of, has ever described such a form of disease in this country, and, therefore, it is with considerable diffidence that I bring forward the present case as an example of it; at the same time the case so much resembles the descriptions which I had read of this remarkable malady, that I informed the medical man under whose care the patient had been, that I could make nothing of it unless it were a case of pellagra. The report of the case, although brief, may be the means of drawing some similar instance from the note-books of other practitioners. I believe it to be true that many diseases which are rife in some countries, and almost peculiar to them, may occur in isolated instances, and in modified characters, in other parts of the world; and, thus it is that elephantiasis or leprosy may be sometimes met with in our own temperate island. In the same way, pellagra, which is described by French writers as not occurring in Paris, yet was supposed to exist in the persons of four patients which were in La Charité some years ago. (M. Willemin in *Archives Générales de Médecine*, Series 4, vol. xiii.)

The disease, as it is witnessed in Italy, is an affection of a very chronic nature, continuing for several years, characterised by a general wasting of the body, and by a rash which covers the exposed parts of the skin, commencing as an erythema, and progressing into a lichenous or eczematous eruption. At a later period, sores sometimes appear, impairment of digestion, and nervous symptoms, as paralysis of the limbs. The cause of the disease appears at present not decided, it having been thought by some that it is due to exposure to the sun, from the fact of exacerbations occurring in the summer time; by others, that it is due merely to poverty, as it does not prevail amongst the rich; but these and similar supposed theories, are refuted by the remembrance that such causes are not peculiar to Lombardy, but exist where pellagra is quite unknown. The most recent theory places the cause in the consumption of diseased maize, the corn being affected somewhat after the manner of the ergotised rye.

In the four cases which occurred at Paris, described by M. Willemin, and which appeared to be true examples of the disease, the skin was covered either with an erythematous, a lichenous, or eczematous rash. This was on the face and arms, and had a thickly defined margin; in two cases a diarrhœa existed; in one the gums were spongy, as in scurvy, and in some there was a weakness of the extremities. The pulse was feeble in all, and in one case, after the patient had been lying down, was reduced to thirty beats in the minute.

The peculiarities of the disease appear to be: in the first place, this cutaneous eruption, which is remarkable in affecting the parts exposed to the light, as the face, neck, chest, backs of hands, arms, or feet, the redness ceasing abruptly at a line where the covering of the clothes commences; the skin also becoming hard and dry like parchment, and in some cases bullæ appearing. Next in importance to the cutaneous rash, are various nervous symptoms, as numbness or pains in the limbs, and sometimes a veritable paralysis, as in myeitis of the spinal cord. It is said by some writers that in very bad examples of the disease, a melancholy overtakes the patient determining to suicide, especially by drowning, and to this has been given the special name of *hydromania*. Other writers, however, are ignorant of the existence of this propensity. As regards the pathology of the disease, nothing is known; some have regarded it as a chronic *gastro-enteritis*; whilst others, at a loss to discover the seat of the disease, have been content to style it *morbus chronicus totius corporis*.

The case which came before me last autumn, was that of a woman, living at Glastonbury, and intimately known to Mr. Malton of that place. This gentleman sent the case up to his relative Dr. Charlton of Dartford, who again brought her to me for an opinion as to the nature of her complaint, the obscurity of which suggested to the former gentleman, I apprehend, that there might be some disease of the suprarenal capsules. She was married, aged 33, and had three children. She informed me that she had been ill for six years, having become very thin and being covered in parts with an eruption. She said that her illness had commenced five and a half years before, in the month of May, after exposure to the sun. These statements were not extracted from her by leading questions; for it was not until after she had left my house, and I was revolving the case in my mind, that the idea struck me, that it was one of pellagra. Soon after this exposure to the sun, a rash appeared on the face and arms, and subsequently she lost flesh and became weak. This rash, she said, had continued ever since with varied severity, being aggravated in summer, and better in winter. Her general appearance was very remarkable, presenting as she did a withered and emaciated look, reminding one of a child in the last stage of marasmus; all the outlines of the face were very prominent, the cheeks were sunken in and the temporal muscles much wasted. The face was covered with a

brownish-red rash, not uniform in amount but patchy; this was of a papular or lichenous character, with a slight furfuraceous covering. The neck was slightly affected in the same manner; the forearms as far as the elbows were covered with a similar rash; the skin being rough and affected by a brownish-red eruption. This appeared to correspond to the papules of the skin, and gave a hard dry feel to the touch. The backs of the hands were similarly affected, and, in fact, all those parts which were exposed, whilst those which were covered were free. Her limbs were wasted, and the joints of the elbows somewhat contracted; not admitting of full extension. On the face there was also the scab of a pustule, and on the arm was another similar one. On the right forearm there was also an ulcer, the seat of a former pustule, and which was unhealthy looking and bleeding. I could discover no disease in the body, for tuberculosis suggesting itself, I looked for phthisis and other manifestations of it, but nothing of the kind could be discovered. I also examined for enlargement of the cervical glands which might have obstructed the thoracic duct; nothing could be felt in the abdomen, although I surmised the presence of mesenteric disease. The only nervous symptom was weakness of one arm. The gums presented no marked scorbutic appearance, but were rather too red and swollen. There was no diarrhœa, and she stated that her spirits were good.

It will be seen that the symptoms in this case very closely correspond to those described as belonging to pellagra; and, therefore, no surprise will be felt when I suggested to Dr. Charlton the nature of the disease. If it should not be of this kind it will be found probably due to some morbid condition interfering with the due supply of chyle to the system, and in connection with this, it will be remembered how harsh and withered the skin becomes in children who are wasting from mesenteric disease. It is not surprising, therefore, that the disease has been called (according to Dr. Peacock) *marasmus pellagrosus*, or *tabes pellagrosa*.

Within the last few days, Mr. Malton has written to say that the patient is going on much the same; the wound in the arm is still ulcerating; and she has lost almost complete power of the same extremity. The disease of the skin is better (winter time). Mr. Malton will, no doubt, report the further progress of the case.

Reviews and Notices.

THE NATURE AND TREATMENT OF GOUT AND RHEUMATIC GOUT. By ALFRED BARING GARROD, M.D., F.R.S., Fellow of the Royal College of Physicians; Physician to King's College Hospital; etc. Second Edition, enlarged and carefully revised. Pp. 618. London: 1863.

WHEN the first edition of this work appeared, three years ago, we gave an ample analysis of its contents (JOURNAL, Jan. 7, 1860). It is therefore not necessary for us now to do more than state that Dr. GARROD has in this edition incorporated the results of his increased experience of the nature and treatment of gout; and has added a chapter on the diseases to which gouty persons are peculiarly liable. At the same time, he has pruned down the historical and other less practically important matter contained in the first edition, so that the present volume contains but a few pages more than its predecessor. The work shows traces throughout of careful revision; but the author has nowhere found reason to alter the views formerly expressed by him. His opportunities of testing them, he says, "have only tended to confirm his opinion as to their accuracy."

CLINICAL SURGERY. ON STRICTURE, RETENTION OF URINE, STONE IN THE BLADDER, AND OTHER DISEASES OF THE URINARY ORGANS. By THOMAS BRYANT, F.R.C.S., Assistant-Surgeon, etc., Guy's Hospital. London: 1862.

MR. BRYANT here furnishes a continuation of his valuable series of surgical clinical observations. His remarks are here founded on 1077 cases of diseases of the bladder and urethra, admitted into Guy's Hospital between October 1st, 1853, and March 30th, 1861: of these, 1008 were cured or relieved, and 77 died.

Among the practical matters which the author has brought forward, we observe that rupture or laceration of the urethra assumes a very different meaning in the Guy's Hospital practice when it occurs as the result of stricture from that which it has when it follows an injury in a healthy urethra. In the former category, 45 cases occurred, of which 15 died; in the latter were 19 cases, and no deaths. This difference in the result is, assuming the treatment in both classes to be equally prompt, no doubt due to the fact that, in the former class, the urine has been long retained in a distended portion of the urethra behind the stricture, and, when extravasated, has become more or less altered from its proper character: in the latter, when urine is extravasated (which does not always occur), it is urine *pur et simple* that is poured out. In all cases, early incision into the perinæum is the practice to be followed; and in cases of extravasation from stricture, Mr. Bryant recommends that the stricture itself be divided at the same time that the incision is made in the perinæum. In cases of ruptured urethra from injury, the following is the line of practice recommended by Mr. Bryant, and apparently followed at Guy's Hospital.

"If called to a patient who has evidently been the subject of an injury to the urethra, suffering from simple retention, the first object of the surgeon should be to attempt to pass a catheter; if the urethra is not completely torn away, and there is not much blood locally effused, there will be a strong probability that he will succeed, and, having done so, the instrument should be left and fastened in; a gum elastic instrument, therefore, with a strong stilette, should be employed. If the attempt at catheterism, although having been fairly made, should fail, some other means must be employed; for it is clear that an outlet for the urine must be obtained, or otherwise extravasation, with its dangers, will necessarily follow.

"An incision into the perinæum with a grooved staff is unquestionably the soundest practice; by it the extravasated blood and urine, if it exists, finds a ready outlet; and the bladder, when it contracts, will find a vent for its contents, without the dangers occasioned by an extravasation of urine.

"If the orifice of the vesical end of the ruptured urethra can be found with a grooved probe, a catheter should be passed, the instrument having been first introduced through the penis, and subsequently guided upon the grooved probe into the bladder; if difficulty is experienced in finding the orifice, there need be no alarm, as it is quite clear that the urine will readily find its way externally through the artificial wound; an early attempt to pass a catheter should, nevertheless, certainly

be made, for it is most important that the continuity of the urethra should be restored as early as possible.

"When a catheter has been introduced, it must be left in; for it is equally important that the patency of the canal should be maintained during the whole period of its repair, and its subsequent contraction in a measure neutralised. The frequent passage of an instrument after the repair has taken place is an important point to be observed; this practice being the best guarantee that a traumatic stricture will not be the result, and if it be, the risks will be materially lessened."

At a subsequent page, Mr. Bryant again insists on the necessity of dilatation by catheterism after rupture of the urethra, in order to prevent the occurrence of traumatic stricture—an affection which he shows to be less amenable to treatment than stricture arising from other causes.

THE MINUTE ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM IN THE LOBSTER (ASTACUS MARINUS). By T. S. CLOUSTON, M.D., Assistant-Physician Royal Edinburgh Asylum, etc. Pp. 35. Edinburgh: 1863.

THIS is a reprint, from the *Edinburgh New Philosophical Journal* for the present month, of a portion of a prize thesis presented by Dr. CLOUSTON on the occasion of his graduation in the University of Edinburgh. We find here evidence of an attentive study of all that has been done in the matter of the nervous system of the crustacea by previous anatomists, coupled with independent and original observation. The pamphlet is illustrated by two plates, containing thirteen figures representing nerve-tubes, sections of ganglia, etc., as observed by Dr. Clouston. Those who are interested in comparative anatomy will probably derive instruction from Dr. Clouston's account of his researches.

OBESITY. We borrow the following curious cases of this inconvenient affection from an interesting book just published by M. Ferdinand Caunière, entitled *De la Médecine naturelle Indo-Malgache.* In a well-constituted adult the proportion of fat is not more than about a twentieth of the weight of the whole body; it may exceed that proportion to a certain extent without inconvenience, but it becomes a regular disorder when it reaches the proportion of one half. Persons have been known to weigh from 600lbs. to 800lbs.; a man spoken of by Wadd had attained the enormous weight of 980lbs. An Englishman, named Bright, mentioned by Coe in the *Philosophical Transactions*, weighed 616lbs. at his death; at the age of 10 he had weighed 140lbs. Bartholin mentions a child of that age who weighed 200lbs. Drs. Percy and Laurent mention a young German woman, who at her birth weighed 13lbs.; at the age of six months, 42lbs.; at six years of her age she could carry her mother, and promised to become unusually muscular. At 20 she weighed 450lbs.; she measured 5 feet 10 inches in height. The circumference of her arms was 18 inches; she could carry 250lbs. in each hand, was active, and could walk for an hour without feeling fatigued. She did not eat more than an ordinary person, drank tea in abundance, and was remarkable for her good humour. In general, obesity is not accompanied with longevity; most people are of a plethoric habit, and the functions of the principal organs are always more or less impeded, which naturally causes various affections. M. Caunière's book contains various curious facts and some useful hints, derived from his experience of the wonderful cures performed by the natives of Madagascar, who only use medicines drawn from the vegetable kingdom, and to whom bleeding, whether by the lancet or leeches, blisters, and cauteries, are unknown. (*Galignani's Messenger.*)

British Medical Journal.

SATURDAY, JANUARY 31ST, 1863.

GRATUITOUS SERVICES.

A CORRESPONDENT sends us a paragraph from a Leicester paper, which tells of the salary of the chaplain of the Leicester Infirmary; and, in doing so, he takes the occasion of asking what are the grounds upon which a distinction should be shown in respect of payment of the spiritual and not of the corporeal advisers of the patients.

"Leicester", he writes, "is a flourishing town, doing well in wool, fat, and flesh, as regards the market; and does a brisk business not only in the sock and stocking, but also in the shoe trade. It is well to do also in matters medical. It owns about thirty physicians and surgeons, and returns the only *provincial* member of the present Council of the College of Surgeons, viz., our respected associate Mr. Paget. Its hospital *employés*, who willingly work for nothing, and do much 'free, gracious, and for nothing,' are men who deservedly stand high in the profession. The chaplain, who is concerned only about the souls of the hospital inmates, and has nothing more to do with their bodies than seeing them quietly covered over in decency, is, as you will see, bold enough to ask, at a quarterly court too, for more in the shape of additional pay. He no doubt finds, as Christmas draws nigh, that some of its real concomitants—tradesmen's bills—come in. But how fares the doctor, who at all hours may be called on to quit profitable employment at home, or in his out-door practice, to go on a mission of mercy in body-curing to the distant hospital? At Christmas, he has no cheque for £12 sent on to his banker, to stave off the butcher, the baker, tailor, or draper, all of whom are probably charitable subscribers to the hospital, but sustain only a sort of discount loss in the shape of a couple of guineas, hopefully and profitably invested! Why do nine-tenths of tradesmen subscribe to hospitals but to enlarge the field of their commercial pursuits? Why do ninety-nine-hundredths of medical men clamour and cry after public service in our hospitals, but for the benefits that are supposed to accrue in the shape of private practice? The subscriber and the medical man, be it remembered, deal only with the frail fabric of the human body. The chaplain is entrusted with the care, cure, and preservation of its immortal soul; and, in his official capacity, may properly be said to be under strong obligations and heavier responsibilities to the Divine Being to lend himself willingly and *gratuitously* to such a 'labour of love'. But do we find it so

The present instance furnishes a proof that the medical man will render for nothing more arduous service than can be obtained from the clergyman under anything less than, to say the least, a very handsome and competent stipend.

"What are the comparative responsibilities pertaining to the practice of the two functionaries, regarded from a worldly point of view? Was an action-at-law ever successfully brought against the former for failing in his duty to his patient? or was he ever mulcted in heavy damages for having failed to effect an impossibility? The historical records of our assize-courts prove, on the other hand, that cases in which the medical practitioner has grievously and unjustly suffered, for having so failed to work a wonder or a miracle, are neither few nor far between. With such an immunity from penal consequences in practice, with a substantial pecuniary acknowledgment sufficient to keep him twelve months in broad-cloth, and without any great sacrifice of talent, time, or money, why should the chaplain of a public hospital receive payment for his services, any more than the members of its all-important medical staff?"

WHAT IS DISEASED MEAT?

We every week read of enormous quantities of meat "unfit for food" being destroyed by order of the inspectors of markets in this great London. Every one will rejoice to hear of the vigilance of those officers of health, as we may fairly call them; and we apprehend that there is no fear of such officials erring on the side of over-destructiveness. Nevertheless, as this destruction of "unfit food" is carried on under the protection and in the name of sanitary science, we should much like to have some distinct—*i.e.*, appropriate, scientific—definition given of the meaning of the words "meat unfit for food." We consider that there ought to be some manifest and positive sign, by which the fitness or unfitness of any given article exposed for sale in a market may be at once declared.

We have heard so much of late of the injury inflicted on the people of the country through the ingestion of "unfit food," that we naturally inquire first, what is this unfit meat which they take; and, secondly, what are the injuries under which they, in consequence, suffer?

It appears that the authors who chiefly maintain that great injury is done to the bowels of our humanity by this evil food, are obliged, for the most part, if not altogether, to resort to the writings of Germans and foreigners for individual instances of the evil effects produced. And they maintain that if, in this country, all sorts of violent diseases do not immediately follow on the ingestion, yet, we may be sure, the people are slowly suffering under the insidious and poisonous action of the vicious food.

Now, in the name of common sense, and for the sake of science, whose name is sometimes unfairly invoked, we would ask for some kind of scientific proof of the position here assumed. Let us have, in the first place, a definition of the terms "unfit food"; and then let us have proofs of its injurious effects on the bowels and bodies of our countrymen. Is all meat which is called unfit really so? "Measly" pork, for example, would, we suppose, hardly escape condemnation; yet is it really true that such pork is unfit for food? May it not be fairly asked, is it not true that roasting and boiling absolutely destroy the vitality of the cysticercus? And when this animal is destroyed in the pork, is or is not the meat fit for food? We believe it is now well ascertained, that pork is guilty of conveying worms into the body of man only when eaten raw; and that, in fact, unless men eat pork in the uncooked or semi-cooked state, they would never be troubled in their bowels with the loathsome parasite. We give this as an example of the questions which require the scientific consideration of our meat inspectors.

Far be from us the desire in any way to arrest or interfere with the excellent supervision above referred to. In such a case, it is surely better to go too far than not far enough—to err on the safe side. All we wish is that such positions, as that assumed of injury done by unfit food, should not be strained beyond a reasonable point. We wish this in the name of sanitary science, which too often suffers in consequence of the wrong conclusions and actions which are taken in its name.

USE OF METHYLATED SPIRIT IN PHARMACY.

On January 9th, an interesting discussion on the above subject took place at the Pharmaceutical Society. The general feeling was dead against its use; and numerous instances of the abuse of the article were related.

"Mr. Reynolds of Leeds said, in a letter, that the poor were almost entirely supplied with methylated medicines; but the manufacture of sweet spirit of nitre was the chief field for the use of methylated spirit. In Leeds, there was hardly a druggist who did not use it; and there was good evidence to show that 12,000 gallons *per annum* were used in the manufacture of what are called 'Indian spirits.' One chemist alone uses 1000 gallons of sweet spirit of nitre in the production of these compounds. [A sample of one of these compounds was exhibited. It was called 'Cordialised and Highly-concentrated Indian Brandee,' and was evidently a strong spirit, flavoured with sweet nitre, and sweetened—much more of the nature of a liqueur than a medicine. It is retailed in Leeds at threepence per ounce.] Mr. Reynolds stated that by the use of methylated spirit all distinction between pure and impure medicines was broken down.

"Professor Redwood said that the use of methylated spirit in liniments for the army and navy had received the sanction of the Army Medical Board. In many cases, too—as in hospitals and dispensaries—the use had been sanctioned by medical men; and when this was the case, the pharmaceutist had no choice but to do as he was ordered. He (Professor Redwood) set his face entirely against its use, and, with Professor Graham and Dr. Hoffman had objected to its employment for sweet spirit of nitre. He believed the use of methylated spirit in pharmacy had in some districts opened up an entirely new line of business. In North Wales, he was informed that tincture of assafœtida was now sold on a scale hitherto unknown. Assafœtida used to be taken solid; but now a cheap tincture could be bought, it was preferred in that state, and large carboys of the tincture were sent to some small towns. Great difficulties, he thought, would be experienced in any attempt to stop the use of methylated spirit for medicines.

"The Chairman said the *Pharmacopœia* Committee was opposed to the use of methylated spirit even in liniments, for fear it might stray into other preparations. The opinion of the entire committee, and of the College of Physicians, was against its use."

HOUSE-WARMING AND VENTILATING.

We need hardly tell our readers that, with all our boasted hygienic rules and sanitary and social scientific movements, the mode of supply of air to our dwelling-houses, and our methods of heating them, are simply of the roughest and most barbarous. The only individuals who are really scientifically supplied in these respects are those interesting persons who are known of late by the title of "Sir Joshua Jebb's pet lambs." No preparation whatever is made, even in our most luxuriously built modern houses, for the admission of that prime article of life, fresh air. The air finds its way in as it best may—through key-holes, and window-chinks, and doorways, etc. During winter nights, when many fires are burning in our London houses, and large draughts of air are passing up the chimneys, and, consequently, large draughts required to replace them, the air finds its way in as above, and also by the following ways: down some unused chimney; or, and chiefly, from the kitchen and cellar departments; and also not unfrequently from the sewers through untrapped and even trapped openings, and through all rat-holes and crevices leading into them.

The only attempt hitherto made to ventilate our houses has been made at the wrong end; viz., to get rid of the foul air. The only true and perfect ventilation in a town house is that which ensures a supply of fresh air. To ensure a supply of fresh air involves of necessity the removal of the foul air. The condition of our houses is, in this respect, a disgrace to the scientific knowledge of architects. The matter, too, is becoming every day one of greater importance, on account of the increased consumption of gas, and the necessary introduction, therefore, of poisonous gases into them.

The heating of our houses, again, is, as we have said, most barbarous. Why does not some scientific member of our profession take up and work out practically the subject. By an excellent invention in this way, he would make a grand fortune, and prove himself a benefactor to mankind. It has been said, that an ordinary chimney is the complete solution of the following problem: "To construct an apparatus which, with the greatest possible expenditure, shall produce the least possible effect."

Lastly, at the French Academy, Général Morin read a paper on Ventilation and Heating by means of fireplaces. His experiments were performed in the room of the Director of the Conservatory of Arts. He found, first of all, that 400 cubic *mètres* of air passed every hour through the chimney without any fire. When eight *kilogrammes* of wood were burnt per hour in the same fire-place, from 1200 to 1300 cubic *mètres* passed up the chimney. It resulted from his experiments, that seven-eighths of the heat produced passes up the chimney and is utterly lost as regards the heating of the room, in the fire-place of which the wood is consumed.

THE MEDICAL COLLEGE AT EPSOM.

We print, at another page, a further appeal from the Council of the Royal Medical College at Epsom. The appeal is a most honest and legitimate one. We believe that there are still some ten thousand members of our profession who have not yet contributed any pecuniary support to this noble institution—a strange and remarkable fact, when we consider its highly useful and democratic character. But if the immense benefits conferred on the profession by the College are now so universally admitted as to need no illustration here, how comes it, then, that there are so many members of the profession who have hitherto withheld from it their support? We can well understand that there are many of our hard-working brethren with whom the struggle of life is far from an easy one, and with whom even small pecuniary aid is not rendered without difficulty; but we would remind them that the benefits of this College are especially destined for those members of the profession and their families who have been least favoured by fortune in this battle of life. Those who have most reason to be anxious for the future of their families are just those who, above others, should by precept and example do their best to sustain and invigorate the growth of this paternal institution.

We would especially call attention to one point in this appeal. It is said that there has been a dread with many of their subscriptions being sunk in building. We now learn that those who entertain this idea can, by expressing the wish, have their donations, etc., added to an Endowment Fund. Such a disposition of their money no one can object to. We

ncerely trust, with the Council, that the establishent of this fund may eventually be the means of ing away with that most painful and expensive nvass which is at present necessary to the admison of foundation scholars, by increasing largely the mber of scholarships. We would ask our brethn: Is there any more legitimate boon which we as body can grant to the family of a brother in disess, than that of giving his children an excellent ucation? Could there be any greater good which unfortunate or disabled father of a family could sh for his offspring, than that they should receive e benefits of that best of fortunes—a good educaon? It is to ask the profession at large to further is grand wish of theirs, that the Council now make eir present appeal

THE WEEK.

HE London and Liverpool Insurance Company has, Mr. Spencer Wells points out, invented a new plan torturing gratuitous medical advice out of medil men. That ingenious body, instead of applying ectly to the private medical man of the person ose life is proposed for assurance, now have the plication sent to the medical man by the person prosing himself. This is a distinct putting on of a ere thumb-screw. How can the private medical an refuse the request of his private patient to cery to his condition of health? Mr. Wells having d such an application made to him, answered it the Company; and then writes the following exlent letter to his patient:—

"January 22, 1863.

"Dear Mr. ——,—I received yesterday, from the verpool and London Insurance Company, a paper, led a 'private medical report,' containing a printed m, which the company have induced you to sign, reesting me to give them a great deal of information pecting your 'habits, conformation, and general alth,' and informing me that this information is nesary to enable the directors to decide on the proposal insurance.

'As a friend and patient, it would, of course, give me at pleasure to oblige you in any way, and it would give far less trouble to fill up the paper sent to me than write this letter; but there is a principle of great imtance to the medical profession involved in this matter, ich I will explain to you.

'Some years ago, most insurance companies obliged who made proposals of insurance to come provided h a medical certificate, and also to submit to an exa nation by their own medical officer. But, as the mpanies gained very large profits, other companies re started, and competition had the good effect of ering the rates of annual payments, and of dividing whole or part of the profits of the company among assured. But the tables are still so calculated as only to insure the company against loss, but to se e so large a profit that a very considerable sum is paid rly by every office as a commission to agents and ers who bring in business; in other words, who induce persons wishing to insure their lives. It is clear t the profit or loss of any office must depend, in a great measure, upon a judicious selection of lives; and equally clear that the directors must be guided in their selection by the reports of their own medical officers, and of the medical attendants of the assured. Nearly all the oldest and most respectable offices have gradually been brought to acknowledge that they should pay for the information by which their acceptance or refusal of a risk is decided. A few still hold out, and argue that, as they pay their own medical officer, the assurer should pay his; and this would be fair enough if the engagement were one of mutual obligation; if the assurer were as anxious to insure his life *in one particular company*, as the company is to obtain business. But when there are not only one or ten, but twenty or fifty thoroughly respectable, rich, well-established companies competing for business, and perfectly willing to pay a fair or moderate remuneration for the information they require, no assurer of ordinary intelligence would make his proposal to an office which obliged him either to incur expense, or to ask a favour of his medical man, when he might go to equally good offices who imposed no such condition, but were perfectly ready to pay for the information required.

"I know nothing whatever of the Liverpool and London company; but of all the shabby modes of evading payment for necessary information, and of obliging assurers to obtain this information, that adopted by this company is the shabbiest I ever heard of.

"You, as a lawyer, would very properly resist any attempt of any public company to cut off the proper emoluments of your profession, and will feel that I, as a medical man, by exposing the artifice of this Liverpool and London Company, am only doing for my class what you would do for yours. I am quite ready to furnish you with the names of twenty companies who offer quite as many advantages to assurers as the Liverpool and London can possibly do, and who are not driven to the expedient of begging for gratuitous medical advice.

"Believe me to be, dear Mr. ——,

"Very truly yours.

"T. Spencer Wells."

His patient, being a man of sense as well as of law, at once sees the injustice of the insurance office's proceeding, and, therefore, writes to the secretary of the aforesaid Company the following note:—

"Dear Sir,—Since I was at your office in Liverpool the other day, I have seen Mr. Spencer Wells, my medical attendant, and having learnt from him that the letter I signed there, and which was addressed to him, is such as to exonerate the London and Liverpool Insurance Company from paying the usual fee, and as he refuses to take any fee from me for his services in this matter, I must decline to insure my life again in your office on such terms, much preferring to insure in an office which properly remunerates medical men for their advice.

"I am, sir, your obedient, etc."

This is certainly a most excellent example; but can we hope to find many such sensible and reasonable patients as Mr. Wells's has shown himself to be? There may, however, be doubts as to the question who should pay the fee to the medical man, who has an undoubted right to it; and, if the office decline to pay it, we really cannot see why the person whose life is proposed should not do so. The assurance effected is for his benefit; and it is for him, as it seems to us, to settle the question with the office. Nevertheless, Mr. Wells's advice is excellent. Let every medical man do his best to persuade his clients to insure their lives only in those offices who will pay medical men for the information they obtain. We should

then soon have a stop put to their ingenious methods of obtaining the advice gratis.

The Director of the French Administration General of Public Health has applied to the English Ambassador in Paris, requesting that he would, through the English Government, obtain from the medical men of this country information on the subject of Tinea Capitis, as observed in the United Kingdom, and in India, Canada, the Ionian Islands, etc. Tinea capitis—a comprehensive term—is, we believe, a much more widely spread disease in France than in England; so much so, in fact, as to become the subject of governmental interference. The Public Administration of Health in France is, it appears, about to organise the treatment of the disease on a more systematic plan. Before doing so, this application to other countries is made for information from those who have had most experience on the subject. A series of questions have been forwarded in schedules, to which answers are sought. The English Government, through Earl Russell, has in consequence applied to the London College of Physicians for its assistance in furthering the wishes of the Frenchman, requesting the College to obtain for him the information sought for. The College have referred the subject to a Committee; and the Committee have recommended that copies of the papers containing the questions be sent to Sir John Liddell, Dr. Gibson, Dr. Farre; to the senior physicians of the naval hospitals of Plymouth and Portsmouth and the military hospital at Chatham; to the medical officers of the Skin Hospital; to the Presidents of the Colleges of Physicians; and to the senior physicians of all the leading hospitals in the country.

Mr. Serjeant Wheeler, Liverpool County Court Judge, does not approve of medical degrees obtained without labour and residence. The learned serjeant thus delivered his judgment on the point last week in his court. Mr. Brown was called to show that the fees charged by a professional brother—Mr. Parker—were too high. Mr. Parker had charged at the rate of 7*s.* 6*d.* per visit; whereas he (Mr. Brown) charged only 5*s.* 6*d.* per visit, and 6*d.* for the toll-bar. The serjeant evidently did not approve of this sort of "reducing" evidence.

"Mr. Brown, who was called for the defence, said he was a physician. His Honour asked, if he was a physician, how could he speak to a surgeon's fees? It was intimated to his honour that the witness was a surgeon—that he was a Doctor of St. Andrew's. His Honour: Just as I expected. This is done away with now, is it not? The witness replied that it was not; residence was now required. His Honour said, formerly a person could go one day, get a degree, and walk away dubbed a doctor the next. He had a great objection to this, and preferred degrees obtained by hard work. It was further stated that Mr. Brown was a Member of the College of Surgeons of Edinburgh; and with this statement his Honour expressed his satisfaction."

Our readers will see, by the report of the trial giv at another page, that the lawyer was non-suit notwithstanding Mr. Brown's views of reasonal charges.

We believe that the Government has made appli tion to the Royal College of Physicians of Lond demanding that the College shall receive a lease its property from the Government. This dema has not a little astonished the College, and will, have no doubt, be stoutly resisted. The Governm asserts that the College is merely leasehold proper that it is held from the Government for a term one hundred years, forty of which have expired; a now demands that the College shall enter int lease for its remaining term of sixty years. Wh has made the kingdom of red-tape thus suddenly r up and make such a claim upon the College is h of comprehension. The College, we believe, has other title to possession beyond the fact of act and quiet possession, and from what is derived fr the general idea of the property having been a g from the Crown. It has no title-deeds. It has ne yet received any lease from the Government, w ought originally to have granted one. The Gove ment, therefore—on, we suppose, the principle better late than never—is now attempting to rep its former negligence.

Mr. Turner, Dr. A. Ransome, and Mr. Knig Chairman and Secretaries of the Manchester a Salford Sanitary Association, take exception t portion of Dr. Buchanan's report, lately alluded in these pages. In his report Dr. Buchanan serves, that

"Typhus fever (of the true Irish type), which had prevailed epidemically since the year 1847-8, has in present year again appeared, and in Preston and M chester has assumed the epidemic form."

To this the following reply is made.

"We are willing to concede to Dr. Buchanan t twenty fatal cases of the disease did occur during period of time specified by him. But do twenty ca in a population of nearly half a million, scattered o five months, constitute an epidemic? That no e demic of typhus fever has prevailed in Manchester si the year 1847-8 is perfectly true, though sporadic ca have during each one of the intervening years ne been altogether absent. Nor, if we consider the num and density of the population of Manchester, is th anything very surprising in such an occurrence. If general standard of the public health is gradually d riorating in consequence of the too doleful allowanc food meted out to the unemployed, it would be natu to expect that each succeeding month, or, at all eve each succeeding quarter, should exhibit some deci increase both in its general and fever mortality o that which preceded it. What, however, turns out to the true state of the case? We find that, in the f six months of the year 1862, 31 deaths occurred Manchester from genuine typhus fever. In the n quarter (and to this and the succeeding one the rep more especially refers as those in which the disease t on its epidemic character), the total mortality from fe

is set down at only 78 cases, of which 11 are stated to have been due to typhus; and in that which followed (the last of the year 1862), the numbers given are 118 and 12. We thus see that, during the six months the famine epidemic is said to have prevailed, it carried off only 23 victims; while during the six preceding months it sacrificed no less than 31. We may further observe, that the total number of deaths from all causes in Manchester and Salford during the first six months of the year 1862 was 5,979, while during the last six months it was only 5,409. We have thus the satisfaction of finding that, in spite of the devastating effects likely to be produced by combined epidemics of typhus fever, scarlatina, and whooping-cough, in spite of the wan and haggard looks of the unemployed, in spite of the inadequacy of the food 'to preserve health and strength throughout a lengthened period', 576 fewer persons were conveyed to the cemetery and churchyard during the six months that have just elapsed than during the two quarters that preceded them. These figures speak for themselves."

Virchow appears to be taking a prominent part in the world of politics, as well as of science. The task of drawing up the opposition address to the King of Prussia was, we read, "entrusted to Dr. Virchow, who, it is said, acquitted himself of it with his usual readiness and ability."

"Do you", writes a French journalist, "remark the place that ophthalmology—what a frightful word to write!—takes in our French journals, our book-shops, and on the walls of Paris? All the ophthalmologists of Germany have invaded the town. M. Sichel has made a famous opening there for his compatriots! Since the death of M. Deval, three oculists at least have appeared to take the place: M. de Wecker, M. Liebricht, and M. —, —I forget his name, who have lately arrived, have themselves much spoken of in the journals."

At the celebrated and ancient University of Alcala, on the 19th of December last, the remains of Francisco Valles were exhumed. He was an illustrious physician of the sixteenth century, the Spanish Hippocrates, deified by his compatriots. Deputations from the Madrid Academy of Medicine, from the Medical Branch of the Army, the royal medical attendants, the press, etc., attended this "pious and imposing ceremony. The memory of the illustrious *savant* was loudly glorified in various discourses, and a banquet terminated this solemn homage rendered to the celebrated commentator of Galen and Hippocrates."

"I have", says M. Chassaignac, "twice practised amputations by caustics. In both cases, the amputation was performed at the middle of the leg, in patients so enfeebled that I dare not amputate in the ordinary way. Both cases were successful. In one case I used the Vienna paste, and in the other a mixture of sulphuric acid and powdered madder. The first of these caustics is not so sure a protection against hæmorrhage as the second, but its action is less painful. In these two cases I left the *bracelet* fixed on for twelve hours; and five applications were necessary for the complete destruction of the soft parts, the bones being then divided by a chain-saw." It is, we imagine, not necessary for us to describe this last surgical instrument—the bracelet of M. Chassaignac.

The *Gazette Médicale de Lyon* writes thus of advertisements: "The insertion of advertisements in the medical journals is without excuse or justification. Whoever permits it, makes himself voluntarily and knowingly an accomplice in the barefaced falsehoods of the advertising system, and becomes morally responsible for the accidental misfortunes, or the injury done to mortality, which thence result. The *Gazette de Lyon*, we are happy to say, has existed fifteen years, and still exists, thank Heavens, without resorting to this disgrace!"

"I have employed, in the acute articular rheumatism of children, emollient and narcotic applications, large doses of nitrate of potash, leeches, bleeding, and opium, without deriving any real benefits from them. I therefore", says M. Bouchut, "now never resort to these agencies, and only employ sulphate of quinine or veratrine. These two agents are, in fact, actual specifics in acute rheumatism. In a very large majority of cases, they remove the articular inflammation with a rapidity surprising to those who are wont to witness the disease prolonged for weeks and months. Unfortunately, quinine is expensive; and it must be given in large doses, and is then apt to produce unpleasant consequences. Veratrine is equally efficacious, though its physiological action is totally different. Given in doses proper in this disease, it never acts as a purgative. The only action which it has in common with quinine is to reduce the pulse. In two or three days it will bring down the pulse from 120 to 100, 90, and even 60."

There is in London, writes *L'Union Médicale*, a society called *Du Cancer* (Cancer Society), where it is taught that cancer has never been observed in persons affected with an ulceration of the leg. M. Broca, therefore, produces a case at the Surgical Society demonstrative of the contrary.

The Imperial Academy of Medicine has received a communication from Dr. Robert Barnes of St. Thomas's Hospital, claiming the priority in practice of producing premature artificial confinement by means of the uterine dilatation lately extolled by M. Tarnier.

Netley Hospital. Arrangements have been made at Chatham for the removal of the invalid depôt, together with the staff at the general hospital, Fort Pitt, to Netley Hospital, which will be ready to be opened in about a month from the present time. The appointment of governor of Netley Hospital has been conferred on Colonel Wilbraham, C.B., governor of the General Hospital, Woolwich.

ROYAL MEDICAL COLLEGE, EPSOM.

Few of those who were instrumental in calling into life the Royal Medical College at Epsom, could have anticipated, ten years ago, that, after the lapse of so short a time, it would be enabled to take its place among the first educational institutions of the country. But those who stood by its cradle had a strong confidence in their cause, and in the powerful vitality of their profession. This confidence has not been betrayed. The infancy of the College has not passed away without some rude shocks, which served to test its vigour; the storms have swept over it without impairing its hold upon the profession from which it sprung, and the time has come when the friends of its childhood may hope to see those too rally round it, who, not animated by the same enthusiasm, failed to see in its young germs the same promise of ultimate success.

The time has arrived when the Council need no longer dwell upon mere aspirations, and point to a promise of future reward as an inducement to the profession to support the College at Epsom. They may now speak of a goodly company of boys they have already trained and sent out well prepared for the battle of life; they may point to some who, as in the great public schools of our country, have, through the bounty of benefactors, received gratuitous education; they may draw attention to the weary and invalid of our profession, who in the College have already found the solace and comfort of a home.

But what has been achieved must only be regarded as an earnest of what remains to be done; and as a guarantee that it will be done. The Council are desirous of increasing the number of Foundation Scholarships, and of placing their maintenance upon a footing, independent, at least in part, of the precarious support of annual subscriptions. This should be the noble aim of the entire profession, and if this call be responded to as one concerning each individual member, the realisation cannot be long wanting.

The exhibitioners defray their own expenses; but from their payments there is no surplus, nor is there likely to be, for the other purposes of the College. The profession has a right to provide for its own offspring the education it deems fit, and upon its own terms; but it has also an imperative duty to perform to those, who, through the vicissitudes of fortune, have been prevented from securing to themselves, their widows, or their children, such maintenance as their rank and education demand.

Hitherto there has been an objection, on the part of many medical men, to contribute to what is essentially their own institution, from a fear that their money would be sunk in bricks and mortar. The building is now on the point of completion, so that this fear will soon cease to have any foundation; moreover, any donor, or subscriber, may prevent such an application of his contributions absolutely, by intimating a wish that they should be added to the Endowment Fund. When this fund has reached a certain point, it is earnestly to be desired, that the admission of the Foundation Scholars may no longer depend upon the present harassing and expensive method of a general canvass of all the governors, but take place by a competitive examination of the candidates, or some similar proceeding, which may at once render it a reward and a stimulus, while it takes from it that purely eleemosynary character which now surrounds it.

It is this consummation, to the fulfilment of which the Council would venture to call the attention of their brethren. It is this noble object for which the Council now plead to every registered practitioner; its realisation will be the best evidence that there is such a thing as a strong professional brotherhood, and that the *unity of the medical profession* is more than a dream.

Donations and subscriptions received at Messrs. Goslings and Sharpe's, 19, Fleet Street; and by the Treasurer, John Propert, Esq., 6, New Cavendish Street, W.

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the Journal cannot be sent to them.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 10th, 1862.

WEST SOMERSET BRANCH: CONVERSAZIONE MEETING.

A conversazione meeting of this Branch was held at Clarke's Castle Hotel, Taunton, on Wednesday evening, January 7th; H. Alford, Esq., President, in the Chair.

Communications. The following communications were made.

1. Excision as a Local Mode of Treatment in Cancer of the Mamma. By H. Alford, Esq. He expressed himself as opposed to the operation, and gave a decided opinion, as the result of his experience and observation, that palliative treatment afforded a prospect of longer life than excision.

An animated discussion followed, in which Messrs. Collyns, Randolph, Bush, H. J. Alford, W. Liddon, and Drs. Pring and Kelly, stated their opinions, cited statistics, and related cases. The prevailing opinion appeared to side with removal, where ulceration had not taken place and the disease was uncomplicated with glandular affections; and that wherever a tumour presented *doubtful* character, its removal, with or without partial excision of the mammary gland, should be effected.

2. Mr. Liddon read an interesting case of Aneurisma Tumour of the Femoral Artery, where the usual characteristic symptoms were absent. A formidable operation and its fatal termination were described and commented upon.

3. Mr. Liddon also showed specimens of Calculi recently removed at the Taunton and Somerset Hospital. One of phosphatic formation, of the size of a small bird's egg, occurred in a boy born and bred in Taunton, and so far as is known, presented a solitary instance of this disease in a native resident in the town. Until the last few years, cases of stone were almost unknown in this vicinity; and lithotomy was not performed at the Taunton and Somerset Hospital during the first fifty years from its foundation.

4. Mr. Randolph read a remarkable case of Gun-shot Wound, where the charge of shot passed through the arm of a boy eight years old, dividing the brachial artery and median nerve. The limb was saved; and although for a long time it was almost deprived of sensation, and no pulse could be felt at the wrist, after a lapse of two years complete recovery took place, both of nervous power and of circulation through the radial artery.

5. Some interesting wet and dry preparations were exhibited, and short histories of cases given.

New Member. Dr. Hamilton Kinglake was elected a member of the Association.

Progress of Medical Science.

Treatment of Burns. Dr. John Ashhurst, late Senior Resident Surgeon to the Pennsylvania Hospital, in a paper elicited by recent accidents in Philadelphia, observes that a burn is to be looked upon as a constitutional more than a local affection. The first question should be, does the sufferer feel cold; and his pulse and respiration should be carefully observed. Put the patient instantly to bed and cover him with as many blankets as can be obtained; give him quickly a moderate amount of stimulus and a decided anodyne; such as sixty drops of laudanum with an ounce of brandy. The first danger is from shock; of ten patients received into the Pennsylvania Hospital last September from the fire at the Continental Theatre, six died within twenty-four hours, and from shock; some having never reacted, and some after partial reaction sinking again with frightful rapidity. The surgeon should not be in a hurry to dress the patient before attending to constitutional treatment; they will perish from shock if reaction be not obtained. Brandy and opium are the remedies most to be relied on in the treatment of burns. Brandy should be given in the form of milk-punch in preference to being mixed merely with water. The amount of stimulation which is well borne and even necessary in these cases is surprising. For weeks and weeks Dr. Ashhurst has given patients two ounces of milk-punch containing one-third brandy, every hour day and night, making a pint of brandy in the twenty-four hours, and this to delicate women and perfectly sober men. Large doses of opium are also required. He generally gives half a grain of the sulphate of morphia every six hours. When the surgeon has seen to the general condition of his burnt patients, and not before, he may properly inquire as to the extent of their injuries. And upon this must in a great degree his prognosis be formed. If half of the surface be involved, no matter how superficial the burn may be, or how good may be the patient's condition, he will almost surely die. Even a burn of one-third of the surface, if it be over the trunk, will almost necessarily prove fatal. And in no case should a recovery be certainly predicted, for burns are not only the most mortal, but the most deceptive injuries the surgeon is called upon to treat. Only a small portion of the surface is to be dressed at once, and it is well to have some systematic mode of procedure. Dr. Ashhurst usually dresses the arms (for they are almost always involved) before any other part, then proceeds to the body, and dresses the face last; this is important, as the dressings cannot be applied as closely to the face as to other parts, and are apt to fall off and require renewal during the changes of position necessary for securing the dressings to the chest or back. The material generally used at the hospital as a primary dressing is the "carron oil," consisting of linseed oil and lime water. This is the most convenient application; its results are, Dr. Ashhurst believes, as good as can be obtained from any other, and in his practice it has been found far more soothing than anything else. The zinc paint is a good dressing, but requires to be frequently renewed, as it becomes dry, and is then very irritating. It is made by incorporating the oxide of zinc with linseed oil, and is applied by means of a brush. He has also painted burns with the solution of lunar caustic, as recommended by Mr. Skey, but has not observed that the sensibility of the parts was diminished by the application. The best method of applying the carron oil is to soak pieces, not more than eight inches square, of patent lint, Canton flannel, or even old linen or cotton goods, in the mixture; and having laid the dressing thus prepared on the parts to be covered, to apply accurately over the whole oiled silk. Should the burn be of the first degree, or even of the second, provided the vesication were not very extensive, carded cotton might be a good application, as recommended by several surgeons. Even in these cases he should be disposed to cover the parts thoroughly with the carron oil before applying the cotton. Where, however, the parts are more deeply involved, rendering suppuration inevitable, he prefers the dressing by means of patent lint and oiled silk. Although he has not himself used cotton, he is familiar with its application in the hands of others, and he has not observed from its use the great relief from suffering which Dr. Anderson considers one of its principal advantages. If cotton be used, it should be carefully prepared; as met with in commerce it is too apt to contain germs which heat and moisture will develope into maggots. The dressings should be retained in place by means of roller bandages. The face should be covered with a mask prepared in the same way, and having holes cut for the mouth and eyes. It is better to keep the cloth over the face wet by frequent reapplication of the oil; but if this cannot be done it may be covered with oiled silk, secured in this case by adhesive plaster, for a bandage around the head is unnecessarily confining. When the patient is dressed, he almost always expresses himself as feeling much more comfortable. He should be encouraged to make hearty meals. The bowels are very often constipated at first, and should be opened by mild enemata; in the course of a few weeks, however, exhausting diarrhœa is apt to set in. Retention very often, and sometimes suppression of urine, occurs during the first days. This is particularly to be watched for in women, who from modesty are often prevented from making their wants known. The most universal accompaniment of burns and scalds is extreme thirst, and from an injudicious gratification of this desire (in obedience, perhaps, to the vulgar impression that water will put out the fire supposed to be lurking in the system) arises one of the most unfavourable symptoms—viz., sickness of stomach. Dr. Ashhurst allows small pieces of ice to be held in the mouth, or gives small quantities of carbonic acid water; but on no consideration permits more than a mouthful of water to be drunk at once. When the patient has been comfortably dressed and has sufficiently reacted, he may be considered out of immediate danger if the extent of surface burnt is not too great. The third and the eleventh are often spoken of as being critical days, and certainly death is very apt to take place about these periods from hypostatic congestions and effusions upon the lungs or brain, from tetanus or other unavoidable complication. After reaction, if the patient eat and sleep well, if he be quiet and do not vomit everything he swallows, he may be considered as in a very favourable condition. If, on the other hand, he become delirious, his chances of life are very much diminished. The delirium of burns more closely resembles that of *mania à potu* than anything else. The local treatment in this the second stage of burns must depend on the condition of the surface. And it is most important that the sores should be dressed as seldom as possible. The first dressing should not be disturbed till absolutely saturated with the discharges; after this the harm of exposure entailed by a redressing will be less than that caused by the presence of so offensive a mass as the old dressing has become. Dr. Ashhurst has generally found it necessary thus to renew the dressing after two days; and thenceforward every other day it will be usually proper to dress our patients entirely anew. As soon as the slough has come away from any part, he removes the carron oil or whatever dressing has been applied at first, and makes use of simple cerate spread upon patent lint. For this may subsequently be substituted the carbonate of zinc cerate, or the ointment of oxide of zinc, according to the nature of the granulations. In washing burns, after removing the soiled dressings, and previous

to applying the clean, great care must be exercised. The water should be at least at the temperature of the room; better warmer than colder; the room itself should be warm. Care should be taken not to touch the raw surfaces with the sponge used in washing; the granulations are very sensitive and bleed easily. On the other hand, the new skin surrounding the sore should be carefully wiped free from all the discharge which accumulates upon it; for it is important for the patient's health that this skin should exercise as fully as possible its exhalent powers. For the same reason, in applying the dressings no more than the part really sore should be covered, for to cover the new formed skin renders it useless. In the latter stages of burns of the fourth degree and deeper, the sore presents the appearance of an ordinary healthy ulcer; here touching the edges with lunar caustic in substance is very useful in promoting cicatrisation. Of course in this the third stage of burns care must be taken, by the use of suitable splints and bandages, to obviate the unsightly contractions which are apt to follow burns affecting more than the mere surface. Burns are the opprobrium of surgery, and will always continue to be so, under whatever treatment; but Dr. Ashhurst firmly believes the mortality might be much diminished, could the rules which have been impressed upon his mind by sad experience be made equally clear to every practitioner. (*American Journal of Medical Sciences.*)

Enormous Tumour of the Side. At the New York Pathological Society, Dr. Conant presented a large tumour removed from the side of a female, with the following history: Miss A., aged 36, presented herself before the medical class in the University of Vermont, with a large tumour attached to the right side from the median line in front to the median line behind over the crest of the ilium. The tumour was attached by a pedicle about sixteen inches long and four to five deep, and hung as low as the knee of the patient. It was somewhat pear-shaped, with the large extremity down, and was so heavy that the patient had to lift it over herself when she wished to turn in bed. It was estimated that the mass weighed thirty pounds. The patient was just convalescing from measles, and it was thought best to take a week for preparation before attempting an operation for its removal. She was again before the class, when, ether having been administered by Professor Stiles, Dr. Conant assisted by Professor Allen and others, commenced the operation by first inserting strong bobbin through the entire pedicle at short distances, tying very tight the different sections as a precaution against hæmorrhage. The ligatures were not all satisfactory as they were constantly giving way during the manipulation of the tumour, so that more than half of them were broken before the operation was completed. The tumour was removed with the écraseur of Chassaignac, dividing the pedicle into parts as large as the chain would surround; it required six segments to divide the whole. The hæmorrhage was very slight from the side of the patient, but the veins were numerous and large, and the hæmorrhage from the cut surface of the tumour was so great that they were obliged to be ligatured during the progress of the operation. The time consumed in removing the entire mass was two hours and ten minutes. The surface uncovered was sixty-four square inches. The lips of the wound were brought together by strong sutures, and the patient removed to the anteroom; some hæmorrhage appearing, the wound was opened, and one bleeding vessel secured, after which there was no more trouble. She was removed on a lounge by members of the class to her boarding-house, and carefully watched three days. No unpleasant symptom arose, dry cloths only were kept applied to the wound, which healed by first intention for about four-fifths of its length. The rest suppurated and healed by granulation, and the patient returned home the second week after the operation. The patient was very thin, and small in stature, weighing only about one hundred pounds before the operation. The tumour weighed twenty-five, so that one-fourth the entire weight was removed. Microscopic examination proved the diagnosis to be correct, and the tumour to be a hypertrophied integumental corium of a fibroma. The patient had numerous small ones in the skin over the body, and proposed to come down each spring and have the largest one removed. (*Phil. Med. Reporter.*)

Examination of the Urine in Disease. M. Bouchardat has arranged the necessary agents for such an examination, so as to make the latter easy. The principal agents employed are heat, nitric acid, tannin, lime, and an iodureted solution of the iodide of potassium. 1. *Heat.* A little above 100°; the urine becoming turbid, will separate albumen in the form of clots or flakes. But it must not be forgotten that every specimen of urine which becomes turbid under the agency of heat is not necessarily albuminous; hence we must employ. 2. *Nitric Acid.* Add some of this acid carefully to the urine. If albumen be present, flakes will be deposited. An excess of acid will dissolve the flakes. Any urine that becomes turbid under the influence of heat, and renders a precipitate under the action of nitric acid, contains, beyond all doubt, albumen. 3. *Tannin.* A solution is made by adding two hundred *grammes* of water to ten *grammes* of tannin, and ten *grammes* of ether are then added to preserve the solution. The action of this reagent cannot be relied upon, since the solution of tannin will produce an abundant precipitate, if soup, rich in gelatine, have been taken shortly before the analysis. 4. *Lime.* This detects admirably the sugar of diabetes. Fifty *grammes* of urine, and two *grammes* of lime, being boiled together in an assay-bottle, will give the colour of caramel, more or less dark, according to the quantity of sugar present. The quick-lime is slaked with water, and then introduced into a flask which has a tight cork. If fifty *grammes* of urine are not coloured when boiled with two *grammes* of lime, then two *grammes* more should be added. After the mixture is boiled again, if no colour appear, it is well to test the lime. For this purpose, a half-teaspoonful of starch-sugar is poured into the flask. On boiling, if the urine should then be freely coloured, we have proof that the lime had been properly calcined, and that the urine contained no sugar independent of the starch-sugar which had been added. 5. *Iodurette Solution of Iodide of Potassium.* This is prepared by dissolving one part of iodine and one part of iodide of potassium in fifty parts of water. This solution will communicate a chestnut-brown colour to urine containing sulphate of quinine or any other alkaloid likely to be administered in therapeutics. (*Jour. de Chim. Méd. and Amer. Med. Monthly.*)

Poisoning by Tincture of Veratrum Viride. Dr. G. N. Edwards was summoned, on December 18th, to see a scientific chemist who had taken one drachm of tincture of green hellebore (equal to about twelve grains of the powder). Dr. Edwards found him sitting in the water-closet vomiting into the pan. His features were sunken; the skin cold, and covered with a profuse clammy sweat; his pulse quite imperceptible. He complained of intense pain about the epigastrium. The vomited matter appeared to consist at first of the food and contents of the stomach; afterwards of glairy mucus. Dr. Edwards gave him immediately about an ounce and a half of pure brandy, which at once checked the vomiting. At this time, he was joined by Mr. Buxton Shillitoe, the patient's usual medical attendant. As the patient had slightly rallied, he was moved into a room a few yards from the water-closet, and laid on the couch in front of the fire. The surface of the body was still

very cold, especially the extremities. The clammy sweat continued, but the pulse could be felt indistinctly, beating, very feebly and irregularly, forty-four in the minute. A dose containing half a drachm of compound spirit of sulphuric ether and a drachm of aromatic spirits of ammonia was given, but immediately rejected by the stomach; but some brandy, given directly afterwards, was retained. A large mustard poultice was applied to the epigastrium, and a large hot-water bottle to the feet. Two or three efforts at retching afterwards took place, and he once or twice vomited food, mucus, and a small quantity of blood. Warmth gradually returned to the surface, and the pulse became somewhat better in volume and power. Brandy was given at short intervals; and, after about an hour, a second dose of ether and ammonia, which was retained. The patient then fell asleep, slept for about a quarter of an hour, and awoke with the expression, "I am all right now," and appeared comparatively well. There was no diarrhœa throughout. He had two or three times a slight return of the symptoms, did not sleep during the night, but was quite easy; and the next morning only felt the discomfort arising from the mustard poultice and the soreness of the muscles caused by the retching. He gave the following account of his feelings during the attack:—"Before taking the dose of the tincture, I had consulted Pereira, and finding Dr. Mead's dose of the tinct. helleb. nig. to be two teaspoonfuls twice a-day, and knowing the green hellebore to be of the same tribe, I considered, in taking one teaspoonful, I was rather under than overdoing it. The drachm of the tincture was taken about half-past four or a quarter to five o'clock p.m., and my stomach soon afterwards whispered that I had admitted a troublesome guest. I went upstairs and sat down, thinking a cup of tea would set all right; but the uneasy constriction of the stomach continuing, with a tendency to sickness, made me retire to the water-closet. The sickness once commencing, soon became alarmingly violent, with the most excruciating pain in the lower part of the stomach, the pain extending to about the size of my hand; the feeling of the seat of the pain was, that all the warm tea, water, etc., that I took to provoke the vomiting, went under the pain, making the constriction more and more violent. Finding the case getting desperate, I sent off for medical aid; the pain continued to increase, and the ejection from the stomach was now glairy mucus with blood, with running from the nose and eyes. The most painful and profuse cold sweating now came on, and the difficulty of breathing became more and more laboured. I could not help wondering at the presence of anything like heat or constriction of the throat; my mind was perfectly calm; and, although I thought it more than probable that I should die, I did not feel alarmed. Hearing and recognising the voice of one of my medical friends is all I recollected for some time afterwards. Immense circles of green colour appeared round the candle, which, as vertigo came on, and I closed my eyes, turned to red. The pain continued excruciatingly at the pit of the stomach, and a slight tendency to cramp existed when my legs were touched. It was some hour or more afterwards when I awoke, and found myself comparatively well. The sting of the mustard I can well recollect, and the horror of being forced to swallow brandy is even now with me. My bowels were not at all acted on. The next morning I took a dose of citrate of magnesia, and, in the evening, a blue pill with colocynth, which relieved my bowels this morning." No authenticated case of poisoning by veratrum viride has been recorded. The full dose of the tincture is eight minims. (*Med. Times and Gazette.*)

Logwood as a Deodorising Agent. A knowledge of its value seems to be more particularly desirable at this time when so many of our soldiers are suffering from sloughing and gunshot wounds. A simple aqueous solution of extract of logwood applied to such wounds will effectually do away with all offensive odour arising therefrom. In cancerous ulcerations, it is equally valuable; and in cancerous disease of the uterus, that most horrible of all diseases of women, it may be used in the form of injections with complete success in removing the terrible odour which always accompanies such disease. (*Amer. Med. Times.*)

Foreign Body in the Foot for Fifteen Years. A case is related in the *Buffalo Medical and Surgical Journal*, in which a piece of glass, one inch long by about half an inch wide at the base, and terminating in a sharp point, was removed from the foot of a lady, after having been there for fifteen years. The glass was stepped upon, several pieces entering about the head of the metatarsal bone of the great toe; and all but this one were removed at the time. It had passed across the sole, and was extracted about an inch behind the head of the metatarsal bone of the little toe.

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The usual annual meetings of our three great hospitals have recently taken place; and the following items in the reports seem worthy of notice.

The Royal Infirmary has a surplus of income over expenditure of £722, a much more satisfactory state of account than has often been presented at the close of the financial year. From the report of this institution, it appears that a handsome and commodious building has been erected, and is on the eve of completion, as a Nurses' Home, intended for the residence of females who are to receive instruction in the wards of the infirmary. It is also in contemplation to erect additional wards to be set apart for the reception of females suffering from uterine disease; a philanthropic and sympathising lady having placed at the disposal of the trustees, for this purpose, the munificent sum of £10,000. The managing committee have done a gracious deed in voting a donation of £200 to Mr. Parker, the late governor of the lunatic asylum, which constitutes a part of the establishment, who retires from ill-health after a servitude of eighteen years. It should be stated that, contrary to the usual arrangement in lunatic asylums, the late governor was not a medical man; but the vacancy is now filled by Dr. Stark, late medical officer at the County Asylum at Lancaster, and it is probable that for the future the appointment will always be in the hands of a professional man.

The Northern Hospital is not in so fortunate a position as to funds; the annual income falling short of the expenditure to the serious extent of £1500. This appears to have arisen from a considerable decrease in the number of subscriptions, as well as of donations and bequests; and is, probably, in some measure, the result of the stagnation in business consequent upon the cotton famine. There is good reason, therefore, to hope, in the words of the Mayor, who presided on the occasion, that "the cloud which has now so long been hovering over us will soon disappear, and, as the new year

rolls on, business may regain its former activity, when the hearts and purse-strings of the people will cheerfully yield a liberal response to the appeal on behalf of this excellent institution."

In the proceedings of the Southern Hospital, it was intimated that in the course of the present year the office of physician to the institution will become vacant by the retirement of Dr. Cameron, whose period of service will expire, in accordance with the tenure of office, which, at this hospital as well as at the Northern, is limited to a definite number of years.

Our parochial authorities are discussing the question as to whether it is requisite or desirable to extend the existing accommodation for the reception of fever patients by the erection of a larger fever hospital in a suitable locality, to supersede the present building, which is thought to be too small, and its present situation, within the precincts of the workhouse, undesirable. From the report of the medical officers, Dr. Gee and Mr. Fletcher, it appears that the present building is well ventilated, and sufficiently isolated from the adjacent buildings; and, in their experience, fever has not been communicated therefrom to the other parts of the workhouse. The number of beds (which is ninety-six) has for the past eight years been sufficient to accommodate all the pauper fever cases that have required admission; but if the number of patients now in the wards should prove to be the average, more extended accommodation will be necessary. As public bodies are proverbially slow in action, it is probable that official delay will afford an opportunity of determining whether the present high rate of fever in the town is only temporary, and thus enable the ratepayers to satisfy themselves as to the necessity of this additional burden upon their funds, before undertaking a work which, however desirable, would doubtless involve a considerable addition to the present expenditure.

The coroner's court has lately afforded another example of the prevalent evils of counter-practice by druggists, or, perhaps, in the present instance, of the incautious manner in which people often venture to become their own doctors. A father, finding that his infant, three weeks old, was very cross, went to a druggist's shop and purchased a pennyworth of syrup of poppies, and administered two doses of half a teaspoonful each to the child, who died the next day. A surgeon had been called in, who found the child narcotised; and upon his evidence, a verdict was returned of *Chance Medley*, accompanied with the opinion that the druggist had been much to blame in not having asked what the syrup was for, and stated the quantity to be taken.

Considerable activity and excitement are now prevailing in our medical world, in the prospect of three vacant appointments about to be filled up.

In consequence of the death of Mr. James Cooper, who held for many years the post of surgeon to the borough police force, the watch committee of the Town Council have determined to divide the office into two, one for the north and one for the south division of the borough, at a salary of one hundred guineas each; the duties being to examine all recruits before joining the force, and attendance upon men injured when on duty—all other sickness occurring to the officers being already provided for by a benefit society of their own.

The select vestry of the parish have also a little patronage to bestow, owing to the resignation of Dr. Ayrton one of the district medical officers. The remuneration and duties of this appointment have been fully detailed in one of my recent letters. As it is just possible that the bare announcement in your widely-circulated columns of these splendid openings might cause an influx of medical adventurers from distant parts, it may be well to add that although, of course, the field is open to all, and although the appointments, up to the time I write, have not been advertised, an active canvass has already been completed by the candidates, whose name is legion, and some of whom possess such local standing and influence as would probably reduce the chances of a stranger to a minimum. It is reported, but I cannot vouch for its accuracy, that there are no fewer than seventy applicants for the police appointments. With regard to the parochial district, I have authority for stating that there are already twenty-four candidates in the field. What a commentary upon the position and prospects of our overstocked profession!

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 7TH, 1863.

W. TYLER SMITH, M.D., President, in the Chair.

Beef-Tea. A preparation of Concentrated Beef-Tea was exhibited to the Society by Mr. BUCKLE, Culinary Chemist, of North Place, Gray's-inn Lane, convenient for administration in cases where expeditious employment of nutritive material is required.

ON VAGINAL LITHOTOMY. BY J. H. AVELING, M.D., SHEFFIELD.

The paper commenced by reciting the particulars of thirty-five cases in which this operation had been performed—twelve British, and twenty-two foreign. The author also gave another case, in which he divided the vesico-vaginal septum, and extracted a small rough stone. The wound was brought together with silver wire sutures. Gilt beads were passed over the ends of these, and run down to the lips of the wound. These were kept in position by a perforated shot, also passed over the ends of the sutures, and tightened upon them by a pair of forceps. He proposes in future to use a coil, made by winding a piece of the suture wire round a pin, instead of the beads. The wound healed in a week, and the patient returned to her home in a fortnight.

Mr. SPENCER WELLS congratulated Dr. Aveling upon the successful result of his interesting case. But he had begun to doubt whether the success which had followed the operation for the cure of vesico-vaginal fistula of late years was so much due to the use of wire sutures as to the improvements which Dr. Sims had originated in the mode of bringing the fistula into view, accurately paring the edges, and bringing them into perfect apposition. After many comparative trials on different parts of the same wound with wires of silver, iron, lead, platinum, and aluminium, and with fine catgut, horse-hair, telegraph wire, india-rubber thread, and the fine strong silk known as "Chinese twist," he had become convinced that wires offered no advantage over silk, while silk offered many advantages over every other material

ised for sutures. In a recent case he had closed a esico-vaginal fistula by five silk sutures, and perfect nion resulted, although no catheter was used. The upposed necessity for the use of the catheter after losing vaginal fistulæ, was another error which time vas correcting. The urine is by no means so irritating a fluid as some believe. With regard to stone in the bladder during labour being a cause of vesico-vaginal istula, he had once removed in the Samaritan Hospital a large stone through a fistula before closing it; but it vas very questionable whether it could often be necessary to remove a calculus through the vagina when no istula existed, or to run the risk of making a fistula to emove a stone. Lithotrity was very easily performed in vomen; and large fragments of stone passed readily hrough the short female urethra, so that no form of ithotomy could often be called for. Where, from some xceptional condition of bladder or stone, lithotrity was nappropriate, vaginal lithotomy might become a valuable peration; but experience was still wanting to show that was better than, or as good as, the lateral operation so uccessfully practised by Dr. Buchanan of Glasgow.

Correspondence.

TREATMENT OF SMALL-POX BY SARRACENIA PURPUREA.

LETTER FROM CHARLES J. RENSHAW, M.D.

SIR,—As there is some difference of opinion with regard to the efficacy of sarracenia purpurea in small-pox, I think the accompanying cases may be worthy of publication.

CASE I. E. A., aged 30, vaccinated when an infant, of good general health, complained on October 31st of feeling unwell, and thought she had taken cold. Nov. 4th. I was called to see the patient, and found her in a state of partial stupor, with severe headache, pain in the back, and feeling of nausea. The urine was high coloured and scanty; bowels costive; tongue dry, dark in the centre, and furred at the edges; pulse 130, hard. I prescribed a purgative to be taken immediately, and a saline every four hours. Nov. 5th, 10 A.M. The patient was unable to speak. The symptoms were no better. The arms, face, and parts of the body were covered with eruption. 8 P.M. She appeared easier; the eruption was spreading. Nov. 6th. Vesicles were forming. She appeared generally a little better. I gave her a decoction of sarracenia purpurea. Nov. 7th. The patient was better in every way. The stupor was entirely gone; the head was much easier; she had no nausea; the tongue was moist; pulse 100, soft. The urine was not so high coloured, nor so scanty. The eruption was rapidly assuming the pustular form. Nov. 8th. During the night, the pustules had filled and died; they were loose scales elevated from the cuticle; not one had scabbed. The patient felt well, but weak. Nov. 9th. The patient continued to improve. The scabs began to drop off, leaving no pitting.

CASE II. T. A., aged 10, had been vaccinated when an infant. He began to complain November 3rd. On the 6th, the eruption made its appearance, with the usual symptoms of small-pox. I prescribed decoction of sarracenia purpurea. In two days the pustules fully formed and died; not one scabbed nor pitted, but all fell off in scales. The patient rapidly recovered.

CASE III. J. R., aged 21, who had never been vaccinated, began to feel poorly October 30th. On Nov. 1st, the usual symptoms of small-pox set in. Nov. 2nd. The eruption began to appear. Nov. 3rd. I prescribed the same decoction. After the first dose, he felt relief. The course of the eruption was completed in forty hours, and the pustules appeared as scales. One only had burst, and that the patient had scratched; they all fell off without leaving a single instance of pitting.

I have used this decoction in two other cases, with similar effects.

The effect of the sarracenia purpurea in these cases seems to agree with the account of its properties given by Mr. H. Chalmers Miles in the *Lancet* for Oct. 18th. Though all the cases were of the simple variety, yet even in these cases the pustules generally burst, scab, and occasionally pit; and the disease is generally of much longer continuance. In each instance, the patient felt better after taking the first dose. By the third day, the pustules had formed and died. Only one had formed a scab, and that from accident. There was no secondary fever nor pitting in any of the cases.

The remedy is, I think, worthy of more general use.

I am, etc., C. J. RENSHAW.

Altrincham, December 1862.

THE SULPHITES IN DIPHTHERIA.

LETTER FROM JOHN LYELL, M.D.

SIR,—In the March number (1862) of the BRITISH MEDICAL JOURNAL, the experiments of Dr. Polli of Milan on the action of sulphurous acid as an antiferment in blood-poison were briefly noticed. From that notice I have been led to the use of this as a therapeutic agent in diphtheria, so evidently toxæmic in its nature; and I beg here to call the attention of the profession to the use of it in that disease. Diphtheria has been prevalent here as an epidemic, and an opportunity thus given for testing the value of this and other curative means. From Bretonneau downwards, these have been acknowledged to be exceedingly unsatisfactory and inefficient; and on its first outbreak here, every means employed seemed to be utterly powerless, whether these were local or general. After a time. I began to use sulphite of soda in half-drachm doses, every six hours or every four hours where the case seemed more urgent. As the improvement following the use of this remedy has been apparently very marked, I have written this brief note in order that its value may be tested where diphtheria at present prevails. The prescription I have been using is the following: sulphite of soda ʒss; water ʒiv. A tablespoonful (ʒss) to be taken every four or six hours.

As a topical application, I use the insufflation of a few grains of calomel to the exudation on the fauces through a gutta-percha tube, together with the inunction of simple camphorated or iodised camphorated ointment. I have no faith in the application of nitrate of silver or other caustics to the parts. By pitting one side of the throat against another, I have found the cauterised side more tardy in getting well than the other. The permanganates and other topical applications I have used, but I cannot say with benefit. My object, however, in now writing is to get the sulphites tested as depurants and antiferments in this terrible toxæmic malady.

I am, etc., JOHN LYELL.

Newburgh, Fifeshire, January 13th, 1863.

EARLSWOOD ASYLUM. One of the most useful of our charitable institutions is the Asylum for Idiots at Earlswood. What is done there, in the way of reviving the flickering light of reason, can only be understood by those who have visited the asylum. Yesterday the annual New Year's festivities took place. There was a distribution of prizes to successful pupils in the schools, a dinner to the inmates, and subsequently a series of amateur dramatic performances. All passed off in a most satisfactory manner.

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on Jan. 20th :—

Baker, Thomas Franklin, Doncaster
Bobart, William Matthews, Ashby-de-la-Zouch
Bracey, William Arthur, Birmingham
Brown, Isaac Baker, Connaught Square
Chandler, Edward, Chester Place, Kennington
Cross, Arthur John Graham, New Street, Spring Gardens
Elliott, George Hurlstone, Chichester
Ellis, Edward, Fitzroy Street
Fry, John Blount, Edgbaston, near Birmingham
Lattey, James, Upper Phillimore Gardens
Megget, Archibald, Scarborough
Mottershead, John, Macclesfield
Randell, Edward Benjamin, Carshalton
Roberts, James Dixon, Shipley, near Leeds
Saville, John James, Sunderland
Simpson, Philip John, Gower Street
Smallhorn, Thomas, Dublin
Spurway, Charles, Tiverton, Devon
Wilks, Joseph, Brighton
Williams, John Wilkins, Paddington
Wilson, John, Musselburgh
Wood, Eltham, Toronto

NAVAL SURGEONS. The following gentlemen passed their examinations for Naval Surgeons at a meeting of the Court of Examiners, on January 20th :—

Allison, Thomas Dunlop, M.D.Glasgow, M.R.C.S.Eng.: diploma of membership dated June 25, 1858
Hughes, Thomas Williams: June 13, 1856
Keelan, Patrick, of H.M.S. *Neptune*, M.R.C.S.Irel.: Nov. 4, 1858
Roche, William (B.), of the Royal Naval Hospital, Plymouth: May 24, 1858

Admitted Members on January 21st :—

Agassiz, Alfred, Bradfield, Essex
Brittain, Thomas Lewis (M.D.Edin.), Chester
Bruce, James, Islington
Buckmaster, Charles Addams, Piccadilly
Cartmel, Henry, Manchester
Clarkson, Frederick Robert, Leeds
Craister, Thomas Lawson, Leeds
Davies, John, Coleshill, Warwickshire
Hay, Robert, Belfast
Leigh, Thomas, Chiswick
Meeres, Albert, Thame, Oxford
Miskin, George Albert, York Road, Lambeth
Nesham, Thomas Cargill, Newcastle
Pattinson, Henry Albert, Penrith, Cumberland
Rains, Samuel, Manchester
Reddrop, John, Tiverton, Devon
Richards, Henry Ebenezer, Sloane Street
Row, William, Clapham Road
Sargent, George Pearse, Camberwell
Stone, Robert Sidney, Bath
Thorne, Richard Thorne, Leamington
Turner, Arthur Newman, Bermondsey Square
Wadsworth, Alfred, Leeds
Walker, Samuel Edward, Warwick
Welby, William Montague Hall, Newark, Notts
Wright, George Vint, Edinburgh

Admitted Members on January 22nd :—

Arnott, John Lovell, Cheltenham
Butlin, Charles Henry, Camborne, Cornwall
Canny, Denis Joseph, Dublin
Cooper, William, Beaumont Street, Cavendish Square
Daniel, William Clement, Kennington
De Leon, Jacob, Jamaica
Dick, Thomas Thomson, Ayr
Farwell, Arthur John, Chipping Norton
Gregson, George, Harley Street
Mapleson, Horsley Thomas, Westbourne Place
Meadows, Robert, Ipswich
Smith, George, Hampstead Road
Smith, Philip Henry Pye, Hackney
Smith, William Frank, Nottingham
Thornburn, John Edward, Cockermouth

APOTHECARIES' HALL. On January 22nd, the following Licentiates were admitted :—

Hobbs, Henry Addison, Croydon
Walker, George Edward, Wigan, Lancashire

APPOINTMENTS.

*DE MORGAN, Campbell, Esq., F.R.S., appointed Consulting Surgeon to the East Grinstead Dispensary, in the room of M. Henry Esq.
EDWARDS, Morgan J., M.D., appointed House-Surgeon to the Glamorganshire and Monmouthshire Infirmary, in the room of F. B Hutchinson, L.R.C.P.Ed.
EVANS, Caleb, Esq., appointed Surgeon to the Birkenhead Borough Hospital.
GAIRDNER, William T., M.D., appointed Medical Officer of Health for Glasgow.
GRABHAM, George W., Esq., appointed Senior Assistant Medical Officer to the Surrey County Asylum.
HARVEY, Alexander, M.D., appointed Surgeon to the Aberdeen Ophthalmic Institution, in the room of the late J. Cadenhead, M.D.
LAPRAIK, Thomas, M.D., elected Surgeon to the Glasgow Asylum for the Blind.
SELWOOD, Henry C., M.D., elected House-Surgeon to the Birkenhead Borough Hospital, in the room of C. Evans, Esq.
STAMPER, James F., M.D., appointed House-Surgeon to the Tunbridge Wells Infirmary, in the room of R. Hicks, Esq.
WARD, Charles P., Esq., elected Visiting Surgeon to the Royal South London Dispensary.

ARMY.

To be Staff-Assistant-Surgeon :—

JACKSON, R. W., from half-pay.

ROYAL NAVY.

BRIEN, Charles R., Esq.
DAVIES, Edward, Esq.
FULLER, Charles H., Esq.
LARDNER, Jason, Esq.
LIDDELL, Henry, Esq.
} To be Deputy Inspectors of Hospitals and Fleets, on the Retired List.

LAW, Ernest, M.D., Acting Assistant-Surgeon, to the *Buzzard*.
RARIE, John, Esq., Surgeon, to the *Buzzard*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

PYLE, T. T., M.D., to be Assistant-Surgeon 3rd Durham R.V.
WALLACE, S., M.D., to be Assistant-Surgeon 1st Administrative Brigade Glamorganshire A.V.

BIRTHS.

BARKER. On January 20th, at Bedford, the wife of *T. Herbert Barker, M.D., of a daughter.
FLOWER. On January 18th, at 39, Lincoln's Inn Fields, the wife of W. H. Flower, Esq., of a daughter.
SWEETING. On November 3rd, 1862, the wife of the Rev. G. Sweeting, Perth, West Australia, and eldest daughter of *F. Page, M.D. Southsea, of a son.

DEATHS.

BOULT, Edmund, Esq., Surgeon, at Bath, aged 48, on January 24.
CATLETT. On September 28th, 1862, at Sydney, New South Wales, Emily Marsh, wife of William Catlett, M.D.
CRIGAN, the Reverend Alexander, M.D., vicar of Skipworth and Riccall, Yorkshire, at Sidmouth, aged 82, on January 25.
FOWKE, Frederic, Esq., Ryde, Isle of Wight, aged 57, on January 24th; and on the same day, aged 59, Anne Wainwright, his wife.
HANNAH. On January 22nd, James W., eldest son of James L. Hannah, M.D., Brighton.
HOLDEN. On January 23rd, at 54, Gower Street, Frances, wife of Luther Holden, Esq., Surgeon.
HUTCHINSON. On January 16th, at Ramsgate, aged 8, Montiz Vaux, fourth son of T. Cayley Hutchinson, Esq., Surgeon-Major Indian Army.
MENZIES. On January 26th, at 23, Westbourne Park Road, aged 6 years, Agnes, only daughter of Duncan Menzies, M.R.C.P.L. Deputy Inspector-General of Army Hospitals.
RAMSAY, David, M.D., R.N., late H.M.S. *Gorgon*, at the Royal Naval Hospital, Simon's Bay, on December 16th, 1862.
SMITH, George T., Esq., Surgeon, at Leamington, on January 19.
WILLIAMS. On October 30th, 1862, at Melbourne, aged 64, Charlotte, widow of John M. Williams, Esq., Surgeon, Kennington.

THE LECTURES AT THE COLLEGE OF PHYSICIANS. Dr. Risdon Bennett, Dr. T. K. Chambers, and Dr. Pavy will this year deliver the Croonian, Lumleian, and the Gulstonian Lectures, at the College of Physicians.

POPULATION OF VICTORIA. Although Victoria has had to meet the temptation of the New Zealand gold-fields the population continues to increase. The Registrar-General has issued his return for the quarter ending Michaelmas last, and states the number of the people at that date to be 549,901, of whom 322,984 were males and 226,917 females.

A Surgeon committed for Perjury. Mr. Evan omas, a surgeon, one of the district medical officers the Manchester Board of Guardians, has been com- tted to take his trial for perjury. The strange cir- mstances connected with the cause of his committal ve been doubtless read by all our readers. The real ts of the case will probably be more fully elucidated the next Liverpool assizes. Mr. Thomas is in the antime liberated on bail.

Medical Society of London. A course of three tsomian Lectures on the Surgical Diseases of Chil- n, by Mr. Thomas Bryant, F.R.C.S., Assistant-Sur- n to Guy's Hospital, will be delivered February 9th, h, and 23rd. Lecture I will be "On the Differences ween the Physiological and Pathological Processes in ldren and in Adults; and on some Congenital De- mities, as Harelip and Malformations of the Rectum." ture II, "On the Differences between Surgical Dis- es of the Nervous, Respiratory, Circulatory, Diges- , and Urino-genital Systems of the Child and the ult. Lecture III, "On the Diseases of the Osseous tem, and on Tumours, etc."

Man and the Monkey. A London correspondent s: "A valuable contribution to the science of anthro- gy is about to be given to the world by Professor xley, in a volume entitled *Man and the Ape*, or some n title, discussing, in a very complete form, the stion at issue between Mr. Huxley, and the anato- ts who agree with him, and Professor Owen. Mean- le, by way of contributing further practical illustra- s to the subject, Captain Burton has come to an ement with M. du Chaillu to join the latter in a lla-hunting campaign in the Gaboon. The prelimi- es were signed at a leave-taking dinner which M. du illu gave his friends the other day, before starting New York, where he has matters of business to nge before facing again the Gaboon and the go- s."

The State of Health of Manchester. Although an undoubted fact that the calls made during the r portion of the past year upon the different hos- s and public medical charities proved unusually erous, we have nevertheless satisfied ourselves that circumstance is to be explained rather by the inabi- of the operatives to pay for medical assistance, than ny general increase of sickness; and we can consci- ously assert that we never remember the public h of Manchester and Salford, during the winter ths, to be in a more satisfactory state than it is at present time. Nor have we noticed, during the fre- t occasions on which we had been brought into act with the unemployed operatives, any of that s of strength, colour, and flesh," which is stated in eport to have been observed in the majority of the n districts. (*Report by Messrs. Turner and Ran- *)

yal College of Surgeons. The subject for the gial Triennial Anatomical Prize of fifty guineas is, e Structural Anatomy and Physiology of the Lym- c Vessels and Glands (the Anatomical Distribution being required); the Communications (if any) be- n the Lymphatics and the Blood-vessels to be de- trated; and the Influence (if any) which the phatic Vessels or Glands exercise on the Fluid they mit, to be elucidated. The dissertation to be illus- l by preparations and drawings". The essays on ubject must be sent in on or before Christmas Day —The subjects for the Jacksonian Prizes of twenty as, for the present year 1863, are: "The Patho- and Treatment of Diseases of the Larynx; the ostic indications to include the appearances as seen e living person. The dissertation to be illus- l by drawings and preparations." And "The al and Pathological Anatomy of the various Syno- vial Bursæ connected with the Muscles and Tendons of the Upper Extremity, and the Treatment of their Dis- eases. The dissertation to be illustrated by prepara- tions and drawings." The essays on these subjects must be sent in on or before Christmas Day next. The terms and conditions may be known on application to the Secretary.

Colney Hatch Asylum. The annual winter enter- tainment to the patients, now numbering nearly 1,900, of this institution took place on the 20th inst., before a large assemblage of the county magistrates, their friends, and others interested in the subject of insanity. At four o'clock, about 250 men and 350 women assembled in the large hall, which was very brilliantly lighted, and deco- rated with flags, Chinese lamps, and evergreens. The amusements commenced with the tricks of a professed conjurer engaged for the occasion, who was followed by Mr. Punch, Mrs. Judy, and the faithful dog Toby. After this, at six o'clock, the patients retired to their wards, where they were regaled with plumcake, oranges, spiced ale, and lemonade, in which those who were unable to be present in the hall participated. At seven o'clock the hall was again filled with the busy and happy popula- tion, when dancing commenced, and was kept up until nearly ten, when the National Anthem closed the pro- ceedings. We are happy to record that not a single casualty or unpleasantness occurred to mar the pleasure of the evening. During the time the patients were at supper, the magistrates entertained the company at a very sumptuous repast. It is right to add that all joined in dancing and the various efforts made to amuse the patients; and it was universally admitted that the Colney Hatch winter *fête* of 1863 is entitled to rank as the most brilliant and successful in the asylum's history.

Action for the Recovery of Medical Fees. In the Liverpool County Court, Mr. Edward Parker, sur- geon, of Kirkdale, claimed from Mr. Chilton, solicitor, the sum of £8 : 8, balance of an account due for profes- sional services. The evidence adduced by the plaintiff was to the effect that from March to July 1861 he pro- fessionally attended the family of the defendant. On the 26th of June, the plaintiff was requested by Mr. Chilton to send in his bill, which was accordingly done; and in this bill he charged the sum of 10*s.* 6*d.* for a visit at night, and 7*s.* 6*d.* each for all other visits. The bill amounted to £6 : 10 : 6. Subsequent to the delivery of that bill, plaintiff made several visits, for which he charged 7*s.* 6*d.* each. For these latter services he sent in a bill amounting to £1 : 7 : 6. On calling for pay- ment, he saw Mrs. Chilton, who informed him that the bill was disputed by her husband, on the ground that more visits were charged for than had been made, and the plaintiff agreed to send in a bill of particulars to Mr. Chilton. Mr. M'Oubrey said Mrs. Chilton would not be called as a witness. His Honour remarked, that it appeared to him the only question to be decided was whether the plaintiff's charges were proper. It was a very serious imputation upon a medical practitioner in Liverpool—who had undoubtedly, as far as had been seen in the witness-box, given his evidence with the greatest possible regard to truth—to turn round upon him in this way. The case had been adjourned to allow Mrs. Chilton to attend; but he had so good an opinion of her sex, that he should have been very sorry to have seen her go into the box to disparage the medical gen- tleman who had attended her. Mr. J. P. Harris, sur- geon, of Rodney Street, deposed that the charges made by the plaintiff were fair and reasonable. Mr. Brown, who was called for the defence, deposed that he had pro- fessionally attended Mrs. Chilton; and his charge for ordinary visits was 5*s.* 6*d.* each, and 6*d.* for the toll-bar. This was the whole of the evidence; and his Honour gave a verdict for the amount claimed, in addition to £2 : 15 paid into court.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2 30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion. Dr. Cockle, "On the Conditions of the Aorta Simulating Aortic Insufficiency"; Mr. Streeter, "Disease of the Brain by Extension from the Ear"; Dr. Greenhalgh, "New Metrotome"; Dr. Richardson, "Nitrate of Amylene". Communications from Drs. Gibb and Thudichum; Mr. Baker Brown and others.—Epidemiological Society, 8 P.M. Mr. Thomas Hunt, "On Certain Epidemic Forms of Cutaneous Disease observed in Schools, Workhouses, and Factories."—Entomological.

TUESDAY. Pathological.— Photographic (Anniversary).— Ethnological.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Mr. Baker Brown, "On Vesico-Vaginal Fistula: Results of Fifty-five Operations at the London Surgical Home"; Dr. Shortt, "On the Medical History of Woman in India."—Society of Arts.—Geological.

THURSDAY. Royal.— Antiquarian.— Linnæan.— Chemical.— Harveian.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M. Practical Evening for the Narration of Cases and the Exhibition of Specimens.— Royal Institution.—Archæological Institute.

SATURDAY. Army Medical and Surgical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JANUARY 24, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1079 / Girls..1007	2086	1426
Average of corresponding weeks 1853-62		1994	1483

Barometer:
Highest (Th.) 29.629; lowest (Tu.) 29.151; mean, 29.439.

Thermometer:
Highest in sun—extremes (Sat.) 73 degs.; (Sun.) 50 degs.
In shade—highest (Fri.) 53.8 degs.; lowest (Sun.) 31.9 degs.
Mean—43.8 degrees; difference from mean of 43 yrs.+6.7 degs.
Range—during week, 21.9 degrees; mean daily, 12.3 degrees.
Mean humidity of air (*saturation*=100), 78.
Mean direction of wind, S.W.—Rain in inches, 0.32.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

L.R.C.P. AND M.D.—SIR: I believe I am correct in stating, in reference to your observations upon Dr. Styrap's communication, that the *new* Charter recently granted to the Royal College of Physicians of Edinburgh, secures, in general terms, to its Licentiates, any privileges which might appertain to the Licentiates of any other College of Physicians within the United Kingdom. Consequently, the Licentiates of the Edinburgh College have *now* the same claim to the doctorate as that possessed by the Licentiates of the Dublin College—be this what it may.

January 1863. I am, etc., L.R.C.P.ED.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND. SIR: I am astonished to find in the BRITISH MEDICAL JOURNAL of January 17th, the question as to the power of the King's Queen's College of Physicians in Ireland to confer the title M.D. revived, after the decision on this point by the Court Queen's Bench, Ireland, when this question of the College tried by their Licentiate, Mr. Barker, on a *mandamus* to com his name to be *restored* as a Licentiate and as a Medical Doc by the Medical Registrar of Ireland; the M.D., importing Med Doctor, having been erased, and the letters struck out, under authority of the General Council.

Subjoined are the dates of the opinion of the Attorney-Gen for Ireland, and the *subsequent* decision of the Court of Que Bench. It is needless to say which is the higher authority, o point out that if the power to confer the title or degree had isted in the Charter, they (the College) would have only been glad of this opportunity of proving it, by the simple productio their Charter. I am, etc.,

January 19th, 1863.

Opinion of Attorney-General, Ireland. "I think the Licenti and Fellows, as such, of the King and Queen's College of Ph cians are entitled to the degree and title of Doctor in Medic and to use the letters M.D. after their names.

"November 21st, 1860." "(Signed), R. DEA

Abstract of Decision, Court of Queen's Bench, Ireland, M 10th, 1861. "Their (the Corporate Bodies) licence entitled party to be called a Licentiate of the particular Corporation; in the schedule there is a marked distinction between a Doct Physic. which is a degree, and a Licentiate, because *the mo corporations cannot grant a degree*, entitling the party to be ent under their diploma as a Doctor of Medicine, but they may g licence, thus creating the party a Licentiate, as in the pre case. The distinction is taken in the most marked manner." "The applicant, Mr. James Barker, jun., had a diploma from College of Physicians (K. & Q.C.P.I.), but that was not any o qualifications mentioned in the schedule entitling him t registered as a Doctor of Medicine," etc. Counsel for the p cution, Mr. Brewster, Q.C., and Mr. W. Smith. For the defen Mr. I. E. Walsh, Q.C., and Mr. Jellett.

S. R.—We believe it is quite true, that the carriages, neither o medical men nor of the patients, are allowed to spoil the un the surface of the gravel roads in the Surrey Gardens. All descend at the gate, and thence (if they can) walk on foot t door of the temporary hospital. Our correspondent asks, W responsible for this absurd and childish act of authority? question is difficult to answer, because the ruling power Thomas's Hospital is not distinctly set forth before the public have, however, always understood that there is one prom potentate, called the Treasurer, who is the dictator and ab ruler of the roast for the time being. He is, therefore, w pose, the issuer of the order in question, and responsible f folly of it. Some of our readers will ask: Is this a specim the acts of the genius which presides generally over the wel the notorious St. Thomas?

COMMUNICATIONS have been received from:—Dr. J. BIR NEVINS; THE HON. SECRETARIES OF THE WESTERN M AND SURGICAL SOCIETY OF LONDON; Mr. T. M. STONE; Dr. SALTER; THE HONORARY SECRETARIES OF THE EPIDEMIOL SOCIETY; Mr. A. G. OSBORN; Dr. P. M. LATHAM; Dr. L BEALE; Mr. LOWNDES; Dr. T. H. BARKER; Dr. JAMES SELL; Dr. F. PAGE; Dr. J. B. HARRISON; Dr. HYDE SA Dr. GRAILY HEWITT; Mr. T. SYMPSON; THE REGISTRAR O MEDICAL SOCIETY OF LONDON; and Mr. P. HEWETT.

BOOKS RECEIVED.

1. Clinical Surgery: Stricture, Retention of Urine, etc. By T Bryant, F.R.C.S. Part IV. London: 1862.
2. The Nature and Treatment of Gout and Rheumatic Gou Alfred B. Garrod, M.D., F.R.S. Second edition. London:
3. The Minute Anatomy and Physiology of the Nervous Sys the Lobster. By T. S. Clouston, M.D. Edinburgh: 1863.
4. An Address on Practical Sympathy and Prompt Benev By Thomas Guthrie, D.D. London: 1863.
5. The Duty of Giving Away a Stated Portion of Our Incom W. Arthur. London: 1863.
6. The Duty of Laying by for Religious and Charitable Stated Proportion of Our Income. By R. S. Candlish London: 1863.
7. On Doing What One Does With One's Might. By the Re Cumming, D.D. London: 1863.
8. Anatomy of the Parts concerned in Femoral Rupture. W. Callender. London: 1863.

Clinical Lecture

ON

STRANGULATED FEMORAL HERNIA.

DELIVERED AT ST. GEORGE'S HOSPITAL.

BY

PRESCOTT G. HEWETT, Esq.,

SURGEON TO THE HOSPITAL.

Mary A. C., aged 51, was admitted into the Princess Ward on December 4th, 1862, with a tumour, of the size of a small orange, in the right groin. It was of a globular shape, with a well marked, narrow pedicle, and for the main part overlapped the right abdominal ring; it was quite hard, very painful, even when slightly handled, and there was great tenderness over the whole of the lower part of the belly, as high up as the umbilicus; there was constant sickness, but the bowels had acted three times during the day; the pulse was small, and the countenance sunken and anxious. The history of the case was a somewhat peculiar one. It appeared that the patient had had a tumour in the groin for seven years; this tumour had apparently been taken for a cyst, for it had been punctured several times, and clear fluid drawn off: no suspicion had been entertained as to its being a rupture, and she had consequently never worn a truss. She was much in the same state as usual, when the tumour suddenly became larger and very painful, and the other symptoms soon followed, and had existed about nine hours when I saw her, shortly after her admission into the hospital. I determined upon operating at once, and she was put under the influence of chloroform. The sac was a remarkably thick one; it contained a quantity of blood-tinged fluid, and a knuckle of small intestine which was of a very dark colour, and somewhat rough on its surface; the stricture was very tight, and the ring a very small one. A grain of opium was given shortly after the operation.

The operation was followed by deep-seated inflammation around and within the sac; but with this exception the case did remarkably well. The bowels were left alone until the ninth day after the operation, when, as there was some slight griping pain, an injection was given, and this was repeated on the following day, as there had been no action of the bowels; a slight motion followed, and the day afterwards the bowels were freely relieved after another injection. From this time, matters went on well; liberal diet was allowed in due course of time, and the patient was discharged, cured, on the 3rd of January, within a month after the operation.

In commenting upon this case, I would first call your attention to its peculiar history. There had been a tumour in the groin for a period of seven years; this tumour had apparently been taken for a cyst, and at different periods tapped, clear fluid being drawn off on each occasion; there had been no suspicion as to the tumour being a hernia, and consequently no truss had been worn. Suddenly one morning, this tumour increases in size; this is followed by repeated vomiting, and the belly becomes swollen and painful, but subsequently to all this the bowels act three times.

On the one hand, then, there was the history of the tappings, and the action of the bowels at three different times, since the setting in of the urgent symptoms; and, on the other hand, sudden increase in the size of the tumour, soon followed by constant vomiting, and subsequently by pain and distention of the belly. By what was I led to operate in this case? By the increase in the tumour, followed by constant vomiting. Such symptoms pointed to an obstruction in the bowels, a knuckle of which had, I thought, slipped out of the belly. True, the bowels had acted three times since then; but this might, I told you, have come from the portion of bowel below the stricture. Sickness, alone, is then sufficient to warrant the surgeon in cutting down upon a tumour in the groin to ascertain its nature. And well was it that there was no dallying in this case, for the ring was a very small one, and the stricture remarkably tight. With such a state of things, a few hours more of strangulation would, in all probability, have led to irreparable mischief; and, as it was, the bowel was already of a very dark colour, and rough on its surface.

Thus much for the present case. And now let me say a few words on different points connected with strangulated femoral hernia in general.

First, as to the administration of chloroform in such cases. By many surgeons who have no hesitation in resorting to the use of chloroform in various operations, this anæsthetic is avoided in strangulated hernia, on account of the sickness and depression which occasionally follow its administration. Such symptoms after an operation for hernia would add greatly to the gravity of the case, and might, if severe and prolonged, lead to a fatal issue. Indeed, independent of operations for hernia, several cases are already known in which chloroform-sickness has gone on notwithstanding all remedies, and induced such a state of collapse that the patient has been in great jeopardy. And if this sickness should, perchance, occur after an operation for hernia, doubtless the danger of a fatal termination would be all the greater. It must be borne in mind, however, that chloroform-sickness of a severe character is, after all, of very rare occurrence; and, as far as my own experience extends, I cannot say that I have ever seen a case in which severe sickness has followed the administration of chloroform in an operation for hernia. Balancing, then, this evil of rare occurrence against the immense use of which chloroform has proved itself to be in the reduction of a strangulated hernia, I have no hesitation in resorting to its administration in such cases.

As to the taxis, that you know was not even attempted in the case which we have just been considering. And why not? The globular and pedunculated shape of the tumour made me think that this was one of the cases of strangulated femoral hernia in which the taxis would fail; and added to this there was the exquisite tenderness of the tumour, which showed that great harm might be done even by gentle pressure. In strangulated femoral hernia, the surgeon cannot be too careful in his attempts at reduction by the taxis; and, do what he will, the taxis will fail in by far the greater number of such cases—in three out of four, at the very least. Let it then be a rule with you in all cases of strangulated femoral hernia, and mind I am now speaking of femoral hernia only, to be very careful, very gentle whenever you may use the taxis. If you are to succeed, depend upon it you will do so by gentle pressure, which ought not, moreover, to be prolonged beyond a few minutes; if you fail, get the

patient under the influence of chloroform, and then try the taxis again, but on no account with any thing like force; and if you still fail under such circumstances, make up your mind to operate, and operate at once. The chances of success after an operation for strangulated femoral hernia may, literally, be calculated by the more or less time during which strangulation has been allowed to exist, and by the more or less force used in the taxis. And yet, what is the history of most of the cases of strangulated femoral hernia with which we have to deal in hospital practice? Rarely is it that the period of strangulation can be counted by hours: it is by days that it must be counted in by far the greater number of cases. Take, for instance, the twenty-two cases of strangulated femoral hernia in which I have had to operate in this hospital: in fourteen out of these twenty-two cases, the strangulation had gone on for two days and upwards, existing in seven out these fourteen cases for three days; in two, for four days; and in one, for five days. In one single instance, it had existed for five, and in another for seven hours; and in the remaining six, the least period was twelve hours. And whilst thus strangulated, the bowel had, with very rare exceptions, been subjected to the taxis, repeated at various intervals, and applied with more or less force. Indeed, in several of the cases, the force had been so great that the skin covering the tumour was of a dark purple colour, the cellular tissue extensively infiltrated with blood, the sac itself filled with bloody serum, and the bowel discoloured from blood extravasated in its coats.

The damage done to the bowel during its period of strangulation varies very much according to the size of the ring, and the consequent amount of pressure. Thus, in cases of recent hernia, cases in which the bowel is strangulated when it first comes down, the ring is very small and the pressure very severe; in such cases, a very few hours will often lead to irreparable mischief, and hence the reason why operations are, as a rule, so much more fatal in recent than in old femoral herniæ. The amount of pressure upon the bowel caused by the stricture is, then, the great source of danger in all cases, but especially in recent cases, of strangulated femoral hernia; and hence the reason why I have so strongly urged you, if the taxis fail, to operate at once.

Opening, or not opening the sac, about which there has been so much discussion of late, is, I am firmly convinced, quite a matter of secondary importance, compared with the period of strangulation, and the more or less forcible taxis.

For my own part, I invariably open the sac in operating for femoral hernia. I have never seen any harm arise from opening the sac; and great harm may arise, in some cases, from not opening the sac. For instance, in cases, and they are not uncommon ones, where the sac contains both bowel and omentum, and in which the omentum is more or less adherent to the sac, how can the surgeon be sure that a bit of the bowel is not left in the sac? Again, in cases where the omentum forms a complete sac enveloping the bowel, the stricture may be in the neck of the omental sac. Thus it happened in a case operated upon by Mr. Cæsar Hawkins. The sac, which was very thin, was laid open, and in it was found a large mass of omentum somewhat altered in structure. The neck of the sac and Gimbernat's ligament were divided, so that the finger could be easily introduced into the belly. The omentum was then carefully examined, and a knuckle of small intestine, of a very dark colour, was seen through its folds, which formed a complete sac; this omental sac was laid open; but, before the intestine could be returned, it was found necessary to divide the neck of this second sac, which formed a very tight stricture; the intestine was then easily reduced. And again, in recent hernia, where the thin, transparent sac has not as yet contracted adhesions with the neighbouring parts, and especially where it has become glued by recent adhesions to the bowel, the sac, if not opened, may be readily pushed up into the belly along with the bowel, and the strangulation thus continue. The possibility of such an occurrence was made manifest in one of my last operations, in which such a state of things existed; and had it so happened that I had not, in this case, opened the sac, it would have been pushed up into the belly when the bowel was reduced; and, as recent adhesions partially glued the bowel to the sac, and especially to its neck, the strangulation would have gone on.

I have said that I have never seen any harm arise from opening the sac in strangulated femoral hernia; but on the present occasion I shall, however, refer only to the cases which have fallen under my own care. Incidentally, I have already mentioned that I have at this hospital operated upon twenty-two cases of strangulated femoral hernia; and out of these twenty-two cases, four only terminated fatally. And now, in looking to the cause of death in these four cases, I find that in no single instance had the opening of the sac anything to do with the fatal issue. Indeed, as far as this part of the inquiry is concerned, one of these fatal cases might be set aside altogether; for death was, in this instance, mainly caused by internal hæmorrhage, of the existence of which there was nothing to cause suspicion. There was no bleeding at the time of the operation, and subsequently no oozing of blood through the wound. The bowel, which had been strangulated for four days, was very much congested, and the sac also contained a small piece of omentum. Previously to the operation, there was great tenderness over the belly; this tenderness went on increasing, and the patient sank in forty-eight hours. At the examination of the body, a quantity of blood was found in the cavity of the peritoneum; it coated the various viscera, but the largest quantity had trickled down into the pelvis. A careful dissection of the vessels around the ring was made, but no injury was traced in any one of them, save in a very small vessel given off from a branch of the epigastric artery, and from this the hæmorrhage appeared to have proceeded. As to the parts which had been strangulated, they were evidently recovering themselves.

But to return to the three remaining fatal cases; in every one of these cases death was evidently the result of the strangulation, and in no way of the sac having been opened.

In the first case, the hernia was an old one, and the period of strangulation three days. When admitted into the hospital, the patient, a man aged 63, was perfectly collapsed, and in such a state of debility that it was thought doubtful whether he could live through the operation. The sac was opened, and the bowel returned, as, although dark,

it did not appear to be gangrenous; but, a few hours after the operation, a copious discharge of thin fæcal fluid escaped from the wound. The patient sank rapidly. At the after-death examination, the mucous membrane of the bowel was found completely ulcerated in a circle corresponding to the seat of stricture, and in two points the other coats had given way.

In the second case, the hernia was a recent one, and the period of strangulation two days; and in this case, too, two spots of ulceration perforating the bowel were found at the point which had been strangulated. The patient was a woman, aged 76.

In the third case, the hernia was also a recent one, and the period of strangulation four days. The patient, a young woman, was in a perfect state of collapse, with stercoraceous vomiting, and great tenderness over the belly, which was tympanitic. Forcible taxis and purgatives had been repeatedly tried before her admission into the hospital. The sac contained a quantity of bloody fluid, and the bowel was of a very dark colour, and mottled. The patient never rallied, and sank in twelve hours after the operation. Extensive peritonitis of a low form was found at the examination after death.

Excluding, then, the case in which death was evidently caused by internal hæmorrhage, I find that I have, in this hospital, operated upon twenty-one cases of strangulated femoral hernia, in all of which the sac was opened; and that out of these twenty-one cases, three have died—that is, at the rate of one case in seven.

Such results will more than bear comparison with the most favourable results published by the surgeons who so strongly advocate that the sac should not be opened in strangulated femoral hernia. True, the number of cases is small; and in a greater number of cases, I might perchance not be so fortunate as I have been; but that the sac should have been opened in these eighteen cases, and that they should all, notwithstanding this, have done well, proves, at any rate, that the real danger does not rest with this mode of operating.

In the after-treatment, shortly after the operation, I usually give some opium, the dose of which is regulated by the state of the patient; but, as a rule, I do not give more than one grain, and this is repeated, or not, according to circumstances. The bowels I make a point of not interfering with. You will have seen in the wards of this hospital many of the cases of hernia on which I have operated, in which there has been no action of the bowels for several days—a week I find to be a very common period among my cases, and yet the cases, as you know, have done well. This is a very different state of things from what it used to be some few years ago at this hospital, when a drachm of salts and some infusion of roses immediately after the operation, and every two hours, until the bowels had acted freely, was the rule.

But should any symptom attributable to the non-action of the bowels perchance arise after a few days, it is then advisable to give either an enema of warm water, or some castor oil, according to circumstances.

As to diet, that ought, as a rule, to be of a generous kind: fluid, until after the bowels have been freely open, and then a gradual return to the ordinary mode of living.

But I cannot conclude these few remarks, gentlemen, without once more impressing upon your minds the imperative necessity of operating without delay in strangulated femoral hernia, as often as you find that the taxis, fairly tried, has failed. Recollect that the great source of danger is in the strangulation, and that the less this is allowed to go on, the greater your chances of succeeding when obliged to operate. And this is a fact which you ought to be careful to stamp upon the memory of every person afflicted with femoral hernia.

Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture V.—On the Stethoscope.

Principal Uses of the Stethoscope.—Rules for its Construction: 1, *as to Material;* 2, *Length, Thickness, etc.;* 3, *Shape, etc., of Extremities—Practical Hints for its Manipulation—Method of Applying—Choice of Whereabouts to apply—Determining Limits of Sound—Ausculting Females and Children.*

[*Concluded from page* 108.]

Having thus described to you what I consider the essentials of a good stethoscope, let me give you some practical hints for its manipulation.

1. *Method of applying and holding the instrument.* Choose your part—apex or base of heart, apex of lung, axilla, or what not—and if you are not particular to a quarter of an inch, select it with the view of avoiding inequalities, and securing the most complete and uninterrupted apposition. Then apply the stethoscope thus (fig. 5), holding it between your

Fig. 5.



first and middle finger of either hand, according to the ear you are going to listen with; then press it firmly, applying your pressure to the spreading part of the chest-end. In this way, all chance of obliquity and partial contact is avoided, and the direction of the parietes alone influences the direction of the instrument. Then, keeping the chest-end gently but firmly pressed against the chest, bring the ear carefully and exactly over the centre of the ear-piece; then, applying sufficient pressure to secure the firm contact of the pinna, so as to stop all

chinks and support the stethoscope, remove the fingers that hitherto had held it against the chest. That is the right way. What is the wrong? The right way is one; but, as in other things, the wrong ways are many. One wrong way is to hold the stethoscope near the ear-piece; another, to place it obliquely against the chest; another, to approach the stethoscope to the ear, when stooping to listen, as well as the ear to the stethoscope; another, to keep the fingers in contact with it after the ear is applied, and support unnecessary. If the stethoscope is held near the ear-piece, it is not at liberty to adjust its direction to the chest, its direction is regulated by the hand and not by the thoracic parietes; for in proportion to the distance from the chest-end that the stethoscope is held does its perfect adjustment to the chest's surface become difficult and a matter of chance. If it is held obliquely so that only one edge of the chest-end is in contact with the chest, and between the other and the skin there is a chink, the column of air in the stethoscope is not isolated, but is in communication with the external air, and that murmurous noise is generated, like that which one hears on applying the ear to a shell, and to which I have already referred. I have often seen this method of handling the instrument fatal to efficient auscultation, and have watched the auscultator listening with the greatest solemnity when he could not possibly have heard anything except the droning hum of an open stethoscope. Then again, when the auscultator is stooping to bring his ear to the stethoscope, he very often unconsciously brings the stethoscope to his ear, especially if he is holding it near the ear-piece, so that by the time the ear is adjusted the chest-end is tilting up on one edge, although it has just been applied quite flat. The only antidote to this is to press the stethoscope firmly against the chest, in the way I have mentioned, till the ear is fairly over the centre of the ear-piece, then press the ear firmly against it and keep the head fixed. Perhaps the commonest fault of all is holding the stethoscope in the hand while listening: this is perfectly unnecessary, for the pressure of the head against the instrument is quite sufficient to support it, and the continued application of the hand often produces disturbing adventitious friction-sounds.

2. In choosing the point at which you will listen, if the object of your search is such as to give you liberty of choice, choose those parts that are the least covered with muscle or fat. Sometimes half an inch will make all the difference. I have not unfrequently seen both medical practitioners and students listen on the thick edge of the *pectoralis* or *latissimus dorsi* when the movement of the stethoscope one inch or less would have thrown them into the axilla, with nothing but the thin digitations of the *serratus* between the stethoscope and the ribs. If, for example, you wish to ascertain the general character of the respiratory murmur, any part of the chest will, with certain qualifications, give you the information required; but no parts are so good as the axilla and the neighbourhood of the apices in front, because in none is the muscular and fatty integument thinner, and therefore in none is the sound clearer. This, however, involves a corollary; namely, that in estimating the standard of sound in different situations regard must be had to the amount of intervening fatty and muscular tissue in those particular situations. For an amount of indistinctness and obscurity of breath-sounds that would be abnormal if heard in the axilla, would be quite natural if heard through the female breast.

3. In endeavouring to ascertain the *limits* of a sound, work gradually towards it and then gradually from it; the former will give you the limits of its first appearance, the latter the point of its first diminution. But in estimating the extent of the seat of a sound by the limits of its audibleness, the character of the sound must be regarded as well as its distribution; for a loud sound transgresses the limits of its generation more than a feeble one, a dry sound is heard further than a moist one, and a deep sound than one of high and slender pitch.

4. In auscultating a female's chest, if you should wish to apply your bare ear to the bare skin, (and I do not hesitate to say, that for getting the most perfect information it is sometimes extremely desirable that you should,) or if you want with your bare hand to examine a friction or souffle fremitus, always pave the way by first applying the stethoscope. A physician in search of a diagnosis is a being of no sex, he is a mere machine; a woman's bare breast is to him only so much integument intervening between him and the object of his interest; he sees twenty in a day, perhaps, and thinks no more of seeing a female chest than he does a female tongue. But it is not so with our patients; and a woman in undergoing a thorough and free auscultation does so at the sacrifice of a certain amount of instinctive sensitiveness and modesty. No doubt, no sensible or reasonable woman would for a moment hesitate, or balance feeling against thorough results; but still there *is* the feeling and it has to be overcome, and we cannot be too careful not to do violence to it. It may seem a mere trifle, a mere sentiment; but it is not, it is a most important element in our constitution, and plays a most important part in the social and moral system of our race. There is a very good French proverb to the effect that "Modesty is the rampart that nature has raised around virtue"; and a Latin one more generally and less happily expressed—"Pudore amisso omnis virtus ruit." And he would be a bad philosopher who would regard as a trifle a feeling normally universal, and in its nature respectable and beneficent.

5. There is nothing more difficult than using the stethoscope with children, (very young children I mean,) and successful auscultation with them often requires a good deal of strategy and *finesse*. Once set a child crying, and it is all over; you get nothing but the held breath and the roar. The difficulty is enhanced from the fact that different ages and different children require different management. Some children are afraid, and roar as soon as you produce a stethoscope, although they do not mind your applying your bare ear to their chests. Others enjoy it as a sort of game, and are immediately quiet and good when you apply the "trumpet" to them. Sometimes, therefore, it is better to use the stethoscope, and sometimes the bare ear; sometimes to shew the instrument, and sometimes to hide it. As a rule, older children are quieted and interested by the mystery of the stethoscope; the younger ones are afraid of it and resent it. My practice with infants is this: never commence by auscultating them; always occupy them while doing it; always listen to the back first; always listen with the bare ear befor-

applying the stethoscope; always warm the stethoscope before using it. I have known it of inestimable value as a toy, occupying the little patient in front, while I have been stealing a march on him in the rear and employing immediate auscultation without his knowledge.

Remarks
ON
THE MOLECULAR THEORY OF ORGANISATION:
IN REPLY TO DR. BEALE.

BY
JOHN HUGHES BENNETT, M.D.
PROFESSOR OF THE INSTITUTES OF MEDICINE, AND SENIOR PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF EDINBURGH.

I AGREE with Professor Beale that there are few questions of greater interest to those who are investigating the principles upon which medicine is based, than a consideration of the laws governing the ultimate molecules of which every living organism is composed. I have great pleasure, therefore, in replying to his remarks; because, probably from want of clearness on my part, he has misapprehended the nature of the theory which, after long and mature consideration, I have ventured to place before the profession in the pages of the *Lancet*.

Dr. Beale thinks that, because I have described histolytic molecules as being *often* larger in size than histogenetic molecules, and as being *sometimes* associated with the *débris* of broken down textures, there is a discrepancy in my figuring the latter in disintegrated tubercle unconnected with such *débris*. But I have never stated that the one class of molecules may not exactly resemble the other; and a glance at the figures representing the development of *ascaris mystax* must prove the contrary. Moreover, as it is an essential part of my theory that the histolytic molecules of one period may become the histogenetic molecules of another, there is nothing contradictory in making one figure represent both. Dr. Beale says that I "surely will not maintain that lifeless particles become aggregated together and form a living mass." But tubercle is not lifeless, and is subject to the general law of organisation. As to when, how, and where life is communicated to matter, these are questions I need not now discuss.

Dr. Beale says I ignore the use of high powers and reproduce figures ten years old, drawn under a magnifying powers of 250 diameters linear, an enlargement far less than he and others employ in the present day. I have frequently used powers varying from 700 to 1200 diameters linear; but in rare cases have gained any advantage thereby. If a thing can be seen distinctly under a low power, we seldom see anything new by making it four times as big. Inexperienced persons, also, by the use of such high powers, are peculiarly liable to be led into error. For the purposes of illustration, therefore, I consider that in most cases (not all), a power of 250 times linear is amply sufficient, and it has the great merit of saving space and expense in wood cutting.

Dr. Beale says that the term molecule can scarcely be properly applied to a body nearly as large as a blood-corpuscle. But I can see, say in milk, no difference in structure between the larger and smaller molecules. I have always maintained that, whatever powers are employed, you cannot reach the ultimate molecule; I am far, therefore, from disputing that many of them may be less than the twenty-thousandth of an inch, and still possess all their vital and physical properties.

In the formation of vibriones, I have certainly never seen two particles in the very act of uniting, any more than I presume Dr. Beale has seen them divide under his eye. Either view is a matter of inference. But if Dr. Beale has been fortunate enough to see them actually divide, this is no objection to my theory, as there is no reason why they may not form in one way and multiply in another. In the same way, having been produced by precipitation, they may increase by absorption or imbibition of nutritive fluids.

Dr. Beale thinks it an objection to my statement, that the formation of bone is connected with the molecular law of aggregation, because "the laminæ of the Haversian system are formed layer *within* layer, while the layers of calculous matter are deposited layer *upon* or *outside* layer". But molecular aggregation may take place equally from within or from without; and, as in bone the nourishing fluid is derived from vessels lining the Haversian canals, it is only from within that one could expect such aggregation to be produced.

Dr. Beale thinks there is some confusion in the definition of molecules, because they may be living and dead, simple and compound; may originate from others, and be precipitated from fluids; may be so large as the 1-4000th of an inch, and so small as not to have been reached by the highest magnifying power; and because they have different properties. I can see no inconsistency in all this. Other elementary parts—for example, fibres—possess equal differences. Cells also vary in size, origin, chemical composition, complexity, and properties; yet they are still cells. As to whether molecules of the same kind or molecules of different kinds become aggregated together, there can be no question that coalescence may occur in compound organisms, both between the same and between different molecules, although the former is the most common. When a minute particle of oil is precipitated in an albuminous fluid, there is aggregated round the former a layer of albumen; and so a simple is at once converted into a compound molecule.

I have thus endeavoured to answer all the topics contained in Professor Beale's communication, in which I have been unable to see either facts or arguments in any way opposed to the molecular theory of organisation. On the other hand, were it necessary, I could easily prove from the valuable facts Dr. Beale has placed on record, and from the laborious investigations which he has made into the structure and growth of the tissues, that he has himself furnished most powerful arguments in its support.

I would deprecate further discussion on this matter until the whole of my lectures are published, when I shall be most happy to argue the subject, in all courtesy, with any opponents who, like Dr. Beale, possess an earnest desire to elucidate the truth.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF RHEUMATIC PERICARDITIS.

Under the care of JAMES RUSSELL, M.D.

PERICARDITIS of the rheumatic variety presents, in its tendency to recovery, a striking contrast with the non-rheumatic form of the malady; the tendency of the latter being, too generally, to death. Ormerod, as quoted by Dr. Markham (*Diseases of the Heart*, p. 16), states "that 91 per cent. of his non-rheumatic cases were fatal, whilst of the rheumatic sort 18 per cent. only were fatal." Dr. Gairdner (*On Pericarditis*, p. 29) gives a still more favourable aspect to the disease, by asserting: "Of rheumatic pericarditis and of pericarditis without previous disease, acute or chronic, I have not had under my own personal care a single fatal case." Elsewhere, however, he rather modifies his assertion (p. 32): "As physician to the Royal Infirmary, I have not had under my care a case of rheumatic pericarditis fatal during the acute period of the attack." There can, I think, be little doubt that the more favourable result of cases of this disease in the present day mainly results from the single circumstance of our recognising in the disease a tendency to health rather than to death, and thus freeing our minds from much of the over-anxiety which led to mischievous interference, and leaving ourselves free to obey the indications afforded by each particular case. The same remark is applicable to pneumonia with, probably, still greater force.

Nevertheless, among various cases of rheumatic pericarditis, we witness the widest diversity as regards the intensity of the symptoms, from complete latency to extreme distress in the patient, exciting most serious alarm for the issue of the case—alarm sometimes justified even by death. The following cases illustrate such diversity. In the severe forms of the malady, our main, if not our entire, interest is concentrated upon the condition of the heart's fibre; it may be truly said that almost, if not quite, all the general symptoms, and some of the most important physical signs also, relate to the manner in which the heart is exerting its contractile power; the chief sufferings of the patient result from failure in the heart's power. Thence also arises the danger of the case; and by the same element, more than by any other, we ought to be guided in our choice of measures.

The contractile power of the heart is liable to be lowered in pericarditis by more than one cause. There is fluid effused and compressing the feeble auricles; there is also the immediate neighbourhood of acute inflammation, with its paralysing influence upon muscular fibre. We see each of these influences in powerful operation in the second case below, doubtless intensified by the severe treatment to which the patient was subjected. There is, however, another peril to which the muscular fibres are exposed in this disease, which does not exhaust itself in immediate effects. The inflammation may extend from the pericardium to the tissue of the heart itself, and may permanently cripple the muscular fibre. The first of the following cases affords an interesting illustration. Throughout the case, evidence of depressed cardiac power was manifest. Before the pericardial signs had well developed themselves, the duskiness of face, the tendency to delirium, the high rate of the pulse and respiration, and the feebleness of the first sound of the heart, suggested that the muscular tissue of the heart was already suffering; most serious evidence of great congestion of the heart's cavities afterwards appeared; and after the acute symptoms had passed away, even though recovery seemed progressing, the same indications prevented our feeling at ease respecting the chance of perfecting the cure. The history of the case, except in its longer continuance, almost resembles one of pyæmic pericarditis, of which an interesting example will follow; a form of the malady in which Dr. Kirkes has shown that the muscular fibre of the heart is primarily affected by the formation of so-called secondary, or more properly tertiary abscesses, in its substance. The morbid changes exhibited the disorganising result of inflammation in the deposit of fat and of fresh fibrous tissue amongst the muscular fascicles, crippling the latter, and causing them to atrophy; whilst the unfavourable condition of the entire organ, as regards nutrition and function, was further evidenced by the interstitial fatty change—a true fatty degeneration—which was commencing in the fascicles of the more healthy part, just as occurs in cases of ordinary valvular disease, when at last the heart fails in the struggle.

The immediate cause of death was of the nature of an accident, but one to which the patient's condition directly led—formation of a fibrinous mass in the right cavities of the heart. With a right ventricle firmly attached to the bony walls of the chest, its thin walls more than half converted into fat, and the patient's blood loaded with fibrine, as is the case in acute rheumatism, every circumstance combined to favour this fatal occurrence.

It is worthy of note how quickly and completely the pericardial adhesion had consolidated itself. Ten days before August 31st (when she was first seen) is the earliest period at which the inflammation could possibly have commenced; friction-sound ceased to be heard on September 30; the patient died on November 9th, with very close adhesions, almost identifying the pericardium with the heart, and both with the osseous wall of the chest.

CASE I. Caroline Taylor, aged 13, servant, was admitted August 30th. She had had a hard place, and had been much exposed to wet and cold in an open shop. She had been ill with acute rheumatism for ten days; and three or four years ago, was confined for a few days with the same complaint. Her father died of rheumatism and diseased heart.

On August 31st, her chief symptoms are reported as follows. There was considerable effusion in the joints of the upper and lower extremity. She perspired freely. Pulse 122, respiration 44. The first sound of her heart was decidedly rough; the roughness being most pronounced under the sternum, on a level with the second intercostal space; in quality, the abnormal sound had more of a blowing than of a rubbing character.

Notwithstanding the unfavourable prognostics attending the opening of the case, it was three days longer before the pericardial inflammation developed decided physical signs, though during that interval the patient's condition boded evil. The pulse and respiration remained at 132 and 34. There was so much general distress added to the severe rheumatic affection of the joints, that for one day opium was prescribed at the rate of half a grain every two hours. Moreover, a very decided tendency to delirious wandering manifested itself from the first; and although there was no physical sign indicative of an increase in the cardiac affection, yet the impulse and the first sound of the heart were very feeble and a marked leaden hue of the features forced itself early upon our attention. Her urine, I should observe, was speedily rendered alkaline by potash.

On the fourth day (September 3rd), no further doubt as to increase in the inflammatory affection of the peri-

cardium remained; the cardiac dulness was extended; and, by the evening of September 4th, rose to the first intercostal space. A remarkably dry to-and-fro friction-sound was distinct over the upper left chest, most intensely beneath the upper part of the sternum. The pulmonary portion of the chest, however, remained in a satisfactory condition. The pulse and respiration mounted to 152 and 68. Inspiration was peculiarly sighing and hard to draw.

The general symptoms of the disease became rapidly more urgent, and evidence of depressed cardiac power, and of consequently loaded cavities, more unmistakable. The lips were first livid, and then almost black; the face pallid and leaden; its expression anxious, and indicative of great distress. The delirium was constant; she was incessantly springing up in bed; and frequently divested herself entirely of her clothes; or she lay uttering a continuous melancholy moan. Her bowels were purged, and she passed her stools under her; her urine was abundant. It is to be observed that notwithstanding the effusion of fluid which had taken place in the pericardium, the friction-sound was maintained, though with lessened power. She was ordered tincturæ opii ɱxv; potassæ bicarbonatis, ʒj, every three hours; and to have a blister applied over the heart. Ten ounces of wine were ordered.

Such was the state of things, with some variations, through September 3rd and 4th. On the following morning, a tendency to improvement was manifested. The pulse and respiration were 128 and 47; the lips had lost their lividity, though the face was still leaden; the delirium was less persistent, and the patient was easily roused. Once only a catheter was required, and one stool was passed involuntarily.

A considerable tendency to quiet sleep accredited the evidence of amendment which was now established.

It was not, however, until September 30th that the physical signs indicated entire removal of the fluid. Previously to that date, indeed, the effusion had again increased. On the 30th, the rubbing sound had perfectly ceased; but its disappearance disclosed a loud mitral blowing sound, which for eighteen days previously had been rising into notice, distinct in quality from the rubbing sound. During the interval, the patient's health had much improved; her appetite for meat had returned; and she had lost much of the discomfort which yet remained. But it was remarked, as being inconsistent with this general improvement, that the region of the heart was liable to be the seat of uneasiness; and what was more important, that the pulse and respiration continued persistently high: on the thirty-second day from her admission, they were 128 and 40 to 46; and no explanation of this abnormity was offered by the condition of the lungs. Moreover, her face was easily rendered livid.

Three weeks more (October 19th) saw the patient sitting up for a short time, with good appetite, improved nutrition, tranquil countenance, and increased force in the heart's impulse. The mitral bellows-sound had attained a musical pitch. Still, notwithstanding the favourable aspect of the case, the pulse and respiration were never below 124 and 28 or 30; the respirations sometimes rising to 36, and on November 6th to 42; and, in consequence, I never felt at ease respecting my patient's progress.

The date just mentioned was the seventy-ninth day of the case. She was on that day pale and feeble, and complained of rheumatic pain. On the next day (the 7th), the pulse and respiration were 144 and 76; her breathing was panting; she had very severe paroxysmal pain in the left side, below the mamma and across the front of the chest; skin cool; face pallid, but remarkably free from any expression of distress.

She died three days afterwards. The pulse and respiration rose to 140 and 96; incessant vomiting came on; she could only speak a few words consecutively. Her pupils were natural; her face pallid; the jugular veins not distended. The pain was at times intense. She did not cry out, but lay on her left side moaning, and in such distress that, almost against my judgment, I again recurred to the opium, ordering one-third of a grain of morphine every third hour, with some benefit. The evening before death, the pupils were greatly contracted, and the morphine was omitted.

Sectio Cadaveris, thirty hours after death. Close and firm adhesions united the pericardium intimately to the sternum, and to each lung. All the large veins were remarkably full of loosely coagulated dark blood. The pericardium was almost identified with every part of the heart's surface with which it could be brought into contact. The left ventricle was somewhat dilated, and its walls were thicker than normal. A mass of pure yellow firm fibrine occupied a large part of the right auricle. Passing into the ventricle, a continuation of the same mass lay upon the septum, to which it was loosely adherent; and from this portion a cylindrical process, of the thickness of the largest lead-pencil, passed up the pulmonary artery, to which, however, it was hardly attached; it followed the bifurcation of that vessel, terminating at the root of the lungs. Some loosely coagulated blood lay in the auricle upon the fibrine. The aorta was much contracted. All the valves of the heart were healthy, excepting the mitral, each curtain of which, but chiefly the parietal, was contracted and corrugated, without being thickened by adventitious deposit. The endocardium was healthy. The muscular tissue of almost the entire *surface* of the heart beneath the adherent pericardium presented a very marked yellow colour for the depth of about one-eighth of an inch; the altered colour blending gradually into that of the normal tissue, precisely as occurs when a superficial deposit of fat upon the heart has encroached upon its muscular fascicles. In one part of the right ventricle, the change in question involved nearly the entire wall. In the remainder of the walls, the tissue presented a perfectly normal aspect.

The changed portion in some parts offered considerable resistance to tearing by needles. Large oil-globules, sometimes in extensive groups, sometimes more loosely scattered, were interposed among the fascicles of the diseased portion of the walls, and appeared to have occupied the place of many. In addition to the oil, a fine fibrous tissue could be seen crossing the fascicles, in some portions constituting the entire substance, intermixed with oil; large strands of beautifully waving fibrous tissue fringing the margin. A large number of the remaining fascicles were perfectly opaque, from a dense collection of minute oil-globules; yet there were others, side by side with those most diseased, which exhibited the normal structure with beautiful distinctness. Free oil-globules of minute size floated around the specimens in such abundance as to impart to the water the aspect of an emulsion.

The remainder of the heart's tissue exhibited a condition of fatty degeneration to a very moderate extent. Certain fascicles were opaque; but the majority retained their transverse striæ, and merely presented small groups of bright globules. The septum had advanced far more in this alteration than the walls. There were no free oil-globules. The lungs were very œdematous, but far from being anæmic, though equally far from being loaded with blood. Nearly the whole liver showed itself below the ribs—no doubt from protracted depression of the diaphragm during the final dyspnœa; it weighed three pounds. Its tissue was anæmic. The kidneys were healthy, but very anæmic.

[*To be continued.*]

Original Communications.

ANEURISM OF THE ARCH OF THE AORTA: PRESSURE ON THE SUPERIOR VENA CAVA.

By Ashby G. Osborn, Esq., Northampton.

Summary. *Aneurism of the Arch of the Aorta, below the Origin of the Arteria Innominata: Characteristic Obstruction to Return of the Venous Blood from the Neck and Face: No Abnormal Valvular Sound: Bronchitis: Death.*

A well proportioned English yeoman, aged 40, whose brandy and water cost about £40 *per annum*; drove a very hard-mouthed horse a distance of eighteen miles at the beginning of November 1852. Within a fortnight he perceived peculiar fulness of the face and neck—a bloated sensation; and it was remarked by his friends how unusually fat his face seemed. In company he would sometimes hang down his head, to show how much this alteration in position increased the turgescence and lividity of his countenance. The surgeon to whom he applied for advice examined his heart, but neither he nor I could find anything abnormal in its rhythm or sounds. There was slight cough; but the face and neck were the only parts congested.

Purging with jalap and elaterium, and cupping, gave temporary relief; but we both thought unfavourably of the case. The local affection remained unimproved, but he continued his customary active life for two months longer, *i.e.*, till January 1st, 1853, when he again drove over the same ground, viz., from London to Brentwood, and felt the cold severely.

Tho following day (Sunday) he was worse; the turgescence of the face had by the evening become extreme; he felt pain and uneasiness at his chest, and great pain in the region of the kidneys; there was slight cough without expectoration; almost stertorous breathing; and the small quantity of urine passed contained much blood.

I do not find in my notes that he was unconscious.

The case being regarded as one of local dropsy from some disease of the kidneys aggravated by cold, the *indication* seemed to be to relieve the local renal congestion which was looked upon as the origin of all the mischief. He was bled to twenty ounces; and a dose of calomel and jalap was given immediately, and an ether mixture every three hours.

The prognosis was very unfavourable.

Dr. Grouse of Brentwood saw him for the first time on January 3rd, and thought there was unusual *resonance* of voice just at the centre of the upper third of the sternum. From the history, and this auscultatory sign, he suspected there was a tumour of some kind originating in the over-straining, and pressing upon the superior vena cava.

For nearly a fortnight, our patient continued to improve under the treatment adopted; the countenance shrunk, and with quiet and small doses of mercury became much more natural. The urine gradually returned to its normal condition. He relapsed, however, when moved from his own to another room, that he might sit up by a fire in his bedroom; bronchitis supervened; and he died on January 12th, 1853, nearly ten weeks after the commencement of the symptoms.

Autopsy. There was a cicatrised appearance of the coats of the ascending portion of the arch of the aorta, just before the commencement of the arteria innominata, and in the immediate neighbourhood, considerable aneurismal dilatations ufficient to enclose a large orange, pressing, of course, on the superior vena cava. There was a large quantity of clotted blood in the aneurismal sac. The valves were quite healthy, and none of the large vessels were involved. The lungs were œdematous.

Remarks. Perhaps the first thing worth noticing in this case is, that a large aneurism, probably of sudden origin, should exist so near the aortic valves without effecting any difference in their sounds, or producing that peculiar vibration which we call the aneurismal "whir."

The habit of constantly stimulating the system which this man had pursued for some years, probably softened the coats of the arteries, and thus rendered them less able to bear tension without yielding.

The termination of the case shows the value of Hilton's remark that there is never local congestion, especially of a venous character, which may not be explained by the existence of some obstruction to the withdrawal of blood from the part; here the venous congestion of the countenance was mistaken for the flushed face of renal disease (the apoplectic seizure of albuminuria).

The pathology seems to be this: by great muscular exertion the circulation of blood through the system is accelerated, but when the muscles are kept in a contracted state for some time, the entrance of blood into their texture is impeded, and thus the backing up of the stream takes place between the propelling power—the heart, and the obstruction—the contracted muscles.

In this instance the heart was acting with unusual force, whilst the muscles of the arms and chest were firmly contracted in controlling a hard-mouthed horse.

Had the arterial canal, particularly its middle coat, been in a healthy state, it might have yielded temporarily, and, perhaps, afterwards regained its calibre without any portion having given way, but this not being the case its middle coat ruptured, and thus an incurable disease was set up.

The temporary relief experienced from the treatment and rest recommended, can be accounted for by the bleeding and drastic purgatives diminishing the quantity of the circulating fluid, and calming the action of the arterial system.

The *practical observations* to be derived from this case are:—

Never rest satisfied till the cause of partial congestion is clearly ascertained.

Distinguish carefully the venous congestion from general fulness of the vessels, as in a flushed face.

Wherever there is reason to fear that the return of venous blood to the heart is impeded by some cause situate within the thorax, too much care to avoid cold cannot be taken, for in this case, though the aortic aneurism would have gone on to a fatal termination, yet the patient's death was occasioned, and no doubt much hastened, by bronchitis of organs already gorged with blood, and not directly from the pressure of the aneurism on the superior vena cava; and the bronchitis was caught in merely moving from one bedroom to another.

CANCER OF THE BLADDER.

By F. Page, M.D., Southsea.

Idiopathic cancer of the bladder is considered by most authors as a very rare disease. Some of high standing, as Sömmering, deny wholly the existence of primary cancer of this viscus; Lallemand affirms that it is extremely rare; Civiale gives authority to the prevailing notion of the rarity of the disease; Sir B. Brodie also says he never met with a tumour wholly resembling scirrhus.

A case of this kind having lately come under my care I think it is not altogether void of interest, and may be of use in forming a correct diagnosis in similar cases.

A. B., a man aged 64, applied to me on December 3rd. He was much emaciated, and appeared sinking from or

ganic disease. He had been ill twelve months, gradually getting worse.

The symptoms were constant pain in the bladder; frequent desire to pass urine; increased and unbearable pain after each effort; striking lancinating pain through the perinæum, anus, and the end of the penis. The urine was constantly bloody. The bladder was never distended. I sounded him, but found no stone.

On examination by the rectum, the prostate was found not enlarged, but I felt a hard circumscribed tumour in the posterior parietes of the bladder. The diagnosis which I formed was that of cancer in the bladder. Under the use of suppositories, anodynes, etc., the symptoms somewhat mitigated; but debility increased, and he died on January 10th.

On *post mortem* examination, there was found a circumscribed tumour of the size of half an orange, situated behind the prostate in the floor of the bladder. Its surface was softened down and ulcerated; it was covered with irregular fungoid granulations, with deep interstices, filled with soft pulpy matter. The base of the tumour was three-fourths of an inch thick. The tumour was of stony hardness when cut through, of a white glistening colour, and presenting very clearly cancerous stroma. The peritoneal covering was normal.

It appears that the deposit had its origin in the submucous tissue, involving the mucous membrane, and eventually ulcerating internally. Cancer-cells, with nucleoli, were visible under the microscope.

Transactions of Branches.

MIDLAND BRANCH.

CASE IN WHICH BILIARY CALCULI ESCAPED THROUGH A SINUS IN THE ABDOMINAL WALL.

By Thomas Sympson, Esq., Lincoln.

[*Read December 12th*, 1862.]

C. F., aged 25, unmarried, a pallid, sallow complexioned countrywoman, having light hair and eyes, was admitted, under the care of Mr. Sympson, into the Lincoln County Hospital, on December 21st, 1857.

The opening of a sinus was seen on a level with and about three inches to the right of the umbilicus, through which a probe passed deeply upwards and outwards towards the right hypochondrium. The sinus yielded a free discharge of thin pus; and the adjacent soft parts were greatly thickened and indurated.

On the 22nd, a more particular examination was made, when the skin was found to be clammy, and the extremities disposed to be cold. The tongue was clean and flabby; the pulse 96, small and soft; the urine copious and pale; the bowels were said to act regularly; the catamenia had been absent since the commencement of her illness.

She stated that up to six months ago she had always enjoyed good health; but that she was then seized with a severe pain in the hepatic region, accompanied with jaundice, and followed by a swelling, which slowly descended towards the umbilicus, and, six weeks afterwards, was opened by a surgeon, when a teacupful of pus was evacuated. Since then, the jaundice had recurred several times, and the matter escaping from the sinus had occasionally assumed a bright green tint. The presence of a solid substance at a considerable depth from the surface was detected by a probe; but an attempt to reach and remove it by means of forceps proved unsuccessful.

She was placed on a liberal diet and tonics, and a linseed-meal poultice was directed to be applied over the fistula.

By January 10th, 1858, several biliary calculi had passed through the fistula. By February 24th, she had got rid of more gall-stones, the discharge was diminishing in quantity, and she had much improved in health. The calculi varied in size from that of a millet-seed to that of half a horse-bean, and in tint from almost white to a deep brown; they were distinctly facetted. On every occasion of their passing, she had great pain in the right hypochondrium for a few hours prior to their appearance; the discharge from the sinus then became of a green colour, and then one or more of them escaped, with instant relief to all the symptoms.

On April 26th, when she was discharged from the hospital, several more gall-stones had passed; there was scarcely any discharge from the sinus; the surrounding thickening and induration had almost entirely disappeared; and her general health was completely re-established.

Roughly analysed, the calculi appeared to be composed of cholesterine, biliary colouring matter, and phosphate and carbonate of lime. One of them was made up of almost pure cholesterine.

LANCASHIRE AND CHESHIRE BRANCH.

ON THE TREATMENT OF ASCITES AND ANASARCA.

By J. Birkbeck Nevins, M.D.(Lond.), Liverpool.

[*Read December 18th*, 1862.]

The principle of treatment in these diseases which I wish to lay before you is, the importance of *operating early for the removal of the fluid by means of tapping or by acupuncture, instead of looking upon this method of treatment as the last plan we should resort to.* I believe that, when the mechanical removal of the fluid is effected at an early period, the chances of the patient are much improved; and that, instead of regarding tapping merely as a palliative to relieve the last urgent sufferings of the sick person, we ought to look upon it as an important curative agent. As I am not aware that this course has been prominently laid before the profession, I am desirous of stating the grounds upon which I recommend it, though it is very possible that the same reasons and the same treatment may have been suggested by other members of the profession, and have escaped my notice.

I have frequently observed the difficulty experienced in obtaining the free action of diuretics in cases of anasarca, until the fluid has been removed by some other means, after which the diuretics have produced the desired increase of urinary secretion; and, as a consequence of this, the further accumulation of fluid in the cellular tissue has been prevented. The means by which the fluid has been removed in the first instance have sometimes been copious sweating in a steam-bath, sometimes free purging by hydragogues, and at other times acupuncture of the legs and feet; but, in whatever way the object has been accomplished, the effect has been the same—viz., the natural action of diuretics, which had previously failed to operate.

In looking for an explanation of this phenomenon, I have come to the conclusion that the secreting portions of the kidneys are so enfeebled in their action by the pressure of the accumulated fluid present throughout the cellular tissue of the body, that they are unable to perform their duties aright, until the pressure is removed by some of the various methods just mentioned. The steam-bath or hydragogues would naturally be tried in the first instance; but, if they *do not speedily produce the desired effect, I urge the early employment of acupuncture*, and think the results of my experience are now sufficiently extensive, to warrant my bringing the subject thus prominently before my medical brethren. I have for some years laid this principle before my class

in lecturing on diuretics at the Medical School; but I have waited for accumulated experience before making more public mention of it.

In addition to its effect in promoting the action of diuretics, I consider the early employment of acupuncture important with reference to the condition of the patient's skin. When it is employed early, and before the skin has become enfeebled by the great and long continued distension, I have never seen any bad consequences follow the operation; but when it has been delayed to the last moment, and the legs have long been swollen to a painful extent, I have seen inflammation follow the operation, which has been troublesome in more than one instance.

In performing the operation, I advise that a few punctures only should be made—say half a dozen in the first instance—in one leg and foot; and that the patient should afterwards sit up as much as he conveniently can. The limb should be folded in flannels, which should be frequently changed as they become wet; and it is frequently necessary to apply warmth to the foot in bed. I recommend the employment of a common *stout* round sewing needle, in preference to a cutting edged needle, which I have for some time ceased to employ, as I have seen the wounds made by a three-cornered needle followed by inflammation more frequently than those made by a round one. The round punctures do not allow the escape of the fluid quite so freely as the others; but the comparative freedom from subsequent inflammation is important; and the operation with a common needle supplied by the patient himself, appears much less formidable to him than when the instrument is taken from the surgeon's instrument-case. As soon as the oozing of fluid ceases, the operation should be repeated if the swelling still continue.

With reference to the treatment of *ascites by early tapping* I have less extensive experience; but the following cases appear to me to hold out sufficient encouragement to warrant the fair trial of any plan which gives us reasonably increased hopes of cure in so generally hopeless a disease as dropsy of the abdomen. When the ascites is apparently dependent upon simple disease of the serous membrane (as, for example, in hydrocele), I think we have considerable encouragement in hoping for recovery; and even if it is due to cardiac obstruction, or to disease of the liver, I should still adopt the same mode of treatment, because it offers tangible advantages to the patient, with no corresponding disadvantage, so far as my experience extends.

It is familiar to us all how difficult it is to obtain the good effects of elaterium, in consequence of the vomiting which it excites; and, owing to this circumstance, we are frequently obliged to resort to tapping merely as a palliative, to relieve the urgent sufferings of the patient. Now, if the delay of the operation enabled us to make one tapping suffice for cure, we should be warranted in urging our patient to bear his sufferings, in the expectation of radical relief; and he would be repaid for his patience. But, since we find that repeated tappings are the rule, and not the exception, it appeared to me very doubtful whether, after all, the benefits from delay did repay the prolonged distress from waiting; and I, therefore, repeated the tapping as soon as the patient became uneasy, without waiting for positive suffering.

I have further observed that, in some cases, hydrogogues acted upon the bowels after the patient had been tapped, although they had produced vomiting, or failed to purge before the operation; and I venture to suggest, therefore, that in this case also, the removal of pressure enables the organs to perform their functions, which they were previously unable to do.

I have now adopted this plan of treatment in three cases of ascites, which have resulted in perfect cures. The first case was that of a woman in whom the early tappings were delayed in accordance with our usual practice, and she was tapped many times before the fluid ceased to accumulate; but at length she was discharged cured, and died eighteen months afterwards of some other disease. The second patient was a man, who recovered after three tappings; and the third was a woman, who also recovered after three tappings.

I regard *constant mechanical support of the abdominal walls as a very important part of the subsequent treatment*, by enabling the tissues to regain their natural tone and vigour, after the extreme and enfeebling distension to which they have been so long subjected; and I, therefore, strictly enjoin the constant use of a flannel abdominal bandage, which I do not allow to be given up until the fluid has ceased to reappear.

In the course of *one or two days after the operation, I always resume the use of elaterium or jalap* in such doses as the stomach will bear without sickness, which ought always to be carefully avoided; and I have frequently found that a single pill daily, containing one-sixteenth of a grain of elaterium, produces copious watery purging without sickness after the operation, though the patient derived no benefit from it before the tapping.

The health should be sustained by a liberal diet, of which malt liquor or spirits may form a part or not, according to the circumstances of the case. Iron tonics have also appeared to be useful.

I feel that some apology is necessary for laying so much stress upon the results of so small a number of cases as the three which I have brought before you; but the principles upon which the treatment is based appear to me to be rational; and, if we can throw even but a little hope into the treatment of a disease which is generally so intractable as ascites, our patients cannot be great losers, and may possibly be great gainers. I trust that the kindness of my medical brethren will induce them to communicate to the profession whether their experience in future bears out or contradicts the principles now laid down; viz., that, in the treatment of ascites and anasarca, we ought *to resort early to the mechanical removal of the fluid*, instead of considering tapping as a last resource; *to employ long continued mechanical support afterwards*; and *to administer such doses of appropriate medicines* as the patient's stomach will bear, *early after the performance of the operation.*

Discussion. In the discussion which ensued, several members confirmed the observation about the increased action of remedies after the operation of acupuncture, and it appeared to be thought that the plan of treatment recommended in the paper offered a reasonable ground of hope, which rendered it deserving of trial.

Science in Turkey. The lectures on chemistry in course of bi-weekly delivery at the Dar-il-Fanoum, Constantinople, by Dervish Pasha, have attracted large and enthusiastic audiences. The lecture-theatre is very comfortably fitted up *à la Européenne*, and the lecturer is amply provided with excellent instruments, diagrams and materials for experiment—all at the expense of the Turkish Government. At the conclusion of the series the present lecturer will be followed by Salih Effendi late President of the Pera Municipality, who will deliver a course on Natural History, and will be in his turn succeeded by Edhem Pasha, who will discourse on geology. "Shades of Amurath and Bayazid!" exclaims the *Levant Herald*, "can all this be taking place within the very shadow of St. Sophia?"

Ozone in Cities. Kosmann asserts that ozone in cities is more abundant during the night than in the day; but that where there is much vegetation, the reverse holds good. He shows that ozone is discharged from the green portions and the leaves of plants.

Progress of Medical Science.

Icterus in Pregnant Women. Dr. O. Saint-Vel relates that in 1858 the island of Martinique was, without appreciable cause, visited by an epidemic of jaundice, remarkable for its severity in pregnant women. It broke out at St. Pierre towards the middle of April, attained its maximum height in June and July, and terminated towards the end of the year. All races were attacked; the patients were mostly adults; no liver-complication could be detected; nor could any resemblance be traced betweeen the disease and yellow fever. It was fatal to females only, especially during pregnancy. Of thirty pregnant women who were attacked at St. Pierre, ten only arrived at the full period of pregnancy without presenting any other symptoms than those of ordinary jaundice. The other twenty all had abortion or premature labour at the end of a fortnight or three weeks, and died in a state of coma, which appeared a few hours before or after the abortion. The females who died were from the fourth to the eighth month advanced in pregnancy. In some cases, slight delirium preceded the coma, which was never interrupted, but became more and more profound up to the time of death. Its longest duration, in two cases, was twenty-four and thirty-six hours. It was not preceded by any notable modification of the general sensibility, nor of the respiration or circulation. Hæmorrhage was absent, except in one case, where a female had it before delivery. When death was delayed till three or four days after delivery, the lochia were healthy. Almost all the children were still-born; some lived a few hours; one alone survived. None of them had the icteric colour; nor was there any sign of jaundice in the ten children who were born at full term of mothers who had had the disease. (*Gazette des Hôpitaux*, 20 Novembre 1862.)

Mechanism of Dislocation of the Lower Jaw. M. Maisonneuve has succeeded in producing dislocation of the lower jaw on the dead body, by strongly depressing the chin, pushing the condyles forward by placing the fingers behind them, and suddenly raising the jaws by means of the index and middle fingers of each hand, placed behind and under the angle, so as to imitate the action of the masseters. This plan, he says, has never failed in more than thirty instances. On dissection, M. Maisonneuve has found that the condyles are carried in front of the transverse root of the zygomatic processes, and rest on their anterior face; that the coronoid processes, completely enveloped by the tendon of the temporal muscle, are depressed below the zygomatic arches, which they scarcely ever touch, and that they oppose no obstacle to bringing the jaws together; that the capsule of the joint is much stretched, but is not torn; that the external ligament, of which the normal direction is oblique from before backwards, becomes oblique from behind forwards, and is stretched, as are also the spheno-maxillary and stylo-maxillary ligaments; that the temporal muscle is elongated, but its tendon is not torn; and that the external pterygoid muscles and masseters are strongly stretched, but that the general direction of the action of their fibres is in front of the dislocated condyles, and not behind them. M. Maisonneuve found also that reduction was not facilitated by dividing the coronoid processes at their base, nor by dividing the zygomatic arches, nor by opening the capsule of the joint. On dividing merely the stylo-maxillary and spheno-maxillary ligaments, as well as the posterior fibres of the external ligament, the dislocation was reduced by the slightest pressure. He believes that the difficulty of reduction depends on the fixing of the condyle in front of the transverse root of the zygoma, by the passive resistance of the ligaments and the energetic contraction of the elevator muscle. He concludes hence that the best method of reduction is to gently depress the chin so as relax the ligaments, and to push the condyles strongly back by means of the thumbs, introduced into the mouth, and resting on the coronoid processes. (*Gazette Méd. de Paris*, 8 Novembre 1862.)

Causes of Obstruction of the Trachea. Dr. Hermann Demme arranges the causes of obstruction of the trachea under three principal heads; viz.: 1. Compression; 2. Disease of the walls of the trachea itself; 3. Foreign bodies in the tube. 1. *Compression* is generally produced by tumours of neighbouring organs, among which the most important are: Tumours of the thyroid gland—a very common cause: Tumours of the thymus gland—very rare: Tumours of the œsophagus, especially cancroid and carcinoma—very frequent: Tumours of the lymphatic glands—frequent: Tumours of the vertebral column—rare (a case is recorded by Ollivier): Congenital hygromatous cysts—rare (cases recorded by Wutzer and Hawkins): Aneurism—by no means rare; the bronchi are more frequently compressed by aneurism of the aorta, the trachea in aneurism of the carotid and arteria innominata. The occasional abnormal course of the subclavian artery between the trachea and œsophagus, producing sometimes dysphagia and difficult respiration, must also be remembered. Compression may also be produced by abscesses in the neighbourhood of the trachea, such as retropharyngeal and œsophageal abscesses, abscesses of the thyroid body, and diffuse phlegmon of the cervical muscles; by effusions of blood; or by foreign bodies, such as bullets, lying encysted between the œsophagus and the trachea. 2. *Obstruction* from disease of the trachea itself may be produced by extensive circular cicatrices, the result of tubercular ulceration, typhous processes, syphilitic ulceration, burns, and ulcers following croup. The trachea may also be narrowed by infiltration into its walls; by croupy exudation; by suppuration and the formation of abscesses around the cartilages; by necrosis of the cartilages; by diffuse thickening of the submucous areolar tissue, hypertrophy of the cartilages, and calcareous deposits, observed especially as the result of chronic catarrh; and by new formations of various kinds, such as papillary growths and polypi of the mucous membrane and submucous tissue; cancroid of the mucous membrane; and carcinoma, rarely primary in the walls of the air-tubes, but generally extending to them from neighbouring organs. 3. Obstruction from bodies in the trachea may be produced by foreign substances introduced into the larynx; sequestra of the cartilages detached as the result of necrosis; and croup-membranes. (*Archiv für Klinische Chirurgie*, 3 Band, 3 Heft, 1862.)

New Motor System of the Heart. Professor von Bezold of Jena states that he has, in the course of some researches on the motion of the heart, discovered a new source of motor nerves of this organ, which connect it much more intimately and importantly than the cervical sympathetic or even the par vagum with the cerebro-spinal system. The following results were arrived at by him from experiments on animals paralysed by woorara. 1. When the pneumogastric and sympathetic nerves were divided in the neck, so as to cut off the hitherto recognised conduction of nervous influence from the central organs to the heart, irritation of the medulla oblongata produced a very marked increase in frequency of the pulse and an uncommon augmentation of the pressure of the blood in the arteries—the latter being sometimes more than doubled. 2. When, further, the spinal cord was divided in these animals at any point above the seventh cervical vertebra, the acti-

vity of the heart was almost immediately diminished: the pressure of the blood in the carotid was diminished to three-fourths, the beat of the heart became weak, and its sounds almost inaudible, etc. On the other hand, when the division was made in the neighbourhood of the third or fourth dorsal vertebra, no such effect was produced. Hence the centre of innervation does not extend below the fourth dorsal vertebra. 3. If, after dividing the cord above the seventh cervical vertebra, the medulla oblongata or the portion of the cord above the division be irritated, however violently, whether mechanically or by electricity, no change is produced in the pressure of the blood or in the frequency of the pulse. But if the portion of the cord on the distal side of the division be irritated, the blood-pressure and the heart's action, which have been diminished by the section, may be raised to or even above the normal height. Hence the motor nerves (exclusive of the par vagum and cervical sympathetic) do not come off above the seventh cervical vertebra. 4. If, in partially poisoned animals, the medulla oblongata and the peripheric portion of the divided vagi be simultaneously irritated, the results are, not an increase, but a diminution, of the pressure of the blood; not an acceleration of the pulse, but a retardation or even cessation. Bezold derives the following conclusions from his experiments. *a.* He believes he has ascertained the existence of a new central organ for the motions of the heart, having its seat neither in the medulla oblongata nor in the brain. *b.* Its fibres run through the cervical spinal cord, and pass out between the seventh cervical and fifth dorsal vertebræ. *c.* They very probably pass through the lower cervical and upper dorsal sympathetic ganglia, and enter the breast as the lower and middle cardiac nerves. *d.* This central motor organ normally furnishes three-fourths of the entire propulsive force of the heart; when it is abnormally irritated, the energy of the contractions of the heart may be increased sixfold. *e.* This cardiac nervous system, apparently having its seat in the medulla oblongata, stands in a reflex connexion with the sensory cerebro-spinal fibres. *f.* Various poisons, especially digitalis and strychnia, increase and strengthen the heart's beat, after division of the vagus, by increasing the irritability and activity of this cerebro-spinal cardiac nervous system. (*Berlin. Med. Centralzeitung;* and *Wiener Med. Wochenschrift*, Dec. 20, 1862.)

Suppurative Aortitis: its Influence in producing Purulent Infection. M. Leudet of Rouen has published a paper on this subject, which, though the observed facts are as yet few, is of some importance. In 1829, M. Andral, in his *Précis d'Anatomie pathologique*, described an abscess existing in the coats of the aorta. The correctness of his interpretation of what he saw was, however, long doubted; and Rokitansky suggested that a softened atheromatous deposit had been mistaken for an abscess. On the other hand, Virchow, in 1847, stated that he had been on the point of supposing an abscess to be a softened atheroma, until microscopic examination revealed the presence of distinct pus-corpuscles. In 1852, Spengler published the first case in which the clinical history had been ascertained. The patient, after exposure to cold, had subacute articular rheumatism; then, after being again exposed to cold, he had general symptoms of thoracic and cardiac inflammation, followed by symptoms of purulent infection. At the *post mortem* examination, there was found to be ulcerative endocarditis, with an abscess between the coats of the aorta opening into the heart. In 1856, Dr. Schutzenberger communicated to the Strasburg Medical Society the history of a man who was recovering from pneumonia of the left lung, when he was attacked with violent rigors occurring at irregular intervals, copious sweating, and a peculiar yellow tint of the skin and sclerotic. At the autopsy, an abscess of the size of a nut was found, which had formed between the external and middle coats of the aorta, and opened into that vessel. M. Leudet has also observed a case similar to those related by Spengler and Schutzenberger. In all three, abscess was at the origin of the aorta; but this is not always its seat, for M. Leudet refers to two cases noticed by Rokitansky and Lebert, where the collection of pus was higher up in the vessel. Suppuration may also, in place of being idiopathic and primitive, be a consecutive result of the deposition of atheroma. In the cases collected by M. Leudet, the pus was collected in a small cavity in the external cellular coat, and was infiltrated into the middle elastic coat. These two coats, especially the external, presented marked vascular injection. Fine capillary vessels sometimes extended into the thickness of the middle coat, but never reached the inner coat, which most generally was not at all coloured. In no case were false membranes or clots observed at the level of the inflamed artery. The pus presented the ordinary characters of this secretion. The large opening by which the abscess communicated with the vascular canal had no doubt introduced a small quantity of pus into the blood during life. The existence of pyæmia was denoted by the simultaneous presence of abscesses in the liver, lungs, spleen, etc. In M. Leudet's patient, there was meningitis; in Rokitansky's case, abscess of the spleen; and Spengler's patient had hypostatic pneumonia. The study of the symptoms of suppurative aortitis is rendered very difficult by the coincidence of numerous lesions, which may mask the peculiar symptoms of the disease. The first stage of the disease is one of inflammation, probably simply exudative, of the coats of the vessels or of the heart. This inflammation is generally intense, as appears from the results of *post mortem* examinations. It is that form of endocarditis which M. Bouillaud terms phlegmonous in opposition to superficial; he compares the first to phlegmonous, and the second to simple erysipelas. Nothing in the symptoms of the cases appears to have led to the suspicion of so intense an inflammation. After the manifestation of symptoms which may be supposed to denote the presence of exudative inflammation there is a kind of remission, which is, however, far from constituting complete convalescence. These symptoms of purulent infection set in—especially rigors. This symptom may lead to a diagnosis, when no inflammation can be discerned elsewhere, especially in the venous system. (*Archiv. Génér. de Méd.*; and *Gazette Méd. de Paris*, 20 Decembre 1862.)

Pneumonia followed by Abscess in the Lumbar Region. Dr. Brandicourt of Amiens relates the case of a young woman aged 22, who in April 1861 had an attack of pleuropneumonia followed by empyema of the left pleura. In July, she was attacked with severe pain in the left renal region; and at the end of August, a swelling appeared at the outer part of the spine on the left side, two finger-breadths above the crest of the ilium. Fluctuation was not distinct, but there was a pasty feeling under the finger. The patient had an obstinate cough, and expectoration was very copious. In the middle of September, Dr. Brandicourt opened the swelling, by plunging in a bistoury to the depth of nearly two inches. A very large quantity of serous pus of good colour, immediately escaped; the flow being influenced by the respiratory movements, and resembling the jet of an intermitting fountain. The discharge, which amounted to three *litres*, was partially restrained by closing the aperture; and on auscultation, the respiratory murmur in the lung, which had not been heard during several months, was detected. The pus continued to be discharged during a month, during which time the patient had rigors every evening, and became very weak. Under the use of tonics, including quinine, the rigors disappeared; the suppuration gradually di-

appeared; and by the beginning of November the left lung was discharging its functions nearly as well as the right. In a short time, the patient recovered perfectly. (*Gazette des Hôpitaux*, 21 Octobre 1862.)

British Medical Journal.

SATURDAY, FEBRUARY 7TH, 1863.

THE ATTEMPT TO CONVERT A PRIVATE CHARGE INTO A PUBLIC SCANDAL.

Dr. Burrows was last year elected President for the year of the British Medical Association. By accepting the office he committed an unpardonable mistake or crime in the eyes of the *Lancet*. Whether it be *post hoc* or *propter hoc* of this presidency—our readers may judge for themselves—it is a fact that, for the last three weeks, Dr. Burrows has been prominently introduced into the pages of that journal, under the heading of "Alleged Consultation with a Homœopath". Carefully abstaining from making any direct accusation against our President, the *Lancet*, with the true spirit of Tartuffe, has quietly allowed (with a sort of "I could now an' if I would" language) the idea to go forth to the profession that there was some actual truth in the accusation. Having, however, striven its best during three weeks to find out, if not overt, some kind of constructive treason; and, having utterly failed in its respectable efforts, the *Lancet* now admits with the worst of grace, and forced by the strength of facts, "that in many respects the letter of Dr. Burrows is satisfactory"; which, being put in plain language, means that "we admit the charge brought through us against Dr. Burrows, and which for the last three weeks we have been carefully fomenting, is without foundation in fact; we admit that Dr. Burrows did not knowingly meet a homœopath in consultation." In this way the *Lancet* characteristically withdraws the charge which it has published, which it has manifestly patronised, and which it cannot sustain.

Our readers will remember that we dealt with this case as we have dealt with every other of the kind which has been brought under our notice. We have never allowed such a grievous imputation to appear in our pages, unless the evidence in our hands was clear and unmistakeable. In this case, when the statement was brought under the notice of Mr. Burrows, he positively denied that he ever, to his knowledge, had met a homœopath in consultation. Dr. Burrows is a man of honour; and we willingly took his word that, in meeting this man at Bedford, he did not know he was meeting a homœopath. More than this: we showed his letter to two of the hospital medical officers at Bedford, and both expressed their belief that Dr. Burrows had not knowingly met the homœopath. Under such circumstances, and in the absence of any evidence to the contrary, to have introduced the incident week after week into print, and to have tacitly allowed the reader to think we believed in the truth of the charge, would have been, in our opinion, simply the fomenting of a gross scandal. Had we done this, we might have very fairly laid ourselves open to the charge of having made use of the pages of this Journal for the purpose of gratifying private malevolence.

Such is our opinion. The *Lancet* thinks otherwise; and in order to cover its retreat from a false position, and annoyed at the discovery of the mare's nest over which it has been three weeks brooding without hatching, it cannot retire without its usual *mud-fling* at this Journal.

Let the members of the Association hear from the high-toned morality of the *Lancet* what sort of a Journal they possess, and what sort of honour and honesty presides over its management. "In the following week," says Tartuffe's organ, "the servile print which disgraces the honourable Association of which he is President bent itself in adulation, and declared naïvely that it had determined, if possible, to avoid all public allusion to the matter," and that the charge "was made under an utter misunderstanding of the facts of the case." Here Tartuffe has surely overdone it: we mean his old game of praising the Association and abusing its Journal. Is it logical to say that an Association can be *honourable*, whose Journal is *servile?* At all events, we are now taught by the mouthpiece of the *Lancet* that to act according to the ordinary principles of honour and of charity, which are supposed to guide the intercourse of gentlemen and members of the profession, is to perform an act of disgraceful servility. We must leave our readers to form their own comments on the character of their Journal, and on the morality of the *Lancet;* remarking only that we will not, until assured of the fact, believe that the lines referred to were penned by any member of the medical profession.

Let us recapitulate the facts of the case. Dr. Burrows is summoned to Bedford by a gentleman who, it turns out, is notoriously (in Bedford) a practiser of homœopathy. He meets him in consultation with the physician of the infirmary there. Dr. Burrows has not the slightest idea of this person's homœopathic principles; not a word thereon is insinuated to him by the local physician, who must have been well aware of the fact, and whose silence on the occasion is inexcusable. The patient is treated, not homœopathically, but medically; not one word of the globulistic method is suggested or thought of in the consultation. Throughout the whole affair, Dr. Burrows is free from the very smallest imputation of having dealt knowingly,

either directly or indirectly, with homœopathy or its practisers. But now steps in Don Basilio, calumniator in chief, and *insinuates* that Dr. Burrows must have known that he was dealing with the thing, because this very person's claim for registration under the Medical Act came under the consideration of the Medical Council on an occasion when Dr. Burrows was himself in the chair. Now to this allegation Dr. Burrows's answer is most explicit: "I certainly did not remember that the name of Coombs was among those who had applied to be registered on diplomas granted by a homœopathic college; and even if I had remembered that name, I should not have suspected that it was that of a former pupil, who, as I have elsewhere stated, has frequently requested me to prescribe for his patients on principles diametrically opposed to homœopathy." Dr. Burrows assures us that he had not the slightest recollection that the man whom he met at Bedford had ever applied to be registered as an M.D.; and that, even if the name of the man who sought the registration in 1860 had come across his mind, he would not have had any suspicion that it was the name of him at Bedford, who was his former pupil, and who had previously sent him patients to be treated medically. And it is well to remember that this Medical Council meeting took place two years and a half ago.

This is the answer which Dr. Burrows gives to the *Lancet*, who has furbished up the scandal; and who says: "It is for Dr. Burrows to explain this striking discrepancy." Dr. Burrows has, we will venture to say, given an answer which will be accepted by every member of the medical profession. But how does Don Basilio receive the reply to the question which he asked? He asked it insinuatingly, and he receives the reply insinuatingly. Like his prototype, the *Lancet* could neither boldly nor truly bring the accusation; he produced it obliquely. And now, when the positive denial has come, true to his character, he admits, from the very force of the facts, that "Dr. Burrows's letter is in many respects satisfactory," and then proceeds to accept the explanation exactly as he made the accusation, insinuatingly and obliquely. And this is the journal which, not many months ago, actually threw its shield over and bedaubed with the most fulsome flattery a gentleman who avowed that he met homœopaths in consultation, and openly defended the practice! No; it is not true to say that Dr. Burrows's answer is "in many respects satisfactory." His answer is not satisfactory unless it is completely so. Either the accusation is true or it is false. But it has been proved to be utterly devoid of all foundation, and, therefore, the answer is wholly satisfactory. As such, we are sure, notwithstanding all the artifices of Don Basilio, it will be received by the profession at large.

We, of course, do not for one moment wish it to be understood that any blame in this matter is to be attributed to the gentlemen who brought this question under the notice of the medical press. We think, on the contrary, they only did their duty in so doing; and we are satisfied that no persons will be more gratified than they to have their doubts cleared up as they have been by Dr. Burrows's emphatic answers.

CHOLESTERINE: ITS PHYSIOLOGICAL AND PATHOLOGICAL IMPORT.

Cholesterine is a product of the animal body regarding which, though it is found in sufficient abundance, and the localities in which it exists are tolerably well determined, physiologists have as yet failed in ascertaining precisely where it arises, or what becomes of it, or whether it has any pathological importance beyond its frequent presence in gall-stones. Thus, Longet, writing in 1861, says that "it is one of the products destined to be expelled from the economy"; but in what manner he does not attempt to shew. Robin and Verdeil also speak of its physiological import as altogether unknown; and, not to quote more instances, our physiological treatises in general are equally deficient of information on more than the existence and locality of this substance.

Dr. Austin Flint, junior, of New York, has made some observations in order to clear up the unsettled points relating to this substance, and has published his researches, with the results at which he has arrived, in the October number of the *American Journal of the Medical Sciences*. He has examined cholesterine in its relations with seroline, a substance found hitherto occasionally in small quantities in the blood, but which Dr. Flint discovers to exist normally in fæces, and which he therefore calls *stercorine*. He holds that these two substances—cholesterine and seroline or stercorine—have a direct relation to each other; that the knowledge of this relation is likely to be of great pathological as well as physiological importance; that, in fact,

"What the discovery of the function of urea has done for diseases which now come under the head of uræmia, the discovery of the function of cholesterine may do for the obscure diseases which may hereafter be classed under the head of cholesteræmia."

The general facts that cholesterine is found in the bile, brain, liver, brain and nerves, and also in the crystalline lens, meconium, and (occasionally) fæcal matter, and that it is eliminated by the liver, being recognised, Dr. Flint applies himself to the examination of the question: Where is the substance formed? Its principal seats being the liver and the nervous system, he has endeavoured first to determine whether it is formed or merely deposited in the brain and nervous system, by making comparative analyses of arterial and of venous blood. His results, in si

xperiments on animals, shew a marked increase of holesterine in the blood of the internal jugular vein, nd also an increase in the blood returning by the emoral vein, as compared with the blood of the arotid artery. He infers hence that the cholesterine produced in the brain and absorbed therefrom by ie blood; and, since the increase in the blood of ie jugular vein can only have come from the for-iation of cholesterine in the brain, he argues, sup-orted by the known results of chemical analysis of ie tissues, that the cholesterine found in the general enous system must be produced in the nerves.

To further confirm this theory, he has analysed lood taken from each arm of three patients suffering om hemiplegia; the result being that on the sound de the blood yielded from 0.481 to 0.808 parts of olesterine per 1000; while on the paralysed side ot a trace could be found.

Dr. Flint has also made analyses of the blood of e portal and hepatic veins, as compared with that the carotid artery. He finds in them proof that olesterine is eliminated by the liver; and that, parently, the diminution of cholesterine in the ood of the hepatic vein is nearly equal with the crease of this substance in the blood that has ssed through the brain. Hence he sees in the bile o important elements having separate functions.

"1. The bile contains the glycocholate and taurocho-e of soda; which are not found in the blood, are manu-tured in the liver, are discharged mainly at a certain ge of the digestive process, are destined to assist in me of the nutritive processes, are not discharged from e body, and, in fine, are products of secretion.

"2. It contains cholesterine; which is formed in the od, is merely separated from it by the liver, and not nufactured in this organ, is not destined to assist in y of the nutritive processes, but merely separated be discharged from the body, and is a product of ex-tion."

At this point, Dr. Flint takes up the examina-n of the hitherto undetermined question: What comes of the cholesterine after it has been dis-arged from the liver?

Cholesterine has been said by several authors on ysiology and physiological chemistry to be present fæces. Dr. Marcet, however, has noticed its ab-ice; and Dr. Flint's analyses lead him to the same nclusion. Convinced, however, that the substance ust be discoverable in some shape, he has, by treat-g dried fæces with ether and alcohol, etc., ob-ned a substance in the form of delicate transparent dles, having all the characteristics of seroline. is substance being found in large quantities in the es, he terms *stercorine*. It is not, according to a, the same substance as that which has been de-ibed by Dr. Marcet under the name of *excretine*.

The observations which Dr. Flint has made in re-d to stercorine are as yet incomplete; but he ngs forward the following evidence to show that s a result of a change of the cholesterine during the digestive process. Cholesterine is found in the meconium, where stercorine is absent. This arises from the fact that bile is formed long before any food is taken into the alimentary canal, and before the intestines have had an opportunity of performing their digestive function. As soon, however, as digestion is established and the digestive fluids are secreted, the cholesterine is lost, and stercorine appears in the excrements. In hybernating animals also, cholesterine is found in the fæces during the period when no food is taken, but disappears when the animal awakes and takes food. Again, normal fæces do not contain cholesterine; but, by examining the discharges of fasting animals, Dr. Flint has succeeded in finding small quantities of cholesterine in conjunction with the stercorine. Hence he infers that the change of cholesterine into stercorine is evidently connected with the digestive process.

The effect of cutting off the supply of bile from the intestines on the presence of stercorine in the fæces has been noticed by Dr. Flint in the case of a patient who had jaundice from duodenitis. The fæces were clay-coloured for a time; and, on examination, no cholesterine nor stercorine could be found in them. Nineteen days afterwards, when the fæces had regained their normal colour, they were again examined; and 0.34 of a grain of stercorine was found in 502 grains.

Further, the theory of the conversion of cholesterine into stercorine is supported, according to Dr. Flint, by the fact that the amount of stercorine found in the fæces corresponds very nearly with the calculated average amount of cholesterine discharged from the liver.

Regarding the pathological relations of cholesterine, Dr. Flint promises more complete observations than are contained in his present paper. So far, however, as his investigations have gone, he has arrived at the conclusion that the retention of cholesterine in the blood is liable to produce a train of symptoms of blood-poisoning, which he designates *cholesterœmia*. He explains in this way the difference in the gravity and fatality of the symptoms of two forms of jaundice; one being attended only with yellowness of the skin, and dependent merely on the retention of the bile in the excretory passages, and the absorption of its colouring matter; while in the other the cholesterine is retained in the blood. In the former case, that of simple jaundice, such as that depending on duodenitis, the amount of cholesterine in the blood is not necessarily increased; while in jaundice connected with structural change, as cirrhosis, the increase over the average maximum in healthy blood has been found by Dr. Flint as high as 146 parts in 1000.

The morbid condition which Frerichs terms *acholia* is explained by Dr. Flint on the theory of the retention of cholesterine. In it there may or may not

be jaundice; but, as described by Frerichs, the patients may "become unconscious, and be afterwards seized with noisy delirium, from which they pass to deep coma, and in this state die." In one case observed by Frerichs, there was "spasmodic contraction of the muscles of the left side of the face." In such cases, attempts have been made to discover the elements of the bile—biliary acids and pigment—in the blood; it being argued that they ought to be accumulated in this fluid in the same way as urea in uræmia. Yet, as has been shown by Frerichs and Moleschott, they have not been found. Dr. Flint suggests, however, that if search had been made for cholesterine, the result would have been different. As regards this acute form of jaundice, Dr. Flint has not had an opportunity of actually determining the retention of cholesterine; although the analogy of the symptoms referrible to the nervous system with those found in cases of cirrhosis, where the retention of cholesterine has been ascertained, is strongly marked.

The degree to which cholesterine may be retained, and the quantity of stercorine in the fæces correspondingly diminished, varies in cases of cirrhosis with the amount of structural disease. If the liver be but partially affected, the symptoms of cholesteræmia may be slight or absent; for the same reason that the function of the kidneys may be partially interrupted without producing symptoms of uræmia.

These researches of Dr. Flint, of which we have given an outline, and which we hope he will extend, are apparently of considerable importance. They seem to show that, physiologically, cholesterine bears the same relation to the liver and bile as urea does to the kidneys and urine; and that, pathologically, the retention of cholesterine in the blood produces a train of symptoms designated by Dr. Flint as *cholesterœmia*, which may be compared with those resulting from the retention of urea—uræmia. Finally, as Dr. Flint observes:

"When we add to these conditions the cases of what is ordinarily called biliousness, attended with drowsiness, an indefinite feeling of *malaise*, constipation, etc. (and all this relieved by a simple mercurial purge, which is said to promote the secretion of the liver), cannot we hope that some light will be shed on their pathology by a knowledge that there is a condition called cholesteræmia? As yet this is but speculation; but the discovery of the important function of cholesterine opens an almost boundless field of inquiry in this direction; and ere long the physician may talk of 'biliousness' and 'liver-complaint' with some definite ideas of their pathology."

Here for the present we leave Dr. Flint and his researches. If at a future time he should continue and publish his observations, we will endeavour to lay them before our readers. What he has already laid before the profession on the subject of cholesterine, we commend to the careful attention of British physiologists and chemists, and practical physicians; in order that they may test for themselves how far the observations of our able American *confrère* are trustworthy, and his conclusions sound.

GRATUITOUS MEDICAL SERVICES.

We have already pointed out the great use of "cottage" village hospitals, and the peculiar services which they are capable of affording to the sick and wounded of the district wherein they are located. It is very probable that the one which has already succeeded so well at Cranley may be the model for the construction of many similar ones throughout the country. We have, in fact, received a circular announcing the intention of establishing a "cottage" hospital at East Grinstead; and we, therefore, at once strongly urge upon the consideration of the medical men who may be attached to such hospitals the most important question of gratuitous service. In the plan which lies before us, one part of the programme is, that the medical officer is to "give his professional services gratuitously"; and, in fact, we gather from the circular that here, as in like cases, the chief promoter of the scheme is a member of our profession. Now we would ask that gentlemen will tell us what are the grounds upon which he thus tenders his services gratuitously. He may answer that he is only doing like all the rest of the professional world; and truly it is not with any idea of blaming him that we ask the question. Our wish is to try and arrest an evil which is ruining and degrading our profession; and to prevent, if possible, its extension into this new field of competition which appears opening before us. We simply ask this: Can any gentleman, who gives or offers these public services gratuitously, adduce one single reasonable argument in favour of the suicidal folly, as we must, in the meantime, be permitted to call it. Here are the Medical College and many medical benevolent funds continually ringing in our ears the direst tales of distress and misery falling upon members of our profession. Continually, also, we have loud complaints of the miserable receipts of the hard-worked and over-worked surgeon; and yet daily do we continue and extend this mad system of doing the work of the community gratuitously. Does the lawyer ever do one stroke of public business without pay? Where is the highly educated, experienced and wealthy vicar, dean, or bishop, who does regular gratuitous public work in a hospital? Do the surveyors of our public medical charities survey gratis? Do wealthy contractors lay their bricks gratis? Do butchers supply the hospital sick with beef gratuitously? Is there one single class of persons in the country, from the Queen down to the scavenger, who do public work gratis, except medical men? Undoubtedly not. To us alone belongs the singular thankless palm of performing public work—the w

the community at large—without pay and with- thanks. Nay, more than this: we actually go wn on our knees and ask the public permission to this work.

Let it be remembered, the system is one of modern vention; it was begotten by selfishness, out of petition. It was no love of doing the heaven- rk of pure charity which presided over, and which l presides over, its existence. We would, there- e, earnestly ask the medical supporters of these tage hospitals to pause before they assist in the ension of this absurd system of professional spo- ion.

THE "POMMADE DIT HOLLOWAY."

ROFESSOR" HOLLOWAY has gained the day against agent, Mr. Sellen. The court has decided that Sellen did not obtain from the French Govern- it the permission required by the "Professor," was, therefore, not entitled to his pay. "Pro- or" Holloway agreed to pay the agent £500 if he ld obtain him permission to sell Holloway's Oint- it in France and her colonies. By the French , which prohibits the sale of secret remedies, that ld only be done by permission of the Minister of Interior. Holloway's Ointment was a secret edy, and was so treated. To obtain a patent it, it had been treated as a cosmetic and called pommade," and as the analysis showed that it tained only butter, lard, turpentine, and wax, the nch had laughed at it, and said there was no- g noxious in that, it might be sold as a "pom- e."

ut even the patent to sell the "pommade dit loway" was worthless; for when offered to the ndant by the plaintiff it was long after it had granted, and when it had become void though non-payment of certain fees.

ho in future will venture to say that a "rose ny name would smell as sweet"? Here is the us invention which as "Holloway's Ointment" "sovereign remedy," and which as "Pommade Holloway" is an unsaleable article. A part of "court," it is worthy of note, in the shape of ice Williams, could not let slip the occasion of ging under the notice of the public at large an llent application,

Mr. Justice Williams said he should be ungrateful did not express his obligations to the *pommade* n as *Pommade Divine*, from which he had frequently ned benefit."

e "Justice" did not (as he should have done) the public whether it was from the application e "pommade" to his skin or to his wig that the fit resulted. We trust the proprietors of the divine nade will not fail to thank Mr. Justice Williams, have his words and name distributed over the ce of the earth on the backs of their ointment-

THE WEEK.

OUR attention has been called to the following announcement in a country paper, and from the statement made at another page we cannot doubt as to its general correctness. We sincerely trust that if the manifest evil done in the present case is irremediable, the fact may lead to the prevention in future of such unwarrantable exercise of power. It seems to us that the gift of the appointment ought to be placed in more responsible hands than in that of a Government Inspector of Factories; and we should strongly recommend those gentlemen who are moving in this case to apply also to the Home Secretary to have the gift of the appointment placed in more fitting hands. We read in the *Oldham Standard* as follows:—

"We are informed that the office of government medical officer for the factories for this district, vacant by the death of Dr. Earnshaw, has been conferred on Mr. Coles, the son of Mr. Coles, the government sub-inspector of factories. Mr. Coles is quite a young man; and has scarcely had any experience in his profession to warrant his appointment to such an important office. It is one of the worst pieces of jobbery perpetrated here for some time; and we understand that the medical gentlemen in the town very properly intend memorialising Sir George Grey on the subject. Surely youth and inexperience ought not to be preferred to age and merit."

SIR E. B. LYTTON, as some of our readers may remember, last year insulted the common sense of the British people by the publication, in *All the Year Round*, of a Mesmeric tale. The fanciful baronet did this, we must suppose, for the purpose of puffing his favourite *science*—the Mesmeric. We are not surprised, therefore, to find that a journal which could admit such transcendental nonsense into its pages should also admit a fling at "illiberal doctors"—the illiberal doctors being those who refuse to meet homœopaths in consultation. Having exalted the virtues and miraculous powers of Mesmerism, naturally enough *All the Year Round* would defend the high priests of the art, even though at the expense of the medical profession. In its current number, it in fact thus abuses a resolution of the Dublin College of Surgeons, for the purpose of praising the epistle of his Mesmeric Grace the Archbishop of Dublin. One can only deplore the illogical ignorance which could dictate the insertion of such a paper in a journal of such pretensions, and may fairly suppose that the great defender of the faith, Sir E. B. Lytton, had a finger in its construction. If so, we wish the homœopaths joy of their new friend.

THE Royal College of Physicians has refused to entertain the subject of the matter in dispute between Dr. Tweedie and Dr. Murchison.

THE *Chemical News*, in speaking of the cleanliness of the process pursued by Messrs. Stevens in their bread making, winds up with the following excellent bit of advice, which we recommend to the consideration of all honourable purveyors of sound articles of food and physic :—

"In conclusion, let us advise the company most strongly to have nothing to do with testimonials from the numerous adulteration-mongers, from whom, we have no doubt, they have long since received applications to analyse their bread. If their bread is good—and the samples we have tasted were excellent—the public will soon find it out, and bestow on them the best of testimonials, a large trade ; while fulsome letters from half-a-dozen 'chemical and microscopical analysts,' with half the alphabet added to their names, can only bring suspicion on their wares, and make sensible people chary of dealing with them. If 'good wine needs no bush,' what shall we say of that still greater rarity, good bread ? The company has commenced in a spirited and dignified manner, without puff or flaming advertisements. Let them go on so, and we venture to prophesy that their household loaves will soon become 'household words.'"

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

BY desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the JOURNAL cannot be sent to them.

PHILIP H. WILLIAMS, M.D., *General Secretary*.

Worcester, November 10th, 1862.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
SHROPSHIRE SCIENTIFIC. [Annual.]	George Hotel, Shrewsbury.	Friday, Feb. 13th, 2.30.

NORTH WALES BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held on Tuesday, January 27th, at 1.22 P.M., at the Dudley Arms Hotel, Rhyl, under the presidency of Dr. G. TURNER JONES of Denbigh. There were also ten other members present. Several letters were received from members, regretting their inability to attend.

Annual Meeting. It was unanimously resolved that the annual meeting of the members of this Branch be held on Tuesday, the 7th of July next, at 1 P.M., at the Royal Hotel, Rhyl.

Papers. The following papers and cases were communicated, and elicited a long and interesting discussion.

1. Diphtheria, followed by Ascites and Recovery. By T. E. Jones, Esq., Llanasa.

2. Case of Retention of Urine. By L. Lodge, L.R.C.P.Ed., St. Asaph.

3. Case of Occlusion of Vagina and Anus. By J. C. Davies, M.D., Holywell.

4. Case of Hermaphrodite. By J. Williams, Esq., Holywell.

The members afterwards dined together, and passed a pleasant and agreeable meeting.

METROPOLITAN COUNTIES BRANCH.

Gratuitous Medical Services. At a meeting of Council of this Branch, held on February 3rd, the lowing proposals for the restriction of the syste gratuitous medical services were approved, and orde to be published in the JOURNAL.

1. To give publicity to all hospitals and dispensa that recognise the principle of payment for medical vices. (This has done good service in the case of insurance companies.)

2. To append to every medical vacancy announce the JOURNAL the amount of salary or honorarium, if that is attached to the post, just as the value is g with every clerical vacancy.

3. To bring from time to time the expediency as as the justice of paying for medical, no less than legal and clerical services, under the considerati the governors and committees of all institutions.

New Members. The following gentlemen, residin the Metropolitan Counties district, have been elected members of the Association, according to XIV, at meetings of the Council of this Branch hel January 13th and February 3rd.

Atkins, Jas. R., M.D., Grove House Asylum, Stoke Newington
Barker, Alfred J., M.D., Upper Holloway
Blackstone, Joseph, Esq., Gloucester Road, Regent's Park
Bridgeman, George W., Esq., 73, Margaret Street
Bryant, Thomas, Esq., Assistant-Surgeon to Guy's Hos Finsbury Square
Burrows, William A., Esq., Quadrant Villa, Islington
Cahill, Thomas, M.D., Albert Terrace, Knightsbridge
Challice, John, M.D., Great Cumberland Street
Clark, Alfred, Esq., Twickenham
Clark, Andrew, M.D., Assistant-Physician to the London Hos Montague Street, Russell Square
Clark, F. Le Gros, Esq., Surgeon to St. Thomas's Hospita Thomas's Street
Dixon, Thomas, M.D., Porchester Place, Bayswater
Dow, John, Esq., St. Martin-le-Grand
Edwards, D. O., Esq., Gilston Road, Brompton
Eyles, Richard S., Esq., St. Andrew's Court, Holborn
Forbes, John Gregory, Esq., Devonport Street, Hyde Park
Forsyth, John, Esq., C.B., late Bengal Medical Service, Orienta
Galton, Robert Cameron, M.D., Harley Street
Gibson, John R., Esq., Surgeon to Newgate Prison, Russell S
Grant, Alexander, Esq., late Bengal Medical Service, Park Haverstock Hill
Hawkins, Francis, M.D., Registrar to the Medical Council, Street
Hayward, Henry H., Esq., Queen Anne Street
Headland, Edward, Esq., Upper Portland Place
Holt, Barnard, Esq., Surgeon to the Westminster Hospital, Savil
Hunt, Alfred, Esq., Hammersmith
Kisch, Joseph, Esq., Circus Place, Finsbury
Kitching, George, M.D., Enfield
Langmore, John C., M.B., Oxford Terrace
Latham, Peter M., M.D., Grosvenor Street
Leared, Arthur, M.D., Physician to the Great Northern Ho Old Burlington Street
Lee, Newton B. C., Esq., Talbot Terrace, Westbourne Park
Mackmurdo, Gilbert, Esq., F.R.S., Surgeon to St. Thomas's Ho New Broad Street
Mapleton, Henry, M.D., Inspector General, Army Medical D ment, Whitehall Yard
Mushet, William B., M.B., Fulham
Norton, Robert, M.D., Westbourne Grove West
Pearse, George, L.R.C.P.Ed., Regent Street, Westminster
Phillips, Richard, Esq., Leinster Square
Randall, John, M.D., Medical Officer to St. Marylebone Infi Portman Street
Rendle, James Davy, M.D., Medical Officer to the Gover Convict Prison, Brixton Hill
Rose, Henry Cooper, M.D., Hampstead
Russell, William A., L.R.C.P.Ed., St. Alban's
Sankey, William H. O., M.D., Asylum, Hanwell
Skey, Frederick C., Esq., Surgeon to St. Bartholomew's Ho Grosvenor Street
Slyman, William D., Esq., Wellington Road, Kentish Town
Smith, Thomas, Esq., Demonstrator of Anatomy at St. Bartholo Hospital, Montague Street
Smith, William A., M.D., Physician to the City Dispensary, D Street
Spitta, Robert J., M.D., Medical Officer to the Clapham Disp Clapham Common
Stone, Thomas A., Esq., Grosvenor Sreet
Witten, Edward W., Esq., Gibson Square

Reports of Societies.

MANCHESTER ROYAL INSTITUTION: MEDICAL SECTION.

DEC. 3, 1862.

L. BORCHARDT, M.D., in the Chair.

idectomy. Mr. THOMAS WINDSOR exhibited a case hich he had performed iridectomy, chiefly with the of showing how beautifully the ciliary processes e displayed.

ncephalocele. Dr. LORIMER exhibited a case of en- alocele evidently protruding from the occiput, and it which he purposed making some future remarks.

upture of the Uterus. Dr. THOMAS exhibited an us ruptured transversely across the fundus. The is was slightly contracted; and ergot had been given homœopathic practitioner.

iabetes Mellitus. The debate on Dr. Noble's paper resumed, and was of considerable interest. Dr. J. letcher, Dr. Roberts, Mr. Greaves, Dr. Edward Smith ondon, and others, took part; and the opinion that e is at any rate a practical distinction between cer- classes of diabetes was generally maintained.

edical Diary. Dr. BARLOW read a narrative of a ge to Australia and back in the *Donald M'Kay.* It of much interest, and abounded with practical hints able for various emergencies.

ANNUAL MEETING, JANUARY 14TH, 1863.

L. BORCHARDT, M.D., in the Chair.

eport. The annual report was read and approved of. owed that the society was never in a more flourish- condition as regards numbers or general activity; egretted the gradually increasing financial difficul- and suggested that to meet these, as well as to in- e the attractiveness of the library, it was advisable ise the annual subscription.

accordance with this suggestion, it was afterwards ved that the subscription for town members be in- ed to two guineas.

ice-bearers and Committee. The following gentle- were then elected office-bearers:—*President*, E. l, Esq.; *Vice-President*, Dr. D. Noble; *Treasurer*, Borchardt; *Honorary Secretary*, Dr. W. Roberts; *orary Treasurer*, Thomas Windsor, Esq.; *Honorary or*, Dr. J. Thorburn. *Committee*, Dr. Alcock; M. R. Esq.; G. Greaves, Esq.; Dr. Medd; Thomas Mel- sq.; Dr. Samelson; Dr. W. Skinner; R. B. Smart, ; Dr. Stone; Dr. Thomas; Dr. Thorburn; J. Wind- sq.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, DEC. 15TH, 1862.

CHARLES MURCHISON, M.D., in the Chair.

RT ON THE STATE OF EPIDEMIC DISEASE IN GREAT BRITAIN IN 1861-2. BY J. N. RADCLIFFE, ESQ.

Report referred to the twelve months ending the September 1862. The following is a recapitulation ne of the principal facts recorded.

e health status of the English population, as esti- l from the unusually low rate of mortality through- ie year, was generally good, notwithstanding dear- of provisions and an excessive amount of pauper- The health status of the Scottish population was edly below the average, as shewn by the large nt of sickness prevalent in the last quarter of 1861, he high rate of mortality since the commencement 62.

The average death-rate of Scotland, it is well to remark, is below that of England. Thus, during the six years 1855 60, the annual proportion of deaths in England was 219 per 10,000 population; during the same period in Scotland, the proportion was 208.

The high range of temperature in the winter months and low range during the summer, in England, exercised a favourable influence over the health, notwithstanding much wet and variability of weather. In Scotland, similar conditions of temperature and weather existed, but to an exaggerated extent; and the great changes which were experienced, and especially the undue humidity of the atmosphere, were apparently the fostering causes of the influenza and throat-affections, which appear to have been more common there than in England.

The epidemic diseases most prevalent in England were continued fever, scarlatina, measles, diphtheria, whooping-cough, and small-pox. In Scotland, the same diseases, with the exception of small-pox; also, and more particularly, sore-throat, often assuming a diphtheritic character, and accompanied by diphtheria, played the chief part in the epidemiology of the twelve months.

In both parts of the kingdom, continued fever prevailed most commonly in the autumn quarter of 1861; and in England, the affection would appear to have been more general in the northern than in the southern portion of the kingdom.

In both countries, *scarlatina* was widely prevalent in the northern districts in the last quarter of 1861; but the disease became more active in the southern districts in the third quarter of 1862.

Measles prevailed extensively, and in some instances very fatally, in the winter quarter in England. In Scotland, the disease appears to have been most prevalent in the spring and summer quarters.

Diphtheria was, in England, principally fatal in the autumn quarter; but the disease prevailed more or less in every registration district during the year. In Scotland, the disease, together with sore-throat, appears to have been epidemic throughout the year.

Whooping-cough was widely prevalent in England during the winter quarter; in Scotland, during the winter and spring quarters.

Influenza was epidemic in Scotland in the autumn and winter quarters.

Finally, small-pox broke out in many districts of England, but more particularly in the eastern and south-western and northern counties, and in Yorkshire.

In no instance did an outbreak of any of the different diseases referred to, as occurring in England, assume what may be termed general proportions. The outbreaks were essentially local. But the dispersion of the various maladies, or of their centres of manifestation, over the kingdom; the cropping out of exaggeration of these diseases in different localities; and the effects they apparently exercised upon the sickness and mortality of certain districts, without heightening the death-rate of the whole kingdom, present a study of great interest. From this study, it is reasonable to conclude that, in dealing with these local outbreaks of epidemic disease in ordinary periods, the best chance is afforded of warding off the wide spread and more deadly outbreaks of extraordinary periods.

The detailed mortuary returns for Scotland extend as yet only to the year 1857; but the returns for England are brought down to 1860. From the latter, then, may be obtained information as to the status of the several epidemic diseases most prevalent in the twelve months discussed, immediately prior to that period.

Since 1857, the mortality from continued fever has slowly declined. In that year, the deaths from this cause amounted to 19.016; in 1860 they were 13.012.

In 1855, the mortality from scarlatina was 17.314. In 1856 and 1857, the number of deaths from this dis-

ease fell considerably—the mortality in the latter year being 12.646. The year following, the mortality increased enormously, becoming well-nigh doubled—the number of deaths from the malady being 23.711. In 1859, the number fell to 19.310; and in 1860, it became as low as 9.305. Prior to 1855, deaths from scarlatina, cynanche maligna, and diphtheria, were not separated in the Registrar-General's report. Whether the detailed reports of the Registrar-General will show an increase in the mortality in the whole of England from scarlatina, during 1861 and 1862, as great as occurred in London, cannot be predicted. It is certain, however, that the activity of scarlet fever was great in several parts of the kingdom.

The deaths from cynanche maligna in 1855 amounted to 199; in 1858, to 770. In 1860, the mortality from the disease had decreased to 376.

The mortality from measles was largely augmented in 1858; and there was a steady increase in the number of deaths from the disease in the two subsequent years.

The deaths registered from diphtheria in 1855 numbered 186; in 1859, 9.587. In 1860, the mortality from this disease had decreased to 5.212.

The mortality from whooping-cough in 1860 was the lowest since 1852; and the mortality from small-pox had declined from 6460 in 1858 to 2749 in 1860.

The reduced rate of mortality throughout England, which occurred in 1860, was chiefly due, Dr. Farr states, to the decline of the number of deaths from scarlatina, diphtheria, and diarrhœa. A decrease also in the mortality from small-pox, erysipelas, and cholera, contributed to the favourable results.

The most noteworthy fact in the epidemiology of the metropolis during the twelve months, was the remarkable outbreak of typhus. In 1858, 1859, and 1860, typhus had become so rare a disease in London, that the question of converting the Fever Hospital to other uses, was seriously entertained. In 1861, typhus again became epidemic; and since January 1862, the number of admissions to the Fever Hospital for typhus has exceeded that at any period of the history of the hospital. Dr. Murchison attributes this epidemic to the *artificial scarcity* produced by the system of strikes, which had for some time previously disorganised the labour market, and the condensation of population caused by the arrival of labourers in the metropolis from the country in search of work. (See Dr. Murchison's recently published *Treatise on the Continued Fevers of Great Britain*, p. 52, for an account of this epidemic.)

The mortality from continued fever in London, doubtless owing to the outbreak of typhus, was in excess of that of any like period since 1848. Indeed, the total mortality of the winter, spring, and summer quarters of 1862 (2839), from this disease, was alone in excess of that of any year since 1848. The true source of this excess of mortality would not have been rightly understood except by the careful nosological and etiological distinction of the forms of continued fever, insisted upon by Dr. Murchison.

The mortality from scarlatina was but a little below that from continued fever during the twelve months—the total mortality from the former malady being 3437; from the latter, 3463. Next in order of mortality was whooping-cough. Continued fever, scarlatina, and whooping-cough, were the chief epidemic affections of the period under observation in the metropolis. The mortality from continued fever increased to a maximum in the second quarter of 1862. The mortality from scarlatina was at its maximum in the last quarter of 1861, then decreased throughout the two succeeding quarters, but largely increased again in the summer quarter of 1862. The mortality from whooping-cough was greatest in the first quarter of 1862. Diphtheria was still largely fatal, having occasioned 625 deaths.

Mr. Radcliffe detailed the history of the outbreak of typhus at Preston in Lancashire to the date of readi the report. He dwelt also at some length on epizoo diseases; brought together the chief accessible inform tion on epiphytics; and terminated his report by a br analysis of the principal contributions to epidemiologi literature in Great Britain during 1861-2.

The chief diseases prevalent among domesticated a mals were epizootic pleuropneumonia, and the vesicu disease of the mouth and feet. Scores of sheep suffe and were lost from *filariæ* in the bronchial tubes a abomasum; there were several local but very fatal o breaks of influenza among horses; and an outbreak *variola ovina* occurred in Wiltshire. The history of t latter outbreak, which excited great alarm at the tir will be imperfect until the official reports are publish There was no special disease among plants during t year.

Dr. Murchison complimented the author on the va able report which had been read to the Society; a observed that a continuation of such reports would of great service to future writers on epidemics. W regard to continued fevers, he pointed out the neces of distinguishing the different forms, before draw conclusions as to their causes. The terms "typh and "continued fever" were commonly employed to signate different idiopathic fevers arising from tot different causes, as well as many febrile affecti symptomatic of local inflammation, which might put typhoid symptoms. Consequently, all official retur from which these sources of error were not exclud were of no value for drawing any inferences as to probable causes of an increased or diminished pre lence of the diseases in question. He proceeded allude to certain instances where great misunderst ing had arisen from confounding the different form continued fever. Twenty years ago, a memorable cussion took place between the late Dr. Alison of Ed burgh and the London Poor-Law Commissioners, specting the causes of "fever"—the latter maintain that it was often due to putrid emanations from dec ing organic matter, and was independent of destituti whereas Dr. Alison asserted that its main cause destitution, and that putrid emanations had nothing do with it. Both observers were right; but they ferred to different diseases. Dr. Alison's observati were made upon typhus and relapsing fever; thos the London observers on enteric fever. Again, the y 1858, in which the filthy condition of the Thames tracted so much notice, had often been referred to proving that enteric fever was independent of pu emanations, because "fever" was less prevalent in L don than it had been for many years before. Dr. M chison did not believe that the condition of the Tha in that year was sufficient to give rise to enteric fe but he insisted that there was no diminution in prevalence of enteric fever in London in 1858: the minished prevalence of "fever" was due to the aln complete disappearance of typhus, which was ackn ledged to be independent of putrid emanations. Murchison then alluded to the present condition Lancashire, in reference to the appearance of f Typhus had broken out at Preston early in Octo and from the reports published in the *Times*, as wel from private information, he believed it to be du overcrowding consequent on destitution. The unp leled relief which had been afforded to the distre operatives, and the great ability with which this r had been distributed, had alone prevented the outb of an epidemic, like that which devastated Irelan 1847, after the failure of the potato crop. It had repeatedly stated that throughout Lancashire there not as yet been a single death from starvation. London, on the other hand, the daily papers repo numerous deaths from starvation; and the poor p lation had been condensed by the arrival of nume

irers from the country in search of employment. equently, London had been suffering from the com- ement of 1862 from an epidemic of typhus, greater any which had visited it for many years. Since ary 1st, nearly 2,000 cases of true typhus had been tted into the London Fever Hospital, a far larger ber than in any previous year of its existence; and had also been numerous cases in the other metro- an hospitals.

. Lawson, Inspector-General of Army Hospitals, ted attention to the probable existence of a certain mic influence, which, for want of a better term, he nated *epidemic force*. His own observations, sys- tically conducted in several parts of the globe, had n that, the ordinary local predisposing causes of mics being present, epidemic outbreaks recurred curious regularity. This periodical recurrence in- d, he thought, a law of epidemic action, independ- f, although acting concurrently with, the recognised ing causes of epidemics, which was deserving of and attentive examination. The epidemic force, characterised the phenomenon, became at times emic. He suggested the propriety of keeping this ble epidemic influence in view, in examining the ality records of this kingdom. They would doubt- hrow much light on the subject.

Richardson remarked that he had been much k, whilst listening to Mr. Radcliffe's report, with acit assumption by the author of the spontaneous opment of certain epidemic contagious affections. ought that the question of the spontaneous deve- nt of contagious maladies of an epidemic character pen to much doubt. He believed that it was a ion which might with much advantage be sub- d to discussion by the Society. He would, there- with the permission of the members, take an early tunity of asking the Society to express an opinion the debated points.

LIVERPOOL MEDICAL INSTITUTION.

January 8, 1863.

B. Steele, Esq., Vice-President, in the Chair.

erforate Anus. The Chairman mentioned that the f imperforate rectum reported at the last meeting rminated fatally. Obstruction had come on, fol- by swelling of the belly and sinking. He was not d to make a *post mortem* examination.

our containing Hair. Mr. Lowndes shewed a r of about the size of a filbert, which was removed he upper part of the outer angle of the orbit, and ned loose hairs in it, and had hair growing on its membrane.

ic Disease of Breast. Mr. Fletcher shewed a ien of cystic disease of the breast, removed from an aged 35. It had existed for a year. It was to be a complete cystic tumour with a large fungus ding into one cyst.

nd of the Penis. Dr. Nottingham brought for- t case of extraordinary wound of the penis. He was more properly a wound of the penis received extraordinary way. A gentleman, after intercourse his wife, observed hæmorrhage, and an incised of the penis. It appeared that his wife had been a glass syringe some days before. On examina- r. Nottingham found a piece of glass behind the fixed at one point. He made use of a four- speculum to open out the vagina, and removed ce of glass with forceps. It suggested itself to at, in such a case, the fragment might be pushed n the peritoneum. The woman was unconscious resence. He shewed the fragment, which was in and sharp; and also the syringe from which it had become detached. In another case, he had found several pieces of glass in the vagina. These glass per- forated syringes are very thin and dangerous, and he always recommended a Higginson's syringe and porce- lain tube.

Mr. Denton had met with a case in which, during in- tercourse, the husband met with an alarming accident. A stem pessary which the female was wearing had be- come inverted, and the stem, projecting into the vagina, had entered the man's urethra and caused great pain and great hæmorrhage.

Mr. Higginson said that some pessaries, when the stems are short, are liable to turn round, and also to drop out entirely. He might be allowed to say that he had no doubt in the world of the value of a stem in cases of anteversion, retroversion, and dysmennorrhœa.

The Turkish Fever Ship. Mr. Higginson read a paper on information collected at Malta and Alexandria respecting the crew of a Turkish frigate, on their voyage from Egypt and return thither, in reference to the out- break of fever in Liverpool in 1861. Mr. Higginson ob- served that the medical history of that outbreak of fever is contained in thirteen papers in the *Medical Times and Gazette*, April to July 1861; in four papers in the *Lancet*, April 1861; and in a paper by Dr. Duncan in the first volume of the *Transactions of the Epidemio- logical Society*, 1862. Thirty-two sick men from the *Schah Gehaed* were admitted into the Liverpool Southern Hospital, four of whom died of dysentery; "there was no typhus." Nevertheless, typhus attacked those who attended on the Egyptians on board the ship, at the baths, and in the hospital; thirty-one people were seized with typhus, and eight died. Mr. Higginson learnt at Malta that when the *Schah Gehaed* arrived there from Alexandria on her way to England, seventy-three of her crew were received into hospital; namely, seventeen cases of febris intermittens, thirty-seven of febris con- tinua, eight of gastritis, four of diarrhœa, and seven of other diseases. One case only of those of febris con- tinua proved fatal; and he was told that the cases classed under this head presented "a pulse of about 100, skin hot, no eruption, tongue white and coated, but not dry; they always had an appetite." Into the same hospital, there were received from the *Voyageur de la Mer*, on her way from England to Egypt, nine cases, of which two were classed under the head of febris continua, and of these one died. There were one case of gastritis, four of diarrhœa, and two of rheumatism. The captain also died of fever, and a resident engineer, who worked on board one night, also took fever (true typhus), and died about the ninth day. At Alexandria, Mr. Higginson learnt that about twenty-five of the Arab crew had been taken to hospital, fourteen of whom had symptoms of continued fever, and of these one died, which was the only death of those arriving in Egypt. Six European passengers, who suffered from a febrile attack more or less severe, all recovered. No contagion is known or suspected to have emanated from these cases. From these data, Mr. Higginson inferred that, in the case of these Egyptians, the same poison may produce fever in hot and dysentery in cold climates.

Dr. Cameron said that in Mr. Higginson's account it seemed that out of seventy-three cases in the first series, only one proved fatal. These could not then be cases of true typhus, but might be of febricula. This form of fever is recognised and described by Dr. Murchison. With regard to the cases that were under his own care at the Southern Hospital, much had been said and written about them, and he had re-considered them most carefully, and the only conclusion he could come to was that they were certainly not cases of true fever. There was a total absence of prostration; the patients were generally able to walk, and they could eat well; there was no delirium; the tongue was clean. Again, more than 200 men worked on board the ship, and did not

take fever. This was not like the contagiousness of ship fever. He referred to several authorities on this point.

Mr. IRVINE, referring to his own published statement on this subject, said that the cases he had there classed under the head of constipation might, perhaps, like Dr. Cameron's, have been cases of febricula. During their stay these patients shewed no signs of true fever, and they bore with impunity the rough treatment they were subjected to on board ship.

Mr. FLETCHER thought Mr. Higginson's paper valuable as proving that there was nothing like typhus at Malta, whatever the physician there chose to call the slight cases under his care. The dirt and emanations from these Turks at the hospital were quite sufficient to give rise to fever. At the Paul Street Baths men took fever after being only a very short time in contact with these patients.

Dr. NOTTINGHAM said that these Egyptians had been closely packed, and exposed to all the circumstances calculated to cause an outbreak of fever; had they been Saxons they ought to have had fever, at any rate when they got into the typhus regions. He is disposed to believe that that Oriental race is less liable to typhus than we are.

Dr. CAMERON said it was very remarkable that those patients of his, whatever disease they themselves had, inparted true typhus to the Europeans who were exposed to the infection.

Dr. VOSE, during the outbreak in question, had attended a clergyman who had contracted the disease at the Southern Hospital. He had distinctly typhus—measly eruption, etc. These filthy Egyptians seemed able to radiate a disease distinct from their own.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, JAN. 16TH, 1863.

M. BAINES, M.D., Vice-President, in the Chair.

ON SOME POINTS IN CONNECTION WITH CEREBRAL HÆMORRHAGE. BY T. JONES, ESQ.

THE author's opinions were based upon forty fatal cases which had occurred at St. George's Hospital. These were taken indiscriminately; but after a careful scrutiny, selecting only those cases in which a perfect *post mortem* examination of all the organs of the body took place, and in which a visible hæmorrhage could be demonstrated from the cerebral arteries, thirty-six cases were found perfectly reliable for his remarks. Of the predisposing causes, the influence of age was first discussed; and, contrary to what had been often advanced, he shewed that the greater number of cases occurred between the ages of 40 and 50; for in thirty-eight cases, he had found three had occurred between 30 and 40 years; thirteen between 40 and 50; ten between 50 and 60, nine between 60 and 70; and three between 70 and 80. But a further examination showed that by comparing the numbers of cases with the respective numbers of population at similar ages, the period of life at which the disease was most prone to occur relatively was between 60 and 70; for between 30 and 40 years, three cases occurred in a population of 2500; between 40 and 50, thirteen cases in a population of 1800; between 50 and 60, ten cases in 1300; between 60 and 70, nine cases in 1000; and between 70 and 80, three cases in a population of 500.

With regard to sex, males were shown to be more liable to the disease than females; for of forty cases, 11 only were females.

Mr. JONES next described the efficient causes of cerebral hæmorrhage, and the intimate connexion between the latter and disease of the kidneys, heart, and arteries. This being one of the principal objects of the paper, he entered minutely into details of the thirty-six fatal cases, in which disease of the kidneys, or the heart, or arte was found, conjointly or singly, with cerebral hæ rhage. The analysis of these thirty-six cases was examined; the result being that disease of the cere and other vessels, of the heart, of the kidneys, was fo in conjunction ten times; disease of the cerebral ves of the heart, of the kidneys, twenty-two times; dis of the heart and kidneys, twenty-nine times; of cerebral vessels and kidneys, twenty-two times; of cerebral vessels and heart, twenty-four times; of cerebral vessels and heart (hypertrophy), ten times vessels not cerebral and kidneys, thirteen times; of sels not cerebral and heart, thirteen times.

The further results of the analysis showed tha more than one-half the cases, the kidneys, heart, cerebral vessels were simultaneously affected, an almost all those cases in which there was absence of ease in one or other of these organs, there was the tory of an accident to which the attack was attribut

The various morbid appearances found in the kid heart, and arteries, under the foregoing circumsta were fully and minutely explained, the author strongly of opinion that the diseased condition o kidneys first led to that of the arteries, and subsequ to the heart.

In support of this opinion, Mr. Jones offered an thesis to the effect that the kidneys, from their ganised state, being unable to depurate the blood o one hand, but allowing the albumen to unduly away on the other, this fluid was rendered unfit to on the nutrition of the tissues, and that the art suffered early from this defective nutrition. The clusions which the author drew from his examinati the subject, were:—

1. Cerebral hæmorrhage, when associated with disease, is almost always found to be dependant rupture of one or more of the cerebral arteries, in sequence of certain morbid changes having taken in their walls.

2. These changes in the walls of the vessels a duced by the altered state of the blood, the effect vanced disease of the kidneys.

3. The enlargement of the heart is the imm effect of the renal disease, conjointly, perhaps, the alterations in the coats of the vessels.

The paper concluded with some remarks upo treatment of these cases, in which a tonic and s lating plan, rather than a lowering one, was advo and two cases were given, which seemed to justify

ROYAL MEDICAL AND CHIRURGI SOCIETY.

TUESDAY, JANUARY 27TH, 1863.

SAMUEL SOLLY, Esq., F.R.S., in the Chair.

CASE OF WHITE FIBRO-SEROUS DISCHARGE FROM THIGH. BY A. B. BUCHANAN, M.D., GLASGOW.

[*Communicated by* E. H. SIEVEKING, M.D.]

THE author recorded the history of a remarkable c discharge of white fibro-serous fluid from the po cutaneous surface of the thigh, under his care in gow. The patient was a woman, in other respe fair health, aged 46, and mother of six healthy chi The discharge was white, like milk, and flowed fre coriations produced by the rupture of small ve scattered over the back of the thigh; and partic from an infiltrated patch, of the size of the palm hand, on which the vesicles and excoriations were abundant. The milky fluid coagulated a few m after being passed. It contained a fatty molecula similar to that of chyle, and a few nucleated cells. results of a chemical analysis closely corresponde those yielded by "chylous urine."

e patient dated the commencement of her malady a shivering fit twenty-one years ago, shortly after n she noticed a "lump" in the situation of the ed surface. Fifteen years ago vesicles appeared, which a brownish fluid exuded on scratching. For ast six years the discharge had been milk-white, was always worst in wet weather, and while the nt was walking about, when its amount might be a pint per hour. At night it ceased to run, recom- ing about an hour after the patient rose in the ing; but in dry and frosty weather it was occasion- bsent for a week or two. The veins of the affected were varicose, but no enlargement of the lymphatic s could be detected. The author succeeded in con- ng the discharge for two months by a long elastic ng; the use of which, however, had to be discon- d, owing to severe lancinating pains in the thigh. breasts also swelled, and began to secrete small ities of colostrum. Immediately on ceasing to use tocking the uneasy sensations subsided, and the urge commenced anew.

er remarking that cases of this affection were ex- ly rare in temperate latitudes, Dr. BUCHANAN d out, by referring to several recent examples, ney were probably more frequent in warm climates. ed, however, and gave an account of, two unequivo- ses of the same affection, both dating from the eenth century; one of which, in a male subject, ed in Germany, and the other, in a female, in a.

le referring to various pathological theories, the fully recognised the identity of the above disease chylous urine," or, as he would prefer to call it, e fibro-serous urine." He objected particularly to heory which identified white fibro-serous dis- s in general with chyle. He gave his reasons for ng that it was more natural to consider them as lent to the white liquor sanguinis—to transuda- of the serum of the blood during its periodical ess after meals, but with certain modifications in- ble from the mode of its secretion. Thus, while ater, albumen, and salts, and possibly also the , would come from the blood directly, he showed e cells present in the discharge must be derived he secretory layer of the skin, or from the epithe- cutaneous glands. He contended that the mole- ase was unquestionably derived from the blood; t the molecules could not be conceived to filter through the walls of the vessels without presup- the existence of a uniformly and intensely milky while the discharge was flowing, even at long in- after meals. To avoid this difficulty, it might be ed that the epithelial cells of the glands of the d the power of separating, by a perverted func- tty matter from the blood, much as the epithelial the intestine are concerned in filtering it into eals. The cells would then become gorged with olecules, and the uniformly white colour of the ge would be accounted for without its being neces- suppose that the liquor sanguinis was ever milky as usual, after meals. On this view, white fibro- discharges would depend immediately on de- glandular action, and the foregoing case might ed as a rare functional affection of the glandular us of the skin.

paper was illustrated by specimens of the milky ge and by a drawing of the diseased surface.

ON SYPHILIS AS A CONSTITUTIONAL DISEASE. BY J. MARSTON, M.D.

tion only of the report was read, and its further was adjourned to Feb. 10th.

NEW LITHOTRITES.

HENRY THOMPSON exhibited some lithotrites of a struction, on behalf of Messrs. Weiss and Son, who wished to show them to the fellows of the Society before making them generally public. As the alteration appeared to him a real improvement, he readily assented to do so. He premised that this related entirely to the mode of applying and disengaging the power, and not at all to the part concerned in crushing the stone. In order to demonstrate the qualities of these instruments, it was necessary to call to mind what are the main points to be achieved in constructing the movement of a first-rate lithotrite. 1. Economy of time in its action; anything which shortened the period necessary to a proper performance of the operation in the bladder was so much clear gain to the patient. 2. To reduce to a minimum vibration or concussion in its action. 3. To permit the utmost delicacy of perception, especially valuable in dealing with small fragments. He showed the deficiency of the old screw instrument in all these respects, and the inferiority of this latter to the instrument known as Charrière's, which was now so commonly substituted for it. He showed the improvement made by Mr. Coxeter, and placed in the International Exhibition; and finally demonstrated the action of Weiss's new instrument as uniting all the characters given above with the greatest strength, comparing it also with the rack and pinion instrument, to the advantage of the former. The power in Weiss's instrument is that of the screw; it is disengaged and converted into sliding action with the most perfect ease, and without moving the hand, while the entire instrument can be changed in direction, or even entirely rotated, by a light application of the finger and thumb. The apparatus for accomplishing this is exceedingly simple, at the same time very strong, and not liable to get out of order.

Correspondence.

PREFERMENT BY AFFECTION.

SIR,—I venture to address you on a subject which is at present engrossing the attention of the medical profession in this town, and which, I have reason to believe, is not indifferent to the general public.

You are no doubt aware that there are in Lancashire, numerous medical appointments, in connection with the staple manufacture—cotton, of considerable value; these being held for life, as under the Poor-law, or during the *good behaviour*, as it is called, of the incumbent.

They are government offices, and in the gift of the Inspector of Factories for the district in which a vacancy occurs. Those who hold them are denominated, "certifying surgeons to the factories," because all children under the age of 16 have to undergo medical inspection before they can be employed as factory operatives. The *direct* pecuniary value of these appointments varies from £100 to £400 *per annum*; and *indirectly*, they are a means of introduction to much surgical practice, considerably more. In the town of Oldham, there are two such appointments; one, the largest in the country I am told, is supposed to yield between £400 and £500 *per annum*; the other from £250 to £300. It is with the latter I have to do.

You may naturally suppose, that whenever a vacancy occurs, there is much emulation amongst the medical residents to gain the prize, especially as the duties pertaining to the position are by no means onerous, and perfectly compatible with the conduct of a large general practice.

It has been customary for the Inspector when called upon to discharge this public trust, to nominate some medical gentleman of established reputation, resident in the town, and possessing the confidence of the public.

During the past week, the death of Mr. Earnshaw, one of the certifying surgeons here, has placed at the

disposal of the Inspector of the district the appointment of a successor. Judge of the surprise of the profession when it was announced that, ignoring age, reputation, and status, he had violated his trust by nominating a non-resident young gentleman, who has just completed his education, the son of a sub-inspector in a neigbouring district! Is it a matter of surprise that all here view this proceeding as a deliberate insult, and a gross piece of official jobbery? We are anxious to take such steps as may manifest this opinion, having in view either the annulling of this appointment, or the prevention in future, here and elsewhere, of a similar injustice. It has been determined, therefore, to call a meeting of the profession in the course of a few days; and it would much aid their object to be fortified by the support of the medical press. It is to the interest of all of us that nepotism should be strangled in its birth.

I am, etc., BETA.

Oldham, January 27th, 1863.

DYSCHROMATODERMA.

LETTER FROM C. HANDFIELD JONES, M.B., F.R.S.

SIR,—Will you allow me, through the medium of the JOURNAL, to call Mr. E. Wilson's attention to an interesting instance of dyschromatoderma, which he has not alluded to in his recently published essay? I refer to the peculiar dark suborbital tinging of the skin which accompanies aguish disorder, and which is perhaps oftenest observed in children. It forms a curve, commencing and being deepest near the inner canthus of the eye, and gradually shading off into the usual tint of the face as it passes below the inner and lower part of the orbit. The parents notice it readily, and say their child is "so dark under the eyes". It does not appear to be a permanent discoloration, as it disappears when health is regained. It is a really valuable sign of the presence of aguish affection, and as such I have long been acquainted with it. Till lately, however, I have been rather inclined to ascribe it to some venous congestion; but I am now more disposed to adopt the view that it depends on pigmentary deposit, derived from abnormal changes taking place in the blood. It is very probable that other causes besides malarious disease may induce it, but I have not observed it so marked in any other states as in this.

I am, etc., C. HANDFIELD JONES.

London, January 1863.

THE TITLE OF DOCTOR.

SIR,—I have found the opinions editorially enunciated by you in our JOURNAL generally so just, that it is with diffidence I venture to differ from you as to permitting the claim set up by some of the Licentiates of the Edinburgh College of Physicians to the title of "Doctor". No doubt Licentiates practising as physicians only have been customarily addressed as Doctors, as no other title could properly designate them; but the case is widely different when my unscrupulous opponent —the general practitioner—invests £10 in a license, with the purpose of imposing upon the public by falsely representing himself as having a title which gives him a superior professional status to myself. We have in our town two of these Edinburgh Licentiates, and one of them (who signs himself Dr. ——, Physician, Surgeons, etc.) industriously circulates the report that he has a higher professional title than myself; and I am convinced that, if we silently allow this assumption, the public will be cheated into this belief; indeed, I have daily knowledge that such is the fact. Then why should I lend myself, contrary to my conscience, to aid in disseminating a falsehood by calling a general practitioner "Doctor", when he has no degree, and his only title to it is "humbug"? Of what is he Doctor? tainly not of medicine; and I do not understand any honourable Licentiate can expect as a right t called Doctor, when his College cannot and does pretend to give him the title. I shall, therefore, duty to myself, oppose such an assumption, and dec to address a mere Licentiate as "Doctor", even at risk of "exposing myself to the charge of discour and to angry rebuke". I hope that our Association take up this matter, and follow the example of the M chester Medico-Ethical Society, which some time ag solved that a Licentiate was not entitled to be ca Doctor, as I am convinced that the more respect members of our profession will not from any feelin courtesy give the title of Doctor to those who, from desire to rise higher than their competitors, reso such an imposition. I am, etc., F.R.C.

February 3rd, 1863.

[Our correspondent must recollect that, if ther any blame to be attached to any one in this matter, to the authorities of Colleges of Physicians, who du that famous year of grace (or money-making) del the country with ready-made physicians. No one be that day refused the courtesy title of "Dr." to a p cian; and we must confess (and for reasons whic have already given at length) that we do not see the title can be refused now. There are, we bel still alive gentlemen, non-diplomatised, to whom London College many years ago actually gave dis permission to take the title of Doctor. How would correspondent deal with them? The tacit gift of "Doctor" was part of their bargain with the Col But if we give the title to one physician, how can w fuse it to any physician? But there is another in tant view of the question, to which we would seri invite attention. Do these titles really give a man special advantage in the eyes of the public? Is man's honourable position won by his own honou conduct, whatever be his medical testimonial—wh diploma or license? We have given long and ea consideration to the subject, and we can come other conclusion than that we have done. EDITOR.

PUBLIC GRATUITOUS MEDICAL SERVI

SIR,—Mr. Spencer Wells deserves the thanks o profession for exposing the injustice attempted inflicted on us by the Liverpool and London Assu Office. As this is, perhaps, the only species of th merous demands on our gratuitous service that has successfully resisted, it occurs to me to ask whethe other Protean exactions on the time and skill o profession cannot be withstood on the same groun

Foremost, and may be parent of all, there is the strous injustice of gratuitous service at our hos and dispensaries, where the general public requi at the cost of much time, skill, and labour, to tre ailments of their nominees, dependants, or labo as the case may be. Now, the public (*i. e.*, the scribers to these institutions) obtains a large amo valuable service, if not actual profit, from the l rendered or preserved to it by us at these institu Ought we not, therefore, to participate in this prof reward for our services? "Woe unto him," exc the prophet of old, "that buildeth his house b righteousness and his chambers by wrong; that his neighbour's service without wages, and giveth not for his work." (Jeremiah, chap. xxii, 13.) that cottage hospitals and dispensaries are being o every day, it is high time that some steps, such as suggested by Dr. Gibbon, should be taken by our ciation to scotch if not to cure the evil.

I am, etc., M

Medical News.

OTHECARIES' HALL. On January 22nd, the following tiate was admitted:—
sham, Thomas Cargill, Newcastle

tted on January 29th:—
ittain, Thomas Lewis, Chester
llis, Heber Dowling, St. Bartholomew's Hospital
ay, Frederick John, March, Isle of Ely
andley, Joseph, King Street, Oldham
hnson, James Mercer, Everton, Liverpool
man, John, Weston Favell, Northamptonshire
ann, John Dixon, West View, Kendal
atthews, James, Cowes, Isle of Wight
iller, John Nicholas, The Square, Hampstead
trick, Samuel Alexander, Tipping Street, Manchester

APPOINTMENTS.

Vilson, M.D., appointed Assistant Physician to University ge Hospital.
EY, George, M.D., appointed Assistant Physician to Univer- College Hospital.
EWS, Charles S., Esq., elected Surgeon to the Farringdon ral Dispensary.
Y, J. Jardine, Esq., appointed Surgeon to the Brighton and ex Infirmary for Diseases of the Eye.
MS, William R., L.R.C.P.Ed., appointed Resident Apothecary ethlehem Hospital.

LAW MEDICAL SERVICE.
M, Fitzgibbon L., L.K.Q.C.P.I., to be Medical Officer to the idge District of the Celbridge Union, co. Kildare.
N, Henry, Esq., to be Medical Officer for the West District of arish of Wednesbury.
L, William S., Esq., to be Medical Officer for the Eckington ict of the Chesterfield Union.
ON, Thomas E., M.D., to be Medical Officer for the Ropsley ict of the Grantham Union.

Staff-Assistant-Surgeon H., to be Assistant-Surgeon 50th *vice* O. Owen.

To be Staff-Assistant-Surgeon:—
Assistant-Surgeon O., 50th Foot.

NAVY.
LL, John, Esq.
N, Thomas, M.D.
William H., Esq.
Richard, Esq. } Assistant-Surgeons to be Surgeons.
RD, William, Esq., Surgeon (supernumerary), to the *Clyde* t-ship.
ON, Robert, Esq., Assistant-Surgeon, to Haslar Hospital.
ER, William B., Esq., Acting Assistant-Surgeon, to the *sus.*
Archibald J., Esq., Staff-Surgeon, to the *Colossus.*
, W. L., Esq., Assistant-Surgeon, to the *Racoon.*
, William, Esq., Acting Assistant-Surgeon (additional), to *rcissus.*
James, M.D., Surgeon, to the *Racoon.*

ARMY.
, Assistant-Surgeon C., Bengal Army, to be Surgeon.
, Assistant-Surgeon F., Bengal Army, to be Surgeon.

EERS. (A.V.=Artillery Volunteers; R.V.=Rifle lunteers):—
V., Esq., to be Assistant-Surgeon 2nd Manchester R.V.

To be Honorary Assistant-Surgeon:—
L, W., M.D., 1st Dumfriesshire R.V.

BIRTH.

On February 1st, at Winkfield, near Windsor, the wife of Hewitt, M.D., prematurely of a son, who survived but ours.

DEATHS.

Iiles, Esq., Surgeon, at 31, Finsbury Square, on Feb. 2.
L, Samuel, Esq., Surgeon, at Rugby, aged 78, on Feb. 1.
. On January 30th, at Limehouse, aged 26, Duncan, st son of W. S. Cumming, Esq., Surgeon.
W. John, Esq., Surgeon, at Oldham, on January 17.
William, M.D., at Newcastle, Staffordshire, aged 49, on y 30.
, Wm., Esq., Surgeon, at Rainford, aged 38, on Jan. 30.

HOVELL. On January 30th, at Clapton, aged 3, Henry S. R., third son of D. De Berdt Hovell, Esq., Surgeon.
HUDSON. On January 29, at Shepton Mallet, Jane, wife of Thomas St. J. Hudson, Esq., Surgeon.
JOHNSTONE. On December 24th, 1862, at Rajcote, Elizabeth, wife of Assistant-Surgeon T. P. Johnstone, 16th Native Infantry.
SHERWOOD. On January 20th, at Melcombe Place, Dorset Square, aged 5 years, Digby, youngest son of W. H. Sherwood, M.D., of Bathurst, Gambia.

THE CONSOLIDATED FUND. The Lunacy Commissioners', etc., expenses were £11,929 in 1861-2, as compared with £12,278 in 1860-1.

ROYAL COLLEGE OF SURGEONS. The Hunterian oration will be delivered on Saturday next, in the theatre of the College, at three o'clock, by Professor Gulliver, F.R.S., and on Tuesday Professor Huxley, F.R.S., will commence his course of lectures.

THE QUEEN'S PHYSICIAN. On the occasion of the christening of the infant son of Dr. W. Jenner on Friday week, her Most Gracious Majesty was pleased to stand sponsor, being represented on the occasion by Lady Augusta Bruce, who, in obedience to the wishes of the Queen, gave the boy the name of Alfred Victor, accompanied with the present of a magnificent tankard, bearing a suitable inscription, and as a Royal recognition of the great professional attention paid by Dr. Jenner to his Royal Highness the Prince Consort.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY. A half-yearly general meeting of the members of this society was held on January 28th, T. A. Stone, Esq., President, in the chair. It appeared that during the past year £1,933 had been distributed in half yearly grants amongst forty-three widows and twenty-six orphans of former members; £10: 10: in immediate relief to a family; £45 towards the self-maintenance of two older orphans; £15 for extra relief to a widow; and £20 as a special grant to an adult son in great distress and illness abroad. We are happy to state that a much larger number than usual of new members has been elected by the Society, and we hope that this increased ratio will continue, so lamentable, and often unexpectedly, is the condition of the families of deceased medical men. The following officers and directors for the ensuing year were elected: *President*—T. A. Stone, Esq. *Vice-Presidents*—M. Ware, Esq.; E. A. Brande, Esq.; P. M. Latham, M.D.; J. Bacot, Esq.; T. Turner, M.D.; D. H. Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; E. Tegart, Esq.; G. Burrows, M.D., F.R.S.; John Miles, Esq.; Sir John W. Fisher; Cæsar H. Hawkins, Esq., F.R.S. *Treasurers*—J. T. Ware, Esq.; G. H. Roe, M.D., (Atg.); R. S. Eyles, Esq. *Directors*—B. G. Babington, M.D.; J. Wetherfield, Esq.; J. J. Sawyer, Esq.; T. Brown, Esq.; C. J. B. Aldis, M.D.; W. Dickinson, Esq.; J. C. Salisbury, Esq.; H. Blenkarne, Esq.; T. K. Chambers, M.D.; J. Clarke, M.D.; D. Scannell, Esq.; P. E. Hewett, Esq.; W. J. Little, M.D.; J. G. Forbes, Esq.; W. Munk, M.D.; B. W. Holt, Esq.; C. Miles, Esq.; W. Cathrow, Esq.; H. Sterry, Esq.; A. Fisher, Esq.; H. Jeafferson, M.D.; J. Paget, Esq., F.R.S.; H. S. Illingworth, Esq.; F. Hawkins. M.D. The seventy-fifth anniversary dinner of the Society, is appointed to take place on May 20th, at the Albion Tavern.

ABUSE OF TOBACCO. There is another habit respecting which I shall venture to say a few words, because it is both a bad one and a comparatively new one—I mean the immoderate use of tobacco—a habit brought amongst us from the continent of Europe, on the cessation of the French revolutionary war. Young military men are apt to regard the habit as a manly one, until severe dyspepsia, giddiness, shattered nerves, sallow complexion, disturbed action of the heart, and other symptoms show themselves, and then it is frequently too late to stop. "The sallow complexions, black, broken, and unsound teeth"

of the Germans are matters of notoriety to all travellers. "You may," says one of them, "smell a German in any part of the room, or scent him at a quarter of a mile's distance in the open air, if the wind be favourable. Much is talked of the good effects of tobacco-smoking in damp and malarious localities, by persons who, in defiance of geographical differences, carry the habit wherever they go—from the marshes of Burmah to the arid plains of Hindustan, forgetting that, meanwhile, in the language of Cassio, "they put an enemy in their mouths to steal away their brains;" but I think there is good reason to question the benefits of this habit of smoking even in the fatherland of fog and damp, or that tobacco ever acts as a preventive to any disease, and least of all to fever. The truth is, that many persons puff themselves into the good graces of snops and spoonies like themselves, and use cigars by the score now, as Lord Chesterfield drank and smoked in his time, notwithstanding his aversion to wine and tobacco—"because he thought such practices very genteel, and made him look like a man." How his lordship may have looked under the united influence of wine and tobacco, his biographers have failed to relate; but we all know how our modern "spoonies" and "snobs" in our thoroughfares look after a course of cigar-smoking alone. *(Sir R. Martin.)*

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. Thomas Bryant, Lettsomian Lecture "On the Differences between the Physiological and Pathological Processes in Children and Adults, and on some Congenital Deformities, as Harelip and Malformations of the Rectum."—Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society. 8 P.M., Ballot; 8.30 P.M., Continuation of Dr. Marston's paper on "Constitutional Syphilis"; Mr. T. Longmore, "On Two Cases of Kelis."—Zoological.

WEDNESDAY. Society of Arts.—Microscopical.—North London.

THURSDAY. Royal.—Antiquarian.

FRIDAY. Astronomical.—Royal Institution.

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JANUARY 31, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1123 / Girls..968	2111	1354
Average of corresponding weeks 1853-62		2008	1466

Barometer:
Highest (Wed.) 30.296; lowest (Sat.) 29.353; mean, 29.857.

Thermometer:
Highest in sun—extremes (Th.) 85.6 degs.; (Sat.) 52 degs.
In shade—highest (Th.) 55.2 degs.; lowest (Wed.) 32.2 degs.
Mean—44.5 degrees; difference from mean of 43 yrs.+6.6 degs.
Range—during week, 23 degrees; mean daily, 11.9 degrees.

Mean humidity of air (*saturation*=100), 83.

Mean direction of wind, S.W.—Rain in inches, 0.60.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addr to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.*

CORRESPONDENTS, who wish notice to be taken of their commu tions, should authenticate them with their names—of course necessarily for publication.

DR. HARRISON'S BOOK ON CHILDREN.—SIR: I beg respectful state, that the comments made on my little work on the *Dis of Children*, in the BRITISH MEDICAL JOURNAL of Decembe 1862, appear to me unfair in imputing to me a wish to "cas flections on the medical body in general." I must distinctly the most remote intention of so doing. On the contrary, I always entertained a high opinion of the medical profession body, both for its enlightened humanity and varied learning the same time, I cannot but think that remarks which are n personal nature, may be fairly directed against errors which sionally arise. Indeed, you properly say yourself in the next of your JOURNAL, page 660: "We need not tell our correspo that from one end of the country to the other amateur an fessional quacks daily prescribe and daily administer medici

I am, etc., J. BOWER HARRIS

Higher Broughton, Manchester, January 1863,

[We willingly insert Dr. Harrison's note. We are sat however, that the construction we put upon Dr. Harrison's as they stand in his book, was the legitimate one. We ar glad to hear from him that no such idea was present in his in writing them. EDITOR.]

FOREIGN PRACTICE BY ENGLISHMEN.—SIR: Can you infor what examination an English registered M.R.C.S. is requi pass, before he is allowed to practise in a French town?

I am, etc., H

[We believe that there is something more than exami required. It is requisite for a foreigner to obtain perm from *l'autorité* to settle in France as a medical man; and w always understood that such permission is not easily ob EDITOR.]

DECAPITATION BY HANGING.—Dr. Gibb has kindly sent us a dian newspaper, containing an account of the decapitation referred to in this JOURNAL. We must still, notwithstandi printed details, hold the fact as hard of belief. If the bo emaciated, its weight would have been slight. *No medic gives any information on the subject.* It seems incredible t rope of the ordinary strength used in hanging criminals, not give way, rather than the neck. We read in the jour ferred to:—

"The fall being so great, and the man's body being in eased condition, the vertebræ and muscles connecting th with the shoulders gave way, and, terrible to relate, th rolled off, while the body fell with a heavy plunge into the of the scaffold! The life-blood of the criminal poured livid streams from the headless trunk, while the torn musc gaping arteries presented a sickening spectacle."

W. C.—Our correspondent is, no doubt, aware that it is ofte easier to ask than to answer a question. The names a the programme prove the authenticity of the society; b regard to the announced proposal of a new society, we posed to think that, as so many societies now exist in this polis, to invent a new one, except upon very distinct and grounds, is very undesirable. An Anthropological Soci tainly seems to us to be, from its title, much of a kin w Ethnological Society; and, if it really be so, then we can that, in our opinion, it falls under the category of an und novelty. To the institution as a publishing society, h there may be less objection.

COMMUNICATIONS have been received from:—Dr. W Budd; Mr. H. Hailey; The Honorary Secretary Royal Medical and Chirurgical Society; Dr. J. I Bennett; Mr. P. Hewett; Mr. Thompson; Dr. Han Jones; Mr. Rogers; Dr. Ogle; Dr. Skinner; Mr. Beale; Mr. A. B. Steele; Mr. J. Kent Spender; Mr. Wade; Dr. Hewitt; Dr. Tenison; Mr. S. Beecroft; M Jones; Mr. W. Cooke; Mr. J. B. Curgenven: H. W.; Dr Russell; Dr. Styrap; Mr. S. Wood; Mr. T. M. Stoni Registrar of the Medical Society of London; Mr. Mr. P. Leslie; and Mr. J. J. Godfrey.

Facts and Arguments

OPPOSED TO

DR. BENNETT'S THEORY OF ORGANISATION.

BY

LIONEL S. BEALE, M.B., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL; HONORARY FELLOW OF KING'S COLLEGE; ETC.

Dr. Bennett deprecates further discussion until the whole of his lectures are published; but as this theory is not a new one put forward for the first time by a young observer, as most of the statements have been repeatedly made, as the same facts and arguments have been advanced before, and many of the drawings now being published have been already used for illustrating similar observations, there seems to me no sufficient reason for postponing the discussion already commenced; and if the forthcoming lectures contain as many statements open to discussion as those which have already appeared, the task of criticism would be too great to attempt. Nor would it be just to the author to raise objections so long after the statements which called them forth had appeared.

Moreover, when a public teacher of deservedly high repute, and an examiner in one of our great universities, makes such vague statements as the following, "*the molecules* of the *ovary* first coalesce to *form the ovum*"—"after fecundation the *spermatozoids and germinal vesicle disintegrate* and form *histolytic molecules*,"—it seems only right to ask at once for further explanation, for it is doubtful if the author means literally what he says. What evidence has he in favour of the view he has expressed? I am not aware of any observations by Dr. Bennett, or by any other observer, which tend in any way to show that the ovum is formed by the *coalescence of the molecules of the ovary*, or that spermatozoids and germinal vesicles disintegrate to form *molecules*.

Again, under the head of "practical applications," Dr. Bennett says,—"*The molecular theory must ultimately constitute the basis for the arts of horticulture, agriculture, and medicine. Thus, vegetables and animals grow by the juxtaposition of molecules which are introduced into the economy in the fluid form. This fluid holds in solution the particles of which the different textures consist. These are deposited, and so increase of bulk takes place.*" It would seem that every sentence here requires further explanation; and I can see no logical connection between the first and those that succeed it.

Dr. Bennett, not content with publishing his own doctrine, asserts that by his view several conflicting theories are reconciled, and at once proceeds to combine ideas which are quite incompatible with each other. He accepts completely contradictory statements, and himself makes assertions so opposite to each other, that both cannot be correct.

If vegetables and animals, as Dr. Bennett asserts, grow by the juxtaposition of molecules, such molecules must exist as positive particles. If in solution, they are no longer molecules. Dr. Bennett must accept his own definition of a molecule as "a minute *body* seen," "a visible molecule;" or he must admit, with other observers in the present day, that living matter absorbs substances in solution, and converts these into matter of the same, or into matter of a different, kind. If the matter is in a state of *solution* when it comes into contact with the living mass there can be no *juxtaposition of molecules*, and Dr. Bennett agrees in this matter with other observers.

With regard to the formation of vibriones, Dr. Bennett says that his assertion that molecules united to form the minute filaments is an inference, like my statement that the particles divided. The latter is a fact generally admitted by observers here and on the continent, and to be *seen* in whole classes of organisms. The former is a statement, in making which, I believe, Dr. Bennett stands quite alone.

Dr. Bennett says living organisms may be formed in one way, and multiply in another;—"Having been produced by precipitation, they may increase by absorption or imbibition of nutritive fluids." Now there is, in such a number of cases, incontrovertible evidence that a living mass does increase in size by the absorption of nutritive fluid, and that it does multiply by a portion of the living matter becoming separated, or moving away from the general mass, or by the division of the mass into two parts, that we are quite justified in concluding that living matter *always* increases in the same manner, and living particles *always* multiply in the same way.

There is, therefore, no reason for assuming that molecules become aggregated together to produce nuclei and cells, for the observed facts can be accounted for in a much more simple manner. That living matter always increases by absorbing nutritive pabulum in a state of solution, and that every living particle springs from a preëxisting living particle, are generalisations justified by observation.

I shall conclude this paper by drawing attention to Dr. Bennett's observations upon the use of high powers. Since many of the drawings and observations now being published by Dr. Bennett were made, vast improvements have been carried out in microscopes and magnifying-glasses, and new methods of observation have been introduced. Dr. Bennett maintains that in rare cases only has he gained any advantage by using powers varying from 700 to 1200 linear. I would simply observe in answer to this—

1. That it has been proved that points can be seen by the use of high powers which are not visible by a power of 250 diameters, and I shall be happy to show specimens in proof of this assertion to any one.

2. It is a fact, that for purposes of class illustration a power of 700 linear can be used quite readily. Objects under such a magnifying power were seen by classes of upwards of one hundred persons in London nearly two years ago.

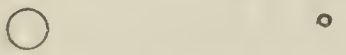
3. There is no difficulty in proving that, by the use of very high powers and special modes of preparation, facts bearing in a most important manner on the mode of growth and multiplication of living particles can be demonstrated which cannot be seen

with powers in ordinary use; and there is every reason to believe that by improved means of inquiry new and valuable facts will be elicited.

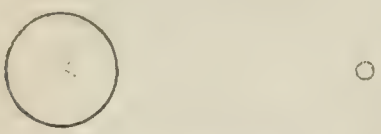
The difference in mere dimension may be illustrated by the following figures of the same circle variously magnified; from which it must be obvious that the higher degrees of enlargement must give a clearer insight into the most minute recesses of structure than the lower powers used by Dr. Bennett, it being understood that the loss in definition bears no proportion to the augmentation of area.



Molecules less than the 1-6000th and 1-20000th of an inch, magnified 250 linear.



Molecules of about 1-4000th and 1-20000th of an inch in diameter, magnified 700 linear.



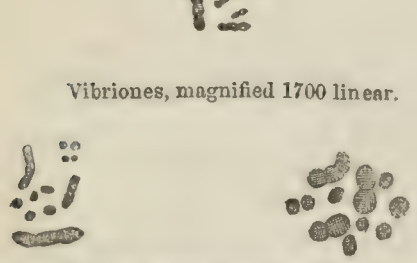
Molecules of the 1-4000th and less than the 1-20000th of an inch, magnified 1800 linear.



Molecules of the same diameter, magnified 3000 linear. The engraver has made the smaller circle too wide by nearly one-third of its diameter.



Vibriones, magnified 1700 linear.



Vibriones and vegetable growths in epithelium of the mouth, magnified 3000 linear.

The one-thousandth of an English inch, magnified 250 linear.

The one-thousandth of an English inch, magnified 3000 linear. This line should have been exactly three inches in length.

It is only just to Messrs. Powell and Lealand that I should state here most distinctly that the high powers made by them, and magnifying from 1700 to 1800 linear with the low eye-piece, are thoroughly practical working glasses. That extremely delicate instruments of any kind rather confuse and discourage than assist those who are just beginning to learn, is certain; but this is no argument against their use by those who have been working for years. Better and higher powers and improved processes of preparation are clearly the means by which alone this branch of inquiry can be advanced.

Now, if molecules have united to form the vibriones represented in the last figure but one, the molecules were *certainly invisible* even to a power of 3000 diameters. The smallest of these organisms is less than the 1-100,000th of an inch in diameter. Particles considerably larger than this are quite invisible under a power magnifying 250 linear. It is certain, therefore, that if this particle were formed by the aggregation of smaller particles, these must have been quite invisible by the powers employed by Dr. Bennett; and since I can at least prove by direct observation that living particles of this size (1-100,000th of an inch in diameter) *do not coalesce or become aggregated* to form larger masses (*compound molecules*), I may affirm that this process cannot occur in the case of particles so large as those figured by Dr. Bennett.

Transformation of Urea into Cyanide of Ammonium. M. Fleury effected this change (*Comptes Rendus*, t. lv., p. 519) by heating urea with an excess of bisulphide of carbon. The products were carbonic acid and sulphocyanide of ammonium ($C^2H^4N^2O^2 + CS^2 = CO^2 + NH^4.C^2NS^2$). He has not perfectly succeeded in forming urea from sulphocyanide of ammonium.

Aluminium Bronze. In the supplementary number to vol. xxiv of the *Philosophical Magazine*, just published, is an article by Lieutenant-Colonel A. Strange, on the properties and present value of aluminium bronze, an alloy consisting of ten parts of aluminium and 90 of copper. Its tensile strength is stated at 73,185lbs. per square inch, being more than double the breaking-strain of gun-metal, and 1,185lbs. more than the average tenacity of cast steel. Its resistance to compression is 132,416lbs. to the square inch; that of cast iron being 115,542lbs. This alloy may be drawn out under the hammer almost to a needle-point at a red heat. Its rigidity is about three times that of gun-metal, and 44 times that of brass; it is less affected by change of temperature than either of the latter; it may be cast with extraordinary facility into any shape; it does not clog the file, and yields fine elastic shavings on the lathe. It tarnishes much less readily in the air than any other metal or alloy used for astronomical instruments, and will receive the finest graduation possible. It is extremely elastic, can be rolled into sheet metal, or also hammered and drawn, and seems admirably adapted for the tubular parts of astronomical instruments. Its specific gravity is 7.689, nearly the same as that of wrought iron. To make this alloy extremely pure, copper should be used; the best is copper deposited by electricity; but since that kind is very expensive, the next best is copper from Lake Superior, which makes an alloy of excellent quality. The ordinary coppers of commerce generally fail, owing, it is said, chiefly to the presence of iron, which appears to be specially prejudicial. Another precaution is to remelt the alloy two or three times. The first melting, in the proportions above stated, produces an alloy of extreme brittleness; but each successive melting, up to a certain point determined by the working, and particularly the forging properties of the metal, improves its tenacity and strength. The present price of English made 10 per cent. aluminium bronze is 6s. 6d. per lb., or four or five times the price of gun-metal; but as a much smaller quantity of the new alloy would give the same strength, the cost of ordinance made of it would not be very considerably increased. (*Galignani's Messenger.*)

Addresses and Papers

READ AT

THE THIRTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LONDON, AUGUST 5th, 6th, 7th, and 8th, 1862.*]

OBSERVATIONS ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND: ILLUSTRATED BY NUMEROUS FATAL CASES.

By WILLIAM BUDD, M.D., Clifton; Honorary and Consulting Physician to the Bristol Royal Infirmary.

"Le médecin doit, dans ses premières études, jeter un coup d'œil sur les animaux qui se rapprochent le plus de l'homme."—*Chaussier.* (Adopted from Régnier.)

[*Continued from page* 113.]

CASE V. The notes of this case were kindly given to me by my friend Mr. Humpage of Cotham, who attended the patient.

"Mrs. S., aged about 40, married, the mother of three children, and of what is called the leucophlegmatic temperament, had complained for several days of a pimple on the chin, which, becoming troublesome, was seen by a surgeon three days before I was first called to her.

"I first saw her on Oct. 12th, 1855, in the evening, and found the following state of things:—On the *chin* a puffy tumour, with a livid spot on its apex; great surrounding swelling and infiltration of the cellular tissue of a hard and unyielding character, difficult deglutition, and much constitutional disturbance, indicated by a very low and rapid pulse, and general exhaustion.

"On the following morning, finding all the symptoms much aggravated, I advised a consultation with my friend Mr. Green. We agreed the case was one of the most imminent danger. A free incision was made through the parts; but they cut like brawn, *dry and solid.* The patient was directed to take brandy freely; but she rapidly sank, as if poisoned, about twelve hours after the incision, and in about thirty hours from the time of my first seeing her."

I have been informed by the husband of this person that for the first three days there was no general illness; nothing, in fact, to lead him to suppose that the malady from which his wife was suffering was any other than a common boil. It began as a minute vesicle, which the patient punctured with a needle on the day following that of its first appearance, and it was her own impression that in this operation she had poisoned the flesh. The vesicle was attended by intense itching when it first appeared.

In some notes of the same case communicated to me by Mr. Green, it is mentioned that when the incision was made, nothing but a little serum slightly tinged with blood oozed from the wound.

CASE VI. For the knowledge of this case I am also indebted to Mr. Green, in whose words, for the most part, it is related.

On June 18th, 1858, late in the evening, I was sent for to see Miss S., living about seven miles from Bristol. Her father, who drove in for me, told me that a few days before a pimple appeared on the lip, followed by enormous swelling, discoloration, and stony hardness. She was, he said, frightfully disfigured. His account left me little doubt as to the nature of the disease I was to find; and I told him that I feared his daughter was suffering from malignant pustule, an uncommon and most dangerous form of disease.

I found the left half of the face principally affected. It was swollen through its entire extent; the lips were greatly enlarged, indurated, and everted. The skin was of a dark, livid colour. There was a small pimple covered by a thin, hard, dry crust on the left side of the upper lip, which was indurated to the extent of about an inch above its margin. The lower lip on the same side was in a state of slough. Sloughing had also begun at the angle, and was extending backwards into the mouth, under the skin, which had not yet lost its vitality. The eyelids were closed; but the swelling there being œdematous, allowed the eye to be examined. This organ was found to be uninjured. The pulse was 120 in the minute; the tongue was foul. There was, however, no delirium or loss of consciousness, and no particular complaint of weakness or depression. The swelling and colour of the face, and the large projecting lips, caused great disfigurement, and removed all doubt from my mind as to this poor young lady's fate.

The disease had first appeared three days before, in the form of a small vesicle, which itched very much, and which the patient herself punctured with a needle the same night. This operation, as in most of the other cases, was followed by great temporary relief to the pruritus. This young lady had spent the greater part of the day in the hay-field, and while there was, as she believed, bitten by a fly. It was in the seat of the supposed bite that the vesicle afterwards appeared. The next day, the face began to swell and change colour; and from that time the disease progressed rapidly, until it had attained the stage in which I now saw it. The right side of the face did not participate in the swelling, but was of a sallow and yellowish tinge. On the second day of illness, the part in which the pimple first appeared having become black, Dr. Vaughan of Keynsham, who was in attendance, made an incision into it. Poultices had been applied to the face, and quinine and iron given internally.

A strong solution of chloride of zinc was now applied to the sloughing surface, and, in place of the quinine, dilute nitromuriatic acid was given every three hours. Wine and strong beef-tea were freely exhibited.

On the following day, there was little change, except that the sloughing had considerably extended.

On June 20th, soon after daybreak, she became rapidly worse. The pulse could hardly be felt; the extremities were cold; she was unable to swallow; and the entire cheek seemed about to sphacelate. She died at noon of the same day, five days after the first appearance of the vesicle, which, in its origin, had seemed so trivial.

This young lady had been somewhat out of health for some months prior to the fatal attack.

CASE VII. For the particulars of the next case, I am indebted to Mr. Bartrum of Bath, and Mr. Hinton of Hinton, who was nearly related to the patient.

The subject of it, W. H. W., was a fine, well-grown, and athletic young man, 19 years of age, who, up to the date of his attack, had enjoyed uninterrupted health.

On October 7th, 1859, he returned from Clifton to his home near Bath, with a painful and swelled lip. The disease had begun the day before in the form of a small vesicle seated on the left half of the upper lip. Whether the itching and hot stinging sensation which usually mark the onset of the malady were present is not said.

On his reaching home, the appearance of the lip led his friends to suppose that a boil was about to form in it. He complained a little of pain in the back, and seemed slightly feverish; but, beyond this, did not feel ill.

On the 8th, the swelling had increased; but, with the exception of a general dingy appearance, there was no local discoloration. On the nights of the 8th and 9th, the tension and pain of the lip were so great as to prevent sleep.

On the evening of the 10th, he took a slight sedative, had a good night, and never after suffered from pain.

Up to this time, nothing had occurred to awaken the minds of the patient or his friends to the terrible nature of the attack, which they still supposed was nothing more than a painful boil.

On the 10th, the swelling extended to the neighbouring parts; the inner surface of the upper lip became livid, almost black, "but without any defined boundary, as though a large carbuncle was forming on the inner surface."

On the 11th, the parts were freely and very deeply incised (from within), with much relief to the symptoms. The cut surfaces presented streaks of dingy yellow, interspersed with dark, livid, bloody, sodden tissue. The blood was thick and treacly. There was no pus.

On the 12th, the swelling occupied the whole face below the eyebrows. The incisions were repeated in several parts that felt brawny, and appeared to give much relief. The pulse had gradually become more rapid, ranging from 140 to 160 in a minute.

The mind remained perfectly clear until about four hours before death, which occurred at midnight on the 14th, eight days after the first appearance of the vesicle. In the second period of the disease, several new vesicles made their appearance in the neighbourhood of the first. Beef-tea, wine, and other nutriment, were given liberally throughout. The patient was unable to assign any cause for his attack.

For the following brief, but clear and graphic, account of the next two cases, I am indebted to my friend Dr. S. H. Steel of Abergavenny. They are extremely interesting, as examples of the disease originating in the hand.

Case VIII. "While paying my usual visit at an ironwork, four miles from my house, I was requested to see Mary John, the daughter of an innkeeper, a tall, healthy, well developed girl, aged 19. She stated that two days before, a red spot, attended by pain and itching, had appeared on the back of her right hand. The redness had extended, and was now very painful.

"I found on the back of her hand a rather irregular, livid spot, half an inch in diameter, surrounded by an erysipelatous blush; deep near the centre, and gradually shading off till it ceased half way up the forearm. The hand and arm were swollen, but not greatly so. The pulse was small and frequent; the tongue was slightly coated and moist; the bowels were confined. She complained of great depression. The treatment ordered was a large warm fomentation to the hand and arm, and an aperient, followed by a stimulating mixture.

"The next morning, I received a message that she was much worse. I saw her at 11 A.M. The livid spot had spread over the whole of the back of the hand and wrist. The swelling of these parts had rather subsided; but the whole arm was œdematous, and the erythema extended to the axilla and side of the chest. The pulse was very frequent and feeble; the tongue was still moist. She was sensible, and answered readily in a feeble voice, but was evidently moribund from prostration. I made two or three free incisions into the livid and adjacent œdematous parts. No blood, but only a little colourless serum, exuded, and no pain was felt. The appearance of the part was very peculiar. The lividity was less deep than that of ordinary gangrene, and shaded off into a dusky erythema, the œdema being greater as it receded from the central disease. The patient died at 2 P.M.

"I was convinced, from the whole aspect of the case, that it was one of some form of animal poisoning, and I made careful inquiries, especially whether any glandered horse had lately been in the inn stable; but I was unable to discover any clue to the cause of the disease."

Case IX. "On January 2nd, 1854, I was sent for to see Morgan Jones, a labourer, aged 34, living about four miles from Abergavenny. He told me that five days before a red, irritable spot had appeared on the back of his right hand, which was chapped in several places from cold. The redness and pain had gradually increased; but he had paid little attention to it till the day before, when he felt very weak, and was unable to go to work. I found the back of the hand livid, and the arm red and œdematous, presenting an appearance precisely similar to that observed in Mary John's case. An incision through the livid part let out only a little serum. The pulse was small and frequent; the tongue was brown and furred, and had been so for a day or two. The man was perfectly sensible. An energetic stimulant treatment was adopted, but the case was evidently hopeless. It terminated fatally the following day. There was no history of animal infection that I could trace. The patient had been employed in tending sheep; hurdling them, and supplying them with cut turnips; but I could not ascertain that the sheep were unhealthy.*

"I was much perplexed by these two cases. I had no doubt of their animal origin; but they did not answer to the description of glanders, to which I was at first inclined to refer them.

"Some time afterwards, I was asked by my father's farm-bailiff to look at two lambs which were diseased, and likely to die of some strange complaint. The hinder extremities of both were greatly swollen, and inside the thighs, where the wool is scanty, the skin exhibited the *same livid aspect that I had observed in my two patients, and upon cutting into it, the same discharge of serum only took place.*

"I had no doubt that I had before me an identical or very closely allied disease. I did not, however, recognise it as malignant pustule, till I heard you relate your cases of that malady. The pustule, which is described as the point of departure of the disease, either did not exist in my cases, or, more probably, was overlooked."

This history, brief as it is, is a very pregnant one. It brings into striking relief a point on which I have not before touched, but which is very important; I refer to the perfect identity of the local morbid changes in the malignant pustule of man, and the corresponding disease of the animal. I need scarcely say to those who are acquainted with the subject, that these two lambs were suffering from the disease familiarly known to veterinarians under the name of "blood," and identical in nature and origin with the "quarter evil" in cattle. Both lambs died in the course of the day in which Dr. Steel first saw them.

In addition to the cases already related, I have obtained, as I have before said, some particulars of no fewer than fifteen others, which have occurred, for the most part, within the last few years in various parts of the country. It may be mentioned, as a remarkable fact, that in all fifteen—as in seven of the nine just detailed—the disease began in the face, and in the greater number, either in the lip, or in the immediate neighbourhood of the mouth.

In all, save one, in which life was apparently saved by early resort to cauterisation and free incisions, the malady ended fatally. In all, save this same one, its seemingly trivial nature in its early stage betrayed the patient into the fatal error of wasting in mere temporising the only period in which curative measures are of any certain avail.

Of the whole series there was only one in which the disease was actually traced to contact with a diseased animal. In its bearing on the question of cause, the history of that case is not unimportant.

A pointer belonging to a gentleman who was out par-

* It is worthy of remark that in both these cases the disease was seated on the *back* of the hand. This is the usual seat of malignant pustule in the hand. It is obvious that, from the greater thinness of the skin, this part is more exposed to an effective inoculation.

ridge shooting, fastened upon the carcase of a sheep which lay dead in a field, and took possession of one of its legs. The morsel was so savoury that the dog would not give it up, and his owner was obliged to wrest it with his own hand from the animal's mouth. Immediately afterwards, this gentleman, unthinking of danger, mechanically put his hand to a part of his face where there was a scratch. On the following day, a malignant pustule made its appearance on the very spot to which the tainted hand had been carried. The disease of which the sheep had died was not ascertained. The dog received no harm.

The circumstances of three other cases are also worth mentioning. One of the subjects was a bullock-jobber, who at the time of his attack was carrying on large dealings in cattle; and another was a sheep-farmer living on the borders of Dartmoor, who owned and tended very large flocks. Although in these two the actual source of the disease was not made out nor indeed inquired into, there is no improbability in the supposition that the pustule might have arisen from contact with cattle or sheep affected with quarter evil or blood.* It is not irrelevant to observe that both these cases occurred in hot summer weather. I may add that the subjects of both were more than fifty years old.

In a third case, the pustule was undoubtedly the result of the bite of a fly. The patient—as in the similar case already related—was a young lady who was attacked by the insect while she was walking in her garden on a hot summer's evening. The itching, heat, and burning of the first stage succeeded immediately to the bite, and in the course of a few hours the characteristic vesicle made its appearance in the exact seat of the puncture. The case was the most rapidly fatal that I have yet heard of.

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF RHEUMATIC PERICARDITIS.

Under the care of JAMES RUSSELL, M.D.

[*Continued from page* 137.]

THE following case was not under my care; but I had the opportunity of watching it throughout. It exhibits the treatment of pericarditis as employed twenty years ago.

CASE II. J. R., aged 21, a baker, came under treatment February 8th, 1843. He had been exposed to sudden alternations of temperature. Seven years previously he had acute rheumatism, accompanied by dyspnœa, præcordial pain, and palpitation; but no symptoms of cardiac disorder remained on the subsidence of the attack. The rheumatism returned in January 1843, together with the pain, dyspnœa, and palpitation. The pain was felt very severely over the entire chest, but especially in the cardiac region, and with it there was a short dry cough. On the date above indicated, all the rheumatic symptoms were subsiding; the pulse and respiration were nearly natural; the thoracic pain alone remained. He was cupped to twelve ounces over the region of the heart; three grains of calomel and a black draught were given; and one-twelfth of a grain of tartar emetic and five grains of nitrate of potash in saline mixture every four hours.

It was not until three days afterwards (Feb. 11), that any record of the physical examination of his chest was made. The cardiac dulness extended to the third rib; but not to preternatural extent in any other direction; and a soft systolic mitral bellows-sound, and a faint diastolic blowing sound at the base, were audible. The symptoms described above, especially the severe pain over the left side of the chest, continued, and respiration had become accelerated. Fourteen ounces of blood were taken from the arm, with the effect of causing faintness, but not of affording relief; and on the 12th, six leeches were applied.

On the day after (13th), the pulse and respiration were 108 and 44. The pain was severe. There were pallor and much exhaustion, with considerable increase of the rheumatic pain in the limbs. His cough was troublesome. A distinct friction-sound had now announced its presence. He was cupped to fourteen ounces.

On the 14th, the distress from dyspnœa and pain was augmented. The pain extended over the entire part of the chest, with an intolerable sense of compression; and movement so much aggravated the pain that the patient's posture was fixed; to the pain was added a harassing cough. The pulse and respiration were 124 and 56. To the friction-sound, evidence of large effusion was superadded; the cardiac dulness extending across the middle third of the sternum for two or three inches into the opposite side. He was ordered to repeat the leeches; to employ inunction of mercurial ointment; and to take a grain of calomel and two grains of Dover's powder every four hours.

The following day presented further aggravation of the symptoms, gasping breath and a ghastly aspect of face, indicative of great distress. The pulse and respiration were 25 and 60. His intellect was entire. The pain unrelieved. Leeches were repeated, and the dose of calomel raised to two grains, the inunction being also continued. The effect of each bleeding was only to induce faintness without affording relief to the pain or to the breathing. The patient passed a wretched night; and on the 16th, his aspect was most distressing. He could not utter a continuous sentence from breathlessness, which he endeavoured to relieve by frequent change of posture; exhaustion had increased; the face was ghastly; the lips livid; but the intellect remained unclouded. No sign of salivation had announced itself. The physical signs were unchanged.

In the afternoon, he was sitting up in his bed, when he suddenly fell back dead, on the fourth day from the first appearance of physical signs of pericarditis.

SECTIO CADAVERIS, twenty-four hours after death. The pericardium contained a considerable quantity of bloody serum. The outer surface of the heart and the inner surface of the pericardium were thickly coated with soft lymph; in many parts, of a deep blood colour, especially posteriorly. The layer of lymph was thicker posteriorly than in front; it could be easily removed, leaving the serous membrane smooth. A large *tache blanche* existed on the apex of the heart; and several others on the posterior surface. The heart was adherent to the pericardium by soft lymph, at the apex, along the right border, and at the posterior part of the base; it was hypertrophied; its muscular tissue was pale. The aortic flap of the mitral valve was thickened at its edges; the parietal flap was much contracted. The lining membrane of the left auricle was opaque and rough; and that of the right auricle was also somewhat roughened between the orifices of the cava. Both ventricles and the right auricle were much distended with coagula, partly recent, partly of pure fibrine. Each pleural cavity contained some straw-coloured fluid; and the substance of the lungs was greatly congested, scarcely crepitating anywhere. Some subpleural emphysema existed at the acute margins.

* The same remark applies to one of Dr. Steel's cases.

It is of the utmost importance in pericarditis correctly to estimate the amount of power possessed by the heart; both as a guide to the selection of remedies, and as affording a basis for prognosis. Among various circumstances which may create difficulty in accomplishing this, none are harder to deal with than extreme nervous susceptibility on the part of the patient. Every practical man knows well what an unfavourable influence is exerted upon the symptoms and progress of organic disease by a morbidly excitable or hysterical temperament; how every symptom is intensified and disguised; how the action of remedies is perverted, and the influence of active disease exaggerated. Every one, too, is aware of the peril of encountering a sudden and fatal termination to a case of disease under such circumstances; a termination often due simply to nervous depression.

But in no class of cases do these difficulties and dangers exist in greater force than in those which relate to the heart, and especially in cases of active inflammation of that organ; for no organ is so liable to be injuriously affected by nervous depression or excitement as the heart.

I quote the following case in illustration. I am still ignorant what is the precise share of blame to be given to the inflammation, and what to the very sensitive temperament of the patient. I more than once congratulated myself that my case occurred in hospital practice, and not at the patient's home.

Case III. Emma Piper, aged 17, a servant, was admitted Oct. 20th, 1862. Her first attack of rheumatism occurred in March 1861; she was not free of the disease till after Christmas. Her present attack (the second) set in about the middle of this month. She had always lived well. Her menstruation had been irregular. Both parents were rheumatic, and she lost a brother in this institution of rheumatism.

On October 22nd, she was noted to be of full habit and of very moveable temperament. The pulse and respiration were 120 and 40; she had rheumatic inflammation of most of her joints, excepting those of the left arm, and she also complained greatly of her back. She perspired much. The tongue was covered with white fur. Half a scruple of Dover's powder given on each of the preceding two nights had failed to procure sleep. The sounds of her heart were clear. She was ordered eight minims of tincture of opium, with bicarbonate of potash every four hours, and half a scruple of Dover's powder nightly.

She continued in much the same state until the 25th. The rheumatic affection had extended to the left arm; the opium had failed to relieve the pain and the restlessness. On the 25th, she had much improved; and the rheumatism was subsiding. The pulse and respiration were 128 and 44. Her urine was neutral. The sounds of her heart were still normal.

In the night, however, pericarditis developed itself. In the morning, the pulse and respiration were 136 and 50; and the face manifested a tendency to lividity; the jugulars also were rather full. *Fremissement* was felt in the region of the third costal cartilage, and a double friction-sound was heard over the upper part of the cardiac region; the cardiac dulness included the third interspace. Eight leeches were ordered to be applied to the chest; and the entire left chest to be fomented.

On the 27th, the rheumatic affection was rapidly subsiding; but the patient had passed a bad night. Her face was pallid, and her aspect indicated great distress. She complained much of a paroxysmal pain in her back, *rising to her throat*, and especially excited by drinking. Her respiration and the action of her heart underwent remarkable variations. At one time, she breathed or rather panted at the rate of 80 per minute; her face was pallid; and the action of her heart became, at the same time, so feeble that the rubbing-sound was almost inaudible; yet, in a short time, respiration fell to 40; the abnormal sound at the heart was again distinct, and colour returned to her face. The *frottement* could no longer be distinguished; her jugulars were free from distension. The pulse was about 136; steady, though rather collapsing. Her abdomen was much distended, and she complained of much pain in that region. A turpentine stupe was ordered to be applied to her chest. She was directed to take every three hours eight minims of tincture of opium and a drachm of compound spirits of sulphuric ether; and to have half an ounce of brandy every three hours.

Her condition in the evening appeared more perilous; the distress was great, the intellect clear, face leaden. The pulse and respiration were 132 and 60. The region of dulness extended from the right edge of the sternum to the nipple, and upwards to the third rib. A blister was applied. Brandy was given every three hours, and the opium was omitted.

During the following two days she improved; and on the 29th, a remarkable disappearance of the entire cardiac dulness was noticed, though on the preceding day it had occupied wider limits than those indicated above. Quinine had been substituted for the stimulant, and the brandy was given every three hours.

On the 30th, she seemed in comparative comfort; yet, in marked contrast, her respiration was 60. The friction-sound was faint, but general.

Again, on the 31st, distress reappeared; respiration still taking the lead, rising to 76, in a succession of pantings with intervals between. Pulse 112 to 120, steady. Her complaints were vehement, and her impatience of pain very great; but, after an interval, the excitement subsided, and she became calm. The cardiac dulness had regained its former limits. Diarrhœa was also present. She was ordered eight minims of tincture of opium and sixteen minims of chloric ether three times a day.

Through eight days from this date, she steadily mended, though still liable to excitement. But on Nov. 9th, the period when the poor girl the subject of the first case, who occupied the next bed, was undergoing her fatal relapse, the patient was found with return of all her former symptoms with great intensity. I now discovered some dulness at the right base; but though some amount of pleurisy might be chargeable with the recurrence of the disturbance, yet experience of her extreme irritability, together with some evidence that her symptoms increased in intensity at the time of the visit, and the evidently depressing influence of the nervous perturbation which she permitted, suggested the necessity of full doses of opium; and, accordingly, with a blister to the right side, sixteen minims of the tincture with an equal dose of chloric ether were ordered to be taken every three hours. The medicine had a decided, but only temporary, beneficial influence. Again we were met with recurrence of all the symptoms, and as the influence of imitation was now clear, from her unfortunate neighbourhood and attendant circumstances, the effect of decided rebuke and firm remonstrance was tried. A hysterical attack was the consequence, and she remained in a decidedly hysterical condition till midnight, when she fell asleep, and from that time progressive amendment might be dated.

It should be added that the pleurisy gave no further trouble. On Nov. 25th, the patient was permitted to leave her bed, and had the appearance of health.

As if for the purpose of establishing a violent contrast, at the time I was treating the preceding case, the subject of the following notes was admitted into the hospital.

Case IV. (Mr. Hiron.) John Holland, aged 14, a brass-founder. When examined, the day after admission, his face was tranquil, well-coloured, and presented the aspect of health, though he admitted that he had lost flesh during his illness. Pulse 102; respiration 16. He

was perfectly free from pain, intercostal tenderness, and cough, and was not conscious of any trouble in breathing; slight deficiency, however, was observed in the expansion of the left side of the chest. His joints were quite unaffected; and he was with difficulty induced to enter the hospital; and, when in, was most unwilling to keep his bed. His urine was very acid, and deposited a cloud of pink urates; in all other respects it was normal.

Cardiac dulness extended upwards to the second cartilage; laterally it reached from the left edge of the sternum to the nipple. A remarkably loud and superficial pericardial friction-sound was heard over the heart; it was indeed one of the loudest rubbing-sounds I ever heard; very coarse, recalling to one's mind the action of a large saw; although so loud over the whole region occupied by the heart, it became inaudible at a very short distance from that region, excepting that it was distinct in the left subclavian space. The pulmonary sounds were normal.

The patient's history was as follows:—Both parents and eight brothers and sisters were all free from rheumatism. The patient had never suffered from rheumatism previously to seven weeks before admission, when he caught cold from bathing. A week afterwards, he was attacked with severe pain in his knees without swelling, for which he kept his bed three days. No other joint was implicated; and three days after leaving his bed he returned to work. Again, a week afterwards, he suffered pain in his left side; which, however, was not constant, and only kept him at home half a day. At the end of another four days, this pain returned with greater severity, and on this occasion he remained from work two days. A fortnight's respite followed, when the pain recurred, but in a milder form; and on the evening of the ensuing day, he was brought to the hospital, the pain having ceased, and the patient rebelling violently against being considered an invalid. During these several relapses, his joints remained free; but he had symptoms of catarrh and coryza.

No fresh symptoms presented themselves during his residence in hospital; he seemed in good health. Nevertheless, no change occurred in the physical signs for twelve days, saving some reduction in the extent of the heart's dulness. At the end of that time he was allowed to get up; and the next day but one, dulness had assumed nearly its normal dimensions, and the friction-sound, though quite as loud, had become smooth. Three days afterwards, the sound was soft, precisely resembling a double bellows murmur, and was hardly distinguishable beyond a limited space in the upper part of the sternum. At the same time the cardiac dulness attained the third cartilage. In two days more not a vestige of friction-sound remained, though once it reappeared for a single day, accompanying the first sound of the heart only, and audible at the junction of the first and second bones of the sternum.

The patient was discharged on the twenty-seventh day, having already made two flights home. At that time cardiac dulness was extended laterally as far as the nipple, close to the fourth cartilage. The impulse of the heart had slightly a peristaltic character, and was rather heaving. The first sound of the heart was decidedly feeble; but there was no bellows sound.

The treatment consisted simply of a blister to the cardiac region with salines, and subsequently, four ounces of wine. Iodide of iron and cod-liver oil were subsequently prescribed.

This case forces on us the conviction how small a part of disease is embodied in the mere organic changes by which it may be accompanied, and how feeble is morbid anatomy, standing alone, as an exponent of pathological science. But a further question arises. Notwithstanding various means of discrimination, it is sometimes difficult, if not altogether impossible, to distinguish between an exocardial and an endocardial murmur; and such a case as the present may suggest that it may also become a question difficult of solution, whether or not we have to do with an acute attack at all; the more so, as Dr. Gairdner has given some instances in the essay quoted above, to prove that an exocardial murmur may sometimes be persistent, as is usually the case with an endocardial murmur.

The other day Dr. Maxwell drew my attention to a woman under his care as an out-patient. She had been in attendance for a week; she had nursed a son through an attack of rheumatic fever, and applied for relief in consequence of pain in the left hypochondrium. She made no complaint whatever referrible to the heart, but on applying the stethoscope, Dr. Maxwell heard the sounds, much as they presented themselves to my ear. A week afterwards, a loud harsh systolic sound, quite superficial, was heard beneath the sternum, from the second cartilage to the ensiform cartilage, becoming, however, fainter just above the latter spot. It was scarcely heard beyond the limit of the sternum, but existed feebly beneath the right sterno-clavicular joint, though not up the carotids. The normal sounds of the heart were heard to the left of the sternum, though more feebly than usual. There was no extension of cardiac dulness.

The woman had never had rheumatism nor any cardiac symptoms. She walked to the hospital on each occasion.

I felt no doubt that the murmur was pericardial, from its situation, its limited extent, its superficial character, and its quality; but I certainly could not venture to assert that it was associated with acute development of inflammation. Unfortunately, the patient never returned.

[*To be continued.*]

New Work on the Birds of India. Surgeon-Major Jerdon, of the Madras Army, who has a considerable local reputation as a Naturalist, is about to publish a work on the Birds of India, as the first of a series of Manuals on the Vertebrated Animals of India. (*Friend of India.*)

Eider Down. This down, the eider-duck plucks from its breast to line its nest; it and the eggs are taken away. Again the nest is lined, and again robbed. The third time, the drake repairs it, supplying the down; and if this be also taken away, the nest is altogether deserted by the ill-used pair. One nest yields about two and a half ounces of the finest clean down, or about half a pound in all if removed three times. What is plucked from the dead bird, it is said, possesses none of that wonderful elasticity which constitutes the value of the other. We should think, however, that this would depend on the state of the plumage at the time. Many thousand pounds weight of it are annually exported for quilts, pillows, cushions, etc. It sells in Iceland at from 10*s.* 6*d.* to 17*s.* 6*d.* per pound. From three to four pounds are sufficient for a coverlet, which, to be enjoyed in perfection, ought to be used unquilted and loose like a feather bed. Quilting is only useful where a small quantity of down is required to go a long way; but, with three or four pounds at command, there is no comparison in point of comfort between loose and quilted—we have tried both. The eider coverlit combines lightness and warmth in a degree which cannot be otherwise obtained. With a single sheet and blanket, it is sufficient for the coldest wintry night. Its elasticity is proverbial; hence the Icelandic conundrum we had propounded to us by our good friend Mr. Jacobson, "What is it that is higher when the head is taken off it?" *Answer*—"An eider-down pillow!" (*Pen and Pencil Sketches of Faroe and Iceland.*)

Original Communications.

THE FIBROUS TUNIC OF THE EYEBALL, OR "OCULAR TUNIC": ITS ANATOMICAL RELATIONS AND BEARINGS IN OPHTHALMIC PRACTICE.

BEING REMARKS IN THE COURSE OF CLINICAL INSTRUCTION AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, F.R.C.S., Surgeon to the Hospital, and to St. Mary's, Paddington; late Teacher of Anatomy and Demonstrator of Operative Surgery in St. Mary's Medical School.

IT may seem strange to say that, till lately, the anatomy of the ocular appendages was not correctly taught. An extensive and important membrane about the eyeball, concerned alike with operations and in the discrimination of disease, was not recognised in orbital dissections, but disregarded and taken away as so much cellular tissue to be cleared out, in order to render evident other anatomical relations.

Knowing how little this structure is understood, how scarcely it has been alluded to either by anatomical writers or surgical teachers, and seeing the importance of it, I shall make it the subject of a short lecture, describing the anatomy, and pointing out the influence it has in actual practice.

So long ago as the year 1804 Tenon demonstrated this ocular tunic, and called it the tunic of the eye. Like, however, many valuable hints in anatomy and surgery, it was forgotten for a long series of years, till a later recognition of it was declared a new discovery. Drs. O'Ferrall and Bonnet were the next to treat of it, each claiming the merit of originality. The former made his views known in 1841, in the *Dublin Journal of Medical Science*, and to him indisputably is due the merit of surgical and pathological application. Bonnet's notice appeared a year later.

I shall now give a description of this tunic, which has been also called tunica vaginalis oculi, cellular capsule, Bonnet's capsule, cellular sheath of eye, fibrous sheath.

It is a distinct tunic of a white colour and fibrous consistence, continuous in front with the posterior margins of the tarsal cartilages, and, extending backwards, adheres to the optic nerve as this penetrates into the sclerotica. With the sharp end of a probe, or of a director, it may be separated from the eyeball, by breaking the fine cellular tissue to which connects them. Within, it is smooth, facilitating the ocular movements; externally, it is loose and cellular. The muscular portions of the recti muscles lie at the outside, so that it insulates and protects the eyeball in the most perfect manner possible. Half an inch posterior to its front margin are six well defined openings, through which the tendons of the muscles pass to their insertions in the sclerotic coat, and over which they play as through a pulley, and get their force properly directed, securing rotation, and opposing retraction, which would otherwise predominate.

The readiest way of exposing the tunic is to cut through the palpebræ vertically, to turn back the separated parts, and to divide the conjunctiva at its angles of reflection from the internal surfaces of the eyelids to the ball of the eye.

How different all this is from the usually received opinion of the orbital muscles being in contact with the eyeball.

The first beneficial result of a proper knowledge of the tunic was the present improved manner of extirpating the eyeball, in which the conjunctiva is cut through close to the cornea, the recti and oblique muscles divided at their sclerotic attachment, and the optic nerve severed within the tunic; so that the orbit is as it were left sealed in front by the membrane. This contrasts greatly with the old operation of dissecting away the whole of the orbital fat and cellular tissue, when it was desirable only to get away the eyeball, and not any of the appendages, an act that can scarcely be justifiable, except in the somewhat doubtful measure of clearing out the orbit for a cancerous growth. The difference in the severity between the two processes and the after effects is great indeed. In the one, there is no shock to the system, and the patient is scarcely invalided, and the effect passes off quickly in one or two days. The orbital vessels and nerves are left intact, and there can scarcely be any bleeding. The extent of the other, the hæmorrhage, the general bodily disturbance, and the somewhat risk, are well known.

The better result in the operation for internal squint is also to be ascribed to the recognition of the ocular tunic. Formerly a very free dissection was made at the inner corner of the eye, and unfrequently the tunic detached from its connection under the supposiiton of being "adhesions" that needed disconnection. The common issue of such mal-operating being frightful eversion of the eyeball with prominence. We now know how essential it is, in order to secure the correct ocular movements, that the divided muscle should acquire an attachment as near the natural spot as possible, through one or other of the four or five processes that *post mortem* inspection has revealed to us, and which is beyond the range of possibility, if the parts in connection, especially the tunic, be much cut and displaced. I think, too, that prominence scarcely, if ever, occurs to any marked degree, when the tunic is not interfered with.

Another addition arising out of this knowledge, is the greater facility and accuracy afforded in the removal of orbital tumours. As it is not in the plan of these remarks to give the detail of cases, I shall not cite instances. Suffice it to say, that it greatly furthers the execution of such operation, whether the growth be solid, or encysted. I have on many occasions been able to proceed with more confidence, better to avoid parts not involved in the disease, and to get superior results. I may mention that these morbid products may grow outside the tunic, on it, or within it. It should be the object of the operator, in every instance, to preserve the tunic as intact as possible. On one occasion, while removing a fibrous tumour from the upper part of the orbit that had cellular connections to the vestment, I was enabled by slow and careful scratching with the point of the scalpel, rather than cutting, to get the whole away without damaging it.

The position of abscesses in the orbit, and their relation to the eyeball, can be better understood, and therefore, the evacuation of the pus more surely accomplished. When a student, I was taught always to keep the instrument, used for such a purpose, towards the wall of the orbit, lest the eyeball should be wounded. But if this be adhered to, how is the abscess to be got at when it is within the tunic. With the commonest care when here it may be evacuated without the least risk. I have relieved several patients after other surgeons, not cognisant with the anatomical matter in question, have failed to find the pus.

To Dr. O'Ferrall is due, too, the credit of recognising rheumatic inflammation of the ocular tunic; and, with his accustomed ingenuity and accuracy, he makes the anatomy of the eyelid available in the diagnosis. He shows that under the orbicularis muscle is a distinct layer of fascia, and that this is the first element of the eyelid that enters the orbit; that there is another layer of fascia beneath the levator palpebræ, which also enters it, and uniting with that above, forms a sheath for the accommodation and support of the muscle; and he points out the attachment of the ocular tunic to the orbital margin of the tarsal cartilages. This anatomica

rrangement he then traces on the outer surface of the relid in the two portions separated by the natural fold f the skin, the upper portion constituting about one-ird of the surface of the lid, the lower the remaining vo-thirds. From these he makes the pathological de-uction, that certain forms of disease within the orbit iat are seated in, or internal to, the motor apparatus—iat is in the substance of, or within the cavity of the cular tunic, extend their effects to the lower portion of ne eyelid, with which they are continuous, and that cer-in other affections situated external to the motor ap-aratus—which is that part of the orbit containing the t—will show themselves by inflammation or other anges in the upper division of the same.

The last subject to be noticed in connection with the ular tunic, is the greater light that Dr. O'Ferrall has en able to throw on the causes that protrude the eye-ll. Inflammation of the ocular tunic will in itself use ocular prominence. This is chiefly through effu-on into the cellular membrane connecting it to the ll of the eye. The infiltration is apparent where the njunctiva is reflected from the eyelid to the eyeball, st where this membrane closes up the ocular tunic in nt. Here it receives the pressure of the effused rum, and becomes separated from the sclerotic coat by e extension of the infiltration. The amber coloured emosis, originating in inflammation of the conjunc-a, is distinguished from it by redness as well as serous filtration.

N THE USE OF NITRIC ACID IN THE CURE OF ULCERATION OF THE OS AND CERVIX UTERI.

Hammett Hailey, M.R.C.S.Eng., formerly House-Surgeon to the Midland Counties Lying-in Hospital.

a meeting in 1862 of one of the leading London dical societies, the subject of discussion was the ue of nitrate of silver as an escharotic in cases of eration of the os and cervix uteri. Having for years t had extensive experience in the treatment of rine disease, and tried the various kinds of applica-ns in general use, both fluid and solid, and finding one upon which I could rely in producing perma-t amelioration of the disease, viz., pure nitric acid,—ill select from my notebook a few well-marked cases ulceration in its various stages, from the phagedænic n to simple excoriation, that have not only been ed, but have borne inspection some years afterwards, have never in a single instance in my practice shown ndency to return—a fact that cannot be induced in our of nitrate of silver, or any other solid, or, I be-e, fluid, caustic application now in general use.

ly nomenclature of diseases affecting the os and ix uteri is, like the treatment, simple: 1. Cases of cerous ulceration, or disease with apparent malig-t tendency, where the ulcer is large, excoriated, dis-rging pus or matter of a mucopurulent character, in junction with great derangement of the general lth—in fact, every symptom of cachexia; 2. Cases of ple ulceration or excoriation, with or without hyper-hy, accompanied by symptoms not quite so distress-to the general health. I will detail a few cases of variety; and then offer some remarks on the rela-value of the various applications, solid and fluid, erally employed in the treatment of ulceration situ-about the mouth of the uterus. Of the first variety, ases of an apparent malignant nature, I have se-ed three examples.

ASE. In the year 1850, I was requested by a gentle-to visit a poor woman aged 42, the mother of six dren, the youngest two years old. Since the birth his child she dated her failing health.

For the last fourteen months she had been gradually losing flesh, with pains in the back, sickness, loss of appetite, perspirations, constipation, and slight cough. She had been treated for pulmonary disease by a private practitioner, and had undergone a digital uterine examination in a neighbouring infirmary. On examination with the speculum (May 8th), I found the uterus prolapsed, and the os imbedded in a mass of mucopurulent discharge (although the patient used daily alum injections), on the removal of which both labia of the os uteri were found extensively ulcerated some distance up the cervix. The patient was directed to have a liberal diet, and for medicine a vegetable tonic with iodide of potassium; for local application, the nitrate of silver. At the end of two months, finding my patient no better and the ulceration but little checked, I resolved to change my treatment both locally and generally. Having washed the parts ulcerated with a moist sponge, and freed the sore from all discharge, I painted the diseased portion with pure nitric acid, requesting the patient to keep the speculum (one of Fergusson's) fixed in its present condition for half an hour. The application caused no pain of importance. Internally, I gave twenty minims of the tincture of sesquichloride of iron twice a day, and left her for a fortnight. At the expiration of this period, I again applied the speculum, and was surprised at the improvement that had taken place. The excavated portions of the ulcer were quite filled up, and the whole disease presented a most healthy appearance. The same treatment was persisted in, and the nitric acid was again painted over the unhealed portion of the ulcer. From this time the symptoms gradually improved; the discharge of mucopurulent matter decreased; and, in less than two months from the time when the nitric acid was first applied, the patient's health was quite restored.

In the year 1853, I attended her in labour of her seventh child. There was not a single symptom of uterine mischief present; nor did there appear any cicatrix to interfere with the proper contraction and dilatation of the os uteri. This patient died of consumption in 1858, without presenting another indication of uterine disease.

Case II. In the year 1859, M. H., a poor woman, aged 33, sent for me one night, having been suddenly seized with a pain over the region of the heart and fainting. She was a washerwoman, and had been delivered of an illegitimate child three years before. She considered her disease to be of two years standing.

There was great emaciation; vomiting after meals; cough; loss of appetite; diarrhœa; fainting upon the slightest exertion or excitement; and every symptom of general cachexia. The catamenia were regular, but attended with pain and difficulty in micturition. Between the menstrual periods, the discharge was excessive, thick, and grumous. On examination with the speculum, the vagina appeared red and inflamed, and gave evidence of its disordered condition by frequent small discharges of blood. The os uteri, as in the former case, was encased by a layer of mucopurulent matter, on the removal of which the following state of disease presented itself. The labia of the os could not be defined; but the whole cervix appeared one mass of ulcerated disease (so far as a bivalve speculum could display), bleeding upon the slightest touch. The menstrual period being over, nitric acid was applied; the ulcerated parts being well covered with it, by means of a glass brush, as before. A pledget of wool was then introduced, fastened to a piece of silk, and passed up the vagina, so as to cover the diseased portion. This application was repeated three times in six weeks; and the last examination displayed a sound and healthy looking surface. The medical treatment was the same as in the last case—tonics, with a generous diet. The patient has remained quite well up to the present; the

catamenia being regular, and no discharge occurring in the interval. This patient had been twice in an infirmary within the last year, but had only been examined digitally; and lotions of zinc and lead had been injected.

Case III. In April 1860, I saw in consultation M. H., of a consumptive family, the mother of three children, the youngest fourteen months old. She had been ill for twelve months, and confined to her bed during five. She was much emaciated; the countenance was pale; breathing short; pulse feeble. She had occasional attacks of hysteria with violent palpitation, accompanied with pulsation of the descending aorta sufficient to raise the bedclothes. The catamenia were regular; the bowels constipated. She had no pain over the region of the uterus, but occasionally a discharge of mucopurulent matter, accompanied with pain.

After a careful examination, no organic disease being discovered, I suggested an examination of the uterus with the speculum, which was complied with. After washing away the thick stratum of mucopurulent matter in which the os uteri was imbedded, I discovered a large excavated ulcer situated upon the posterior labia of the os, and extending up into the cervix. The ulcer was very extensive, and evidently of the sloughing variety. I applied a good layer of the pure nitric acid, retaining the speculum until every chance of the adjacent mucous membrane being touched was over; and, on its removal, I plugged the vagina with wool. A tonic with hydrocyanic acid was given internally, to allay the violent sickness which disturbed her during the day; and generous diet with port wine was ordered. Ten days from this date, I again applied the speculum, and found the ulcer nearly healed, and the general symptoms much improved. The nitric acid was again applied to the parts of the ulcer not already cicatrised, and the general treatment continued. The patient slowly recovered her strength; the ulcer became perfectly healed, without another application; the discharge became natural; and in the early part of 1862 she was again delivered of a fine child, without the slightest indication of uterine disease being present.

I will now give some cases of simple ulceration of the os and cervix uteri, with or without hypertrophy.

Case IV. In the year 1855, a lady, aged 30, married, consulted me for relief from a disagreeable taste in the mouth, sickness after taking food, lumbar pain, accompanied by severe constipation. She had never borne children, but had miscarried twice, and considered she was now three months advanced in the family way. I prescribed rest and the remedies usual in such cases, but without success; for she aborted the following week. In about six weeks after this event, when my patient had quite recovered, I requested to be allowed an examination with the speculum, which was granted. Upon examination, there appeared a slight amount of hypertrophy, for both labia of the os were elevated; but the fissure, quite into the cavity, was ulcerated and slightly excavated, looking as if small pieces had been cut out, discharging a fluid, not mucopuriform, as in the former cases, but such as would be expected from an ulcer on any other portion of the body. The whole of the diseased surface was fully displayed by a Fergusson's speculum; therefore, without removing the instrument, I freely painted the diseased portions with nitric acid with a glass brush, as before, allowing the liquid to pass into the cavity; requesting the patient to retain the speculum *in statu quo* for half an hour—this being the most effectual method of preventing the acid from injuring the adjacent parts. I next prescribed for her twenty drops of the syrup of the iodide of iron and manganese twice a day, and a liberal diet. I found it necessary to apply the acid to the surface ulcerated in about ten days, after which period, with the exception of slight hypertrophy, the part was quite healed, and the patient paid her usual annual visit to the sea. I have since attended her in two accouchements; and the mother and both children are alive and well.

Case V. C. S., aged 27, married, consulted me in 1856. When single, she had suffered from dysmenorrhœa, and between the menstrual periods from a discharge of a grumous character. Since her marriage she had miscarried twice—once at six months, and the other time at the fourth month. She had all the appearance of being *enceinte*. The papillæ on the breasts were formed. I supposed her to be about four months advanced. I recommended rest; but in a few days afterwards I received a letter to say she had miscarried, and was going on well. Six weeks after this event, I requested an examination with the speculum which was granted. The os uteri appeared swollen but, on close inspection, the orifice between the labia presented an ulcerated appearance, with little indurations on its surface. The nitric acid was allowed to touch the whole of this surface; and this operation was repeated before the next menstrual period. The tincture of the sesquichloride of iron was given internally and liberal diet and moderate exercise in the open air were recommended. Her recovery was rapid. I have since delivered her of two children—one in 1858, the other in 1860. The old symptoms have not shown any tendency to return.

Case VI. In the year 1858, I visited Mrs. B., aged 26, married, the mother of one child. She had suffered since her confinement from dyspepsia, with pains in the back, occasional sickness, palpitations, and extreme nervous irritability. She had taken tonics, and had also consulted a London practitioner, who had applied the nitrate of silver, with temporary advantage.

On examination with the speculum, the os uteri externally appeared much hypertrophied; but the whole of the internal surface of the labia was much excoriated, exuding a muco puriform discharge. The nitric acid was applied as on the former occasion, being allowed to pass into the neck as far as possible. The tonic treatment was continued; and, one month afterwards, not the slightest unevenness or ulcerated surface remained. The hypertrophy continued for some time, causing painful defæcation; but, with the aid of sea air and bathing, it ultimately disappeared.

Remarks. If, in the language of Dr. R. Lee, the women of England have suffered from the injudicious use of the speculum matricis, I think it is our duty to occasionally record cases containing proofs of the benefit resulting from its judicious employment. I am quite aware there are men even in the present day, well versed in uterine pathology, who believe and freely assert that for all practical purposes, digital examination is sufficient to explore all the ordinary affections of the os and cervix uteri. The gentleman quoted above says, "I am fully satisfied that the speculum does not enable us to decide earlier than the finger that cancer has commenced; and if it did so, as some maintain, and enable us to make applications to the os uteri, which could not be made without, not the slightest advantage would be gained in practice."

With regard to the first part of this statement, I have no wish to dispute the powers which some persons possess, from extensive experience, of ascertaining or obtaining a knowledge of diseases by the organ of touch; but as to the latter part, viz., the inutility of appropriate applications in the ulcerative stage of uterine disease, including malignant, I wholly differ. Hundreds of females have testified to the comfort and freedom from pain experienced from the use of judicious application to disease of the uterus, even in its worst stage—the process of ulceration. What, for instance, would have been the fate of Case No. II, where the poor woman had for months undergone digital examination, and consumed gallons of injection of lead and alum; and where, thou-

duced to a shadow and despairing of ever receiving re-
f, after the loss of the greater part of the os and cervix
eri by ulceration, she recovers strength and is restored
her original health and vigour, and at the present time
rsuing the most arduous of female occupations?

There is one remark emanating from the pen of Dr.
Lee, viz., the impropriety of using the speculum to
e virgin uterus, with which I quite coincide. For my
n part, I never make use of it in the unmarried; and
ere is a certain class of cases of young females, with
r hair and light complexions, of the strumous diathe-
, who suffer much from dysmenorrhæa when single,
come much worse after marriage, and frequently mis-
ry. Upon examination with the speculum, ulceration,
th or without hypertrophy, will, in almost every in-
nce, be found the cause of mischief; and, in a mild de-
ee, was no doubt the cause of the dysmenorrhæa prior
marriage. It is a question in my mind which would
the most correct course of practice; to cure this malady
or to marriage, and thus save the patient much suf-
ing mentally and bodily, or to wait until the mischief
s taken place, before the remedy is applied.

The subject under discussion, not being one treating
the diagnosis or exploration of uterine mischief, but
ating to the properties of the various applications now
use for the amelioration or cure of that stage of in-
nmation of the most accessible portion, called ulcera-
n, I will, in describing these applications, divide them
o two classes; viz., solid and fluid. The first, or solid,
the lunar caustic; potassa fusa; the actual cautery;
l lastly, Mr. Ellis's electric cautery. The second class,
fluid applications, are, injections of various sub-
nces, such as solutions of lead, alum, oak bark infu-
n, nitrate of silver, and various other substances, ac-
ding to the nature of the case; and for escharotics we
e chloride of antimony, tincture of the sesquichloride
ron, the acid nitrate of mercury, and the various
neral acids.

Before dilating upon the merits of these various ap-
ations, we must first see what we require them to do
the diseased parts, in order to bring about the object
ired; and to do this correctly, I cannot do better than
te a remark of Dr. Bennet on the subject. "The
y treatment to be depended upon, is one of such
nulation of the ulcerated part as to modify its vitality
such a manner as to induce a healthy action, and
dly cicatrisation." Taking this as our text, and the
ve named substances as our pharmacopœia, we must
t consider upon which to pin our faith.

The first amongst the solids, the nitrate of silver, has
n for years past the favourite in general practice, and
in many instances succeeded; but it is very uncer-
and requires constant repetition, very much to the
oyance of the patient and to the dissatisfaction of
surgeon. The result arrived at, from extensive prac-
private and public, is that it is only palliative, and I
convinced that if the opinion of the majority of the
fession who have used the remedy were taken, they
ld coincide with my verdict.

The second on the list, potassa fusa, may be associ-
l with the actual cautery, from neither of which I
e seen much benefit derived, but often great con-
itional irritation. With regard to the electric-cautery,
I can say is, that women have already a great
ignance to the use of the speculum, and in all
bability the addition of an electric-battery in that
cate region would cause a sensation of still greater
rust. The fluids, I think, give us more hope for suc-
; considering, that to cure effectually an ulceration
ny magnitude, the application must not only be
e to the ulcerated surface, but must dip into the
ty itself.

The first on this list—injections—may be passed over,
equiring but few remarks. Their use is vaginal only;
in nineteen cases out of twenty, they never reach the os uteri; therefore, except in cases of leucorrhœa, or cancer, as cleansers of the vagina, or to convey some temporary relief in the form of an opiate, they are useless.

The next remedy to that which I am about to extol, is the acid nitrate of mercury, an application highly spoken of by Dr. Bennet. I believe that it possesses great stimulant and healing properties; but, from my experience of its use, it is not equal to the pure nitric acid. What the former accomplishes in two or three applications, the latter will perform in one.

My attention was directed to the powerful escharotic and healing powers of nitric acid some years past, in a case of deep-seated syphilitic ulceration of the perinæum, when every other remedy had failed. It not only destroyed the diseased membrane, but at the same time produced a healthy action in the new tissues—a change so rapidly accomplished that both patient and surgeon were singularly surprised by the sudden metamorphose. Of all the membranes in the body the mucous seems to be the most adapted for this remedy, as shewn by the extraordinary power which it possesses of stimulating and producing a healthy action when applied to the ulcerated mucous membrane in cases of internal piles. Very little irritation is produced by its application.

In cases of cancer of the uterus when the stage of ulceration has commenced, and hæmorrhage made its appearance, nitric acid will be found the safest and most styptic application in arresting its progress. The tincture of sesquichloride of iron will not be found sufficiently powerful in such cases as an external application; but, as an internal remedy, it performs its office more effectually.

In conclusion, after reviewing the few cases here recorded, and again adverting to my text—"Stimulation to produce a healthy action, finally cicatrisation"—I may with safety say, there are three things necessary for the cure (not palliation) of ulceration of the os and cervix uteri; first, a full view of the diseased surface; secondly, supporting the general health; thirdly, the application of an appropriate powerful escharotic, that will not only touch the external portion of the os uteri, but will dip full into its cavity; the practitioner, armed with the tincture of sesquichloride of iron as an internal and the pure nitric acid as an external remedy, need never despair of not fulfilling these intentions.

I am quite aware that the plan adopted by me in the cases recorded is not novel, but employed freely by other practitioners; but, considering that confirmation of treatment is the essence—the principle—upon which the profession wish to rely, my cases are designed to confirm the nitric acid treatment in cases of ulceration of the os and cervix uteri; and with this view I am inclined to give my experience of the great value of the agent.

Testimonial. A tea-service has been presented to Mr. C. Parsons, by the nurses and patients of the North Staffordshire Infirmary, as a mark of the kindness which they received at his hands whilst House Surgeon of the Infirmary.

The King of the Belgians. Professor Langenbeck's first visit to the King of the Belgians resulted in the greatest success. The stone was almost entirely removed. King Leopold, however, has thought it prudent to request the professor to defer his second visit for some time, as His Majesty fears his strength will be unequal to so speedy a repetition of the operation. Professor Langenbeck speaks with surprise of the clearness of mind and self-command displayed by the old king, who did not permit so painful an operation to prevent him from discharging his usual business. The distinguished surgeon received 200 Friedrich d'Or (£170) as *honorarium* for his services.

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SATURDAY, FEBRUARY 14TH, 1863.

THE LATE INQUEST AT LEAMINGTON.

[WE have more than once called attention to the case of Dr. Philbrick, against whom an action has been commenced, in consequence of a most (in our opinion) unjust verdict given by a coroner's jury at Leamington. The case is one, in many respects, of much interest; and, as it has been through the evidence given by members of our profession—through medical evidence—that Dr. Philbrick has been thus placed in the position of defendant, we have placed the facts in the hands of an authority on the subject of midwifery, and have received from him the following deliberate opinion on the case. This opinion will, we are sure, satisfy our readers that Dr. Philbrick deserves the warmest sympathy at the hands of the profession; and we cannot doubt that, if he be eventually driven into a court of law, the profession will not hesitate in giving him the practical proof of their sympathy.*]

The circumstances of the case which has recently occurred at Leamington, and in which the inquisition held by the coroner for the purpose of determining the cause of the death of Mrs. Bull, are such as to call for serious consideration on the part of those interested in the obstetric department of medical practice. The verdict of the jury, as it stands, is such as to throw blame on the practitioner who attended the case. The medical evidence, as to facts and as to points of medical practice, submitted to the jury, was such that the jury had hardly any alternative but to come to the conclusion they did. Inasmuch, therefore, as the evidence in question supplied the data on which the jury arrived at a conclusion so damaging to Dr. Philbrick, it is very essential that these data should be rigorously scrutinised as regards their scientific value and accuracy.

The case is a mixed one, and several important questions are raised by its discussion. The points which it is chiefly important to discuss are:—

1. What is the proper treatment of a woman in labour with twins, one of which has been delivered?

2. Is it possible for the second child, which, three hours after the expulsion of the first, is found to present footling, to undergo such change in position as shall result in its presenting by the two hands eight hours later?

3. What was the cause of the hæmorrhage which, as is asserted, accelerated the patient's death a fortnight after the delivery?

4. Does the occurrence of profuse hæmorrhage, after labour, predispose to softening of the brain a extravasation of blood on the surface of the brain?

1. What is the proper treatment of a woman labour with twins, one of which has been delivered

In the text-books on Midwifery, it is really le to the discretion of the attendant either to expedi the delivery of the second child, or to wait the occu rence of labour-pains—that is to say, if nothing u toward have occurred or appears likely to occu "Should the second child", says Denman, "prese with the breech or inferior extremities, there can no solicitude about the case. We must act as w before advised in such cases; that is, we must wa for the expulsion of the child by the natural effor if they be excited, or be equal to the effect; othe wise we must give assistance." .... "The most fort nate presentation of the second child in a tw case is certainly with the inferior extremities Dr. Ramsbotham says that "the length of time would be desirable to wait after the birth of the fi child before means are taken to extract the secon no dangerous symptom appearing in the interval, a point admitting of some dispute, and deserving very grave consideration." This author then go on to observe that some practitioners decry artific assistance merely in consequence of lapse of tim and "that often many hours, sometimes many da have been allowed to pass after the birth of c child, before the labour was terminated." He agr with Denman in thinking that, if uterine action not re-established, some limit should be placed our passive treatment. He specifies four hours—t time mentioned by Denman—"as perhaps the le objectionable." In a note it is mentioned that C lins' limit is two hours. If we turn to Rigby, find it is stated in reference to the actual history twin labours, that the uterus may resume its exp sive efforts in "twenty minutes after the birth the first child, or it may remain quiescent for seve hours without at all disturbing the regular a natural course of the process."

It is unnecessary to adduce further written aut rity on this point. There can be no doubt that, the absence of dangerous symptoms, or of such m position of the second child as to prevent deliv naturally, it is perfectly justifiable to wait the acc of labour-pains before accelerating the delivery the second child. It is a matter of opinion wheth under such circumstances, steps should be taken complete the labour at once, or whether the c should be left to nature. This is not the place argue which of the two methods is absolutely t best. It is sufficient to point out what is, accord to recognised authorities, "admissible" practice.

To apply this rule to the case of Mrs. Bull. At time when Dr. Philbrick was called in, was any d gerous symptom present? Here a careful attent

* Since these lines were written, we learn that a declaration of action, with damages laid at £500, has been entered against Dr. Philbrick, to be tried at Warwick in the March Assizes.

to the facts of the case is necessary. The midwife (whose evidence, by the way, is contradictory) states that, before Dr. Philbrick had been called in, there was much hæmorrhage; but it does not appear certain whether she sent for Dr. Philbrick in consequence of this hæmorrhage, or because she did not know what was really going on. Dr. Philbrick stated before the coroner, that at the time of his visit there was no hæmorrhage; and the facts in the history of the case from the date of his visit at 7 A.M. up to 3 P.M., as derived from the statements of the husband, of Dr. Horniblow (who saw her at 1 P.M.), and of others, leave scarcely a doubt as to the fact that, during the time in question, hæmorrhage was absent. Before Dr. Philbrick arrived, the hæmorrhage spoken of by the midwife, of the occurrence of which to any extent there are grave doubts, did not make the patient even faint; the midwife made no reply when asked by the coroner, at the inquest, whether there was faintness. Dr. Philbrick found the patient, three hours after the birth of the first child, weak, and administered brandy and water; but there is no evidence that her weakness at this time was more than might very well be accounted for irrespectively of the occurrence of hæmorrhage. Dr. Philbrick, it appears, left the patient, seeing nothing in her general condition calling for immediate interference; ordering remedies of a restorative character to be given from time to time, and directing the midwife to send for him in case she required his service further. From about half-past seven to half-past eleven, nothing further appears to have occurred; there is no evidence that any hæmorrhage was going on. The husband, who went to call Dr. Philbrick the second time at 11.30, says nothing of there having been more hæmorrhage; and, even supposing there had been hæmorrhage going on subsequent to Dr. Philbrick's visit at 7.30, the midwife is clearly responsible for allowing it to proceed without calling in Dr. Philbrick, as he had directed her to do. But, as before remarked, the evidence clearly points to the conclusion that, from 7 A.M. to 11.30 A.M., there was no hæmorrhage.

Dr. Horniblow, who saw her at 1 P.M., states in evidence that he was told, at the time of his visit, there was no hæmorrhage going on; and, although the patient was found by him at that time to be exhausted, there is nothing to indicate that it was a dangerous exhaustion. Dr. Horniblow states, in fact, that her condition at that time was not such as to render it unadvisable to wait till another medical man could be called in before proceeding to interfere.

So far, then, as hæmorrhage is concerned, it does not appear evident that during the time Dr. Philbrick was at all concerned with the case—viz., from 7 A.M. to about 11 A.M.—the patient was in a dangerous state from hæmorrhage. The question of hæmorrhage will have to be considered again presently.

2. Next we come to a question on which the evidence adduced at the inquest appeared to the coroner and jury most conflicting; viz., the nature of the presentation at the time of Dr. Philbrick's visit. Dr. Philbrick states that the child presented footling. At 3 P.M. Mr. Fenn Clark states that the presentation was that of both hands. From the other medical evidence given at the inquest, the jury could only draw the conclusion that, if Mr. Clark was right, Dr. Philbrick must have been wrong; and, in their verdict, they find that "he was mistaken as to its being a foot-presentation". This point is most important; because, applying the rule above laid down, if the case were footling, it might be left to nature; if, on the other hand, it were an arm case, no such natural termination could be expected. Now there appears nothing absolutely impossible in the supposition that both observers were right; and in this way. First, it is well known that, when the uterus is lax and loose, changes do take place in the position of the fœtus; and a slight degree of change would be quite enough to bring about an apparent evolution of the fœtus. Thus, supposing the fœtus to lie transversely, the feet and arms hanging downwards towards or in the os uteri, it will be a matter of accident whether the feet or the hands are expelled into the vagina first; and there is nothing inconceivable in the hands assuming the forward position late in the day, while at an earlier period the feet may have been lowest, forming really the presenting part. It is very true that, when the feet are felt in the vagina, the expulsion of the child generally takes place with the breech foremost; but, unless the breech itself be actually engaged in the pelvic inlet, there appears no reason why such an occurrence as that suggested above should be impossible. It is well known that, in "cross" cases, there may be simultaneous presentation of hands and feet at the os uteri; and it is perfectly reasonable to conjecture that, in the above case, both feet and hands lay near the os. They being so placed, the alteration in presentation is explicable. Further, it appears from the evidence that, during the interval in question, certain manipulations, the precise nature of which does not appear, were performed by the midwife. These manipulations may very well have assisted in producing the malpresentation. In his summing up, the coroner says: "It is perfectly clear, in the first stages of the affair, he (Dr. Philbrick) made a most unfortunate mistake."

The foregoing argument tends, however, to disprove the coroner's assertion. Admitting, therefore, as we do, the accuracy of Dr. Philbrick's diagnosis, this removes the case altogether out of the exceptional class; and it was quite open to Dr.

Philbrick, if he so pleased, to wait and allow the labour to be completed by nature.

3. We next come to a very important question; viz.: What was the cause of the hæmorrhage which, as is asserted, accelerated the patient's death fourteen days after?

First, as to the facts. *When* did the hæmorrhage occur? Reasons have already been given for concluding that before Dr. Philbrick's visit, or during the time for which Dr. Philbrick is answerable, there had not been any considerable loss of blood, though throughout the inquiry the coroner seems to assume that the contrary was the fact. In his summing up, he says: "We must assume the principal amount of hæmorrhage had occurred between the birth of the first child and the time that Dr. Horniblow saw her" (1 P.M.). But the coroner and the jury, and indeed the medical witnesses, appear to have overlooked the important fact that the chief hæmorrhage occurred after the second child had been extracted, at 3 P.M., by Mr. Fenn Clark. The latter gentleman, in his evidence, says "the subsequent hæmorrhage was fearful, and continued two or three hours before it could be stopped"; and further, that he considered it necessary to remain with the patient until 7 P.M. The placenta was, as Mr. Clark adds, detained. Now, at the inquest, the subsequent "fearful hæmorrhage" appears to have had no attention paid to it; whereas to the first hæmorrhage, the occurrence of which to any marked extent is problematical, is given the credit of producing all the serious subsequent mischief.

So far for the facts as to hæmorrhage. We now come to the consideration of its cause. We have not far to go to find an explanation of this. The woman was weakly; she had had eight children; she was pregnant with twins. All these circumstances conspired to predispose to the occurrence of uterine hæmorrhage. The serious hæmorrhage which took place was subsequent to the delivery of the *second* child, and was due to detention of the placenta. It was due to the same cause which protracted the labour; viz., inertia or sluggishness of the uterus—a sluggishness which for a time baffled Mr. Clark's doubtless skilful attempts to overcome. But this hæmorrhage, controlled with such difficulty by Mr. Clark, would it have been less, had the patient been delivered earlier of the second child? By implication, the coroner and the jury seem to have concluded that it would have been less; but it would be exceedingly difficult to prove this. Nay, the opinion might very well be defended by those who are in favour of allowing nature to act unassisted, that it was the best practice to wait, and that by so waiting there would be less risk of the occurrence of *post partum* hæmorrhage.

4. With reference to the connection endeavoured to be made out between the hæmorrhagic loss the patient had sustained and her death from red softening and extravasation of blood on the brain seventeen days after the labour, that connection appears utterly devoid of foundation. The pathological doctrines adduced in support of this view are open to very serious question as to their truth; it is very certain they are not so generally accepted by the profession as to be capable of being made the groundwork of a charge, by implication if not literally, amounting to one of manslaughter. And it is unnecessary to consider this question at all, so far as this case is concerned, because if Dr. Philbrick was not answerable for the hæmorrhage, he could not have been answerable for the effects of the hæmorrhage.

There is one other point to which it is necessary to advert; viz., the position of Dr. Philbrick in reference to the patient and the midwife. Dr. Philbrick was called in by the midwife—so far as can be seen—to inform her as to what was going on and it is not evident that he was called in for another reason. Dr. Philbrick attends, gives the necessary opinion, and believing the midwife competent to conduct the case—a natural one, as he concluded—to a successful termination, ceases his personal supervision of the case.

There seems to be no reason for the statement that, under the circumstances, Dr. Philbrick was necessarily called upon to continue his personal attendance on the patient, seeing that a competent (reputedly so, at all events) individual was in charge. It will be very difficult, indeed, to prove that the patient actually suffered from, or that the subsequent accidents were in any way connected with, Dr. Philbrick's ceasing to give his continued personal attendance to the patient between the hours of 7 and 11.30 A.M.

It appears unnecessary here to discuss the question as to whether it was incumbent on Dr. Philbrick to undertake the management of the case and at 11.30 A.M. when sent for, this question being one which cannot be determined by any amount of scientific reasoning. If the case be considered as one of consultation, which it undoubtedly was, the fact of Dr. Philbrick having attended once does not seem to imply any obligation on him to attend twice.

THE WEEK.

THE London College of Physicians has issued its annual list. No Fellows have been added to the list during the past year. A little breathing time was required, we suppose, on the year following the famous one "of grace." During 1862, fourteen new Members have been elected, and sixty-three Licentiates. Naturally enough the number of Licentiates elected is less in 1862 than in 1861, when the election of Licentiates first came into operation.

s G. Grey has willingly accepted Dr. Brady's pro-al of introducing a bill into Parliament for the ulation of the conveyance of persons, subjects of ctious diseases, in public conveyances. A great l of nonsense has been talked upon this subject. s evident that there is only one possible way of venting the use of public conveyances by persons fering from infectious disease, and that is by sup-ing the public with other means of conveyance ressly adapted for the occasion. It has been said a large authority that a cabman is justified in re-ng to take cases of this kind into his cab; but t does such an idea involve? Why it actually verts the cab man into a pathologist. A cabman o decide whether or not his fare is the subject of ctious disease! So that if a man with an unfor-ate rosy-spotted face should present himself, the man, relying on his own diagnostic powers, would e the privilege of saying—No! I shan't take ; you've got the small-pox! As we have said, only way to meet the evil is to establish public veyances for the purpose required. And, even n, it is very certain that the evil will only be met way. Nothing that we can do can prevent the of cabs and public conveyances by infected per-s. The subjects of these infectious diseases are ourse smitten by them before they are conscious he fact; and when they recover from them they still, in many instances, for a shorter or longer son, hand the disease on to others. All that slature can do is to provide a partial remedy for evil; and that much it is bound to do; but when conveyances are established, it is not reasonable uppose that any person, other than hospital and house patients, will make use of them. If Dr. ly meets all the difficulties of the case, he will r himself to be a most clever bill-maker.

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s with great pleasure we recognise the following lid remarks on a case which one of our weekly emporaries (we might rather say two, for Tar-'s friend, of course, follows suit in such a busi-) have attempted to convert into a scandal. The *ical Times and Gazette* says:—"We do not k it *fair* or *honourable* to drag a respectable sician before his brethren because he has been apped into consultation with such a person (a œopath)." The italics are ours.

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are glad to find that what we lately referred to e Journal as a thing to be desired is about to rried into effect by the London College of Phy-ns; viz., the electing of *two* Examiners in Sur-instead of *one* Examiner. Two Examiners are ired to give that seriousness and importance to examination which the College evidently attach

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Mr. Coulson has been elected to serve the office of sheriff for the county of Cornwall during the present year.

Sir R. Peel is determined to do justice, and something more than justice, to Ireland. Led away by his newly acquired Hibernian enthusiasm, he gives the House of Commons the following piece of information, which, we are satisfied, will astonish our Irish medical brethren as much as their English *confrères*. It is curious that so knowing a hand as is Sir Robert Peel should have forgotten the odiousness of comparisons. "These dispensary medical officers", he says, "are superior to the village doctors in England; many of them have professional connexions extending over large tracts of country, and I believe they will be able to furnish most valuable returns."

The following extract from an Indian journal, the *Friend of India*, gives us an idea of the complete and cruel fix in which the Indian medical officers have been placed by the government as regards their pay. It is a gross grievance that in the private councils of the Government the medical officers have no voice to represent their interests.

"We receive repeated and earnest inquiries on the subject of the amalgamation of the medical services and the publication of the Staff Pay Code. As to the former, we believe the Government of India are quite as ignorant as the public. From mail to mail a decision is expected; but as yet not the slightest indication has reached Calcutta from England as to what scheme of medical amalgamation the home authorities propose to adopt, nor when the question will be settled. This much only is as certain as anything about which Sir C. Wood and the Horse Guards are disputing can be, that the scheme adopted will not, in its main outlines, be Colonel Balfour's. Meanwhile the suspense in which Indian surgeons are kept, and the continued denial to both services of the substantial benefits of the Royal Warrant, are as disgraceful to the English authorities as the delay in paying the Indian prize-money. Were Parliament sitting, a few well put questions might secure justice."

It is reported that the two dental societies of London, the Odontological and the College of Dentists, are about to amalgamate. We should be very glad if other societies would follow their example. This union of forces is a much wiser proceeding than that of attempting to establish an Anthropological Society in the teeth of existing Geographical and Ethnological Societies.

Virchow maintains, or rather is earning, a high position as a statesman. What will become of his scientific tendencies? The journals say:—

"Deputy Virchow followed, and spoke at considerable length. 'The Minister-President,' he said, 'tells us that the State must live, and from that proposition he starts to draw false inferences. I ask if that be a maxim for a statesman? Is it possible to say to a representative assembly, which has to grant money—The State wants

money, consequently you must give money; consequently you must assent to everything?' He referred to the addresses to the King sent up by the Absolutist party during the recess; and, amid the laughter of the House, read one of them couched in terms of ridiculous exaggeration. He indulged his sarcastic vein at the expense of the Premier, and apparently not without effect, eliciting from him a brief but bitter reply.

The Commissioners in Lunacy have addressed a circular to all the superintendents and proprietors of public and private lunatic asylums, inclosing a copy of the following letter sent by them to Mr. Elliott of Munster House.

"Office of Commissioners in Lunacy, 19, Whitehall Place, January 9th, 1863.

"Sir,—In the letter addressed to you by the solicitors of the Board in the month of August last, the censure of the Board was conveyed to you for your culpable neglect, before taking charge of Mr. James Hall as an insane patient, to ascertain by reading the certificates that they were in all respects conformable to the statute; and the opinion of the Board was expressed in the following terms:—'There is no part of the duty of the proprietor of a licensed house which requires greater care than the examination of certificates. Your long experience ought to have rendered you familiar with the particulars in regard to them, which demand special attention; and the Commissioners, therefore, consider your negligence on this occasion as a most grave offence.' Had you performed this, your obvious duty, you would not have received Mr. Hall, inasmuch as Mr. Guy's certificate was, upon the face of it, invalid and incapable of amendment under the statute, being founded upon an examination of the patient more than six weeks before its date.

"The question of the sufficiency of the facts set forth in medical certificates admits in many cases of much doubt; and the certificates, in this respect, may be amended after the reception of the patient. It is entirely different if the examination of the patient took place, as in the case under consideration, more than seven days prior to admission. Mr. Guy's certificate bore date six weeks subsequent to the day on which he last saw Mr. Hall. This was fatal to the validity of his certificate; and it is, therefore, of paramount importance that proprietors and superintendents of asylums should, before taking charge of a patient, carefully peruse every certificate.

"The Commissioners feel themselves called upon, in the existing circumstances, and for the above reasons, to intimate to you their determination to visit any violation of the provision of the law, such as that of which you were guilty in Mr. Hall's case, with the penalties of the statute.

"In order to the promulgation of their views, the Commissioners intend to circulate general copies of the present communication.

"I am, sir, your obedient servant,

"(Signed) W. C. Spring Rice, *Secretary*.

"C. A. Elliott, Esq., Munster House, Fulham"

We have received a long letter from Dr. Coombs of Bedford. He says, "I have now to assert that Dr. Burrows was perfectly right in assuming, as he did, that I was practising medicine according to his teaching"; and he then goes on to state that he had met "Dr. Evans, and that nearly all the practioners of Bedford were in the habit either of meeting me in consultation or of interchanging professional services." He also points out instances in which he bleeds, gives croton oil, and in fact practises medicine. But one thing in this long letter h does not do. He does not say in two words that h does not practise homœopathy; although his lette from beginning to end, would lead the reader t suppose that he had nothing to do with it, just a his practice led Dr. Burrows to suppose. Let D Coombs say that he has nothing in the future to d with homœopathy, and we will gladly record th fact.

The Institute of Lille offers as the subject of i next year's prize the following questions:—Wha are the accidents connected with prolonged absti ence from food, and how are they to be distinguishe from those proper to disease? What are the di turbances excited in the body through the exag gerated employment of alterative, antiphlogisti purgative, and vomitive medicines?

To perpetuate the remembrance of the servic rendered to medical science by Professor Matteuc as Minister of Public Instruction at Turin, the pr fessors of all the universities of the kingdom Italy have raised a subscription in order to off him a grand medal of honour. The portrait is su rounded with the words:—"To Charles Matteuc 1862"; on the reverse, "For having establish unity in study"; and on the border, "The ccl pr fessors of the Italian Universities."

Louis Napoleon allows no opportunity to esca of rewarding with decorations his men of scien Of the French members of the jury who dealt wi surgical, etc., affairs at the late exhibition, the f lowing have been rewarded:—MM. Balard a Nélaton have been made Commanders of the Legi of Honour; MM. Barral, Bella, Demarquay, a Wurtz have received the rank of officers; M. M son, the publisher, is made Chevalier, and so a M. Lecorché. The makers of instruments, Cheval fils, Luer, and Mathieu, have been entered Chevali likewise. What rewards have been bestowed up the English medical jury and the English instr ment makers we know not. We suppose that, cording to the custom of the country, the form will have to be contented with a clear conscien and the latter with a brisk and more extended s of their goods.

The three surgical instrument makers of Pa who obtained prizes at the Exhibition have ce brated the event by giving *fêtes* to their workm which *fêtes* "during the last few days have p duced a remarkable degree of animation in the la quarter of the city."

The corps of Italian military medical men, whi in 1858 did not amount to more than 155 individua now consists of 755.

Casper, the medico-legist, a few weeks ago p formed his thousandth medico-legal autopsy.

EXHIBITION JURORS' REPORT.

served Meats. Very little improvement has been in this branch of industry since the Exhibition of notwithstanding the importance of it, and the large ıse of its trade. Most of the meat is overdone, and ded with fat, and in many cases the food had ac- l a metallic flavour from the vessel in which it was rved.

kles. Since the Exhibition of 1851 a very great vement has been effected in this branch of manu- e. Public attention has been drawn to the fact, nost of the green pickles of English commerce inted, or rather mordanted, with copper, the metal g been put into the vinegar purposely, in the form alt, or else communicated to the pickles by boiling in copper pans. Little by little, however, this e has been discontinued, or rather diminished, the proportion of copper in a bottle of pickles reached the hundredth part of a grain. Manu- ers were anxious to exclude even this small pro- ; but they were met with the difficulty that, when ckles were prepared without a minute quantity of , they were very unsightly, and in many cases wholly unsaleable. The pickles of France and m, however, demonstrated the fact, that very colour might be communicated or retained with- e admixture of a particle of copper; and very re- some of the manufacturers of this country have olished the object without the aid of this metal. aest specimens of this class of goods were, beyond bt, those very recently produced by Messrs. Batty ., who use a colouring material from vegetables een foliage.

fectionaries. A glance at the confectionary will ow great has been the improvement of its manu- . There has also been a large increase in the ty produced. No longer ago than the year 1855, al amount of confectionary made in this country t exceed 8000 tons in the year, whereas at the t time the quantity is not less than 25,000 tons *num.* One house alone, as we are informed, is g about two and a-half tons of lozenges and com- day, besides about fifty tons of marmalade, and f jams in the course of the year.

ing at the kind of confectionary which was in n use in this country at the time of the first Ex n of 1851, it is manifest that a great improvement n effected in every stage of its manufacture; no are the poisonous compounds of lead, mercury, pper employed as colouring ingredients; and lo we find that any notable proportion of starch has been introduced into the composition.

OUR LONDON HOSPITAL SICK.

ocial Science Review has the following calcula- especting the sick and medical attendants of Hospitals:—

m the year 1856 to 1861, the average number of treated in the large hospitals, amounted alto- in in-door and out-door relief to 380,262; since tain of the hospitals have published an increase, slight decrease, in patients received and treated. ame year the number of physicians and surgeons ated these patients amounted to 150. Twelve of least were consulting physicians or surgeons, ld office nominally, and did no work. Lately, ght or nine acting physicians or surgeons have ded to the collective staffs, and as many con- have disappeared. We may, therefore, take d honestly the state of the hospitals in question, —and taking them as average specimens of hospital works and workers,—that 380,262 sick people are treated annually by 150 medical officers.

"We have calculated the labours of 150 medical men among 380,262 patients, on the idea of an equal division of work. But the work is not equally divided in fact, so that our calculation is not quite exact when compared with actual practice. Of the 150 men, 82 are what are called full physicians or surgeons; these attend to the in-patients. Technically, they are said 'to have the beds,' meaning the patients in the beds of course. The other physicians and surgeons, 68 in number, are called the assistant-physicians and surgeons; these see the out-patients, and they have not, except by courtesy of their colleagues, or by special provision, any beds. It is quite an event in a man's life, in fact, when he is allowed beds. The number of in door patients falling to the 82 chief officers amount, out of the 380,262, to 30,316. The number of out-door patients, falling to the 68 assistants, amount to 349,946. The work consequently bears this division. Each full physician or surgeon has under hand 369 cases a year; which at the rate of 16 visits to each patient, gives to him 18 a day, for every day in the year, Sundays excluded; while each assistant has 5,146 cases, which, at the rate of 8 visits to each case, yield rather more than 131 cases a day for each day in the year, Sundays excepted, or nearly nine hours work a day at four minutes to each patient."

THE HOTEL DIEU OF PARIS.

A DEMOLITION of the hospital of the Hôtel Dieu and its reconstruction, which the inhabitants of Paris have loudly called for during many years, are at length decided on. The place on which the new hospital is to be erected is not yet fixed; but a decision must shortly be adopted, inasmuch as the present building is so defective. This is the second time that the Hôtel Dieu will have been displaced. The primitive position of the Hôtel Dieu was to the south of the little church of St. Christophe, nearly in the middle of the *parvis* of Notre Dame. The Seine was not then as it is now, confined with walls, and its waters after the least flood washed the wall of the old city. During the excavations made in 1847 the foundation of this wall was discovered. It followed a line parallel to the river, and its position is distinctly indicated by the iron railing of the garden of the Hôtel Dieu in the Rue Neuve Notre Dame. The present building, consequently, could not have been erected until after the demolition of that wall. The opening of the Rue Notre Dame, which was accomplished in 1181, in order to facilitate the approach to the grand entrance to the church then being constructed, and which absorbed a portion of the church of St. Christophe, coincides with the destruction of the Gallo-Roman wall. Thus the appellation under which it was generally known—*Hospitale Pauperum quod es apud ecclesiam Sancti Christofori*—was beginning to be replaced by its present title, *Domus Parisiensis Dei.* The hospital, moreover, did not in those distant ages possess the character which it subsequently acquired. It was rather a house of refuge for mendicants and foreigners. The friars, according to the ancient custom, washed the traveller's feet. It was not until the reign of Philippe Auguste that invalids were admitted. The Prince, who may be called the founder of the hospital, built the Hall St. Denis and its additions. Blanche de Castille, his daughter-in-law, founded the Hall St. Thomas, and Louis IX built the large hall on the bank of the river and a chapel beside the Petit Pont. The crypt, which extends under the ground occupied by the old church and by the Hall St. Thomas, and which now serves as a wine-cellar, has preserved the character of the period,

and the distinct signs of the thirteenth century. Louis XI decorated the two doorways opening on the Petit Pont. All the buildings on the banks of the Seine were constructed during his reign. In 1535 Cardinal Duprat constructed a magnificent building called the Legate's Hall. It occupied the place now used as a clothes store. When Francis I heard of this munificent act of the Cardinal, he observed that the hall should be very large to contain all the people he had ruined. It appears from the bill of the carpenter who made the beds for this hall that a bench was placed beside each bed, called "the bench of repose"—that is, if the bed contained three invalids, it might be made to accommodate six by permitting three to sit on the bench while three took their turn in the bed. During an epidemic which prevailed in Paris eight persons were placed in a bed. The buildings of the Hôtel Dieu being in a dilapidated state during the reign of Henry IV, they were repaired by that Monarch. Between the years 1802 and 1804 the Hôtel Dieu was again repaired, and the building lost its mediæval character. The chapel, with its doorway, was taken down, and the architect, Clavareau, replaced the handsome and delicate work of the 13th century with a heavy peristyle.

THE ARMY MEDICAL STAFF.

WHAT is it that has given rise to the present deeply-felt discontent among the medical officers of the army? What cause or causes are now in operation deterring young medical men from offering themselves as candidates for commissions in the service?

How comes it that the remedy which was effectual in allaying discontent in the commissariat, the ecclesiastical, the pay departments, has failed so signally to cure the medical officers of theirs? Is it that in the one case it has had fair play, while in the other it is believed not to have been honestly tried? We fear it is even so. The medical warrant purported to regulate the rank, pay, and promotion of medical officers. It was accorded by Government, after its necessity had been demonstrated, not merely as a matter of generous feeling towards a hard-working and self-sacrificing profession, but as a necessity, in obedience to the commercial principle of supply and demand. Young medical men of any mark refused to enter the military medical service in sufficient numbers at the then rate of pay and status. The army could not exist for a month without them. It is needless now to attempt to conceal what is notorious; the War Office had much difficulty in overcoming the strenuous opposition of the Horse Guards to that part of the warrant which gave increased relative rank to medical officers, without which it would have been inoperative. The Warrant was, however, published at last, and medical officers received it with the respect due to its declared royal origin, and thought that it formed the Magna Charta of their professional rights. They now complain that it has been transgressed in several ways, and we feel bound to give place to the complaints of such a body of men.

By the 17th clause of the Warrant, it was stated to be the Queen's pleasure that "such relative rank shall carry with it all precedence and advantages attaching to the ranks with which it corresponds." One exception only was made; it was specially said, as regards precedency of courts-martial, "where our Royal will and pleasure is, that the senior combatant officer be always President." Few medical officers knew that they were eligible to sit on courts-martial; none that we ever heard of claimed to do so; although within our knowledge, where purely combatant officers were not to be had in sufficient numbers, military surgeons have been called in to supply their place. We are quite sure that medical officers are not desirous to serve on courts-mar although we are disposed to say that where one of t own number is arraigned before such a tribunal, it wo only be fair to have a proportion of medical officers the court. Be this as it may, military surgeons h always been required to sit on boards relating to vari matters not strictly military; it constantly happened t an old surgeon and a young lieutenant were on a bo together. The young military officer did not affec know anything of a matter, nine times out of ten, q out of his professional ken, but he acted as presiden the board, and controlled its proceedings. The surg had to sign his name to the proceedings after him. T was the practice stigmatised by Lord Dalhousie, w Governor-General of India, in language that we must call to the minds of our readers:—"It is impossibl imagine what serious justification can be offered f system which, in respect of external position, postpo service to inexperience, cunning to ignorance, age youth; a system which gives a subaltern who is ha free from his drill, precedence over his elder, w perhaps, has served through every campaign for th years; a system which treats a member of a learned fession, a man of ability, skill, and experience, as inf to a cornet of cavalry; a system, in fine, which thr down grey-headed veterans below beardless boys."

When the Warrant was issued it was thought o hands that this system was at an end. Surgeons then properly claimed to sit on boards above describe virtue of their relative rank, and of course, if the s be not present, to sit as president. They were ord to sit on boards as they had done before. This they to be a direct breach of Her Majesty's Warrant. Sh afterwards the Commander-in-Chief directed that a medical officer was likely to be a senior on a bo "he should be summoned as a witness," obviously military officers might be spared the indignity of si on a board or court of inquiry with a "doctor" as p dent. This gave the second blow to the confiden the service in their Magna Charta. By the 17th cl medical officers having the rank of Inspector-Ge claimed the forage allowance granted to the ran which they were assimilated. It was refused, on ground that if two horses were enough for a De Inspector-General, they were enough for the sup rank. Again, a regimental or staff surgeon ran under the Warrant with a field officer is not allowe baggage of that rank, a direct breach of the very of that document. The adjutant of an infantry regi is allowed the privilege of a second batman for the of his horse, so is a major, but the commanding c may give or withhold it from the surgeon at his plea Before the issuing of the Warrant a surgeon of a goon Regiment was allowed to keep two horses; promoted to the relative rank of field officer unde Warrant, he claimed the right of his rank, freel corded to the major, of keeping four horses. I refused. It may be that a surgeon does not require horses,—neither does the major; the larger numb simply an appanage of rank, and as such is rega and under the new system the medical officer was entitled to the same privilege as the major. Lastl greatest grievance of all, and the one most felt an sented, was the taking away from surgeons the relative rank of major—that is, making them inva junior of that rank. The surgeon is now, it is plained, in the face of the solemn promise of Oct 1858, converted into something more than a captai less than a major.

Into the many ways in which the Warrant is sta be broken in its spirit, we have not space to ente above, it is held, is enough, and more than enou explain why the old chronic discontent again prev the service, and why young medical men, educated the high standard the new regulations require,

fallen below the demand. The warrant of 1858 ot an isolated measure. The aim and end of it was ure for the service of the State the highest avail- rofessional talent and skill.

have already quoted Lord Dalhousie's famous e, and with one other extract from that dispatch, ding equal justice for military surgeons, we con- —"I respectfully submit that such inequalities are d on no sound grounds of justice, expediency, or ; no valid reason has ever been given or can be l for maintaining them. Their effect is to depress rit of the medical officer, to depreciate a profes- ad class of service which ought to be held in the ; respect, and supported equally from motives of ce and gratitude." (*Army and Navy Gazette.*)

WILLIAM PETTY, THE FOUNDER OF THE LANSDOWNE FAMILY.

rtunes of the Lansdowne family were formed by chiefly known as the founder of a new science— ence of Political Arithmetic, but whose life in- so many of the modes of activity which a very re- le period afforded, that one is surprised to find has been almost entirely overlooked by the bio- rs. Sir William Petty, the son of a clothier at y, fought his way desperately to fame and fortune times of the Commonwealth and the Restoration. ered the navy, and soon left it; he tried merchan- r a time, and left that also; he then invented a ; machine, but received no profit from it; he to medicine, and dissected in Paris under the ce of Hobbes; he became Professor of Anatomy ord; to anatomy he added music, and became pro- of this art at Gresham College; subsequently he physician to the Irish army during the Protecto- ot content with these occupations, he contracted admeasurement of lands in Ireland forfeited by ellion, his survey being still of great value in the rts as a work of reference; he became a member ament under Oliver; he was knighted by Charles was one of the founders of that Royal Society as had so much influence on the development of ; he at length became a shipbuilder, inventing a bottomed vessel to sail against wind and tide; ally, by various important works on taxation and l wealth, he established, as we have said, the new of Political Arithmetic. He died, leaving what e times would be considered very large posses- personal estate to the amount of £45,000, and roperty to the value of £6,500 a year. Such are made men who supply our English aristocracy w blood and preserve it in vital connection with ts of the people. He married a lady who was s Shelburne in her own right, and by her r, his only surviving child, who had intermarried Kerry family, he became the great grandfather elebrated Earl of Shelburne, the first Marquis of vne, and the father of the deceased Marquis.

LESEX HOSPITAL. Among the legacies bequeathed he past quarter to this charity, there was one . Cropper, who was ninety years old when he died, it appears, survived all his relations. He was a -at law, and lived in the most frugal manner in bers at Gray's-inn. The amount of his property me of his decease is estimated at about £4,000 *im*, and £10,000 in money, the whole of which he owed upon London charities, selecting Middle- pital as his residuary legatee.

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the JOURNAL cannot be sent to them.

PHILIP H. WILLIAMS, M.D., *General Secretary.*
Worcester, November 10th, 1862.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Ordinary.]	Athenæum, Corn Street, Bristol.	Thursday, Feb. 26, 7 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Pavilion Hotel, Folkestone, on Thursday, March 5th, at 3 P.M.

THOMAS BOYCOTT, M.D., *Hon. See.*
Canterbury, February 10th, 1863.

Reports of Societies.

ETHNOLOGICAL SOCIETY.

TUESDAY, FEB. 3RD, 1863.

J. CRAWFURD, ESQ., President, in the Chair.

ON THE PSYCHOLOGICAL DIFFERENCES WHICH EXIST AMONGST THE TYPICAL RACES OF MAN.

BY ROBERT DUNN, F.R.C.S.

As papers of a psychological character have so rarely been read at the meetings of the Society, the author offered no apology for asking the attention of the meeting to this subject, being satisfied that if there was any branch of the science more interesting than another it was that which related to the psychological differences which characterise the different varieties of the human species. That the genus *Homo* was one, the author believed and maintained, on the ground that in man's moral and religious attributes the inferior animals do not participate; and it was this, he considered, that constituted the difference between him and them. The barrier was thus, he considered, impassable between man and the chimpanzee and gorilla; and wherever two-handed and two-footed man, in his erect attitude and with his articulate voice, is found, his claims to our common humanity must be immediately acknowledged, however debased the type may be or mean the garb in which that humanity is clothed. Mr. DUNN'S conviction was, that there was proof of a general unity exhibited in all the races of the great family of man; inasmuch as they were all endowed with the same instinctive, sensational, perceptive, and intellectual faculties—the same mental activities, however much they may vary in degree. It had, he thought, been fairly argued that all the races of the human family form but one species, from the physiological fact that they are all capable of fruitful union, which would not be the case with the hybrids of two species of even the same genus. Believing the brain to be the material organ of the mind where the ultimate molecular changes take place, and whence the mandates of the will issue, the author considered the study of the cerebral organisation and development in the various typical races as one of the most effectual means of better understanding and elucidating the psychological differ-

ences which characterise them. This subject, however, was one that yet required to be worked out; and ethnic psychology was still a desideratum. The difficulties which formerly beset it no longer exist, and it was, he thought, to our shame that, notwithstanding our extensive and daily spreading intercourse with all the nations and races on the face of the earth so little had been done. The author then reviewed at length what had been done by anatomists and ethnologists, including Spurzheim, Tiedemann, Gratiolet, Herbert Spencer, Huxley, Owen, and others.

In conclusion, he pointed out that the lower savage races, such as the Sandwich Islanders, made progress in the early part of their education, and were so far as apt and quick as the children of civilised Europeans; but at this point they stopped, and seemed incapable of acquiring the higher branches. The Sandwich Islanders have excellent memories and learn by rote with wonderful rapidity, but will not exercise the thinking faculties. They receive simple ideas, but not complex ones. In like manner, it was found, practically, that negro children could not be educated with white children. In all these cases, as well as in the minor cases continually occurring amongst ourselves of inability to understand subjects and reasonings of a certain order of abstruseness, the true explanation is, that the cognate faculties have not reached a complexity equal to the complexity of the relations to be perceived; and, moreover, it is not only so with purely intellectual cognitions, but it is the same with *moral* cognitions. In the Australian language there are no words answering to justice, sin, guilt. Amongst many of the lower races of man, acts of generosity or mercy are utterly incomprehensible—that is to say, the more complex relations of human action in its social bearings are not cognisable. This, the author thought, was in accordance with what *à priori* might have been expected to have resulted from organic differences in the instruments of the higher psychical activities—or, in other words, in the nervous apparatus of perceptive and intellectual consciousness. The leading characters of the various races of mankind were simply representatives of particular stages in the development of the highest or Caucasian type. The Negro exhibits permanently, the imperfect brow, projecting lower jaw, and slender bent limbs of a Caucasian child some considerable time before the period of its birth. The aboriginal American represents the same child near birth; the Mongolian the same child newly born.

In the discussion, the president, Dr. Copland, Mr. Luke Burke, and Dr. Donovan, took part.

HARVEIAN SOCIETY OF LONDON.

ANNIVERSARY MEETING, JANUARY 15TH, 1863.

WEEDEN COOKE, ESQ., President, in the Chair.

Report. The Honorary Secretary read the Report of the Council. It was proposed by Mr. HENRY THOMPSON and seconded by Dr. BALLARD,

"That the Report be received and adopted, and that the thanks of the Society be given to the officers and Council."

The Treasurer laid before the meeting a statement of the expenditure and income of the Society for the past year, showing a balance in hand of £79 : 8.

Officers and Council. At the close of the ballot the following gentlemen were declared elected officers for the ensuing year. *President:* Henry W. Fuller, M.D.; *Vice-Presidents:* William Adams, Esq., J. B. Sanderson, M.D., W. Sedgwick, Esq., W. Wadham, M.D.; *Treasurer:* Henry William Fuller, M.D.; *Honorary Secretaries:* J. B. Curgenven, Esq., C. R. Drysdale, M.D.; *Council:* P. Burke, Esq., F. Cock, M.D., T. K. Hornidge, M.B., E. Hart, Esq., T. H. Hill, Esq., J. C. Langmore, M.B., W. B. Mushet, M.B., W. O. Priestley, M.D., O. A. Field, Esq., E. Shercombe, Esq., H. G. Times, Esq., J. Walker, Esq.

PRESIDENT'S ADDRESS.

The Annual Address was then delivered by WEEDEN COOKE, the president.

The President after thanking the Society for support they had afforded him during his year of o entered upon the inquiry, "What have we done, are we doing, to advance our knowledge of disease, means of alleviating, not only the 'ills which flesh heir to,' but likewise those illegitimate offspring, w are bred of ignorance of the laws of nature and of curbed vice and passion?"

On reviewing the history of the Society since foundation in 1832, it appeared that Dr. Marshall Dr. C. J. B. Williams, Dr. Hope, and Dr. A. T. Thomp had been its early associates; and had developed first germs of those grand views which made these n illustrious, in the meetings of this Society. So far as 1835, Dr. Green had anticipated the present Tu bath mania, and shown the advantages to be de from the hot air and other baths, when directed practitioner skilled in the knowledge of the di proposed to be brought under the influence of remedies. Mesmerism had been fully, freely, liberally discussed in the Society, and the decisio rived at when it was a fashionable belief was well ported by the subsequent decadence of the illusion.

The subcutaneous division of tendons for the c club-foot was ably brought before the Society in by Mr. B. Phillips. This was, perhaps, the first taken in our country of the labours of Stromeyer i important branch of surgery; and, although Dr. from his persevering energy in establishing the O pædic Hospital, and bringing the subject befor profession in the published works, has obtained credit of naturalising orthopædy amongst us, H had long before proved the advantages of subcuta incisions, and the great surgeon, whom we have rec seen pass full of honours nobly won from among proposed and executed a plan for the cure of va veins by subcutaneous section. This Society o debt of gratitude to its learned and most worthy me Mr. William Adams, for several instructive papers, trating the advances made in the pathology and ment of these cases; and the marked absence of uns cripples from our streets notes the benevolent pr of our art.

In intimate alliance with this subject, come the improvements made of late years in the treatm diseases of joints. Almost every full-grown man c member that "white swelling" was the general te all diseases of the knee-joint, and that the limb life of the sufferer was surely condemned. Now, by excision of the ends of the bones, or by th more conservative plan so ably advocated by Mr. in his college lectures, diseased joints are resto usefulness, and many lives are saved by abstinenc amputation. Mr. Cooke had been able to put this plan of treatment into operation in several cases ease of the hip, knee, wrist, ankle, and other joints thought that thanks were due to Mr. Hilton, f elucidation of those anatomical and physiologica upon which the whole rationale of this treatment se rests, as well as for his able demonstration fro perience of the results to be obtained from this pr

The swing-cradle, and the starched apparat securing comfort, and a rapid release from the r bent position in fractures of the extremities, were objects of admiration.

Ovarian disease, ruptured perinæum, and vaginal fistulæ, were referred to in illustration progress of surgical art; whilst iridectomy, as other new operations in ophthalmic surgery, to with the introduction of the ophthalmoscope, eli

ulogium upon the skill brought to bear upon this l branch of practice.

Marshall Hall's method of restoration in cases of ia from drowning, if not complete in itself, at any ave the first impulse to a mode of inflating the which cannot fail to be instrumental in saving the f hundreds of our fellow creatures. Epilepsy as brought before the Society, by the same dis- hed physician, on the 1st of May, 1856, being his st visit previous to that retirement to Brighton, was to be followed, too soon for science, by his ed death from cancer of the œsophagus.

etes, the subject of a discourse by Dr. Hodgkin 3, would seem happily to be giving way to the logical and pathological inquiries and experiments luring the last ten years; and we have, in the re- s of Dr. Pavy especially, well-grounded hopes of g considerable influence over even this intract- alady. The dissolution of stone in the bladder lney, the beneficent uses of chloroform, and many subjects were cursorily alluded to, as having matter for discussion. In a paper read before iety in 1860, the president had shown how readily tis yielded to treatment, when it was regarded as le local inflammation. He had also published s upon the subject of syphilis, which were con- o the generally received doctrines. He looked he so-called secondary symptoms as nature's own of eliminating an animal poison, which was ally baulked and hindered by the customary mer- ourse. He related the case of a gentleman who courses of mercury with quantities of iodide of um and sarsaparilla, and was, after ten years nt, a miserable cripple.

part of the history of our profession, from Hip- s downwards, are we without records of attempts the ravages of cancer. As we may think now, f these attempts were fruitless, and only deserved ures they experienced; but they were done in ac- e with that Aristotelian method of reasoning revailed before the inductive theory of Bacon had l its way into the schools of science. Now that on from facts, and prefer to confess ignorance, than puzzle our brains to invent theories which bably turn out to be "as idle as the wanton sum- id", it seemed highly probable that from the com- ses of physiology and pathology, and not entirely ; experimental therapeutics, a considerable con- y be obtained over the disease. It is believed n those minute vessels which connect the arte- venous systems—the capillaries—a fluid, by the ul power of exosmosis, is poured into the inter- substance; and that it there forms material for struction and regeneration of the tissues of the nging body. This process is as quiet and na- d universal as the laws which govern the pla- ystem; but as in the skies there are comets, so structure we have eccentric phenomena, which o baffle our philosophy. With or without an cause apparent to our senses, the constructive poured out of the capillaries shall, in some part odies, be composed of cells which have not the mation. Instead of being globular or fusiform, ll assume strange shapes, and the nuclei shall ually multiplied. These are the microscopic s of that disease which we designate by the erm of cancer; and, if we take them in con- ith the knowledge that, in a certain proportion , there is an hereditary tendency; that blows mall an influence in the supposed production of dy, that but one person in eight, in a collection three thousand cases recorded at the Cancer , was enabled to trace the commencement of se to that cause; and that operation is but a y expedient in putting off the fatal issue; that the disease will surely return in the cicatrix itself, or in some neighbouring or remote part of the body, at a period varying from six weeks to ten years,—we shall find it difficult, if not impossible, to agree with those surgeons who still maintain that cancer is a local disease—that a part only, and not the whole system, is at fault. Although operation in cancer must be abandoned as a means of cure, it is neverthless, in selected cases, acceptable as a compromise; and unfortunately, in this sublunary world, we are obliged to make compromises and build halfway houses in many paths of life.

Five-sixths of the cases of cancer that come before us are in the female sex; and of these, three-fourths are made up entirely of scirrhus of the mamma. It is, therefore, of the first importance that we should arrive at the best mode of treating this particular lesion. There are different temperaments to be observed, various degrees of health to be noted, the assurance of mental and bodily comfort to be obtained, before any plan of treatment can be decided upon with advantage to the patient. If statistics could decide the question, operation, whether by knife or caustic, would give us but poor comfort. Of 307 cases of operation noted at the Cancer Hospital, the average lapse of time before the disease returned was but eleven months.

It is generally conceded amongst histologists that the cancer-cell is comparable with the cell-formations of embryonic existence; that it is, in fact, deficient in a something which, if added, would make it form healthy adult tissue. It is patent that this "something" must come from within, and that the blood must be the means of supplying it. If we cannot pour into the body nutriment to manufacture the very highest health in the vascular system, so that no more half-fledged cells shall be created, we shall necessarily fail in checking the fatality of this malady. The means to that end it were a work of supererogation to indicate in a society of highly educated practitioners.

In the epithelial form of the disease, perhaps, we have more favourable results from operation, provided there be no extension of the disease to the neighbouring glands. The lower lip is the most frequent seat of epithelial cancer; and appearing, as it does, so commonly in men and rarely in women, it cannot be doubted that the pipe or the cigar has something to do with its development; although why the lower lip should almost invariably be selected in preference to the upper does not very clearly appear. It is only by carefully selecting the cases for operation that any good can be effected in this manner. Should there be any thickened cord extending from the indurated lip, or any glandular enlargement beneath the maxilla, or at the angle of the jaw, it is worse than useless to operate; for the disease will assuredly return in a more aggravated form. Epithelial cancer of the tongue is never benefited by operation; but there are many ulcers of the tongue mistaken for cancer, which will readily yield to well-adjusted treatment.

After referring to epithelial cancer of the extremities, and to the inefficiency of all treatment in medullary cancer, the President continued: I have sketched but a few of our battles won, of our peaceful victories over disease; and I have indicated where we have still ramparts to storm, almost forlorn hopes to encounter. The men of the past in this society have laboured like good soldiers in the cause; the men of the present, with improved machinery for the examination of the eye, the ear, and the larynx, cannot fail to subjugate many of the ills which have hitherto eluded our attacks, whilst there are still grand deeds of valour open to the laborious student who is just entering upon this wide field of enterprise. Thus, our glorious contest with disease goes bravely on,

> "Bequeathed from labouring sire to son,
> Though baffled oft, is ever won."

Correspondence.

HEALTH ASSURANCE OFFICES.

LETTER FROM J. M. BRYAN, M.D., F.R.C.S.

SIR,—My attention has been arrested by a communication in a contemporary journal on the above subject, in which I fully coincide. To the question asked, as to the existence of any provident society for medical men during sickness or disability, I named the Norwich Provident Insurance Society, established in 1860, in which insurance can be effected against sickness, etc.; although I do not know much of its working.

I have (in common with the correspondent I noticed) long felt the urgent necessity of some institution in which members, by paying an annual subscription of from two to ten pounds, might be entitled to relief during sickness, disability, or old age, to the amount of two pounds weekly, or more, if so determined.

Having myself, three years since, passed through the ordeal of a fearful illness, confining me to my bed for twelve weeks, and subsequently disabling me for nearly twelve months from attending to my practice, which I had conducted single-handed for nearly thirty years; and also constantly having cases brought under my notice of medical men disabled, or their wives and families left destitute; no one can better judge of the absolute and urgent necessity of some provident society other than those already in existence. I have often longed to join one on the principles of the Clergy Mutual, from which a poor curate, by paying a yearly subscription, draws, in case of illness, two pounds per week.

I think that, with our worthy founder as treasurer and the present Honorary Secretaries for a staff, the thing might at once be done; and then the question would not so often be asked, what good does the British Medical Association? by many lukewarm members.

I should be glad to cooperate with any one medical man or number of medical men for the purpose of at once forming such an institution. I think that the question only requires agitation and publicity for its establishment; and that our Association, with its benevolent founder at its head, might soon form a society.

At a recent meeting of our South Midland Branch, I brought before the members the question of endeavouring to join the Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity; but I have received an answer from its secretary "that no members can be received out of its present bounds." Hoping that this may be the means of agitating, and thereby establishing an association, for the furtherance of which I shall be happy to receive communications and exert myself, I am, etc.,

JOHN M. BRYAN,

Hon. Sec. and Treasurer to the South Midland Branch of British Medical Association.

Northampton, February 7th, 1863.

SIR,—Can you inform me if there is any society connected with the medical profession to which a medical man can subscribe, with a view to receiving a certain amount if incapacitated by sickness? or from which he can derive aid if permanently hindered from following his professional duties by age or physical infirmity?

It seems to me that the mechanic who pays into a good club is better off than the professional man in case of illness; and I cannot help thinking that many of my professional brothers would gladly avail themselves of the opportunity of prudently setting by a little against a winter day. Societies of this kind may exist, but I am ignorant of their whereabouts; and it would be a comfort to me if I could insure in the way I mention, without feeling that I might be assiste some *charitable* medical body, but had a *right* to th I required. I am, etc.,

ENQUIRI

[Our correspondent will find an answer in Dr. Br letter. The subject is one which will not, we hop allowed to drop. EDITOR.]

MODERATION IN SANITARY SCIENCE

LETTER FROM LIONEL J. BEALE, ESQ.

SIR,—I agree with you that it behoves all who re the art of preventing disease as one of the greatest b ings of the progress of modern science, to take care the doctrines of sanitary reform should not be push an extreme. You are quite right in demanding more cific definitions of the kind of meat that should be demned as unfit for human food. Some would conc all that has not gone through the butcher's hands surely an ox or a sheep killed by collision with a ra train, or other accident, cannot from its mode of be very much inferior to that which has undergon operation of the butcher's implements. It would al desirable to determine whether some chemical or process, or some mode of cooking might not be covered to render some of the meat which is now demned, fit for human food. Again, it is a que whether animals which have recovered from pl pneumonia, are not fit for food, although many sions of the pleura may remain. I think on these p we should not be entirely dependent on Germa French inquirers, knowing as we do how much general habits of the poorer classes in those coun from the lower kind of food they eat, are more a able to some diseases than our own population.

I am sure that sanitary science will get into som repute, if we are too stringent in our measures, we cannot always give a good reason for the faith th in us. I have long asserted, and continue to be that we are too rash in condemning *all* superficial I have had three under my inspection for several two contain on an average from forty to fifty grai solid matter per gallon, and the other, often as mu eighty grains. All the pumps are well worked, an water drank in large quantities. I have authority my vestry to close the worst of these at any mo My inspector and myself have tried to find a ca against the water of these wells, but we have hit been unsuccessful. We have had the wells cleane several times, but have never found any great d either on the brick-work or at the bottom. One r of keeping a surface well in good condition is rapid sumption of the water; if a London pump is but used the water in the well soon deteriorates. The of my pumps is the most in use. I still believe much might be done to render the large supply of from the surface wells available for drinking pur and all who are sufficiently water drinkers to kno difference between the refreshing character of s water in comparison with the mawkish stuff suppli our London water companies, would rejoice at any to preserve that high character which London s water at one time universally maintained, and des

You cannot do a better service to the cause of sa reform, than by a close criticism of all measure nected with it, as a means of establishing it in the of the public; for enthusiasm in any special caus apt to lead us into excesses. Perhaps the presen dition of the prison discipline system, and the exc care taken of Sir J. Jebb's pet lambs, may be tra overstrained working of the philosophy of health.

I am, etc., LIONEL J. BEALE,

Med. Off. Health, St. Martin-in-the-F

London, January 1863.

GRATUITOUS MEDICAL SERVICES.

LETTER FROM FREDERICK J. BROWN, M.D.

The Medical Act is bearing good fruit; it is the members of the profession into one faculty, admits of professional distinctions. As regards blic, the one thing needful is registration. of every kind are springing up day by day in fession, promoted, I believe, by the Medical Act. these changes, I include the general outcry of ession for a cessation of gratuitous services to harities. The pride of the heads of the profes- de them, in times past, desirous of appearing to the acceptance of salaries. At the present the dignity of Fellows and Members of the llege of Physicians would be hurt by suing at ees.

ame pride obtains amongst barristers; but it to me that this "chivalry" has nearly seen its in law and medicine.

ot think that there is an instance of the same chivalry" in the church. Clerics, after all, are astic in money matters than their brethren of n and of the clinique.

s the pride of the profession itself, there has ther cause in operation keeping up gratuitous ervices. This is a desire on the part of the drive a bargain with medical practitioners. It only said that medical gentlemen are bad busi- , and they often confirm this saying by their

matter of gratuitous public services, the public us: Dr. A. or Surgeon B. will benefit himself this hospital appointment. He will be con- hundreds, and will become eminent and rich. him for benefiting himself? This style of rea- eminds us of the custom of certain Oriental that demand a backsheesh from the doctor that hem; for, say they, "Think of the great ex- that you have gained by attending us." (See *Travels.*)

to ask the members of our Association what k of the scheme drawn up by the Chancellor rtholomew's Hospital at Rochester. The hos- be opened after Midsummer, and is to be in a resident surgeon. There will be a licentiate pothecaries' Hall to act as a *pharmacien*, and l be a consulting physician and a consulting There will be fifty general beds, and thirty for women. The resident surgeon and the pothecary will receive salaries, but the consult- 's will not be paid. The duties of the consult- 's is to visit the hospital twice a week at least, xamine every patient on admission and on dis- xcept Lock patients); and to attend the meet- e Board. The duties, therefore, are those of as well as of consulting officers. They are y to consult on all occasions, but they will not reatment of patients.

ask the members of our Association whether this scheme to be either practicable or just. ent surgeon will have to prescribe for out-pa- to treat all the in-patients. It appears to me to be work for one man. Then it will be dangerous, for one man to attend thirty Lock patients as e general patients. Next, as to the consulting pointment, it would be a loss of time to medi- tioners, without any compensation whatever; s not the professional pleasure afforded them e and treatment of patients.

brought the matter before the trustees of the d before the public of Rochester and Chatham, my duty to our profession so to do.

good case for an attempt to obtain an altera- tion in the system of hospital services; for the charity is rich, being the oldest in England since the conquest. St. Bartholomew's Leper House Charity was founded in 1078.

I am, etc.,

FREDERICK J. BROWN.

Rochester, Feb. 9th, 1863.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. The following gentlemen passed the first part of the Professional Examination for the Licence of the College, on February 9th, 1863:—

Bryan, John Morgan, St. Mary's Hospital
Burrell, Edwin, Guy's Hospital
Hyde, Sidney, King's College
Lovegrove, Washington, 34, Dowgate Hill
Low, Alexander James, St. Bartholomew's Hospital
Pyle, George Edward, Middlesex Hospital
Squarey, Charles Edward, University College

APPOINTMENTS.

COLES, Robert W., Esq., appointed Certifying Surgeon, under the Factory Act, for the District of Oldham, East.

*COULSON, William, Esq., appointed, by His Royal Highness the Prince of Wales, Sheriff of Cornwall, for the ensuing year.

FREEMAN, Robert G., M.D., appointed Surgeon for the Greenwich District of the Royal Kent Dispensary.

KAVANAGH, Patrick, M.D., appointed Surgeon for the Deptford District of the Royal Kent Dispensary.

LESLIE, William, Esq., appointed Inspector, under the Factory Act, for the Aberdeen District.

MURRAY, J. Jardine, Esq., appointed Surgeon to the Brighton and Sussex Infirmary for Diseases of the Eye.

OLDHAM, James, Esq., appointed Consulting Surgeon to the Brighton and Hove Lying-in Institution.

RIVINGTON, Walter, Esq., appointed Resident Medical Officer to the Tower Hamlets Dispensary.

SAVERY, John, M.D., appointed Surgeon Extraordinary to the East Sussex Infirmary.

WILL, James, M.D., appointed Inspector, under the Factory Act, for the Aberdeen District.

*WOLLASTON, Robert, M.R.C.P., appointed Physician to the Stafford General Infirmary.

POOR-LAW MEDICAL SERVICE.

ALLISON, William, M.D., to be Medical Officer to the Clandy District of the Londonderry Union.

ATKINSON, Frederick A., Esq., to be Medical Officer to the New Leake District of the Boston Union.

CRAMER, Frederick A., L.R.C.P.Ed., to be Medical Officer to the Hanbury District of the Droitwich Union.

CRICKMAY, Edward, Esq., to be Medical Officer to the Dilwyn District of the Weobley Union.

MCGREEVY, Neil, L.K.Q.C.P.I., to be Resident Apothecary to the Workhouse of the Lurgan Union, Armagh.

MACKLEY, Herbert, Esq., to be Medical Officer to the Clackheaton District of the North Brierly Union, Yorkshire.

O'CONNOR, Laurence G., Esq., to be Second Medical Officer to the Clifden District of the Clifden Union, Galway.

TIMMINS, Daniel, Esq., to be a Public Vaccinator for Dudley.

TURNER, Edward W., Esq., to be Medical Officer to the Deddington No. 1 District of Woodstock Union.

ARMY.

FRANKLIN, Staff-Surgeon-Major H., from half-pay, to be Staff-Surgeon, *vice* J. T. Telfer.

JOHNSTONE, Staff-Assistant-Surgeon John, M.D., to be Assistant-Surgeon 26th Foot, *vice* J. McLetchie.

STEWART, Deputy Inspector-General A., retiring on half-pay, to be Honorary Inspector-General of Hospitals.

To be Staff-Assistant-Surgeon:—

CRAWFORD, Assistant-Surgeon J. R., 69th Foot.

ROYAL NAVY.

BAYNES, W. W., Esq., Staff-Surgeon, to the *Indus*, for the *Canopus*.

GEORGES, Thomas E., Esq., Assistant-Surgeon, to the *Asia*, for the *Hannibal*.

GIMLETT, Hart, M.D., Surgeon, to the *Asia*, for the *Hannibal*.

HADLOW, Henry, Esq., Assistant-Surg. (additional) to the *Fisgard*.

KEPLING, Thomas, Esq., Assistant-Surgeon, to the *Indus*, for the *Canopus*.

MCCARTHY, Charles D., Esq., Surgeon, to the *Vigilant*.

MINNOCH, Alexander, Esq., Assistant-Surgeon, to the Woolwich Division of Marines.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

SEALE, J. L., M.D., to be Assistant-Surgeon 2nd Wiltshire R.V.

To be Honorary Assistant-Surgeon:—

VYE, E., Esq., 4th Devonshire R.V.

DEATHS.

BLACKMAN, Matthew, Esq., Surgeon, at Whitstable, on Feb. 4.
BROOKS, Richard B., Esq., formerly of Chelmsford, at Madeira, aged 27, on January 12.
*COLLYNS, William, Esq., at Chudleigh, Devon, on January 15.
HOLMES. On February 8th, at 11, Great Coram Street, Louisa Theresa, widow of the late James Holmes, Esq., Surgeon R.N.
LAING. On February 7, at Aberdeen, Mary G. T., widow of Francis Laing, M.D., Staff-Surgeon.
PACKMAN, William S., M.D., of Clarges Street, at Alexandria, aged 45, on January 24.
WHITE, Peter, Esq., late Surgeon 72nd Regiment, at Brompton, aged 82, on February 5.
*WILLIAMS, R. Parry, Esq., at Bron Offa, near Wrexham, lately.
WINSTON, David, Esq., late of Haverstock Hill, aged 30, on Feb. 1.

Mr. CUBITT has resigned the office of President of St. Bartholomew's Hospital.

DR. HARLEY has been elected a corresponding member of the Royal Academy of Sciences, of Bavaria.

SUCCESSFUL MIDWIFERY. Only nine fatal cases have occurred in 3,540 deliveries effected during 1862, at the Royal Maternity Charity.

ARMY MEDICAL OFFICERS. Each medical officer in an army has made his charge an average of 241 soldiers, exclusive of soldiers' wives and children.

UNIVERSITY OF OXFORD. Dr. Rolleston and Sir Benjamin C. Brodie, Bart., have been nominated examiners for the Burdett Coutts scholarsuip.

REJECTIONS OF RECRUITS. About 350 per 1000 of those who present themselves for medical examination as recruits, are rejected on account of physical disability.

BIRTHS IN 1862. During the past year 711,601 children were born in England and Wales, amounting to an average of 1,950 *per diem*. This is the largest number of births ever recorded as occurring in this country.

SANITARY STATE OF WINDSOR CASTLE. We are glad to find from a report of Mr. Rawlinson, that he believes Windsor Castle to be the most complete in sanitary works, appliances, and arrangements of any large building in existence.

CONGRÈS INTERNATIONAL DE BIENFAISANCE. The publication of the *Compte Rendu* of the recent London Session is in progress. The foreign papers and reports will be in French, forming one volume; the English papers and reports in English, forming a second volume.

CARBONIC ACID AS AN ANÆSTHETIC. M. Ozannan has given a mixture of three parts carbonic acid with one part of atmospheric air with success as an anæsthetic. After breathing it for ten minutes the patient became insensible, and an operation was performed without his evincing any sign of pain.

ROYAL INSTITUTION. At a general monthly meeting, held on the 2nd instant, the secretary reported that the executors of the late James Walker, Esq., F.R.S., M.R.I., had bequeathed to the Institution a marble bust of Professor Faraday, by Mr. Matthew Noble, M.R.I. The thanks of the members were returned to Professor Tyndall, and to his Eminence Cardinal Wiseman, for their discourses on the evening meetings on Fridays, January 23 and 30.

NON-COMBATANTS. Dr. Detmold of New York says in his lectures as military surgeon:—"In case of a disaster to the army, such as a hasty strategic movement, change of base, or whatever else the commanding general may choose to call it, where the wounded are left beh need not say that the surgeon must remain wi wounded, that is, a sufficient number of surgeons be left behind to take care of the wounded whi into the hands of the enemy. It is beginning to b an established custom no longer to make prison war of the surgeons; they are non-combatants, a they extend a helping hand to all wounded, w friend or foe, so should their sacred calling protect and wherever surgeons have been captured of la have, I believe, invariably been unconditional leased."

UNIVERSITY COLLEGE, LONDON. On Saturda the result of the last year's competition of three dates for the clinical gold and silver medals, inst at the suggestion of Dr. Elliotson by the late Fellowes, LL.D., for the best observations on the cal cases in the hospital, was reported by the exam Dr. Walshe, Dr. Garrod, Professor Jenner, an Hare. The council, on the recommendation of t aminers, in consideration of the very high order o of all the papers sent in, awarded as follows: th place and the gold medal to Mr. Talfourd Jon second place with an extra gold medal to Mr Fre T. Roberts; the third place with the silver medal Richard Dawson.

SCHOLARSHIPS IN NATURAL SCIENCE AT SIDNEY S COLLEGE, CAMBRIDGE. This College has just is notice that two scholarships, of the value of £40 num each, will be given this year for natur ence, the examination to commence on Octobe the subjects being electricity, chemistry, geolog anatomy (human osteology and general anatomy) scholarships are perfectly open. The successful dates will be required to enter at the College. I information may be obtained from th Rev. J. Ellis, tutor of the College. Other schol ips, r in value from £32 to £80 per annum, are to b peted for at the same time.

INFECTIOUS DISEASES AND PUBLIC CONVEYANC the House of Commons, on Monday, Dr. Brady the Secretary of State for the Home Departmen attention had been directed to the evils resultin persons labouring under infectious diseases being to hospital in public conveyances; and, if so, if i intention to introduce any measure this session view to remedy the same. Sir G. Grey said his a had not been called to the subject except by letters in the newspapers. The subject had be cussed when the Hackney Carriage Act was befo liament, and a clause had been proposed to m difficulty suggested by the hon. gentleman. On sion, however, the clause had been withdrawn. in the power of parochial authorities to deal w matter by their own private acts, and some of the carriages for the purpose of conveying persons hospital. He thought the driver of a public con would be justified in refusing to convey a person ing under an infectious disease. In reply to a question from the hon. member, the right hon. man the Home Secretary said, so far from hav objection to the hon. member introducing a bi medy the evil, he should be much obliged to hi so, that he might know in what way he proposed with the question.

REGISTRATION IN IRELAND. In the House o mons, on Monday last, Sir Robert Peel moved f to introduce a Bill on this subject. He said th tem of registration would be of immense util would be very beneficial, for instance, in promoti tary reforms. If correct *data* could be obtaine the health of the people, measures would b promptly and effectually taken to mitigate disea

es will be benefited by its adoption in Ireland, not mere registration of births and deaths, but as a plan ringing annually before the public, as in England Scotland, the causes affecting the health of the com- ity. Ireland is almost the only civilised country in rorld where no such system of civil registration of s and deaths exists. The English Act was passed 36. It caused a good deal of agitation at the time, t has worked admirably. The passing of the Scotch vas even more strongly opposed, and it was not un- 54 that the opposition was overcome. The Scotch s an improvement upon the English one. In the nt Bill, he adopted a system in conformity with in operation in England—so that the areas or dis- will be the areas of the unions, the dispensing medi- ficers of the unions will be the registrars, and the s of the unions will be the superintendent registrars. Poor-law districts are well known, whereas con- able inconvenience would have resulted in that re- from the employment of the constabulary. In Ire- besides 163 unions, we have 718 dispensary districts 777 dispensary medical officers—thus forming an able machinery ready to our hand. As to expense, eputations from the College of Surgeons of Ireland, tatistical Society, and the Social Science Association, commended that the remuneration of the registrars d be defrayed from the local rates, but that the intendent registrars should be paid out of the olidated Fund. He proposed that the registrars d be paid, as in England, out of the rates, but that perintendent registrars should receive their fees the Consolidated Fund. Considering the advan- hat will be derived by all classes from this measure, otal burden that will be thrown upon the public oe comparatively very trifling—namely, £16,000. opos[illegible] to pay the registrars 1*s.* for each entry, and upt[illegible]endent registrars 2*d.* There will be no out[illegible]y attending the scheme except the salary of Registrar-General, to be increased to £1,000 a year. require by this Bill the compulsory attendance of arties. This is absolutely necessary; and Regis- eneral Graham says the want of it is one of the blots in the English system. The only other on which I need trespass on the time of the House ry important one—namely, the medical certificates. sh to make our scheme as complete as possible, ler to obtain not a mere registration of births and , but a scientific record of vital statistics, and with iew we have introduced into our Bill a provision we think will meet the approval of the medical s. We have not desired, as is done in Scotland, se it binding on them penally to give the return. the opportunities I have had of conversing with resident of the Royal College of Surgeons, and g also from other sources of information, I believe he medical officers generally, will be prepared to rate with the State, and to furnish it with the re- particulars as to the deaths of persons whom they ave attended professionally with greater readiness left to them to do it freely, instead of its being ompulsory on them by the insertion of a penal " Lord Naas could not congratulate the right hon. t on the experience he had gathered during the for it was to be feared that he had got into the of the doctors, and very few men were much the for that. Of all the schemes propounded for ob- these important statistics, that which called in of the doctors was the worst. Many of the dis- y doctors were eminent in their profession; they a large practice, their time was occupied from ig till night. In his opinion, doctors, of all others, ie most unsuitable for the performance of these in Ireland. Dr. Brady maintained that medical ere of all classes the best qualified to act as regis- In this country butchers and bakers were ap- pointed registrars, who, in copying the cause of death from the medical certificate, were often totally at a loss, being ignorant of the professional meaning of the terms employed. Mr. Maguire thought that however great a calamity it might be to fall into the hands of the doctors, it would be still worse to fall into the hands of the public. After a few words from Sir R. Peel in reply, leave was given to introduce the Bill.

Mortality During Last Quarter. The mortality in England and Wales in the last quarter of 1862 was at the rate of 2·226 per cent.; in 1860 it was 2·043; in 1861, 2·061. Though the autumn of 1862 was not as a whole colder than those of 1860 and 1861, the sudden invasion of cold in November, and the abrupt succession of heat account for is having been the most fatal. The north-western counties, Yorkshire, London, the northern counties, and the west midland are the five divisions in which the highest rate of mortality prevailed. In the first, which contains the districts of the cotton manufacture, the rate—2·66 per cent.—was higher than in any other division. This distinction is not of recent birth; it is not the fruit of adverse circumstances, but has sprung from causes which have been in operation since Liverpool, Manchester, and other towns, in what has been called the worst drained part of England, rose into importance as seats of commerce and manufacture. But whatever be the sanitary condition of the towns and villages they inhabit, human beings must be affected by the atmosphere in which they are immersed, and the effects of which they can but partially control; and as the cotton districts participated with the rest of the kingdom in the benefit of a healthy summer, they have also suffered, like other parts, from a less healthy autumn.. Scarlatina and diphtheria, and also diarrhœa, prevailed to a considerable extent in Manchester. An increase of deaths in Ashton-under-Lyne is attributed to scarlatina and measles. Scarlatina caused eighty deaths, being a third part of the total number, in Oldham-above-Town; these occurred not only in the working-class, but in the general population. In Blackburn and Witton the mortality was increased by measles and bronchitis, and at the latter place there was "much sickness in consequence of the damp weather." The mortality in the Chorley subdistrict was nearly doubled, chiefly by measles, and the weather, "mild and damp," was considered unfavourable to health. The deaths in the districts of Liverpool rose from 1,883 and 2,193 in the corresponding quarters of 1860 and 1861 to 2,625 last quarter; those in West Derby rose from 1,111 and 1,472 to 1,726. A great part of this formidable increase has been caused by the ravages of scarlatina. This disease caused 50 out of 105 deaths in the Clowance subdistrict in Devonshire. Of 203 deaths in Kingstown (Portsea Island) no less than 126 were those of children from scarlatina or other fever and croup. A very malignant form of scarlatina raised the deaths much above the average at Halstead, in Essex, and it is reported in many other parts. Diphtheria caused a third part of the mortality at Hailsham, in Sussex, and it has been very prevalent in the neighbourhood of South Walsham, in Norfolk; 13 out of 34 deaths from all causes being from this disease. Diphtheria was very prevalent in the subdistrict of Diss, Norfolk, and trebled the average mortality in the parish of Dickleburgh. Measles has been unusually rife and fatal in Falmouth, hardly a family with children escaped, and many adults were attacked by it. (*Registrar General's Quarterly Report.*)

Lansdowne House Library. The library itself was exquisitely decorated by Cipriani in imitation of the antiquities found in Herculaneum, and it was while occupied in this superb temple, as the librarian, philosopher, and friend of Lord Shelburne, that Priestly made the discovery of oxygen.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. Thomas Bryant, Lettsomian Lecture "On the Differences between Surgical Diseases of the Nervous, Respiratory, Circulatory, Digestive, and Urino-Genital Systems of the Child and the Adult."—Asiatic.

TUESDAY. Statistical.—Pathological.—Ethnological.

WEDNESDAY. Society of Arts.—Geological.

THURSDAY. Zoological.—Royal.—Antiquarian.—Linnæan.—Chemical.—Harveian.

FRIDAY. Royal College of Physicians, 5 P.M. Dr. Pavy. Gulstonian Lectures. "On the Amyloid (so-called) and Fatty Degenerations."—Geological.—Royal Institution.—Western Medical and Surgical, 8 P.M. Dr. Anstie, "On the Therapeutical Value of Cod-Liver Oil in Convulsive Diseases."

SATURDAY. Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE TITLE OF DOCTOR.—From press of other matter, we must defer until next week the publication of many letters which we have received on the subject of the Title of Doctor.

PELLAGRA AND ECZEMA.—SIR: The great interest which attaches to that rare disease, pellagra, may perhaps excuse so remote an allusion as the following to the subject. It will occur to some of your readers to have seen chronic eczema of both hands and both arms, with light mulberry tinge, a constricted, rather dry, shining surface, stiff attenuated fingers, and a decrepit posture of the hands: such cases are seen in persons of a poor habit and enfeebled constitution. They have been pointed out to me by those who have seen pellagra, as bearing a considerable resemblance to that disease. The opinions of M. Biett are well known; viz., that pellagra depended upon a gastro-intestinal irritation for its proximate cause. If it be so, the two diseases are brought into yet nearer affinity, as the early treatment of eczema rests upon that hypothesis. Eczema, too, results from over fatigue, and we may suppose from nervous exhaustion generally. It might be serviceable to inquire whether such cases as I have described above, occur in establishments allotted to insane patients. I must add that M. Biett had great opportunities of studying this disease in Italy.

I am, etc., GEORGE GASKOIN.

3, Westbourne Park, February 9th, 1863.

COMMUNICATIONS have been received from:—Mr. WILLIAM COPNEY; Dr. RODEN; Mr. ANCELL; Mr. R. DUNN; Dr. WILLIAM BUDD; L.R.C.P.ED. & F.R.C.S.E.; Mr. T. WINDSOR; Mr. JOSEPH HINTON; Mr. R. S. FOWLER; ENQUIRER; Mr. A. BALL; Dr. JAMES RUSSELL; Mr. H. NORRIS; Dr. R. JONES; Mr. STONE; Dr. LIONEL BEALE; Mr. BUCKNILL; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Mr. GEORGE GASKOIN; Dr. G. M. HUMPHRY; Dr. F. J. BROWN; Dr. THOMAS BOYCOTT; Dr. DAVEY; Dr. R. WOLLASTON; Dr. F. T. PONCIA; Mr. W. PARRY; Mr. C. VASEY; Dr. STYRAP; Dr. BRYAN; Mr. JOHN PARKS; Dr. B. W. FOSTER; Mr. DAYMAN; Mr. C. R. THOMPSON; Mr. A. NAPPER; Mr. R. W. FAVINS; Dr. MARSTON; Mr. HAYNES WALTON; Dr. KIDD; Mr. C. F. BROWN; Dr. H. MARSHALL; and AN OLD ASSOCIATE.

ADVERTISEMENTS.

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Short Clinical Lectures

ON

THE FIRST PRINCIPLES OF MEDICINE.

Delivered at King's College Hospital.

BY

LIONEL S. BEALE, M.B., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL; HONORARY FELLOW OF KING'S COLLEGE; ETC.

I.—Some Observations on the Nature of Certain Healthy and Morbid Changes, and on Counterirritation.

I propose this morning to direct your attention to a plan of treatment which I believe is adopted, in many cases of disease, by every practitioner in the present day, which is employed in every civilised country and by some savage nations, and which has been in use from the very earliest ages.

Recent careful observation has compelled us to doubt if many remedial agents which have been held in the highest repute really exert the influence which was formerly attributed to them; but of the benefit of counterirritation few practitioners have any doubt. Indeed, until I recently read a lecture of Dr. Chambers's, I thought we were all agreed, not only with respect to the beneficial action of this plan of treatment, but also as to the principle upon which it is enforced. I have always been taught that by counterirritation we seek to establish an increased action in one tissue or organ, for the purpose of diminishing an increased action which is taking place in another tissue or organ, the due performance of whose function is of great importance to the organism.

Dr. Chambers, however, tells us—but I think few will agree with him in his statement—that the idea of counterirritant practice is to substitute one *disease* which is "less dangerous and painful, or whose disorganising tendencies are but temporary," for another *disease* which may be dangerous or painful, or which tends to disorganise the body;" and yet the author of the *Renewal of Life* has admitted, as examples of counterirritation, purgatives to relieve a cold on the chest, and excessive diuresis for dropsical swelling? Are ordinary temporary purgation and excessive diuresis, diseases? After stating that it is probable "that future physiologists may be able to explain in another way the instances which *seem (!)* to favour the system," he says that "in the meantime it appears unwise to adopt, as a principle, the estimation of the utility of our drugs by the power they possess of making a sound man ill" (!). Now what does the word "ill" in this sentence mean? When our bowels act a little more than usual; when we pass four pints of urine instead of two in the twenty-four hours; when we perspire freely; if we apply a turpentine stupe or a mustard poultice to our sound and healthy skin,—do we necessarily become ill?

The idea of counterirritation clearly is, not *to establish one disease for another*, but to increase the action of one or more tissues, with the view of reducing the increased action which is already going on in other and more important tissues or organs.

It seems to me that much of the obscurity which occurs when an attempt is made to account for changes, and to explain various actions, results from the effort to define the *diseased*, as distinguished from the *healthy* state. The best plan, therefore, in discussing morbid actions and changes, is simply to try to ascertain with accuracy what *is* going on, and contrast it with what physiology teaches us *ought* to go on.

If we make an attempt to define exactly what is meant by the substantive *disease*, or by the adjective *morbid*, great confusion must result; and for this simple reason, that we cannot separate by any distinct line healthy actions from morbid actions, or the *healthy state* from the *diseased state*. Of course, a small contracted liver or kidney, doing one-tenth of the work healthy organs would do, and exhibiting the most obvious alterations of structure, are diseased. They have, however, not passed suddenly from the healthy to the diseased state, but by very insensible gradations, so that, had you seen the organs in an early stage, you would not have been able to point out any differences by which they could certainly have been distinguished from healthy organs, although, had you examined the secretions formed by them, you might have obtained evidence of change in quantity or quality. Up to a certain point, although there may have been excessive or deficient action, you could not have spoken of the condition as one of disease.

Nor can we define disease as increased or diminished action—increased or diminished vitality; for in some diseases tissues grow too fast, in others the structures or organs are reproduced too slowly. Disease may consist of an *excess of action*, or there may be *deficient action*. The tissue may live too fast, or it may undergo its changes more slowly than in health. There is in many morbid structures or products a greater activity, a more rapid conversion of pabulum into living matter, than in health. A certain bulk of epithelial or other form of cancer, or of pus, or of the lymph occupying the air-cells of a pneumonic lung, exhibits greater evidence of vital activity than the same bulk of healthy tissue. It grows faster; it appropriates nourishment faster; and this nourishment more quickly becomes converted into tissue; or is transformed into compounds, totally different from those existing in it before its appropriation, far more actively than in a normal tissue. *The conversion of inanimate pabulum into living matter, which in health takes place under certain restrictions, takes place in these instances under restrictions very much diminished.*

To say, then, that "disease is not a new excess of action, but a deficiency; not a manifestation of life, but partial death",—is stating that which is opposed to most important facts of general observation, and is strangely at variance with the facts demonstrated by very many observers in the present day.

Nor can I agree with Dr. Chambers in his statement that "the business of the physician is directly or indirectly not to take away material, but to add;

not to diminish function, but to give it play; not to weaken life, but to renew life." We very often desire to take away material, as when any organ is the seat of greatly increased action. We try to get rid of the lymph in an inflamed lung, the matter poured out into the areolar tissue and other tissues in inflammation, or into the joints and fibrous tissues in gout and rheumatism. Not only so, but the blood itself often contains matters which we desire to get rid of; so that we really often have to take away material; and if we could but diminish the supply of blood to many organs at the right moment, and for the right time, we might possibly prevent a diseased action from being developed.

So, again, it seems to me that we really do often desire to diminish function. When an organ is deranged, is it not a principle established by experience, and does it not accord with common sense, to try to *diminish its action*, and make some other organ do its work for the time? The last advice given to the physician, "not to weaken life," seems to me to require explanation; for surely, if we could "weaken the life" of a cancer, it would be just what we desire; and if we could but prevent it from *renewing its life*, we should be doing more than medicine dares at present to hope ever to achieve.

I have drawn your attention to these points, because it seems to me that the dogmas insisted upon by my friend are opposed to the principles of sound physiology, and to the teachings of the bedside, while they are not supported by any new observations of his own; and because the very positive exposition of his peculiar views in his first lecture seems to me to demand our attention; and I therefore take this opportunity of discussing some of the first principles upon which our science is based.

I cannot help thinking that Dr. Chambers has assailed some notions which are very much nearer the truth than the substitutes he proposes; and I do not think that the statement that "disease is a deficiency of action and partial death," as a general principle, can be received or sustained. It is also incorrect to talk of "life-giving articles". Nothing gives life, save that which has life; and this is, at any rate, a sound truth, from which all our speculations upon the essential nature of healthy and morbid changes in living structures must start.

[*To be continued.*]

Memorial to the late Dr. Cusack. A very handsome memorial has been erected in St. Anne's Church by the subscriptions of the friends and admirers of the late eminent physician, W. Cusack, M.D. The memorial consists of a very tasteful stained glass window at the north side of the apse. (*Dub. Med. Press.*)

Photographic Statistics. Some very interesting statistical facts, relating to the immense consumption of photographic chemicals by the London Stereoscopic and Photographic Company, have recently been made public. The number of glass negatives taken at the exhibition (from which the paper pictures are printed) amount to very many thousands. The paper used was 300 reams; albumen for ditto, about 280 gallons; nitrate of silver, 4,000 ounces; gold, 90,000 grains; hyposulphite of soda, 4,800 lbs. The photographic pictures produced from this immense amount of material are now approaching 1,000,000. (*Post Magazine.*)

Illustrations
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BIRMINGHAM GENERAL HOSPITAL.

CASES OF RHEUMATIC PERICARDITIS.

Under the care of James Russell, M.D.

[*Continued from page* 163.]

The next case appears one of typhoid pericarditis, remarkable from its mildness as compared with the attendant symptoms, and more so from the singular persistence and recurrence of symptoms allied to typhoid fever on more than one occasion.

Case v. Anne Tibbets, aged 37, a nurse in the hospital, had never had rheumatic fever; nor was she aware that she inherited any rheumatic tendency. She had been very assiduous in her attendance upon some cases of typhoid fever, and especially upon one of great severity, which was admitted on January 17th 1862, and was not convalescent until February 8th. On that day, she was taken with shivering, heat of skin, and great depression, together with soreness of throat, without any morbid appearance presenting itself in the interior of the fauces. On the 10th, a sharp eruption of herpes appeared on her lips. The fever did not subside until the 12th, when she was able to sit up for a short time. From that date until the 19th, she walked about the ward, but was very feeble, occasionally shivered, and complained of severe pain between the shoulders, and of tightness across the chest.

On February 19th, she was very poorly; had sharp cutting pain across the chest, through each breast, and round the shoulders. In the evening, she was seen by Dr. Maxwell, from whose notes I have extracted the preceding report. He found her greatly exhausted, and looking very ill. Careful examination of the chest did not detect any morbid signs in that region, excepting very rapid and irritable action of the heart. The sounds of the heart were perfectly clear.

She passed a very restless night, and spoke next morning very urgently of the pain she had suffered in the neck and chest; which, however, was somewhat relieved by the application of warm flannels. At 4, an opiate draught procured ease. At 7, Dr. Maxwell, at his visit, detected the physical signs of pericarditis.

2 P.M. The pulse and respiration were 124 and 32. There was much moaning; the face was very pinched; aspect exceedingly typhoid; tongue very dry and fissured; skin dry. A fine pericardial friction-sound was heard, chiefly with the *diastole* of the heart. When first heard in the morning, it was double, very loud and coarse, and was distinct over the entire cardiac region.

℞ Æther. chlorici ʒij; tincturæ cardamomi comp. ʒss; aquæ ʒviiiss. M. Sumat ʒj 4tis horis.

She was ordered to have six ounces of wine.

During the following two days she remained in much the same state. She lay on her back, and was very languid. There was no delirium, excepting some confusion during sleep. Pulse 80, labouring, and presenting an interval after every third beat. She complained of some pain in her left shoulder. Her abdomen was soft, free from distension and from eruption. There was no diarrhœa. The friction-sound continued to be chiefly *diastolic*, and the cardiac dulness was not extended. The pulmonary signs were normal. She had been ordered half an ounce of brandy every second hour.

On the 23rd, improvement was decidedly visible. The pulse was 60 to 65, frequently intermitted. The friction-sound was harsh and *systolic*. On the 25th, she desired solid food. On the evening of March 8th, the patient suffered from an attack of orthopnœa, with much fluttering of the heart; and on the following day a more severe paroxysm occurred, having the characters of angina pectoris. The systolic friction-sound, which was noted on the 4th to be hardly distinguishable, was again very loud. A blister was applied to the cardiac region. The pain and dyspnœa were relieved by two draughts containing opium and chloric ether. She left on March 30th. The friction-sound was then not quite inaudible; but in June, when she returned, the pericardium was quite silent.

She continued equal to her duties from the last mentioned date, though they were at times very laborious. Early in August she went for a holiday to Coventry. Whilst there she again became ill and depressed, and suffered from diarrhœa, sickness, and entire loss of appetite. She returned to take to her bed, but was sent out convalescent on September 24th; but, four days afterwards, was again received, very feeble, with a running, vibrating pulse.

She came under my care on the 12th of the month, with all the symptoms of typhoid fever. The symptoms were not alarming, though sufficiently severe; obstinate vomiting was very prominent. No eruption appeared, but diarrhœa was present to a moderate degree. She did not leave her bed until the last week in October, a relapse having been occasioned by premature indulgence of her desire for solid food. From that period her recovery progressed satisfactorily; and at the present time she is actively employed in the hospital, in perfectly good health. There were no symptoms of any cardiac affection during the last illness.

The concluding two cases are of a more ordinary character; but each suggests some interesting points respecting the diagnosis from physical signs; and the former of the two also presents a remarkable abnormity in the heart's action preceding the development of the pericardial inflammation. A curious question also suggests itself with reference to the second case—whether the present were the first attack of pericarditis from which the patient had suffered. She presented a serious rheumatic history, implicating the heart, which retained distinct traces of former mischief inflicted on the mitral valve. If a previous pericarditis had occurred, the heart must have been left sufficiently free from adhesion to develope a renewed rubbing sound.

Case vi. Robert Goodman, aged 15, fireproof-safe-maker, was admitted January 31st. He had been ill five weeks with irregular rheumatic pains. He had never had rheumatism before; nor could any hereditary tendency to that disease be discovered. He was very anæmic, looked feeble, and was not well nourished. The impulse of the heart was very abrupt, and a diastolic aortic bellows-sound was at once distinguished.

He continued to suffer from irregular rheumatism, with effusion in his left knee, and a deposit of red urates in his urine. On February 11th, the normal sounds of his heart presented a remarkable character. They occurred in two regularly alternating sets; one set consisting of two or three successive cardiac sounds, of normal distinctness, followed, after a distinct pause, by the same number exceedingly faint and distant, suggesting to one the ringing of a peal of bells half muffled. The first sound of the heart had a ringing character. The rheumatism at this time had increased in severity. Three days afterwards, a suspicion arose of the commencement of pericarditis; but the suspicion was not converted into certainty by distinct sounds until four days longer.

The general symptoms of the disease were not severe; but the period of illness was prolonged by the feeble state of the patient's health. His pulse was quick and irritable; he emaciated considerably; his urine was loaded with light coloured urates. He left his bed for the first time on March 3rd, and the hospital on April 11th.

The physical signs merit a somewhat more careful notice. No evidence of fluid effusion, beyond a small amount, presented itself. Once only was there a suspicion, not confirmed, of left pleurisy. The pericardial friction-sound was double, and was heard beneath the sternum, and to its left side over the region of the heart, with greatest distinctness over the fourth cartilage and third space; it was not heard at all on the right of the sternum, unless firm pressure were made, when it was immediately produced. The friction-sound never overcame the aortic diastolic sound. No *frottement* was ever present. On February 25th, the sound presented a variation which illustrated the similarity, under certain circumstances, of a rubbing and a bellows-sound, and also the obstinate duration of a rubbing sound. A loud harsh single murmur, following the first sound of the heart, was discovered at the apex, occupying a limited space; this murmur, which in quality was not distinguishable from a blowing sound, remained; it was quite separate from the aortic sound, and an exchange between them was effected at the fifth cartilage, where there existed a neutral spot, neither one nor the other sound being heard. The murmur in question was loudest in the fifth space beneath the nipple (just at the apex), and ended at the axillary line, not being audible behind. It was observed on one occasion to be much influenced by the degree of pressure exerted by the stethoscope. When the patient left, the sound was still distinct; but, at a visit paid a month afterwards, it had perfectly ceased—strong presumptive evidence, conjoined with the limited space over which it was audible and the effect produced upon it by pressure, in favour of its exocardial origin.

Case vii. M. A. Evitts, aged 17, servant, was admitted December 30th. Her mother had one attack of rheumatic fever. The patient's first symptom of rheumatism presented itself six years ago, when acute rheumatism confined her for six weeks; she had then severe pain in her heart, and was blistered. Every returning winter the attack has recurred, lasting usually from one to three months; and each time she was blistered over the heart.

She was a delicate looking girl, with a light complexion and irritable temperament, but tolerably well nourished. She entered the hospital for rheumatic pains in her joints, but was without fever. The impulse of the heart was seen extending nearly an inch to the left of the nipple, though there was no abnormal dulness; and was abrupt. At the apex, a sharp shrill mitral bellows-sound was audible; it was also audible posteriorly; was heard over a remarkable extent of surface, even from the occiput to the sacrum. The aortic valves appeared healthy. The first and second sounds of the heart were clear.

About three weeks afterwards she suffered from a sharp feverish attack, without, however, any indication of chest-affection; her tonsils were much swollen, and her strength was much reduced; she was recovering from this attack, when, on February 2nd, she began to complain of pain in the cardiac region.

On February 3rd, the pulse was 104, respiration 42. The pain in the region of the heart had been relieved by fomentations. A slight but distinct *frottement* was felt over the entire cardiac region, most distinctly at the base, but disappeared after the following day. A double friction-sound was very distinct, whereof the systolic sound was heard to an unusual extent, for an exocardial murmur, beyond the limits of the cardiac region. The patient was very feeble. A blister was ordered, and a mixture of decoction of cinchona with compound tincture and ammonia.

Evidence of fluid effusion in the pericardium presented itself on the following day, February 4th; the cardiac dulness extending completely across the sternum, and in an upward direction to the third cartilage, and at the same time the rubbing sound, though remaining distinct, became systolic only, and resembled more nearly a blowing sound, though retaining a "crumpling" character at the base. Pulse and respiration as before: the pulse very yielding and unsteady, and the action of the heart so tumultuous as to shake the whole left chest. At this time a troublesome vomiting set in, and prevented her taking wine and medicine, so that for the five succeeding days, an occasional dose of morphine, with the application of fomentations, was the only medical treatment employed.

On February 9th, she improved and began to take some solid food, though in small quantity, she also took more readily the wine which had been previously prescribed. The ammonia and bark mixture was resumed, and a morphine pill ordered each night.

Though her state did not occasion the least anxiety, she advanced very slowly. It was not till the thirty-eighth day of the pericarditis (March 11th) that she could leave her bed even for a short time. A mild attack of pleurisy developed itself on the left side, on February 11th, and it was eighteen days before the effusion was removed from the chest.

She suffered considerable pain in the left side, both before and during the attack of pleurisy, and her posture was rendered irksome, between the soreness of the left side, and the breathlessness occasioned by any attempt to lie upon the right. A troublesome cough too, occasioned by great enlargement of the tonsils, distressed her, and required removal of a portion of one tonsil for its relief.

The pericardial effusion began to lessen in four days after its first appearance, and was entirely removed in the course of two days: the action of the heart becoming more tranquil; but nine days afterwards, from some unexplained cause, it reappeared, even exceeding its former limits, and a week elapsed before it began again to retire.

The friction-sound had not ceased to be heard when the patient left (April 4th), but on her visiting the hospital seven weeks afterwards, it could not be distinguished at all, though in a month subsequently some roughness of the first sound was noted at the base.

The sound had continued systolic, and hardly distinguishable from a bellows-sound, excepting by its position (along the left edge of the sternum) and by the circumstance that at one time, a distinct diastolic sound was produced by firm pressure with the stethoscope, at a particular spot corresponding to the fourth cartilage. Adhesion of the pericardium if effected, as was probably the case, was very slow in accomplishment, and was probably never complete.

[*To be continued.*]

Spontaneous Decomposition of Chloride of Lime. About three years ago, Dr. Hoffman mentioned the case of a choice specimen of chloride of lime in his laboratory undergoing spontaneous decomposition, and bursting the bottle to pieces. Another instance of this decomposition occurred in Dr. Letheby's laboratory. The specimen of chloride was perfectly dry, and the bottle had not been opened since June last. In making an attempt to loosen the stopper it was projected with great violence. The residual gas was instantly secured by covering the bottle, which was not broken. It was colourless, there was no odour of chlorine, but when tested by a match with spark it was relighted several times—an experimental proof that the result of the decomposition was oxygen. (*Chemical News.*)

Original Communications.

PRACTICAL REMARKS UPON THE PREVALENCE AND TREATMENT OF SYPHILIS.

By Jeffery Marston, M.D., Royal Artillery.

So long as the public will not entertain any plan of legislative enactment with the view of controlling the spread of syphilis, it would be futile to dwell upon the importance of sanitary measures directed to the examination and removal of affected women.

In large towns, indeed, it would be difficult to carry out efficiently any measures to this end; but it is not so within the limited areas of smaller garrison towns, particularly abroad. The experience obtained in Belgium and elsewhere of the control and diminution of syphilitic disease by these measures is quite parallel with my own observations. In Malta and Gibraltar, where measures were stringently enforced, there was almost entire immunity from syphilitic disease amid the troops; and when, as in the former station, these sanitary measures were discontinued, disease became so quickly and widely prevalent as to necessitate a recurrence to them.

Looking to the immense amount of disease and want entailed by these disorders, the great expense incurred by the Government from their widely spread prevalence among troops, and the subsequent loss of health and strength, as well as the congenital or inherited diseases to be traced to these causes, it seems wonderful that so little should be done to prevent their spread, and that the desire should be so determined to ignore their existence.

The number of hospitals and means in Great Britain for the treatment of so highly a contagious disease is very small and quite inadequate.

Persons out of the army can form but little idea of the amount of disease and the modifications of health induced by syphilis.

The limits within which any suggestions can be offered are practically narrowed to such as can affect the soldier. Military hospitals—in Britain, at any rate—would be comparatively empty were it not for diseases of this kind. As at present, the liberty of the subject is carried to its furthest extent, and made to press unfairly upon the more steady soldier. In all benefit clubs, it is a recognised custom that no member shall obtain any advantages for diseases of his own producing and within his own control. In the army, it might surely be regarded as a breach of contract when a soldier escapes his duties by his own immoralities. A soldier whilst in hospital with such a disease pays no more than another suffering from one the direct result of the execution of his duties. Moreover, for every day so spent, duties are escaped, which fall upon the other and effective men, upon whom therefore, practically, the burden falls. It often happens, also, that a soldier, by means of such diseases, is enabled to escape some punishment awarded to him at a date prior to the appearance of it. These facts seem to carry with them their own remedies.

It would be Utopian to suppose that we shall be able to *eradicate* diseases of this nature by any efforts directed to the education and amusement of the soldier. No doubt the practical workers in sanitary science have done much, and much more remains to be done; but we must not forget that diseases resulting from immoralities are common enough among persons as far removed from the soldier, in these respects, as possible. If not so common, obviously, the one class possess means by which they can more easily guard against and escape these evils than can the other.

It is well that those who expect so much from the education and elevation of the soldier, should remember that the life of a soldier is altogether peculiar; *e.g.*, he enters the army as a very young man, and is not an old one when he leaves it. During this period of life the passions are not by any means at their weakest. The life of a soldier is a non-natural one of celibacy. It would be incompatible with the nature of his occupation for the soldier to be married, even were it practicable to find sufficient barrack accommodation. Every one will perceive that such a state of things must entail a good deal of immorality.

The married soldiers, however much they may encumber a regiment upon the march, or in barracks, do not swell the list of occupants of military hospitals and prisons.

A soldier's life contrasts with that of a civilian at the very commencement. The "raw material" of our army is composed, in some part, of men unfitted for occupations requiring steady habits and perseverance—if not worse; and the discipline of the army exerts a great influence in the removal and repression of much of the crime which would otherwise elsewhere occur. The plan of enlistment is but too often a scandal. The system of barrack life is such, that a man is contaminated by the evils around him; it almost necessarily entails a loss of modesty; and individuals obtain that kind of mutual support and sympathy from the conduct of others, to which we can find no parallel in civil life.

Abortive Treatment. Although the doctrines hitherto promulgated upon this head require some limitation, it is certainly true that the soft suppurating chancre can be destroyed by caustics.

As obviously we can have no means of diagnosing the exact nature of a sore at early dates, before the appearance of its induration, or the characteristic affection of the inguinal glands, we must not conclude (as is too commonly done) that we have, by an early destruction of the sore, prevented the occurrence of constitutional infection, because no further symptoms follow. We can, pretty certainly, arrest the progress of the soft suppurating form by caustics; and shall certainly do no harm, at least, if it prove to be of the indurating, infecting variety.

The agents which I am in the habit of using for this purpose are—the strong nitric acid, or the potassa cum calce (the latter is very convenient in the form of small sticks). If the former be applied, the pain may be very much alleviated indeed by immediately afterwards pouring a continuous stream of cold water upon the part from some spouted vessel.*

Should the soft, suppurating sore not be destroyed within a few days of its appearance, the tissues surrounding it imbibe and become infected with the virus; the specific ulceration will then tend to run its course, and it may be five or six weeks, or much longer, before the sore heals.

It may be well, therefore, to use various means to accelerate the healing of a suppurating sore, and such means are sometimes absolutely necessary. So long as the sore has the specific characters of ulcerating deeply, with clearly defined vertical edges, it is right to continue the use of some mild caustic, such as solution of nitrate of silver. When granulations spring up, and the base appears healthy, it matters little what applications be used, provided the part be kept scrupulously clean.

The ulcer may assume the characters and appearances of similar lesions elsewhere situated; *e.g.*, it may be indolent, irritable, or inflamed, or, by granulating too redundantly, impede the cicatrisation. Such symptoms are to be met by the same measures as would ordinarily be used.

* The application of nitrate of silver for this purpose is useless, from its limited action and deficiency of penetration.

If the chancres threaten sloughing, it is best to dry the parts and apply nitric acid; afterwards using a lotion of potassio-tartrate of iron. With a solution of that salt applied to the sore, and the administration of the same drug internally, the phagedænic action will almost always alter its character.

Sometimes a large amount of inflammation, with great pain, attends the local progress of the disease. In such cases, the administration of morphia in liquor ammoniæ acetatis is highly beneficial.

That peculiar form of destructive ulceration which gives rise to the serpiginous sore, may not only attack a chancre or bubo, but the seats of lesions of consecutive syphilis. In sores, the subject of this complication, there is a tendency to the destruction of the neighbouring tissue in the form of segments of circles. It is a molecular death of the part, and is preceded by an inflamed, glazed, shining appearance of the surface. This is often very difficult of cure. Sometimes the application of calomel vapour to the part is very beneficial; particularly if the bichloride of mercury in tincture of cinchona be given at the same time, with the soap and opium pill at bedtime. A little watching upon our parts will soon determine whether this plan is likely to prove useful. The administration of the potassio-tartrate of iron internally, and the application of a lotion of the same salt to the affected part, sometimes answers very well.

The great thing, however (as far as local measures are concerned), is to excite an artificial and more healthy inflammatory process around the periphery of such sores. The following plan is a very good one:—A thin layer of Fell's paste (chloride of zinc paste) is to be spread on the unhealthy edge, in such a way as not only to destroy the affected, but a narrow rim of the nearest healthy tissue also. Attention to cleanliness, good air, and hygiene, are of primary importance in these cases.

Of the buboes which attend and accompany these chancres, two varieties may be mentioned. The progress of the first we can hope to arrest, while that of the latter will surely go on.

First. An inflammation of the lymphatics,—such as often occurs after abrasions or wounds of other parts,—may arise. The nearest inguinal gland may enlarge, and the textures seated upon it inflame, without there being any specific material in the gland-tissue itself. If an abscess form, it is a simple abscess, and the ulcerated surface does not become a chancre, affording inoculable discharge.

Second. When lymphatic absorption occurs, there is a transmission and lodgement of a chancrous virus in the part. An abscess will then ensue, and the resulting ulcer will, ofttimes, be but a repetition of the chancrous process, and to be treated, therefore, in a similar manner to the chancre.

When we have no means of deciding to which division the symptoms in the lymphatics are to be referred, it is well to try—by a few leeches, perfect rest, hot or cold applications, pressure, and the application of vesicants—to prevent suppuration. Of the latter, the best are—the vesicant action by a strong solution of iodine, or painting the integument with a strong solution of nitrate of silver, dissolved with the aid of a little nitric acid, as suggested by Mr. Henry Thompson. As soon as the effect of these remedies has subsided, pressure may be employed if the parts are still enlarged.

Should these plans fail in discussing the tumour, it is better to allow the patient to get up and walk about in the air.

Suppuration having set in, shall we open by multiple and small incisions, or by a depending one, involving the whole length of the swelling? The former course—with or without the use of stimulating injections—has proved very uncertain in its results; a free opening is generally to be preferred. The wound may then be dressed with strips of lint, from the bottom.

If the integument be thin and undermined, the action indolent, and the skin of a dull red colour, opening the abscess by means of a liberal application of potassa fusa will be found to expedite considerably the subsequent healing.

When the abscess has been laid open, it will be often found that a large indolently inflamed gland appears at the bottom. Between this and the apposed textures no union will generally ensue, and nothing is more common than to be able to pass a probe around the circumference of such gland. Matter is apt to lodge in these intervals, inflammation and burrowing to ensue, with the formation of sinuses.

Nothing can be more troublesome to cure than these buboes; and by far the shortest course is to destroy the gland by caustics, or to put the patient under chloroform, incise the gland, and detach it with the handle of the knife or fingers, subsequently stuffing the wound with lint.

As the last may appear a severe plan of treatment, it may be well to try first the effect of repeated applications of nitrate of silver or the red oxide of mercury, by which the gland-tissue is gradually destroyed, and contraction of the walls of the abscess sometimes ensues.

Sinuses, here as elsewhere, must be laid open; for it is rarely that these heal by the injection of astringent and stimulating fluids. Of course, however, the effect of these can be tried before proceeding to the incisions.

When a sinus runs perpendicularly downwards—*i.e.*, at right angles to the surface of the body—it cannot be laid open. An enlarged and inflamed gland will be found occupying the base of the sinus, and preventing its healing. By applying caustic to this, and stuffing the part with lint, it may be generally be made to heal from below. So soon as there is a healthy granulating foundation, the sinus will begin to be filled up. If the process become chronic, it is a good plan to pass a narrow bistoury to the bottom, and incise the walls of the sinus, applying pressure afterwards.

During the whole treatment, the patient should live well, take as much air and exercise as he well can, and steel with tonics are generally indicated.

Of the treatment of the infecting sore, I may at once state that, do what we may, constitutional symptoms will generally follow. I have treated cases with mercury until not a trace of induration has remained in the cicatrix, and yet secondary symptoms have appeared. Looking back upon the records obtained from numerous observations, I am led to conclude that mercury will remove an induration more speedily than any other medicine; that the interval between the appearance of the primary and secondary phenomena is more protracted than when mercury has not been used; that the secondary symptoms, when they appear, are not so marked or so severe, but that the syphilitic cachexia and loss of health may be as marked as if no mercurial treatment had been pursued.

Some of the worst cases are those in which the system becomes speedily affected with mercury, and a rapid ulcerative action sets in about the induration of the chancre. A rapid effect upon the system by mercury seems almost invariably to act injuriously; whether such result from the idiosyncrasy of the patient, or the object of the surgeon.

In many cases, the constitutional symptoms will be relatively slight, and the progress of the disease does not pass the secondary stage, but, in spite of relapses, tends to wear itself out; in others, the symptoms appear to increase rather than diminish in intensity as the evolution of the disease progresses. Diday makes the very practical division of the mild and severe, and modifies, to a great extent, the treatment pursued, by the recognition of these two types.

In the employment of mercury for the treatment of syphilis, I do not think that sufficient attention is given to the following.

1. *Hygiene.* The patient should be warmly clad; live upon a good but plain diet; take plenty of exercise in the open air; use occasionally warm baths; and avoid stimulants, unless specially indicated.

2. It is neither necessary nor desirable to depress the system for the cure of syphilis. The disease in itself tends directly to induce a chloro-anæmic state; and it too often happens that the sufferers from it are the subjects of some debilitating conditions—congenital or acquired. In all cases, it is essential to elevate the general health to a normal standard; and we should neglect no means so to modify our treatment as to meet the exigencies of the case. As in other diseases, individual cases will almost always present a physiognomy of their own. Not only is there no reason against, but every reason for giving steel, quinine, vegetable bitters, or cod-liver oil, as circumstances require; at the same time that we apply a specific remedy.

Believing, as I do, that there is no remedy equal to mercury for the treatment of this disease, I cannot avoid perceiving that in primary affections its administration rarely, if ever, prevents the occurrence of constitutional symptoms; while, for the secondary lesions, it will be found that relapses and slow recovery are the rule, and a rapid return to health the exception.

In the treatment of the primary disease, I am guided by two considerations—1. The history of a previous attack of true syphilis; 2. The condition and indolence of the sores.* If the sore be but slightly indurated; if it do not prove indolent, but can be healed by local remedies, I do not think it right to anticipate symptoms, which after all may not occur, by a remedy of doubtful efficacy, as a preventive to their appearance.

As many of the sores are mixed, and not so typical as described in books, the diagnosis is obviously not quite certain.

Powdered calomel is one of the best local applications to the indurated sore.

When sloughing, gangrene, or rapid ulceration appear in the chancre, mercury is either not to be given, or immediately withdrawn.

With regard to the various modes of treating primary syphilis by iodide of potassium, etc., I have not been able to assure myself of their possessing any influence.

Almost all primary sores will heal without treatment in time; but, when much induration exists, non-specific remedies fail to affect this, and the constitutional symptoms appear, as regularly and certainly, as if no treatment had been pursued.

For the secondary symptoms—with the exception of the pustular, rupitic, and ecthymatous forms of syphilide, or those accompanying cachectic states of the system—mercury, in some form or other, is the best remedy.

The course I pursue is—to use the mercurial vapour-bath, or mercurial inunction; allowing the patient steel and a good meat diet, if his strength appears impaired by the treatment. I invariably attempt to affect the system as slowly as possible, and to remit for a time the use of the remedy as soon as that effect has been attained.

Ricord advises that mercurials should not only be used so long as any symptoms are apparent, but that the treatment should be continued and sustained for *long periods* afterwards. With all deference to so great an authority, I am not sure that the practice indicated is a good one, even if patients could be found to submit

* Supposing the patient to have suffered from a constitutional syphilis, the infecting sore will be much modified in its characters, and will rarely require mercury to heal it. Unless, therefore, there are some other reasons present for its administration, it is unnecessary.

to it. I have myself tried his plan, and, I fear, to the disadvantage of the patient.

What I conceive to be preferable is, to follow up the mercurials, so soon as the symptoms for which they have been given have fairly disappeared, by a course of steel and other remedies. In three cases (after the use of mercury, where the health seemed impaired by the remedy, and although no fresh symptoms had appeared, the cutaneous affections could not be said to be quite cured), I have given podophyllin in small doses (1-6th gr.), with extract of belladonna, with great advantage. The complexion improved very markedly under the use of this remedy.

Without having any statistical evidence whereon to ground my belief, I may say that symptoms referable to internal syphilis—such as cerebral, osseous, and glandular diseases—are apt to appear when a mercurial treatment has been sustained for a long period.

What I particularly remarked also, in some cases, was a cachectic aspect, and a liability to chronic rheumatismal pains, without cutaneous manifestations of syphilis, where a mercurial plan of treatment had been too persistingly pursued. Among these rheumatoid affections, I would enumerate sciatica, and inflammations of the fibrous fasciæ covering tendons, bones, and cartilages.

The exhibition of mercury by the calomel vapour bath is excellent. It is not liable to affect the digestion, and it leaves room for the exhibition of any other remedies that may be required. It is, moreover, mild, slow, and equable in its action; so that it is safer than other plans, inasmuch as we have no means of telling beforehand what effect the remedy will have upon the system. Sometimes, from these very causes, it seemed to be inadequate. Every one must have remarked the seeming antagonism between the two states of system—that engendered by syphilis, and that by mercury. A patient will, perhaps, be easily affected by the mineral exhibited during the primary, and very difficultly so during the later stages of the disease. In cases of relapsing secondaries, the system is very tolerant of the drug, and but little amenable to its action. Hence, often, mercurial inunction will cure more speedily than the calomel vapour-bath. A very good plan is to rub some mercurial ointment into the thighs, and direct the patient to wear the same drawers for ten days or a fortnight, taking a tepid bath occasionally at night.

Should the patient's system be early affected by mercury, while the symptoms are not benefited, I give chlorate of potash in compound tincture of cinchona at the same time.

Of the internal preparations of mercury, I prefer the bichloride, in compound tincture of cinchona or in tincture of sesquichloride of iron; or the iodide of mercury in half-grain doses, with iodide of potassium or syrup of the iodide of iron.

Frequently, in strumous subjects, I find it useful to give the bichloride of mercury combined with cod-liver oil, which is easily done by first dissolving the bichloride in ether, before adding it to the oil. In some of the more intractable forms of syphilitic squama, a combination of liquor arsenicalis, solution of bichloride of mercury, and tincture of sesquichloride of iron, will be found very useful.

In syphilitic diseases of the skin generally, Mr. Startin's advice to avoid the use of soap in ablution is well worth bearing in mind. The soap appears to irritate and inflame the parts occupied by an exanthem, and to protract the cure of the disease.

For the symptoms denominated tertiary, it is well always to try the effect of iodides of potassium, iron, etc.; for it is in this stage of the disorder that these remedies appear so useful. Should they, however, prove inefficacious, recourse may be had to mercurial treatment, by means of the calomel vapour-bath.

In some of the syphilitic diseases of the interior of the cranium, giving rise to extreme pain and symptoms indicative of cerebral irritation or inflammation, iodide of potassium, in large doses, appears to act with rapid benefit; while in others it as completely fails. When it does so, it is a good plan to shave some part of the head, blister the scalp, and dress the blistered surface with mercurial ointment; at the same time continuing the use of the iodide of potassium.

In the treatment of the external manifestations of syphilis, much benefit may be derived from local treatment. It often happens that a patient is cured of a cutaneous syphilide, in so far that no fresh spots appear, yet the older sores fail quite to disappear. In such cases, local treatment succeeds admirably. To indicate some of the symptoms and states benefited by local measures, I shall enumerate a few illustrations.

Raised papules (cutaneous and mucous) may remain indolent. The application of an ointment, composed of oxide of zinc, calomel, and simple cerate, will hasten their absorption.

The eruptions such as lichen, acne and herpes, will also be much benefited by the application of oxide of zinc lotion, or ointment; and if, as often happens in soldiers who have served in warm climates, these cutaneous diseases be mixed with prurigo and urticaria, the diacetate of lead lotion will equally expedite their cure.

Some of the vesiculo-crustaceous looking spots will, equally, cease to reappear if the affected parts be first painted for a few days with a solution of nitrate of silver (gr. x—xx to ʒi), and the oxide of zinc lotion applied afterwards.

Tar ointment, or the alcoholic solution of tar, is an excellent application to most of the dry forms of cutaneous syphilide, and to chronic eczema of the extremities.

Indolent glandular swellings, in a similar way, will gradually disappear under the use of strong solutions of iodine.

The superficial form of ulceration attending the pustules of ecthyma will likewise be much benefited by the occasional use of solutions of nitrate of silver or sulphate of copper. The deeper forms of ulceration attending the appearance of ecthyma as a tertiary phenomenon will hardly get well without the application of caustics and local stimulants.

The fissured condition of the palms in psoriasis palmaris will be much improved by the use of glycerine.

Whenever any of the ulcerated bases of syphilitic sores threaten sloughing, lotions of potassio-tartrate of iron will generally improve their aspect.

It must not be forgotten, that a papular form of eruption may appear after the use of iodide of potassium, and be mingled with the other cutaneous affections, as I have more than once observed; this will disappear upon the discontinuance of that remedy.

In all cases of cutaneous syphilide, an occasional warm bath will have a beneficial effect.

In the secondary syphilitic sores and fissures about the lips and buccal membrane, the occasional use of nitrate of silver and lotions of chlorate of potass will prove very effective.

Syphilitic onychia is a very troublesome affection, and, in addition to the use of mercury, will require careful local treatment. It varies much in degree and severity. The milder cases are excited by an ingrowing nail, the top of which has, probably, been torn down to its bed by the patient. The overlapping fold of skin then commences to inflame and ulcerate. The plan of treatment is, to remove the pressure by inserting some cotton wool in the interval between the fold of skin and the nail, at the same time that we harden the integument by lotions of nitrate of silver, and wait the growth of the nail beyond the bed upon which it rests. In other cases (particularly in the true syphilitic onychia, where the ulcer-

ation commences as a dark spot at the root of the nail), it is best to scrape the nail as thin as possible, and repeatedly apply the solid nitrate of silver, as well as a lotion of the same salt, to the parts, by which the death of the nail is procured, and, as it rises from its bed, it can be separated. In some it will be necessary to enucleate the nail, and then to treat the ulcerated surface.

Syphilitic Iritis. In the treatment of this affection, mercury and the application of atropine are the ordinary means used.

The mercury need not be given in large doses; and there is no reason against employing such other remedies as the state of the patient may indicate. It is well to drop the solution of atropine into the eye every six hours, or sufficiently frequently to maintain a dilated condition of the iris.

In some cases, neither mercurials, iodide of potassium, nor turpentine, appear to exert any effect. The iritis, instead of yielding, appears to advance. Some cases are, probably, of complicated nature—a mixture of the rheumatic with the syphilitic form of the disease.

I have seen an iritis commence in one eye of a patient who was affected with mercury for an iritis of the other eye.

In these cases there is not only a good deal of circumorbital pain, with photophobia and lacrymation, but the anterior chamber becomes clouded; the iris with the periphery of the cornea yield, so that the latter appears to rise abruptly out of the sclerotic, although the cornea, as a whole, is less convex than normal; and the eyeball feels a trifle more tense and firm than that of the healthy organ.

In addition to the synechia, and recurrence of iritis from this very cause, there is a well grounded fear that the eyesight may remain impaired. In such cases nothing answers better than a division of the ciliary muscle and evacuation of the aqueous, by Mr. Hancock's operation.

In two cases in which I pursued this course, great and rapid improvement ensued.

The operation is so slight, and so easily performed, that there is little or nothing to fear from it in these respects. When it is considered that the ciliary muscle is the point at which the sclerotic, cornea and iris meet, and that any effusion behind the iris must tell directly upon this, the most unyielding part of the eye, we cannot be surprised at the beneficial results ensuing from its division, and the establishment of an opening between the anterior and posterior chambers.

Now that I am upon the subject of iritis, I may remark that there is a variety of ophthalmia occasionally following gonorrhœa, allied, in its symptoms and appearances, to rheumatic iritis; indeed, it is a form of gonorrhœal rheumatic inflammation. This disease is very easily mistaken for syphilitic iritis; but it differs from it in not having the minute beads or nodules of lymph deposited upon the iris, which are so common in the syphilitic disease. The sclerotic is always affected; the conjunctiva generally so; and the margin of the cornea looks dull, preventing the perfect view of the iris. The pupil is contracted, as in syphilitic disease, and yields difficultly to the action of atropine, but synechia is not a common result. The disease is more chronic, painful, and difficult of cure than the syphilitic form; photophobia and lacrymation are also more marked phenomena.

Rollet has well described this sequela of gonorrhœa. I have given the symptoms as I have observed them; and the subject has been introduced here upon account of this form of disease being very commonly, but erroneously, referred to a syphilitic origin.

In conclusion, I must reiterate, what I have already implied, that any treatment of syphilis, particularly in its constitutional phases, will be materially assisted by a strict attention to hygiene. The patient cannot take too much air, nor live too plainly, nor can we endeavour too much to invigorate his system. In military hospitals this cannot be done, unfortunately, to anything like the required extent. Air and exercise cannot be obtained; and the patient, after a monotonous confinement within the wards of an hospital, but too frequently plunges into dissipation as soon as he leaves it.

ON UTERINE FLUXES, THEIR CAUSE AND CONSEQUENCES.

By W. E. C. Nourse, F.R.C.S., Brighton.

Uterine and vaginal fluxes mainly originate in conditions of local vascular fulness and activity, dependent on the anatomy of the uterine blood-vessels, or on the vascular determinations consequent on the various physiological conditions of the womb. In this, they differ from the bowel-flux and lung-flux, the two other great classes of disorder in which discharge from the body is an essential feature, and which are more under epidemic influences. The fluxes from the utero-vaginal tract may be enumerated as:—1. Hæmorrhagic discharges (excluding those of pregnancy or parturition); 2. Menstrual discharges—menorrhagia and dysmenorrhœa; and 3. Altered discharges—leucorrhœa.

I. A lady was attacked with violent flooding four weeks after a miscarriage. Here the recurrence of the monthly determination was the principal cause; the uterine muscular fibres not being in the same state of development as they possess four weeks after child-birth, when they have power to prevent by compression any such occurrence. But, non-completion of the requisite changes after the expulsion of the contents of the uterus, is also to be taken into account. Uterine disorder is often noticed after the birth of a dead child. A case of this sort is recorded, in which peculiar uterine conditions were present, coupled with typhoid fever. The following is somewhat similar. A lady was confined with a dead child; after which menstruation was profuse, and with clots; and in four months she was attacked with low fever, accompanied by intense hysteria. Excessive and painful menstruation continued for some time; but at length was replaced by leucorrhœa. Two years later, she was suffering from symptoms treated as ulceration of the os uteri, with the speculum and caustic, but which were in reality, merely due to relaxation of the vagina, permitting the uterus to fall a little from its place. Cure was speedily effected by means restoring the tone of the vagina. This patient had suffered from hepatic symptoms. In another case there was congestion of the uterus after the birth of a dead child. In another, irregular, painful, and excessive menstruation, with uterine leucorrhœa, following the birth of several dead children. Circumstances pointed to previous uterine derangement. In these cases, the death of the fœtus is probably caused by previous uterine disorder, which becomes more prominent after the birth, and thus is noticed as following the birth of a dead child.

II. In other cases, menorrhagia was associated with plethora; with hysteria; with debility and want of vital power; with lactation; alternating with leucorrhœa, the vagina relaxed, and the womb low down; and especially with hepatic derangement, and with habitual drunkenness. Disordered liver, however caused, is frequently found to accompany increased, difficult, or painful menstruation; the obstructed portal circulation favouring a tendency to pelvic congestion.

III. Leucorrhœa frequently alternates with, or succeeds and replaces dysmenorrhœa and menorrhagia. A lady, subject to frequent attacks of painful congestion of the liver, was also a great sufferer from dysmenorrhœa. Some years after, leucorrhœa alternated with the dysmenorrhœa; and ultimately, there were symptoms of

dropping of the womb, with enlargement and congestion of the os uteri, from relaxation of the vagina. Another lady, subject to hepatic derangement, suffered from excessive and painful menstruation. Miscarriage was caused; and after a time, leucorrhœa came on. In these disorders, the uterus itself remains free from any structural alteration. But a common sequel of long continued leucorrhœa is, relaxation and weakening of the mucous membrane of the vagina. Former disturbed menstrual conditions may have ceased; the menses themselves, from one cause or other, may have ceased; the leucorrhœa accompanying former menstrual disturbance may remain, or again, it too may have ceased; while the consequences of these successive occurrences, which have very likely been forgotten, the relaxation of the vaginal mucous membrane, may be giving rise to a number of structural alterations. The commonest of these is, partial descent of the uterus, the os uteri being lower than natural, and often resting on the floor of the vagina. This condition, if unrelieved, may last long, and cause much distress. If it be suffered to continue, another change takes place. The os uteri thickens and enlarges, or may even ulcerate. Other well known effects of relaxation of the vaginal mucous membrane may be, either vaginal rectocele, vaginal cystocele, or prolapsus uteri, diseases which may last for years, long after the uterine fluxes which have preceded them have ceased.

Thus the sequence of events is: 1. Menorrhagia or dysmenorrhœa, due to vascular fulness about the uterus, often connected with obstructed portal circulation; 2. leucorrhœa; 3. Relaxation of the vagina, permitting the womb to fall a little from its place; 4. Consequent enlargement of the os uteri, perhaps with ulceration; 5. Some kind of prolapsus.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF MONSTROUS BIRTH.

By Joseph Hinton, M.R.C.S., Hinton, near Bath.

[*Read November 27th*, 1862.]

The mere fact of the uterine contents being monstrous in form may not in any way interfere with the parturient efforts of the organ, and the delivery may prove perfectly natural, albeit the said contents may have faint resemblance to "the human form divine"; whilst, again, with scarcely any extreme deviation, the monstrosity may complicate the delivery, and render our diagnosis exceedingly difficult. To this latter category my case belongs.

A few weeks ago, I received an urgent message to attend a woman, who was in labour before she anticipated. From the messenger I could gather nothing as to the nature of the case, and nothing very satisfactory as to the duration of the labour. On this latter point, I have since received very conflicting accounts; the current report being that the woman had been several days in labour; that some six-and-thirty hours before my arrival, the pains had been so violent, that the completion of the labour appeared imminent; but that soon, and without any reason, these pains died away wholly, and she had scarcely experienced any since. The midwife declared that she had sent off immediately on discovering that something was coming down, which she could not understand. The patient was a young and apparently healthy primipara. Her condition was not the most satisfactory. She was cold and shivery, often drowsy; her pulse small and feeble; in fact, she was decidedly prostrated. She did not consider herself more than seven months advanced. On examination, I found a mass, of the size of a cricket-ball, outside the vagina; it gave somewhat the sensation of the placenta but smoother. Unable to arrive at any conclusion as to its nature by the touch, I exposed and carefully examined it, but for some minutes I was equally staggered.

Its odour and appearance resembled that of strangulated intestine in a sloughing condition. The closer the examination, the more convinced was I that the mass was intestinal; at last, I fancied I detected something that might pass muster as a diminutive appendix vermiformis. A vaginal examination was made with difficulty. I traced the mass within what I believed to be the posterior edge of the os uteri; but was unable to detect any other presenting portion. I was led to diagnose total deficiency of the abdominal walls in the fœtus, and that this presenting mass was the fœtal intestines. With much difficulty, I succeeded in reaching a knee, and bringing it down; the foot was very broad and flat, with scarcely any great toe; the cuticle separated very easily, although the patient considered she had felt the child in the morning. The other foot was then brought down; it resembled its fellow. The nates and abdomen, such as it was, were then brought to view. To the inexpressible horror of the midwife, the former boasted a very respectable tail about two inches long, and a quarter of an inch in diameter; it was devoid of hair.

In endeavouring to deliver the remainder of the fœtus, the spine gave way. I then brought down both arms. The third finger on the right hand was a stump. I used all the force I dared with the arms unsuccessfully; the head was not in the pelvis, the neck being much stretched; the abdomen was still large. I therefore left the patient quiet and she fell asleep, whilst my instruments were sent for. Whether during this interval any portion of a large hydrocephalic head had so given way, as to allow the escape of a portion of the fluid, I cannot say; but on introducing my fingers to guide the blunt hook, a large quantity of serum escaped, and possibly an attempt at delivery might have been perfectly successful. I decided, however, on passing the hook; and, fixing it in a portion of bone I could detect, which proved to be the left orbit, I drew out with tolerable ease an enormously elongated head, like a thickened bladder, with the cranial bones hanging loosely in the interior. The placenta was soon expelled; it was large but healthy, except in the funis. The child was a male.

The head was exceedingly large; the body was not larger than that of a seven months fœtus; the nails were unformed; the features were most revolting; two holes represented the nose, whilst, extending into this feature, was a very wide hare-lip, the lip itself being scarcely visible; the palate also was deeply cleft. The cranial bones appeared loose within a very thickened scalp. Within this there was still a quantity of fluid; there was also a small cerebral mass. The spinal column was much distorted, being bent with the bow part forwards. The abdominal parietes were wholly deficient; the left kidney appeared almost in its normal position; the right was amongst the convolutions of intestine; so also was the liver. I could not make out exactly how the funis was attached, as it had suffered from the general condition, and had given way in the delivery. Some drops of meconium oozed from the anus.

When I placed the monster in position for taking a rapid sketch, I was struck with the resemblance in face to a man whom I used often to see in Bath, who walked by the aid of two sticks, on the balls of his toes, and has, I think, hare-lip, etc. At any rate the expression was very similar, and the same impression was conveyed to the mind of the midwife. However, the patient, when questioned, denied firmly having experienced any fright at any time during the pregnancy. She allowed that she knew this man, and that, about five months ago, he pointedly came across the street to her to beg.

Here, the patient, if her statement can be believed, and there appears no reason for doubt, was unaware of

any effect having been produced on her, nor was the fact of her having seen this individual, elicited except on cross-examination. We very often meet with the reverse; frights sustained, horrid phantoms and realities witnessed, yet the fœtus is proof against them all.

As this man is a Bath character, I was anxious to mention the case at one of our Bath meetings, hoping some of our associates might know more of the individual, and be able to tell us whether he enjoys the distinguishing mark of a tail, which in these days of disputation, might prove a valuable connecting link to those, who contend that men are only monkeys of a wiser growth.

If he be thus gifted, it is a peculiar coincidence that it should be stamped on the fœtus, without the cognisance in any way, as we must presume, of the mother.

Reviews and Notices.

LECTURES ON SYPHILITIC AND VACCINO-SYPHILITIC INOCULATIONS: their Prevention, Diagnosis, and Treatment. Illustrated by Coloured Plates. By HENRY LEE, F.R.C.S., Hon. Fellow of King's College, London; etc. Second Edition. Pp. 335. London: 1863.

SINCE the first edition of these *Lectures* appeared in 1854, Mr. LEE has zealously and ably availed himself of the opportunities at his disposal for observing the phenomena of syphilis. The conclusions at which he has arrived he has from time to time made known through the medium of the medical societies and the professional press; and he has now done good service in collecting into one volume his opinions on *Syphilitic and Vaccino-Syphilitic Inoculations*, on which subjects he has acquired for himself the right to be listened to as an authority.

The volume before us consists, besides a preface and introduction, of sixteen lectures under the following heads: 1. The Suppurating Syphilitic Sore; 2. Syphilitic Infection; 3. Syphilisation (so-called); 4. Syphilitic Inoculation in Animals; Lymphatic Absorption; 5. Destructive Syphilitic Inflammation; 6. Transmission of Syphilis by Vaccination; 7. and 8. Vaccino-Syphilitic Inoculation; 9. Twofold Inoculation; 10. Inoculation with the Blood of Syphilitic Patients; 11. Syphilitic Inoculation Modified by the Hereditary Transmission of Disease; 12. Syphilitic Inoculation Modified by Previous Disease; 13. Transmission of Secondary Syphilis; 14. Constitutional Syphilis; 15. Secondary Syphilis, continued; Tertiary Syphilis; 16. The Calomel Vapour-Bath.

Until within a recent period, writers on syphilis have sought to determine the number of poisons producing the morbid actions commonly classed as venereal. Some have recognised but one poison as producing all the syphilitic affections, including gonorrhœa; others distinguish between syphilis and gonorrhœa; while a third class, in addition to this distinction, separates the syphilis which infects the constitution from that which does not. Mr. Lee, however, at the outset expresses his object not to be to engage in speculations as to the number of poisons, regarding which demonstration is difficult and the results often varied and contradictory, but rather to study the modes of action which follow impure contact—"the morbid processes to which the contact of syphilitic matter gives rise, the circumstances under which these diseased actions develop themselves, and the results which they respectively produce."

It is in this way, by the accurate observation of facts, that satisfactory results are to be arrived at. For the several forms of morbid processes observed are each always the same under the same conditions; while theories about the number of different poisons may vary constantly. By describing the morbid processes as they are observed in nature, many of the apparent difficulties which have long surrounded the subject of syphilis are removed, and many apparent contradictions are explained. It was on this plan—observation—that Hunter worked; and it seems that now his labours and writings on syphilis are, for the first time in the present century, assuming their true position and receiving their proper appreciation.

The forms of syphilitic action described by Mr. Lee are two; viz., that which produces the local suppurating sore; and that which infects a patient's system. Either of these may be complicated by lymphatic absorption and by mortification; so that four distinct processes may follow syphilitic inoculation.

"1. The inoculated part may become affected with the 'adhesive form of inflammation,' in which lymph is poured out either in the substance or on the surface of the part.

"2. The absorbents may assume an active share in the morbid process, taking up some of the infected parts, and with them portions of the syphilitic poison. This process will be called 'lymphatic absorption.'

"3. The inoculated part may, within a few days of the application of the poison, be affected with suppurative inflammation.

"4. The morbid action may terminate in mortification. Of this there are two practical subdivisions:—(*a.*) Death of the whole infected part, which is then thrown off as a slough; (*b.*) Dissolution and death of a part only of the contaminated structure, leaving a part still infected." (Pp. 3, 4.)

These four kinds of morbid processes were described by Mr. Lee in the ASSOCIATION MEDICAL JOURNAL as long ago as 1854.

The subject of lymphatic absorption in its relation to syphilitic infection has been very carefully examined by Mr. Lee. It was asserted by Hunter, that venereal matter is taken up by lymphatic vessels and carried by them into the general circulation; and this theory has been generally received as correct until lately. Recent researches, however, in which Mr. Lee has taken an active part, have shown that in no case can the poison be traced beyond the first set of lymphatic glands. The absorbents convey the poison up to this point, both from the suppurative and from the adhesive or indurated sore; and in each case the peculiar local action is manifested in the parts traversed by the lymphatics and in the glands first in order; but, beyond this point, "no further effect is produced upon the lymphatic vessels. The fluids which they contain are bland and harmless, and afford no indication of containing any poisonous or irritating ingredients." Virchow holds a similar opinion with regard to the supposed transmission of pus and other matters, such as the substances used in tattooing, through the first set of glands beyond the point of absorption—a transmission which he denies ever to take place.

Mr. Lee lays much stress on the *mode of origin*

of syphilitic affections; holding that the action which accompanies the first appearance of the disease will indicate, in uncomplicated cases, whether the patient's system will or will not be infected. The suppurating sore, whether produced by lymphatic absorption or by artificial inoculation, is diagnostic of the pustulous or non-infecting variety of the disease, while the adhesive or indurated sore gives rise to constitutional symptoms.

An important means of diagnosis between the non-infecting and the infecting sore lies in the reinoculation of the secretion. This theory was first announced in 1855 by M. Clerc.

"In 1855, M. Clerc announced the doctrine, that the secretion from infecting sores could not be inoculated—a theory which corresponded with, and might have been deduced from Ricord's dogma, that a person can have syphilis once only. As the indurated sore was allowed to be the necessary precursor of constitutional syphilis, and as syphilis was supposed always to follow an indurated sore, it followed that, when once the constitutional affection was established, the patient's system in which it was so established would no longer be capable of being reinoculated so as to produce again the same disease." (P. 27.)

The merit, however, of proving this point by direct experiment is due to Mr. Lee, who, in 1856, published the results of his observations in the *British and Foreign Medico-Chirurgical Review*. These observations, which have been confirmed by those of M. Fournier (published in 1858), and by the more recent observations of M. Rollet, have established that a means of diagnosis between the non-infecting and the infecting sores lies in the fact that the former yields a secretion which is "auto-inoculable" —that is, capable of producing a specific pustule when inoculated on the patient; while, "if a disease which we believe to be primary syphilis yields a secretion which is not auto-inoculable, then the evidence is against the local character of the affection, and indicates a constitutional mode of treatment." The results of experiments on this point are found by Mr. Lee to be very uniform; and the apparent exceptions which have occurred in his own observations and in those of MM. Fournier and Rollet, he ascribes to the circumstance, that in these instances a twofold inoculation had taken place, and produced the local suppurative sore as well as the infecting chancre.

The most interesting parts of the book are those which refer to twofold inoculation, and to the inoculation of the blood of syphilitic patients.

In speaking of twofold inoculation, Mr. Lee argues that this phenomenon may occur under several circumstances, when the products of different diseased actions are brought into contact with the same part of a fresh patient. Thus, gonorrhœa and a suppurating sore, or a suppurating and an infecting sore, or gonorrhœa and an infecting sore, may act simultaneously; or the effects of any of these may be again complicated and masked by the introduction of decomposing fluids. But the most important subject in connection with twofold inoculation, is the transmission of syphilis by vaccination. Regarding this, he shows that the experiments of Viennois, and the startling series of facts recently observed at Rivalta, as well as other observations, demonstrate the possibility of communicating syphilis, whether from primarily or from secondarily infected patients, by vaccination. This is contrary to the almost universal belief which prevailed a very few years ago, and which is still held by many, that syphilis cannot be communicated in this way. But does this furnish an argument against the practice of vaccination? Certainly not. It merely enforces on our consideration a lesson which has been long known, but which requires occasional repetition — to use proper care in the performance of the operation.

"In practice, four very simple rules would appear to be sufficient to ensure safe vaccination:—

"1. To use a clean lancet upon each occasion.

"2. To take the lymph not later than the eighth day from the vesicle of the vaccinifer.

"3. To take the lymph only, and not to allow blood or other secretions to be mixed with it.

"4. To obtain the lymph from a healthy subject." (Pp. 178-9.)

The third of these rules is an important one, and forms the text of the tenth lecture. Viennois found in his experiments that syphilis was not communicated unless the vaccine lymph were mixed with blood; and, in the Rivalta epidemic, it is averred that blood issued from the vesicles of the child Chiabrera —the first vaccinifer, who infected the others— during the vaccination, and that the lancet used was impregnated with blood during the operation. The inocubility of the blood of syphilitic patients so as to produce a disease on the inoculated point has been further established by several other experiments, especially those of an Italian physician, Dr. Pelizzari.

Closely connected with this subject is that of the inoculation of the secretions of syphilitic patients, which is treated of by Mr. Lee in his thirteenth lecture. He there shows how many cases which have perplexed Hunter and other surgeons are explicable on the ground of the infection being communicated to a healthy person by the secretions of a patient affected with secondary symptoms, or even by the ordinary secretions of a syphilitic body, when derived from a part in a state of increased action or inflammation. He refers to some interesting cases noticed by Hunter in which syphilitic symptoms were developed after the transplantation of teeth into healthy individuals. Although the cases were believed to be syphilitic and treated as such, it seems to have been a very general belief that the disease could not be communicated in this way; but, calling to mind the results of Hunter's well known experiments on the transplantation of parts, and the demonstration, in one of the previous lectures, that syphilis may be communicated by the blood of an infected person, Mr. Lee argues that

"If the tooth of an infected person be transplanted into the mouth of a person who has never before had the disease, the minute quantity of blood which it contains may be sufficient to infect the healthy person; and it is quite clear that simply wiping the outside of the tooth would not prevent such an occurrence."

Some have supposed, that wiping the tooth before insertion would prevent infection.

Having thus given a sketch of some of the leading points in Mr. Lee's work, we must conclude by commending it to the favourable notice of our readers, as the result of much accurate observation, diligent study, and careful reasoning, on the part of th author.

British Medical Journal.

SATURDAY, FEBRUARY 21ST, 1863.

THE TITLE OF DOCTOR.

THE "Doctor" and "M.D." title, as assumed by non-diplomatised Licentiates of Royal Colleges of Physicians, is still, as our correspondence will amply show, a disturbing subject of discussion. It is not surprising that there should have been much discussion, and, considering the apparently conflicting interests at stake, much difference of opinion held on the matter; but we apprehend that most of the profession, who have taken an interest in it, will now admit that all that can be said upon the subject has been already many times said, and that we are now in a position, from the arguments *pro* and *con* before us, to come to some definite conclusion about it. We have already expressed our views; but, as we still continue to receive communications on this *ter quaterque vexata quæstio*, we shall once again repeat what, as it seems to us, is the fair and legitimate compromise which must be come to. The world lives by giving and taking.

Our conclusion, then, is this: that no private member of the profession can refuse to give the courtesy title of Dr. to any gentleman—Licentiate of a College of Physicians—who chooses to claim the title; that no member of the profession—no physician—who does not possess the university degree of Doctor, has the right of, or is justified in, appending to his name the letters M.D., unless he possess the right under some special powers of the charter of the College from which he has obtained his physician's license. We make this latter exception, because, as most of our readers are aware, the King and Queen's College of Physicians in Ireland claims that its charter contains special powers under which the College is enabled to grant the title of Doctor of Medicine. The College, we are told, is supported in its claim by strong legal authority, and is ready to try the question at law with any one who is willing to dispute the right.

But it will be seen at once, upon consideration, that this special claim of the King and Queen's College, founded on alleged special powers of its charter, gives no kind of right to the Licentiates of other Colleges—of the London and Edinburgh Colleges—to assume this title of M.D. On the contrary, it leads distinctly to the opposite conclusion; viz., that they have no right to the M.D. appendix, because the charters contain no such special clause as that above referred to. We need scarcely add, that neither of these Colleges makes any pretence to a claim of the kind; and we believe we are quite right in saying that, in fact, any Licentiate of these Colleges, non-diplomatised, who does add M.D. to his name, is actually liable to the pains and penalties of prosecution under the Medical Act. Let it be understood that we are speaking of the Licentiates of the London and Edinburgh Colleges; for of the case of the King and Queen's College we have made an exception, and upon it we offer no definitive opinion, beyond what may be obtained from the *primâ facie* position assumed by that College, and from its readiness to try legal conclusions with any one who desires to dispute its claim.

The arguments in favour of giving the courtesy title of Dr. to any Licentiate who claims it are these. In the first place, it must be remembered that no doubt or difficulty occurred on the subject until the year of grace upset the even tenour of physicians' ways. It was only when physicians began to descend on the country from our Colleges like avalanches, that the doctors began to feel themselves disturbed; and truly every one must admit that it was rather a rude blow to the rare physicians and doctors of the previous days to find themselves all of a moment surrounded, and as it were swamped, by a suddenly created corps of new physicians. The ancient doctor naturally enough expressed a little surprise on finding, when he woke up in the morning, several of his medical neighbours, whom he had on the previous evening regarded as general practitioners, suddenly converted into doctors and physicians of Colleges, just like himself; and no one can be astonished that the aforesaid physician and doctor should be rather chagrined when he found how easily and pleasantly this conversion had been effected, and when he recollected the three days written and oral examinings which he himself had been subjected to before he had been able to obtain the like honourable title. No one can be surprised that there should, under such circumstances, have been utterings, mutterings, and murmurings.

Now, however, that time has mellowed down and made us better acquainted with the griefs of that year of grace, we are able to take a more calm and serene view of the case. And, in truth, as practical men, we are bound to judge it as it stands before us. Now it is idle and useless to pretend that Licentiates made during the year of grace, because they passed through no examination, are not as good, veritable, and true Licentiates, as any other Licentiates of the Colleges. The Colleges, in granting those licenses, acted with their eyes open, and are therefore bound to throw their equal mantle of protection over all their Licentiates. They cannot, with justice, distinguish an examined Licentiate from a year-of-grace Licentiate. One Licentiate, therefore, is in its eyes equal every way to another; and any injury which may have been temporarily inflicted upon the few Licentiates of other days by this large

year-of-grace creation of new ones must be regarded as one of those misfortunes which are necessarily incidental to all great movements—we mean, of the kind which unfairly hit the few whilst benefiting (as presupposed) the majority.

Such being the position of things, what we find is this: All Licentiates of Colleges of Physicians are of necessity physicians. Then, again, in the eyes of the community, all physicians are doctors; and there can be no doubt that a great many members of the profession took their physician's license under this general impression, conceiving that thereby they would win for themselves the title of Doctor. In fact, as is well known, a vast many doctors have sprung up in consequence of that year-of-grace licensing. But not only has the general sentiment of society in modern times made physicians and doctors synonymous terms, but the London College of Physicians has itself on various occasions permitted and sanctioned, and actually patronised, the assumption of Dr. by its non-diplomatised Licentiates. Now, without inquiring why the College did this, the fair inference to be drawn from the fact is, that the assumption was in its eyes in no way an improper or an immoral act. But, as the College had no power whatever to grant the title of Dr., it necessarily did so merely as a matter of courtesy. Why, then, it may be fairly asked, should not the profession use the same act of courtesy, if they think right to do so, and give the title of Dr. to those Licentiates who demand it?

True, the London College of Physicians has now altered its views, and refuses to address as Dr. those of its Licentiates who possess not a diploma; and so far it has reversed its former position; but it has done no more than this. It has not asserted that its Fellows, Members, and Licentiates shall not so give the title of Dr., if they please, to those of their Licentiates who ask for it. The College has, indeed, as far as we can judge, left the question an open one—every man being permitted to act according to his own lights and inclinations; and, if we are not much mistaken, there are very few if any Fellows or Members of the College who, privately, actually do refuse this courtesy Doctor title to those who ask it. So that, as private members of the profession, they do not stand by the conclusion which they sanction as members of a public corporation; and this clearly indicates that there is, at all events, some slight logical looseness in the screw of the corporation's resolution.

Thus, then, we find the following facts before us in favour of giving this courtesy title of Dr. to all Licentiates of Colleges of Physicians:—That Licentiates are physicians; that the public regard physicians and doctors as synonymous individuals; that the College of Physicians of London has itself sanctioned the affix of Dr. to its Licentiates' names; that the Colleges of Physicians, when they were making Licentiates by hundreds during the year of grace, in their consciences (if corporations really possess such inconveniences) well knew that the Licentiates would take the title of Dr. with their license; that the Colleges do *not* direct or recommend their Members, etc., not to give the affix to non-diplomatised Licentiates; and that it is impossible, and would be most unfair, to attempt to draw any line of distinction between one set of Licentiates and another; and, therefore, that all are equally entitled to all the privileges which belong to "physicians". Lastly, we may add, that there is nothing illegal in the assumption of the prefix of Dr. And for these reasons we conclude that we cannot refuse to give the title of Doctor to any Licentiate of a College of Physicians who chooses to ask for it.

We must, however, in conclusion, state that for any non-diplomatised person* to append to his name the letters M.D., appears to us to be doing that which is utterly without defence. He undoubtedly thereby subjects himself to the pains and penalties of legal prosecution; and, worse than this, we are satisfied that he will, in so doing, meet with the general reprobation of the profession.

MEASLY PORK.

M. Delpech has just read a paper at the French Academy of Medicine on the hygiene of measly pork.

The "leprosy" of pork, he concludes, consists in the presence of cysticerci in the tissues of the animal, and especially in its muscular tissue.

Taken into the human stomach with the meat raw or not well cooked, these animals are the most common, if not the sole source of the development of this entozoon.

The researches, however, of Weiss of St. Petersburgh on the flesh of raw beef, and the curious facts collected by M. Judas from the reports of the military medical men, who have pointed out the endemicity of the animals in Algeria, show that further investigations are required to prove that the affection has no other origin.

The cysticerci exposed for some length of time to a temperature of 100° centigrade (212° Fahr.) are destroyed, and the flesh containing them thereupon loses its hurtful properties.

The cysticerci are rarely found in the fat. Measly pork, therefore, cooked in the neighbourhood of the abattoirs, under the surveillance of the police, may be safely employed as an article of food; and the fat may be also safely employed.

The cysticerci in the pig are derived from the ingestion of the ova of the tænia solium, or some other species of worms enclosing the ova, which they find

* We of course exclude from this consideration the Licentiate of the King and Queen's College in Ireland.

in human excrements. This diseased condition of pork results originally from the filthy condition in which the pigs are kept.

It would be well to spread these facts widely and authoritatively amongst those who breed pigs. During life, the characters of this condition of the pig are obscure. The presence of sublingual vesicles, when it exists, is the only sure sign.

These different conditions have caused the authorities to prohibit the sale of diseased pork; but we may now consider that this prohibition should be removed. Moreover, the loss ought to fall on the person who fed the animal, and not on the butcher who buys it for sale. This would cause the breeder to be more careful in the keeping and feeding of his pigs.

THE WEEK.

We would call the especial attention of our readers to a letter signed "An Army Surgeon." The writer knows his subject well. The gross injustice to which he calls attention should be well understood in the profession. From the systematic way in which the Medical Department of the army has always been snubbed by the aristocrats at the Horse Guards, it appears evident that there is only one way by which the profession can wring justice from that quarter. The profession has certainly (if it would only exercise its powers) in its own hands the means of teaching the Horse Guards a lesson; and that is, by abstaining from entering into the army, until the equitable terms of agreement laid down by the late Lord Herbert are granted. At all events, the younger members of the profession would do well carefully to consider the actual worth of the position they will obtain by entering the army, before they don her Majesty's livery. Our correspondent certainly gives no flattering account of the position and prospects attached to it.

At a meeting of numerous friends (medical and general) of Mr. Adams, held on the 18th instant, at 5, Cavendish Square, it was resolved, that a public meeting should be called to express sympathy with Mr. Adams, as being the victim of an attempt to extort money; and to consider what steps should be taken to prevent unjust charges from being brought against medical and other members of society. An executive committee was appointed to carry out this resolution. The feeling in favour of Mr. Adams was universal and most strong. Much misconception, it was stated, had arisen in the public mind, and prejudice has been raised against him, in consequence of the report of the trial given in the *Times*. From this report, many persons have been led to think that Baron Pollock summed up against Mr. Adams. Mr. Adams has, therefore, published the judge's summing up in full from the short-hand writer's notices; and a perusal of it will satisfy any one that the judge was, from the beginning to the end, in favour of Mr. Adams. Indeed, it appears certain that, had it not been that some twisted-minded person had been on the jury, the trial would have been stopped by the judge on the first day. The general feeling at the bar is clearly in favour of Mr. Adams. An eminent legal authority assures us that, in his opinion, the verdict of the jury in the case of Russell *v.* Adams was undoubtedly wrong—undoubtedly not justified by the evidence. It ought, he says, to have been simply a verdict for the defendant. The meeting referred to will take place early next week, and the public will then have an opportunity of manifesting their sympathy with Mr. Adams.

Mr. Coulson has notified to his colleagues his resignation of his office of surgeon to St. Mary's Hospital. Mr. Spencer Smith will doubtless fill the vacancy caused by his retirement.

In alluding, as we have often done, to the abuses practised in London hospitals by those who obtain improperly gratuitous medical advice, we have remarked that it is especially in the special hospitals that these abuses are most rampant. A remarkable instance of the fact came before the public at a late trial. A "gentleman of the name of Crump, a cashier," who, it appears, pays his governess forty guineas a year, obtains a letter, and sends his child to the Orthopædic Hospital, where it is treated gratuitously. Such a case needs no comment. Gratuitous advice given in this way is simply a robbery of the profession.

Dr. Struthers, Lecturer of Anatomy in the Edinburgh School of Medicine, has lately written a paper on the function of the round ligament of the hip-joint. Anatomists, as our readers know, have heretofore differed as to the uses of this ligament. Dr. Struthers now says:—"The function and the only function of the ligamentum teres is to check rotation outwards in the flexed position."

We suppose that the supply always indicates a demand; and, therefore, must conclude that the following advertisements, taken from the *Daily Telegraph*, show the existence of a peculiar kind of traffic, which is going on spite of our famous and innocent Medical Act:—

"For Sale.—A Medical Diploma to be disposed of. For price, etc., send a directed envelope to J. A., care of Bookseller, 3, Spur Street, London, W.C."

"An Original Medical Manuscript to be disposed of. It is a first class production, and will bring both profit and *prestige* to the purchaser. Address, for interview, to Medicus, 3, Spur Street, London, W.C."

M. Renault informs the Academy of Sciences that during the last twenty-four years he has, at Alfort, made numerous experiments for the purpose of learning the period of incubation of hydrophobia in the dog. During that period, 131 dogs have, under conditions (which he describes), been either bitten by mad dogs under his own observation, or have been inoculated by him with the foam as immediately collected from the mad animals. Of this number, 63 having presented no signs of disease during the four subsequent months, were not further observed. Of the 68 others, the hydrophobia was developed at various periods, as shown in the following table :—

In	1	dogs between the	5th and 10th day.
	4	,, ,,	10th and 15th day.
	6	,, ,,	15th and 20th day.
	5	,, ,,	20th and 25th day.
	9	,, ,,	25th and 30th day.
	10	,, ,,	30th and 35th day.
	2	,, ,,	35th and 40th day.
	8	,, ,,	40th and 45th day.
	7	,, ,,	45th and 50th day.
	2	,, ,,	50th and 55th day.
	2	,, ,,	55th and 60th day.
	4	,, ,,	60th and 65th day.
	1	,, ,,	65th and 70th day.
	4	,, ,,	70th and 75th day.
	2	,, ,,	80th and 90th day.
	1	,, ,,	100th and 120th day.

Thus, of these dogs—

	31	became mad after the	40th day.
	23	,, ,,	45th day.
	16	,, ,,	50th day.
	14	,, ,,	55th day.
	12	,, ,,	60th day.
	8	,, ,,	65th day.
	7	,, ,,	70th day.
	3	,, ,,	80th day.
	1	,, ,,	118th day.

The last number of the *American Medical Times* gives an engraving of the instruments of a notorious abortionist. They are fifteen in number, and of a most unsurgical-like appearance. They were found "at the establishment of the notorious abortionist, E. M. Browne."

"The complete collection contains forty different articles. The principal ones are here represented. They consist of spoon-handles, bent in different directions to suit the operator; several penholders with wire attached; one tack-hammer, with glass rod for a handle; one hair curling-tongs, altered to resemble a placenta-forceps; two porte-crayons, holding mustard-spoons; one large glass tube, closed at one end with wax and covered with cerate, containing cowhage (mucuna pruriens); together with catheters, bougies, etc."

His trade is for the moment arrested.

"Clementina Anderson, then between four and five months pregnant, entered this establishment to have an abortion produced. On the same day she was subjected to two operations by Dr. Browne; one in the morning, and the other in the afternoon."

In the end she dies, and so brings Mr. Browne into the hands of the law.

Ireland is the country of anomalies. It is really difficult to understand why in Ireland alone Poor-law medical officers must be twenty-three years of age before they are fit for their duties. The *Dublin Medical Press* may well cry out for justice here :—

"The Poor-law Commissioners in Ireland make the attainment of the age of twenty-three years a necessary condition for obtaining an appointment to a dispensary or workhouse. At twenty-one years of age, a man is eligible, even in Ireland, to be placed in charge of a county infirmary; he may be appointed as surgeon or physician to any gaol, penitentiary, or lunatic asylum; no hospital in Dublin is closed against him on account of age; and her Majesty's service in the army or navy is open to him. Strangest of all, however, is the fact, that he is eligible for any Poor-law appointment in England and Wales. Can it be explained why in England a young gentleman shall at once enjoy the fruits of a successful course of study, and in Ireland he shall be literally punished for his diligence and promptness in the acquisition of professional knowledge. Surely this state of things is unjustifiable, and calls for a speedy alteration."

The *Gazeta de Lisboa* relates a case of aneurism of the vertebral artery which was mistaken for aneurism of the carotid. It occurred in the Lisbon Hospital San José. The tumour occupied the left side of the neck, reaching from the ear down to within four or five *centimètres* of the clavicle. It was soft, elastic, and pulsated feebly, the pulsation being diminished by pressure on the carotid. There was no *bruit* audible over it. It was first thought to be an abscess, and afterwards a carotid aneurism. The ligature of this artery was, therefore, practised; but the pulsations of the tumour were not stopped thereby. In the evening of the day of operation, the patient became agitated, and three days later paralysis of the left side of the face occurred, with violent pain in the arm, which was also paralysed on the following day. The tumour was rapidly developed; dyspnœa, caused by pressure on the larynx, at last destroyed life about twenty days after the operation. The sac contained about 1000 *grammes* of blood, liquid and in clots, and communicated with the vertebral artery in its passage between the axis and the third vertebra.

The atmosphere of Strasbourg seems favourable to the operation of ovariotomy. Dr. Kœberlé of that city has, we read, practised it four times, and four times with success. His last case, however, was nearly fatal. On the twelfth day after the operation, in consequence of distension of the abdomen, the pedicle was ruptured, and hæmorrhage into the peritoneum occurred. Dr. Kœberlé thereupon opened the wound, sought for the pedicle, tied the ovarian artery (from which the blood escaped), and applied perchloride of iron to the pedicle. He then carefully removed all the blood from the peritoneal cavity, and closed it up again. No accident followed, and now, forty days after the operation, the woman is convalescent.

L'Union Médicale and the *Gazette Médicale de Lyon* still carry on a disputation respecting the propriety of advertising being permitted in medical journals. The Lyons journal says it cannot be necessary, for "our journal lives, and so do half a dozen more, who allow none of these lying documents (as he calls them) admission. The *Gazette Médicale de Paris*, the *Gazette Hebdomadaire*, the *Archives Générales*, the *Bulletin de Thérapeutique*, also all do well, and yet none of them admit advertisements."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Hunterian oration, now biennially given in the theatre of the above institution, was on Saturday last delivered by Professor Gulliver, F.R.C.S., before an unusually large audience. The orator, who was received most enthusiastically, commenced by admitting the difficulty at this day of finding absolute newness for comments on the valuable records of Hunter. In his time physiology and zoology were so oppressed by mere facts as to be in danger of sinking under their number, confusion, and weight, until he so surveyed and arranged them as to show their affinities and contrasts. Long before there had, indeed, been a sort of dead order, which it was reserved for his genius to mould by expositions of relation and difference, of unity of progression, or continuity of transition, or development, into a living method. No one can properly contemplate Hunter's unrivalled museum in connection with his writings without perceiving this great truth, nor without being impressed with the force of evidence by which the master spirit was led to the impressive and crowning conclusion that life is independent of or precedent to organisation. Moreover, a somewhat familiar acquaintance with his works has long since taught us to look up to him as the foreteller of many principles or central phenomena, only recently become well known by new or improved means of research, and claimed as late discoveries, in utter ignorance of his earlier observations. Among other instances, his description of the leading fact in the formation of the buffy coat of the blood was particularly worth notice, not only from its importance, but also because his priority in this respect was so little known or even suspected, and so long completely hidden, that it was left for Professor Gulliver to point out, in his course of lectures lately delivered, how the immortal Hunter had anticipated the main result of the excellent observations of Schroeder van der Kolk, Nasse, Henle, Wagner, and Wharton Jones. The orator then gave an elaborate history of the fibrine of the blood, and its vital endowments, of deep interest to the medical profession, together with notices of those physiologists who had confirmed Hunter's views on this important subject. Mr. Gulliver severely censured some of the authors of books, more particularly German works, placed in the hands of our pupils. "What," he asked, "is this plasma, protoplasm, blastema, or cytoblastema of these Germans, but the coagulable lymph of our own illustrious Hunter?" He added, amid considerable applause, that we had now adduced sufficient evidence to show that the Hunterian doctrine respecting the blood stood yet in all the majestic simplicity of truth, really unaffected by the more complex tenets of Schleiden, Schwann, and Valentin; that, in fact, even this single scene in the great drama, this little episode in the grand epic of Hunter's labours, would alone be sufficient to show the depth of his genius, and entitle him to the admiration and gratitude of all posterity. Since the last address had been delivered death had numbered among its victims such worthy disciples of Hunter as Quekett, Norman, Stanley, and Brodie. The three latter died full of years and in the enjoyment of all that should accompany old age. Professor Quekett was early lost to science. He was one of the first, if not the very first, in this country of those eminent men who devoted their talents exclusively to the abstract branches of the profession, regardless of the meaner considerations of practice and profit. Though Mr. Quekett, like Pope, might truly have complained of "that long disease, his life," he retained to the last his wonted serenity and affability, kindness, and humility, unaffected by the plagiarism of his labours abroad, or even by the pitiful attempts of anonymous slander at home. The orator, in conclusion, paid eloquent eulogiums on the characters of Sir Benjamin Brodie and Messrs. Stanley and Norman.

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

BY desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the JOURNAL cannot be sent to them.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, November 10th, 1862.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Ordinary.]	Athenæum, Corn Street, Bristol.	Thursday, Feb. 26, 7 P.M.
LANCASH. & CHESHIRE. [Ordinary.]	Royal Institution, Manchester.	Thursday, March 12th, 3 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Pavilion Hotel, Folkestone, on Thursday, March 5th, at 3 P.M.

THOMAS BOYCOTT, M.D., *Hon. See.*

Canterbury, February 10th, 1863.

LANCASHIRE AND CHESHIRE BRANCH.

AN ordinary meeting of this Branch will be held at the Royal Institution, Manchester, on Thursday, March 12, at 3 P.M. Notice of papers, etc., to be sent to the Honorary Secretary.

A. T. H. WATERS, M.D., *Honorary Secretary.*

Liverpool, February 16th, 1863.

SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

A GENERAL meeting of this Branch was held at the George Hotel, Shrewsbury, on Friday, February 13th, under the presidency of ROBERT BLAIKIE, Esq., of Oswestry. A goodly number of members were present. Letters were received from many others, regretting that, in consequence of the great amount of sickness prevailing at the present time, they were unable to attend; and suggesting summer or autumn as a better period of the year for the meeting. This point was referred to the consideration of the Council of the Branch.

The President then gave an excellent and brief address.

Papers. The following papers were read.

1. On the Present Treatment of Disease. By W. Newman, M.D.

2. Case of Hæmorrhagic Diathesis complicated with Renal Disease, producing Total Blindness: Dissection of the Eyes. By Professor Wharton Jones.

3. Case of Traumatic Tetanus from Compound Frac-

ture of Leg, in which Recovery took place on Division of the Internal Saphenous Nerve. By Samuel Wood, Esq.

4. A Handful of Scraps; being Short and Practical Notes on several Medical and Surgical Subjects and Formulæ for the Elegant Selection of the Gum Resins. By W. W. Morris, Esq., Clun.

5. Case of Lithotomy, in which Phagedænic Ulceration occurred, and Recovery after the Administration of Oxygen Gas. By William Eddowes, Esq.

New Members. The following members were then elected:—Charles J. Covernton, L.R.C.P.Edin.; William Eddowes, jun., Esq., M.R.C.S.

The members afterwards dined together, and a very agreeable evening was spent.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 10TH, 1863.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

REPORT UPON SYPHILIS, IN ITS MANIFESTATIONS AS A CONSTITUTIONAL DISEASE.

BY JEFFREY A. MARSTON, M.D., ROYAL ARTILLERY.

[*Communicated by* HENRY LEE, Esq., F.R.C.S.]

AFTER referring to a previous paper,* the writer gave a short *resumé* of prevailing doctrines. Upon the subject of one attack of true syphilis affording an immunity against a second, the writer made some remarks illustrative of its general truth, to which, however, there were a few rare exceptions. Under this category he gave a case, in which a soldier had been treated twice during eighteen months for indurated chancre.

The writer next briefly adverted to the comparatively modern reaction relative to the contagious character of secondary syphilis. He then passed to the subject of secondary sores upon the penis, commencing either by a recrudescence in the cicatrix of a former sore, or upon some part not previously diseased. These he described under three heads:—1. Such secondary lesions may commence as a circumscribed patch of purple or bluish redness, very slightly raised, from which the epithelium is shed, the surface becoming abraded, cracked, or covered with ill-formed and degenerating epithelial products. 2. This purplish-red spot, after becoming raised, takes on a chronic ulceration, similar to that of the scooped-out ulcers seen upon the tonsils. The first variety corresponds with, and often accompanies, a squamous or erythematous exanthem; the latter appears allied to the syphilitic tubercle, the ulceration of which plays so important a part in the evolution of syphilis in some subjects. 3. The third variety appears as a persistence of the ulceration, or an unhealed condition of the chancre, which becomes transformed into a mucous tubercle, as described by Ricord. Of these he gave illustrative cases.

Upon syphilitic infection, contracted from some other source than contact with a virus obtained from a primary lesion, the following were cited as in all probability instances:—

1. A wife and two children. The former had syphilitic nodes and an ulcerating tubercle upon the lower extremity. Of the latter (who slept with her) one was an infant, in whom the disease was probably hereditary, though not congenital in its outward manifestations; the other was a girl of five years, with anæmia, non-ulcerated sore-throat, engorged post-cervical glands, cutaneous syphilida of trunk, with psoriasis palmaris. All had very restless nights. The husband lived separately, and was healthy.

2. The subject of disease was a military servant, a married man, who suffered from secondary and tertiary symptoms after intercourse with a woman known to be constitutionally syphilitic. Attempts to trace any primary lesion in this man failed.

3. The infection of a female by labial contact with diseased secretions from secondary lesions upon the lips of a male. The disease so produced in the female commenced as an irritable and indolent fissure upon the mucous membrane of the lower lip.

The writer next adverted to the evolution and succession of syphilitic symptoms as ordinarily witnessed among soldiers.

Under the cutaneous affections, he particularly remarked upon the mixed character of these; the majority of cases partaking of more than one affection at the same time, and upon the same or different parts of the body. Although great modifications in the future health and efficiency of the soldier were, doubtless, the result of syphilitic infection, yet cases of the more severe and intractable forms of constitutional disease were not very common.

With the view to prognosis, the writer said it was important to inquire, what relation, if any, has the severity of the primaries to those of the latter symptoms? From a consideration of his own observations, he inferred that the following were as approximate expressions to the truth as the facts warranted:—

1. The greater the induration, and the longer the period during which primaries remain unhealed, the more certain will it be that the constitutional infection will be severe.

2. The amount of ulceration, etc., of the primary sore stands in some relation to the worse and more intractable forms of secondary lesions—*e. g.*, the pustular, erythematous, and rupitic eruptions,—the unhealthy ulcerations, nodes, and gummatous tumours.

The writer then passed to those cases in which there was an irregular evolution and succession of the stages and symptoms of syphilitic disease. Assuming that, when an indurated sore has been recognised, some specific treatment has been employed, and that soldiers are exposed to changes of climate, etc., we might infer, what is actually the case, that the constitutional symptoms would be irregular in their appearance and varied in their kind. As illustrative of his remarks, the author cited:—

1. A case of Hunterian chancre unhealed at the end of three months, when syphilitic rheumatism, and a node upon the left parietal bone appeared.

2. A case in which, three years after a sore upon the external integument of the penis, a soldier suffered from two attacks of jaundice, anæmia, nodes upon the tibiæ, synovitis of left knee-joint, and rheumatism, without any history of secondary symptoms having been traced.

3. A case of repeated epileptic attacks, with violent pain in the head (upon which a node appeared), cured by specific treatment. The subject of the disease had suffered from repeated attacks of venereal disease, but not from any primary disease for two years and a half previously.

4. A case of chronic dyspepsia, slight icterus, pseudo-epilepsy, and paralysis of the third nerve. History of syphilitic attack two years before. Treated then by mercury. No history of secondary symptoms elicited by close questioning.

5. A case of osteocopic pains, paralysis of seventh nerve, followed by lichen and iritis, in a man undischarged from hospital for primary disease.

6. One of secondary syphilis, in which symptoms of intracranial inflammation appeared, followed by marked alteration of manner, loss of memory, dirty habits, etc.

7. Case in which there were—first, symptoms indica-

* Syphilis, with reference to the more mixed and unusual forms of the primary symptoms. *Medico-Chirurgical Transactions*, vol. xlv.

tive of venous lymphatic absorption of pus, or some of the diseased products of secondary lesions; second, ocular disease, paralysis of third nerve, and other symptoms indicative of intracranial mischief.

The writer adduced also other cases, and made some remarks upon the character and nature of these nerve lesions.

As illustrative of the long interval which sometimes ensues between an attack of primary and secondary symptoms, he adduced the following:—

8. Lepra, psoriasis, and syphilitic cachexia, in a man who had not suffered from primary disease for nearly five years; he had been married for three, and his offspring were healthy.

9. Syphilitic cachexia, etc., in an infant, who died of the disease; the father not having had primary symptoms for four years, and having been subsequently the parent of one healthy child.

The author then spoke of the occasional latency of the syphilitic element, until some other disease or impairment of health appeared, which seemed to act as an exciting cause to its manifestation. He also remarked upon the modifications of diseases, or convalescence from them, that are sometimes, apparently, the result of a prior syphilitic infection. In support of the foregoing he gave some cases.

The paper concluded by stating the experience of the author to show that the effect of the Mediterranean climate upon the syphilitic diathesis was very inimical during the summer months.

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

FEB. 4, 1863.

E. LUND, Esq., in the Chair.

West African Drugs. Mr. ARTHUR RANSOME laid before the Society a collection of vegetable productions from West Africa, used by the natives for medical purposes. They had been forwarded to Mr. Thomas Clegg, a gentleman largely engaged in the promotion of cotton culture. Most of them were new to the members, and it was thought that there might be some of value; among others were a new vermifuge, several remedies for intestinal pains, and also several internal remedies for scabies.

Cataract. Dr. SAMELSON showed a case of cataracta arida siliquata tremula in conjunction with atrophy of the iris. The patient was twenty-six years of age, otherwise healthy. The disease originated six years ago, without pain or inflammatory symptoms. The posterior capsule is a perfect, milky, concave disc, in front of which are yellowish white masses of irregular form and apparently cartilaginous hardness, and suspended, as it were, at the top only. As regards the iris, only a narrow light-coloured contour of varying width appears. The anterior layer is entirely absent, the urea alone remaining; the pupil, however, is round and dilatable. The globe is softer than its fellow, and slightly reduced in size. There is faint perception of light. The right eye is moderately short-sighted.

Thermometer for Medical Purposes. Mr. T. WINDSOR exhibited a cheap and accurate thermometer, of German manufacture, for medical use; and several members commented on the diagnostic value of the temperature in various acute diseases.

Aneurism of the Aorta. Dr. W. ROBERTS showed a preparation of a large aortic aneurism proceeding from the middle portion of the arch. It communicated with the aorta by a small round opening, and from the tumour appeared to spring the innominate and left carotid arteries. The case was interesting from the doubt as to whether this appearance was due to an aneurism arising between the origin of these two vessels, or to an abnormal origin of the latter from the former. Dr. Roberts inclined to the latter view of the case.

Hydrocephalocele. Dr. LORIMER exhibited a preparation of a case of congenital hydrocephalocele in a child ten months old. The general health had been good up till a few weeks before death, but the tumour rapidly increased while dentition was commencing. After an attack of measles, the skin over it sloughed, and gentle oozing of fluid took place; convulsions occurred at the close. The lateral ventricles were extremely dilated with serum. In the tumour was a pouch of membranes with a portion of cortical substance. The circumference of the tumour was ten inches.

Apoplexy. Mr. PEATSON exhibited a brain showing a large apoplectic hæmorrhage into the left side of the cerebellum. The symptoms were not observed during life.

Chronic Arthritis. Dr. LORIMER exhibited a preparation of the hip-joint showing an immense accumulation of osteophytes, the consequence of chronic arthritis following an injury of the joint.

Pathology of the Retina. Mr. HUNT read a paper on the Pathology of the Retina. He dwelt chiefly on the subject of muscæ volitantes, which he endeavoured to classify according to their seat of production and corresponding appearance. Certain forms he considered to have their origin in an actual change of the structure of the retina and of its circulation, and to exist independently of disease of the brain or optic nerve. These were characterised chiefly by their diffused cloudy appearance, of varying degrees of intensity. He promised to return more fully to the subject on a future occasion.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

FEBRUARY 4TH, 1863.

The Calabar Bean. An interesting paper was read by Dr. D. ARGYLL ROBERTSON, on the Calabar bean as a new agent in ophthalmic medicine. Dr. Robertson related some experiments which he conducted, whereby he proved that the application of a spirituous extract of the bean to the conjunctiva caused myosis or contraction of the pupil, and induced a condition of temporary myopia or short-sightedness. These effects he ascribed to stimulation of the ciliary nerves, which he concluded was the action of the Calabar bean on the eye. The action of the Calabar bean was directly antagonistic to that of belladonna or atropine on the eye; and the one possessed the power of counteracting the effects of the other. The cases in which this new agent might be usefully employed, he said, were more especially those in which atropine had been employed with the view of aiding ophthalmoscopic examination, or of assisting in the exact determination of the state of the accommodation of the eye; cases of paralysis of the ciliary muscle, which frequently results from long continued debilitating diseases; and cases of ulceration at the margin of the cornea, where perforation and prolapsus of the iris may be feared.

Phthisis and Insanity. Dr. T. S. CLOUSTON read a paper containing statistics on the relations between phthisis and insanity. He pointed out many interesting facts; among them, that there is an increased percentage of phthisis (as ascertained by *post mortem* examination) among the insane; that the occurrence of phthisis in the general paralytic was extremely rare; and that in phthisical subjects the form of insanity was always marked by depression. When acute mania occurred in such cases, the patients neither made complete recoveries, nor subsided into a condition of progressive dementia, but, after the acute symptoms passed off, remained in an irritable condition, and in almost every case manifested in a marked degree monomania of suspicion. Where tubercle was found to exist in the peritoneum, the cases had all been of a melancholic nature.

Correspondence.

THE ARMY MEDICAL OFFICERS AND THE HORSE GUARDS.

Sir,—It is well known that the British Medical Association led in a great degree to the removal of the unjust position of inferiority in which the assistant-surgeons of the navy were formerly placed on board ship. The time seems now to have come when the attention of the members of the Association should be called to the treatment of medical officers in the army. The combatant authorities, in whom are vested nearly all influence and power, have undone so much, and evince such determination to undo still further, the work of two Secretaries for War, Lord Herbert and General Peel, as regards the medical profession in the army, and to stamp on the medical officers a status even lower in relation to themselves than existed before the issue of the Royal Medical Warrant, that now the interest of the whole medical profession seems concerned in the question. Moreover, there is now a want of medical officers. Young men are required for assistant-surgeoncies; but there can be no doubt that men of good attainments will not compete for commissions when they ascertain the opinions of their value, and what the chances of their future prospects are, from those who are already in the army. The feelings of disappointment and irritation which pervade the army surgeons are so deep, as no doubt now to be injuring their usefulness, and are evidently making some of them lose all pride in their vocation. An inquiry into the subject is therefore urgently required, and the more thoroughly it is sifted the better.

I will recall briefly one or two matters which relate to the present condition of the medical profession in the army. It is well known that medical officers had been for years prior to the Crimean war dissatisfied with their position relatively to other officers of the army; that the causes of their complaints were thoroughly investigated by the Royal Commissioners on the sanitary state of the Army, of which Lord Herbert was chairman in 1857; and that this dissatisfaction was then proved to be well founded and just. It was also shown that the position of the medical officers caused indirectly many evils to the army itself. In consequence, the Royal Commissioners advised the preparation of a new Warrant, ensuring to medical officers the rank, emoluments, and rates of retirement to which their services entitled them. This Warrant, framed by Lord Herbert, was issued with royal authority, by General Peel, in 1858.

Among the clauses of this Warrant was the following:—"The relative rank of the medical officers of our army shall be as follows: Staff, or regimental surgeon as major, according to the date of his commission, etc.," and again another, the seventeenth clause, which defined that, "such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds (except as regards the presidency of courts-martial, where our will and pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel, and light, or allowances in their stead, detention, and prize-money. But, when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters."

In 1861, the surgeons were reduced from ranking as majors according to date of commission, and were ordered to take rank after all majors. This alteration caused so much dissatisfaction, that a year ago a committee was ordered to consider the matter. They reported that the rank ought to be restored, and the medical profession was congratulated in the *Globe* ministerial paper on the prospect of its speedy restoration. The rank has not been restored; in consequence, it is asserted, of the influential objections of the combatant chiefs at the Horse Guards.

The seventeenth clause, quoted above, contains some of the most valuable of the privileges which were conferred by the Warrant; but, clear as its language and meaning are, those privileges have been systematically evaded or ignored. In this lies the main grievance of the medical officers. They are publicly told they have no rank, not even in the mess-room; that an ensign who may have just joined the army from school, has precedence over the oldest surgeon in the service, even in the ordinary ceremonies of the dinner table. No sooner was the Warrant published, than military orders were given in direct opposition to it, that no medical officer was to be allowed to sit as president of any committee, whatever its nature, where a combatant officer was present. If the experience of such a medical officer was required, he was only to be permitted to give information as a witness to the committee. If a medical officer claimed the horses, servants, or other allowances, such as the military officer of relative rank obtained, he was met with evasions, and the demand refused. If the Commander-in-chief obtains the allowances of a Field Marshal, he obtains nearly double the allowance for forage, for horses, that he had as a general, though no one could say that the increase was rendered necessary by additional work; and the same rule descends through the ranks of the combatants; but medical officers under corresponding circumstances are told that the rule does not apply to them. In India, the medical officers are told that none of the provisions of the Warrant have any force there at all, and to this hour its very existence is ignored in all three presidencies.

Another occurrence, quite new in its nature, has taken place several times during the past year, which has tended to undermine more deeply the confidence of medical officers in their position. Several surgeons have been dismissed from the service without any trial or court-martial, for asserted incompetency or misconduct, after years of service, without any statement being published in the *Gazette* containing the notice of dismissal, beyond the fact of their services being dispensed with. The current pay has never been regarded even by the authorities as full compensation for medical services, but only as part; the remainder being the rate of retirement according to length of service. Now all dependence on this provision is destroyed. The surgeons in the army regarded the Royal Warrant as a Charter of rights, and those who have entered the army since its publication were told by their teachers that it was a guarantee of the position they were to hold, and the recompense they were to receive for their services. They now find that, however clear the language of the Warrant itself may be, they have no guarantee for its just interpretation, and can there then be wonder at the prevailing discontent?

It is the custom for the combatant officers to urge as an excuse for their treatment of the medical officers, that the latter wish to assume military command. The medical officers deny this; they assert that they have no idea of coveting the province of the combatant officer. The seventeenth clause of the Warrant they seek the fulfilment of, and other clauses, settle all question of military command. They only desire to be on a fair footing with their brother officers, as gentlemen of at least an equally liberal profession should be, and to have the rights which the Warrant of 1858 conferred on them. They wish nothing more, and will never be content with anything less.

One other point: as before mentioned, assistant-surgeons are now wanted for the army. There are alto-

gether about seventeen hundred medical officers required for the Queen's forces, including India. The number of higher grades is very limited. It is calculated that, at the present rate of promotion, an assistant now entering the army will be from sixteen to eighteen years before he becomes a full surgeon. With such treatment existing, and such prospects before, can any but those who have no chance of occupation elsewhere, be looked for as competitors for army employment?

I am, etc., ARMY SURGEON.

February 1863.

"O FORTUNATOS NIMIUM .... AGRICOLAS."

SIR,—The "experiences of a country practitioner" constitute, so far as I am aware, the unwritten page of our medical literature; and doubtless would, if sketched by a master hand, form an interesting contribution to the annals of medicine.

Cut off to a large extent from much intercourse with his professional brethren, the country practitioner "lives, moves, and has his being," within a sphere of his own. There he is bound as by an iron chain, which so rarely admits of any lengthening out, as to afford him but few opportunities of coming into contact with the great world around him. He is necessarily thrown much on his own observation—largely on his self-reliance and promptitude of action—in the performance of the various duties which belong to his isolated position. How few of us live to make our names known beyond the limited circuit within which we range! We tread, in a professional sense, a kind of solitary pilgrimage through life, and then pass away,

"Alike to fortune and to fame unknown."

Still, let us hope our labours may not be altogether useless; and although we may say, with the apostle, that our days are chiefly spent "in journeyings often, in weariness and painfulness, in fastings often," yet, on the whole, I have no reason to think we endure either a discontented or an unhappy life. Such has been my lot for upwards of twenty years. I may, therefore, claim to speak, if not with the tongue of wisdom, at least with the voice of experience.

Like most of men, in early life I may have had my day-dreams, and indulged in the belief of a higher destiny and a more exalted station; but time has worn out all such impressions. I am now fully reconciled to my condition, and desire no change. I have lived long enough to learn that happiness consists, not in worldly distinctions, nor even in the acquirement of wealth, but depends rather on the preservation of health and a contented spirit. The possession of the former we may ascribe chiefly to the nature of our pursuits, which require us to spend a large portion of our time in the open air; the latter, I trust, we endeavour to cherish by a constant exercise of the mental faculties, and by allowing no time to be wasted in unavailing regrets. I know of no occupation which better tends to keep both mind and body in high working condition, than the daily avocations of an actively employed country practitioner. A brisk ride of thirty-five miles round the country is a most excellent cordial for a troubled spirit, aided by the additional diversion of attending to the various maladies of eighteen or twenty people during that interesting excursion.

Nature herself lends her bountiful aid towards enlivening our pursuits. We enjoy the delights of spring, the glories of summer, the beauties of autumn, and even the storms of winter. Each season, with its ever-changing landscapes, has its peculiar charms and delicious contrasts, and affords a perpetual feast of varied pleasure.

The geological features of the district in which we live may become a source of surpassing interest. I reside at the foot of an extensive range of chalk-hills, and have formed (so far as I know) a theory of my own to account for their more prominent features. They are deeply excavated by winding valleys, evidently the beds of extinct streams; and the deposits or detritus left behind by the conflux of currents are as distinctly traceable as though the whole had been the work of a recent flood. The upheaval of the chalk is also shown by the varied inclination of the strata, which assume in some places a perpendicular form. The plain or level district below (known by the name of Cars) consists of an alluvial deposit, interspersed with beds of peat, marking the sites of a lacustrine vegetation; and beneath the surface are the remains of a submerged forest, as shown by the blackened trunks which have frequently to be dug up before the land can conveniently be traversed by the plough.

My sketch would be incomplete, if I did not say something concerning the character of the people. They may be divided into three classes; the first comprising the local gentry and clergy; secondly, the farmers, with whom I would also include those who live by trade or mechanical pursuits; and lastly, the agricultural labourers. Amongst the latter, it is commonly the fate of the country practitioner to be largely patronised. I am sorry to add, he receives little else in return for his services. Their apparent reliance upon him, however, in the hour of need, and the anxious manner in which they seek his help, usually overcome all his scruples; and in most cases he obeys their calls promptly, and bestows upon them his best care. On this account, I believe, the poor rarely suffer, even in our remotest districts, from want of proper medical assistance.

The farmers, as a rule, are our best friends. As a class, they are noble fellows; and though they may want the exterior polish which bespeaks a refined education, and display at times a roughness and sternness of manner, they are generally true and sound at heart. Their hospitality is unbounded; you may dine with them every day, and find a welcome. I merely mention this as an illustration of their character.

The gentry, unfortunately, do not figure largely in the ledger of the country practitioner. Each family appears to have its "town" physician, who, as one might suppose, provides a batch of prescriptions suitable for the various disorders, both present and to come. These, of course, find their way to the chemist's shop. The "village doctor" is merely summoned under the same conditions as the country tailor; viz., in cases of great emergency. I have heard it intimated that this feeling has been sometimes fostered by the metropolitan practitioner; but I, for one, am reluctant to believe it.

Our practice, I need scarcely say, partakes more of a medical than of a surgical character. Unlike our professional brethren living in the mining or manufacturing districts, we rarely meet with severe accidents acquiring the aid of operative surgery. When they do occur, I am not aware of any lack of the usual disposition or ability—as a great warrior once said of his soldiers—"to go anywhere or do anything". I have known a country practitioner to amputate a leg successfully—I may say single-handed, save and except such *impromptu* help as he could obtain by selecting the steadiest nerves around him to hold the candles and hand him the instruments.

Fractures and dislocations, laceration of limbs, etc., not unfrequently come under the care of the country practitioner; but the larger operations of surgery he is seldom called upon to perform. Nevertheless, he considers it his duty to keep "his case of instruments" in proper order, in the event of any necessity arising to require their employment.

Midwifery constitutes rather a large element of our practice; and, if I may so speak, is the bane of our peace. Like some of our heavenly bodies, these cases occur at very irregular intervals—at inopportune and unexpected times—and altogether disarrange our calcula-

tions and movements. They interrupt our daily rounds, rouse us from our sleep, snatch us from our meals or away from the society of our families or friends—everything, in fact, must yield to their imperative calls. Like all other evils, however, they happily come to an end; and we return home, thankful to be released from the imprisonment we have undergone whilst Nature has been engaged in performing her slow yet admirable office.

Now and then we are roused to activity by the occurrence of one or other of those painful complications connected with this department of our profession, with most of which we are too familiar; and they not unfrequently subject us to severe trials. The operation for turning; the employment of the forceps; the performance of craniotomy; or (what we dread, perhaps, the most of all) the supervention of hæmorrhage,—have each to be encountered, without any further assistance than can be secured from the ancient matrons of a country village.

Our obstetrical practice on the whole, I believe, is very successful, as many a country practitioner can testify by referring to a long career of practice without having had the misfortune to lose a single case.

In my younger days, I can remember an old-fashioned country doctor, who enjoyed a great reputation for his success over a wide district. He was a thin, wiry man, somewhat bent with age and long service, but yet active, and a cheerful, hopeful, good-hearted soul. His neck was enveloped in a large "comfortable"; his lower limbs encased in mahogany top-boots, "for his shrunk shanks a world too wide," and apparently constructed for the better convenience of leaping into or leaping out of them at a moment's notice. He also rode a thin gaunt horse, which had a character for endurance only next to that of its master: and to see him perched on an antediluvian saddle, equipped for his journey, was a view of earthly glory not soon forgotten. Poor old man! his labours have long ceased; yet his name is remembered with affection, and spoken of with reverence amongst the hills and valleys where he was so long regarded as the "ministering spirit".

The prevailing complaints of our country districts are, as a rule, stern realities, and rarely belong to the imaginary type. Inflammatory diseases assume an acute form; and fevers rage high amongst the well-fed and well-conditioned residents of our agricultural villages.

I still adhere so far to the "old school" as never to go abroad without a lancet in my pocket; and, in spite of the doctrines now taught by modern physic, I retain some faith in that useful, though formidable little instrument. I have known cases of pleuropneumonia, peritoneal and enteric inflammations, and congestive affections of the brain, apparently cut short by a moderate bleeding. The relief, at least, has been simultaneous with the employment of the remedy; and, therefore, so far as human judgment could decide, might fairly be considered to stand in the relation of effect to cause.

Some distinction is certainly allowable betwixt the judicious use of an established remedy, and its entire abandonment. It is a wise maxim, "to stand fast in the old ways—cleave to that which is good," especially where, so far as venesection is concerned, we have it now displaced from its once accredited position as a valuable agent in the treatment of disease, without leaving us anything behind as a reliable substitute in its place. Most practitioners of the present day depend more upon a careful direction of the efforts of nature towards the removal of disease, than upon their own heroic exertions; and he best fulfils his trust, who knows when and how to assist, and when to withhold.

In all cases of fever, whether typhus, typhoid or exanthematous, bleeding, I believe, is never employed even in country practice. We adopt the sustaining system early; favour the action of the skin, as being the safest source whence "poison" may be eliminated; and administer wine and stimulants in moderate quantities. The bowel-complications of typhoid fever are generally most to be feared; and the worst cases of this kind which I have witnessed have occurred where the patient has injudiciously taken a "lot of physic" at the onset of his illness. Where hæmorrhage has come on, the acetate of lead with opium has been in my hands by far the most serviceable remedy. I entirely accord with the views of Dr. W. Budd on the propagation of fever through the medium of the alvine excretions. I have often been able to trace its extension to that source, and could furnish one or two striking illustrations, if space would permit.

I have also noticed during the prevalence of epidemics, whether of scarlatina, measles, small-pox, or fevers, that each, so to speak, has had a reign of its own—that these different disorders rarely intercalate with each other. Are we to infer each depends upon some specific virus, spread abroad under a condition of atmosphere favourable for its propagation? or that it arises from some change in the ordinary constituents which directly produces such outbreaks? Contagion does not always satisfactorily account for the occurrence of cases, often far apart from each other, or where the least communication with others suffering from a similar malady has never taken place.

I must now conclude. It has been my humble endeavour to describe the thoughts and occupations of a country practitioner—one of a class who may be safely regarded as "outsiders" in the race for professional honours. We may run, but never hope to gain the prize. We yet feel ourselves as belonging to a great commonwealth, which has its representatives even in remote corners and obscure localities, who labour, I trust, diligently and usefully, and under a full sense of the responsibilities connected with a noble calling. We hope to gain our reward, if not in riches and honours, at least in the respect and approbation of those amongst whom it is our lot to toil, whilst endeavouring honestly and faithfully to dispense those blessings which no other profession can so richly bestow as our own.

I am, etc., "Vox Rure."

January 20th, 1863.

DR. SALTER'S LECTURE ON THE STETHOSCOPE.

Letter from H. Dobell, M.D.

Sir,—In Dr. Salter's very excellent lecture on the Stethoscope, there are two points relating to the shape of the instrument, in which I think he is slightly in error; and I shall be obliged by your allowing me, through your pages, to submit what appear to me to be the corrections.

1. Dr. Salter says:—"The ear-piece should be *large*, for the very same reason that the chest-end should be small—to secure apposition and occlusion; for the larger it is, the less critically exact and central need the apposition of the ear to it be in order to prevent chinks and a want of coincidence between them."

I submit to Dr. Salter, that there is a natural limit put to the proper diameter of the ear-piece by the zygomatic prominence. If the half diameter of the ear-piece—that is, from its margin to its central bore—be greater than the distance from the external meatus to the zygomatic prominence, one of two things must happen; either the central bore must be placed to the rear of the meatus, or the ear-piece must be tilted up by resting on the zygomatic prominence, and thus "chinks" will be left, and proper "apposition and occlusion" will be impossible. The diameter given by Dr. Salter—viz., three inches—is too large for the majority of ears. A circumference of seven inches for the ear-

piece, I have found to be the largest which the majority of persons can use, without either resting it upon the zygomatic prominence, or removing the central bore to the rear of the meatus.

2. I quite agree with Dr. Salter, that "the chest-end should be small"; that is a very important point when the stethoscope is required for defining rather than for exploring—and it is for defining that this instrument is especially valuable; but I think it is a mistake to have "the edge narrow," as described and figured in Dr. Salter's lecture. He thus loses two advantages: first, a wide conducting surface of wood; and secondly, a greater safety from the admission of air beneath the stethoscope by slight inequalities in the surface of the chest, or by accidental tilting of the instrument. In my opinion, the chest-end should have as broad a surface of wood as its size will admit of, and this surface should be rounded off towards the circumference and towards the central bore, so that the line of greatest convexity shall form a circle about midway between the circumference and the central bore. This secures the most accurate apposition with the least trouble in adjusting, and, having no sharp edges, presents a very comfortable surface to the patient's skin.

Allow me to add to these remarks that, by marking out the circumference of the flat surface of the ear-piece into inches and parts of an inch, a gauge is provided, which, by rolling the ear-piece like a wheel over a part, can be used for measuring any extent of surface either large or small. Stethoscopes comprising the advantages recommended by Dr. Salter, with the addition of such as I have here pointed out, are constructed with great care by Messrs. Maw of Aldersgate Street, and sold under the name of the "gauge stethoscope."

I am, etc., HORACE DOBELL.

29, Duncan Terrace, Feb. 11, 1863.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

LETTER FROM B. W. FOSTER, M.D.

SIR,—Your correspondent Δ, in his letter which appeared in the BRITISH MEDICAL JOURNAL of January 31st, on the power of the King and Queen's College of Physicians to grant the title of M.D., seems to entirely misconstrue the judgment of the Court of Queen's Bench. On reading the trial, it will at once be seen that the case did not at all turn upon the power of the King and Queen's College of Physicians to confer the M.D. The application of my friend Dr. Barker was refused, *only on the ground that the King and Queen's College of Physicians was not enumerated in the schedule of the Medical Act as granting the degree of Doctor of Medicine.* The last sentence in the abstract of the judgment, sent by your correspondent, proves this; viz.: "The applicant, Mr. James Barker, jun., had a diploma from the College of Physicians (K.& Q.C.P.I.); but that was not any of the qualifications mentioned in the schedule entitling him to be registered as a Doctor of Medicine." Dr. Barker lost his case, simply from the fact that the Medical Act had not recognised his College as conferring the M.D.; and therefore the Registrar, acting under the provisions of that Act, could not be compelled to register it. The court carefully refrained from expressing any opinion as to the powers contained in the charter of the College; and stated, moreover, that even if the power of the College to grant the M.D. were admitted, it would not entitle Dr. Barker to the *mandamus* he applied for, as it was not one of the qualifications enumerated in the schedule of the Act.

Your correspondent's remarks as to the comparative value of the opinion of the Attorney-General, and the decision of the Court of Queen's Bench, are, on a clear conception of the case, simply absurd. The opinion of the Attorney-General was given as to the power contained in the charter of the College; whereas the decision of the Court of Queen's Bench, without denying the powers of the charter, only held that the degree could not be registered according to the provisions of the schedule of the Medical Act. The production of the charter could have had no effect in altering the judgment of the Court, as no other decision could be arrived at, with the schedule of the Act retaining its present form. I am, etc., B. WALTER FOSTER.

Birmingham, February 7th, 1863.

SIR,—I cannot for a moment suppose that your correspondent Δ, in his last letter to the JOURNAL, intentionally perverted the truth in the matter of the decision therein alluded to. I would, therefore, in reply thereto, merely remark that the Court of Queen's Bench in Ireland gave no decision whatever on the right of the Licentiates of the King and Queen's College to the title of M.D. The whole legal question there involved was simply this. The King and Queen's College applied for a mandamus to compel the Branch Council to insert the title of M.D. in the *Register*, as an additional qualification; and the court ruled that it was not within their power to do so, as such title was not specified in Schedule A of the Medical Act. The decision went no further. It left the right untouched.

If, as certain internal evidence would seem to indicate, Δ is a resident of the Irish metropolis, he can probably inform your readers why the authorities of Trinity College, who some months ago intimated their intention to try the right of the King and Queen's College to confer the doctorate, have refrained from doing so, although duly informed by the latter College that they were fully prepared to accept the challenge and have the question adjudicated upon.

The gauntlet has again been thrown down by the College; and, should Δ or his College feel disposed to take it up, and try the point in a court of law, either in England or Ireland, the writer will be happy to afford him every facility; and, with that view, encloses his name to the editor for Δ's information, and in the meantime subscribes himself, L.K.& Q.C. and M.D.I.

February 11th, 1863.

THE TITLE OF DOCTOR.

LETTER FROM HUGH MORRIS, L.R.C.P.Ed.

SIR,—I am sorry to take exception to anything that appears in the pages of our JOURNAL; but I must protest against the tone of the letter signed "F.R.C.S." in the number for the 7th instant. "Unscrupulous," "falsehood," "humbug," "imposing," "cheating the public," are words a gentleman does not generally use lightly.

Even if he have met with uncourteous or unfair behaviour on the part of his opponents, that can be no excuse for his denouncing in such terms the whole body of Licentiates of the Royal College of Physicians of Edinburgh, or for his further insinuating that no examination was submitted to by any of them.

While writing his *nom de plume*, he may not have recollected that some few years since at least as many Fellows were created by the London College of Surgeons without any examination, as Licentiates by the Edinburgh College of Physicians in the year 1859; and for myself, I cannot think it a disgrace to have received my diploma from the latter, after being examined by such men as Drs. Craigie, W. T. Gairdner, and Keiller.

There are many of us who, without the desire to aggrandise ourselves at the expense of our professional brethren, contend that we have an undoubted prescriptive right to use the courtesy title of Dr., and the public seems likely to fall in with this opinion. I believe also that some (I can truly speak this of myself) only as-

serted that right in consequence of the gross and ungentlemanlike abuse that was heaped upon us Edinburgh Licentiates at the commencement of this controversy.

In conclusion, I cannot speak too strongly against the common practice of writing anonymously on subjects involving great difference of opinion. I think it leads to more ill-feeling by far than would arise from a contrary course, and that a man would often blush to read his own name at the foot of a letter using ugly words towards his neighbour; while he would regard the same composition with complacency if finished off with F.R.C.S., or any other pseudonym behind which, as behind an ambush, he may think it prudent to conceal himself. I am, etc.,

HUGH NORRIS.

South Petherton, February 9th, 1863.

SIR,—Surely "F.R.C.S." allowed his feelings to outrun his judgment in inditing so remarkable a diatribe. His views and opinions on the question of medical titles appear to be as superficial and erroneous, as his objects are palpable in selecting the Edinburgh Licentiates for vituperation. Is it not, Mr. Editor, manifest that he designedly shelters himself under an anonymous signature for the purpose of charging grave and serious offences against a brother-practitioner, well knowing there can be no opportunity of rebutting them?

I will not occupy your valuable space by entering upon a discussion already worn threadbare, and which, if prolonged indefinitely, can neither abrogate nor affect the right of physicians to the title of Dr.

One erroneous statement of "F.R.C.S." I cannot permit to pass uncontradicted. The Manchester Medico-Ethical Association has never resolved that a Licentiate of a College of Physicians was not entitled to be called Dr.; nor has it once interfered in the question of medical titles. I am, etc.,

L.R.C.P.Ed. and F.R.C.S.E.

February 9th, 1863.

SIR,—I was much amused with the letter of F.R.C.S. on the title of "Doctor", in last week's JOURNAL. He, a Member of the College of Surgeons, pays £10; and without examination, or leaving home, takes the title of 'Fellow", and no doubt considers himself much superior to his neighbour who is only "Member". I, a Member of the College of Surgeons, pay £10 to the College of Physicians of Edinburgh; and, after a most practical and strict examination (which I think F.R.C.S. will find in the JOURNAL for Oct. 1st, 1859), am 'snubbed" because 'I take the title of "Physician" or 'Doctor", which I believe I have a right to assume.

I also beg to state, for the information of F.R.C.S. who says that the College refuses to give us the title of 'Dr."), that on receipt of a circular from the Edinburgh College a short time since, it was directed "Dr."

I am, etc., L.R.C.P.ED. BY EXAMINATION.

P.S. Of course I do not allude to the F.R.C.S. by examination.

February 13th, 1863.

SIR,—There is one circumstance connected with the use of the title of Dr. which does not seem to be generally recognised, but which in some measure strengthens the editorial remarks you have appended to the letter of a correspondent in your impression of Feb. 7th.

In the well known address of Launce to his dog, in the *Two Gentlemen of Verona*, that practical philosopher, among other hints at the cur's imperfections, says:—'I would have, as one should say, one that takes upon him to be a dog indeed; to be, as it were, a dog at all things." Now, this is precisely the position of many graduates who object to their licentiate brethren using the title of Dr.

The words "Doctor of Medicine" have, from time immemorial, implied something more than the fact that the person using the title has graduated at an university. Among gentlemen, and in the higher walks of the profession, a "doctor" has always meant a "physician," one who "took upon him to be a physician indeed; to be, as it were, a physician at all things."

Will the graduate who claims this title and pursues his art as a "general practitioner", consent to forego that general practice and confine himself to the office of a physician. I do not think he will be ready to make any such sacrifice; but until he does so, he must submit to the other alternative, and acknowledge that what has been claimed by the licentiate in courtesy has been forfeited by the graduate in practice. I am, etc.,

CHIRURGUS.

February 9th, 1863.

SIR,—Permit me to thank you for your editorial remarks appended to the epistle of "F.R.C.S." in the number of the JOURNAL for Feb. 7th. I, sir, am one of the "gentlemen, non-diplomatised," *i.e.*, non-graduated, "to whom the London College of Physicians many years ago actually gave distinct permission to take the title of Dr." So far as the "gift of the Dr." is concerned, I would beg leave to add, it was, or is, not "tacitly," but openly and avowedly, made to me, and conveyed, *bonâ fide*, by the word *titulis* in my diploma. On examination, being found a most proper man (ornatissimum virum), I was permitted both to practise and to teach medical science; and I was given, moreover, to enjoy the highest "honours," "titles," and "privileges," common to physicians, here and everywhere.

These words, written in Latin, I see before me in my diploma of the College of Physicians of London. What I complain of, more particularly in company with many members of years standing, is that the governing body of the College did not, previously to the creation of the famous by-law,* which undoctored so many, offer to us some kind of explanation, if not apology, for the course taken, or rather about to be taken. An act of courtesy of this kind would have gone far to put the matter on a more pleasant footing than it now assumes. As it is, I cannot help feeling that could I recall the last twenty-one years of my life, I would then either have been content as a surgeon and apothecary, or have gone northwards for the M.D. degree. It is no joke to a man engaged day by day in the work of our calling to have to relearn the odds and ends of anatomy, chemistry, materia medica, pharmacy, etc., and to polish up yet again old Celsus, Heberden, and others of this class; and, what is more, to pay a sum of money in exchange for even a courtesy title; but this much is now withheld by "my college"† from

Yours, etc., M.R.C.P.LOND., etc.

February 9th, 1863.

SIR,—In the JOURNAL of the 7th instant, you have appended some remarks on the title of Dr. in a spirit of great liberality, which I hope will settle that *quæstio vexata*, the right or claim of using the title. I possess a German degree and am also a Fellow of the College of Surgeons and Licentiate of Apothecaries' Hall, and some time ago I thought it well to pass the London College of Physicians, fully believing that it was the highest medical society in Britain, and that its diploma conferred the absolute right of a title of M.D. In the old charter, when the President confers upon the candidate the dignity of being a Licentiate, he says: "Cum honoribus, *titulis*, et privilegiis." Besides, if the College gives the right of practising and *docendi*, how can a man do that unless he is *doctus*, or substantively doctor.

* This ought never to have had a retrospective operation; herein the College erred.

† See letter by F.R.C.S.

The year of (*dis*)grace did the College an irreparable injury in public estimation; the doctors now are as thick as mackerel. The distinctive honour of being a member of the Royal College of Physicians of London is gone; it is levelled down to the dust. The new Licentiates are calling themselves physicians! Quantum mutati ab antiquis medicis! I confess I am sorely grieved that the venerable old College, chartered by Henry VIII, did not preserve its ancient dignity as a College of Physicians exclusively. Now you have surgeons and apothecaries licensed by the College of Physicians. It is a decided come down; the status is degraded. I am, etc., R. W.

February 9th, 1863.

Medical News.

Royal College of Surgeons. The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwery at a meeting of the Board, on February 11th:—

Anderson, Edward Charles, Birmingham: diploma of membership dated November 18, 1862
Baker, Thomas, Birmingham: November 18, 1862
Bloxam, Matthew, Duke St., Grosvenor Square: Nov. 20, 1862
Bothwell, G. Granville, Rathmullan, co. Donegal: July 31, 1861
Cook, John, Fitzroy Place, Kentish Town: November 5, 1859
Elliot, Richard Luscombe, Kingsbridge, Devon: May 7, 1862
Emmett, William Henry, Bolton-le-Moors: January 30, 1862
Fisher, Stephen Winter, Bristol: August 1, 1861
Hollis, William Pottinger, Burton Crescent: March 8, 1861
Holt, John, Bolton, Lancashire: May 8, 1862
Lloyd, Samuel, Smethwick, near Birmingham: Nov. 15, 1860
McDiarmid, Albert, Rochester: June 10, 1862
Morgan, William Taylor, *Dreadnought* Hospital Ship, Deptford January 14, 1859
Richards, Samuel Smith Crosland, Bedford Square: July 29, 1862
Sheldon, Thomas, Stratford-on-Avon: December 5, 1859
Wine, Henry Charles, Bristol; June 4, 1861

APPOINTMENTS.

Bradley, Samuel M., Esq., appointed Physician's Assistant at the Manchester Royal Infirmary.
Brittain, Thomas L., M.D., elected Assistant House-surgeon to the Chester Infirmary.
Forbes, David, M.D., appointed Surgeon to the Glasgow Lock Hospital.
Gervis, Henry, M.D., appointed physician to the Surrey Dispensary.
Macdonald, Keith N., Esq., appointed Resident Medical Officer to the Bath Eastern Dispensary.
*Mason, Frederick, L.R.C.P.Ed., appointed Surgeon to the Bath Eye Infirmary.
Matthews, Charles S., Esq., appointed Surgeon to the Farringdon General Dispensary.
Nunn, Thomas W., Esq., appointed surgeon to the Middlesex Hospital.
Schollick, Thomas J., Esq., appointed Resident Medical Officer to the Guildford and West Surrey Dispensary.
Watson, William, Esq., appointed Honorary Surgeon to the Lancaster General Dispensary.

The Prince of Wales's Household. His Royal Highness the Prince of Wales has made the following medical appointments to his household.

Jenner, William, M.D. } To be Physicians in
*Sieveking, Edward H., M.D. } Ordinary.
*Paget, James, Esq., F.R.S. } To be Surgeons in
*Pollock, George, Esq. } Ordinary.
Minter, John, M.D., R.N., to be Surgeon Extraordinary.
*Chambers, Thomas K., M.D. }
*Acland, Henry W., M.D., F.R.S. } To be Honorary Physicians.
Armstrong, Alexander, M.D., R.N. }

Poor-Law Medical Service.

Constable, John, M.D., to be Parochial Medical Officer for Leuchars, Fife.
Johnston, Robert, M.D., to be Medical Officer for the Bellaghy District of the Magherafelt Union, co. Londonderry.
Mackenzie, Duncan, Esq., to be Parochial Officer for Kilsyth, Stirlingshire.
Rea, Hugh P., M.D., to be Medical Officer to the Southfield District of the Belfast Union.
Wilde, John, L.R.C.P.Ed., to be Medical Officer to the Winchester District of the Winchester Union.

Royal Navy.

Digan, Patrick, Esq., Surgeon, to the *Castor*.
Orwin, Thomas W., Esq., Assistant-Surgeon (additional) to the *Cumberland*.

DEATHS.

Cavell. On February 14th, at Oakley Square, Camden Town, aged 80, Sarah, widow of the late Charles Cavell, Esq., surgeon, of Bardwell, Suffolk.
Chaldecott, Frederick W., M.D., at Sydney, aged 27, on December 22, 1862.
Murray. On January 2, at Port of Spain, Trinidad, aged 26, Richard Henry Murray, barrister-at-law, eldest son of Thomas Murray, M.D., of Trinidad.
Ridout. On February 15, at Egham, aged 19, Louisa, daughter of G. V. Ridout, Esq., surgeon.
Thomas, John, Esq., surgeon, at Ladbroke Place West, on Feb. 15.
Yonge. On February 8, at Plymstock, Devon, Elizabeth B. A., wife of John F. D. Yonge, M.D.

Births and Deaths Registation (Ireland.) This bill has been read a second time.

University of Oxford. Mr. F. C. J. Griffin of Weymouth, B.A., Lincoln College, has been elected to the Radcliffe Travelling Fellowship.

Metropolitan Association of Medical Officers of Health. The next meeting will be held this (Saturday) evening, at half-past seven o'clock, at 8, Richmond Terrace, Whitehall. A communication will be read from the secretary of the Epidemiological Society, respecting the proper registration of sickness among paupers. Mr. Chadwick will make a proposal in reference to an application to Parliament on the sanitary requirements of public schools. At eight o'clock, Dr. Murchison will read a paper on Continued Fever. A communication on the Fever of Canterbury will be read by Dr. Boycott.

Bequests. By the will of Miss Rosa Frances Lewis of Cadogan Place, the only daughter of the late Mr. W. T. Lewis, the celebrated comedian, the following medical charities, along with several other institutions, receive bequests; namely, to St. George's Hospital, £200; the Hospital for Consumption, Brompton, £200; the Asylum for Idiots, £100; the Lying-in Charity, Liverpool, £200; the Infirmary, Brownlow Hill, £200; and the Dispensary, Vauxhall Road, Liverpool, £200. The sums left by Miss Lewis in charitable objects amount to £14,000; and by her death, a sum of £10,000 and the portrait of her father by Sir Martin Shee revert to the National Gallery.

Russell *v.* Adams. On Wednesday afternoon an influential preliminary meeting was held at No. 5, Cavendish Square, Dr. Brady, M.P., in the chair, at which a resolution was unanimously passed, calling a public meeting, and inviting members of the learned professions and the public, to take into consideration the best means to suppress the increasing practice of attempting to extort money by false charges. A resolution was also passed electing a general and executive committee. The following gentlemen were present:—W. Coulson, Esq.; Borlase Childs, Esq.; I. B. Brown, Esq.; J. F. Clarke, Esq.; Haynes Walton, Esq.; Dr. Markham; Spencer Wells, Esq.; W. Harvey, Esq.; G. Lawson, Esq.; Dr. Leared; Dr. Wynn Williams; Dr. Dick; H. Thompson, Esq.; W. L. Leaf, Esq.; H. H. Cannan, Esq.; John Churchill, Esq.; Ernest Hart, Esq.; J. Tomes, Esq.; S. S. Scriven, Esq.; Dr. Brown-Séquard; John Chapman, Esq.; W. F. Low, Esq.; A. Fisher, Esq.; Erasmus Wilson, Esq.; Br. Bloxam; John Gay, Esq.; John Erichsen, Esq.; Dr. Cape; Dr. Ross, etc. The following executive committee was elected:—The chairman, Dr. Brady, M.P.; John B. Walker, Esq., 17, Clifton Gardens, W., Hon. Secretary; W. L. Leaf, Esq.; B. W. Richardson, M.D.; J. Dangerfield, Esq.; Mr. Sheriff Jones; T. Spencer Wells, Esq.; H. H. Cannan, Esq. The proceedings of the meeting were enthusiastically received, and terminated with a vote of thanks to the chairman.

OPERATION DAYS AT THE HOSPITALS.

NDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

ESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

DNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

URSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

DAY..... Westminster Ophthalmic, 1·30 P.M.

URDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

NDAY. Medical Society of London, 8.30 P.M. Mr. Thomas Bryant, Lettsomian Lecture "On the Diseases of the Osseous System, and on Tumours, etc."—Royal Geographical.

ESDAY. Royal Medical and Chirurgical Society of London, 8.30 P.M. Mr. Longmore, "On Two Cases of Kelis"; Dr. Robert Lee. "On the extent to which Human Life has been prolonged or abridged by Ovariotomy."—Zoological.

DNESDAY. Royal College of Physicians, 5 P.M. Dr. Pavy. Gulstonian Lectures. "On the Amyloid (so-called) and Fatty Degenerations."—Society of Arts.

RSDAY. Royal.—Antiquarian.

DAY. Royal College of Physicians, 5 P.M. Dr. Pavy. Gulstonian Lectures. "On the Amyloid (so-called) and Fatty Degenerations."—Royal Institution.

URDAY. Royal Botanical.

PULATION STATISTICS AND METEOROLOGY OF LONDON—FEBRUARY 14, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
uring week.....	Boys..1092 / Girls..1016	2108	1346
erage of corresponding weeks 1853-62		1986	1407

meter:
ghest (Fri.) 30.502; lowest (Sun.) 29.829; mean, 30.170.
mometer:
ghest in sun—extremes (Fri.) 88.9 degs.; (Sun.) 55 degs.
shade—highest (Wed.) 49.1 degs.; lowest (Fri.) 29.7 degs.
an—40.7 degrees; difference from mean of 43 yrs.+2.1 degs.
nge—during week, 19.4 degrees; mean daily, 12.6 degrees.
humidity of air (*saturation*=100), 84.
direction of wind, Variable.—Rain in inches, 0.09.

TO CORRESPONDENTS.

All letters and communications for the JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

ESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not essarily for publication.

LANCET AND SERVILITY.—The accusation of servility brought inst the BRITISH MEDICAL JOURNAL by the *Lancet*, means ply this: that the BRITISH MEDICAL JOURNAL plays a slavish esion to the ordinary sentiments of honour and of courtesy, ch are supposed to regulate the intercourse of gentlemen as l as of members of the medical profession.

AL SCIENTIFIC ASCENTS.—The *Chemical News* tells us, in a ure by Mr. Glaisher on the above subject, "that the scientific ults of these ascents have been but small." The risk of life great enough, at all events.

LD ASSOCIATE.—The term "Baruria" means simply "heavy e": that is to say, urine presenting a high specific gravity. derivation of the word is βαρος, weight: οὐρον, urine. The er of Dr. Handfield Jones to which our correspondent refers, cates to what precise conditions the term is applicable.

APPER'S letter shall appear next week.

THE LANCET AND DR. BURROWS.—SIR: As a member of the British Medical Association, I consider some steps should be taken to testify our abhorrence of the attack made upon our President by the editor of the *Lancet*. I think it must be obvious to all that such bitterness of spirit would not have been shewn, and certainly unnecessarily continued, had Dr. Burrows not been our President. This I consider the *Lancet* indirectly admits, when speaking of the President, the Editor, and the JOURNAL of the Association. It is needless for me to express my feelings with regard to the illiberal remarks uttered in the periodical before mentioned against Dr. Burrows, as I firmly believe the feelings of the whole profession are unanimous. In what manner these feelings can be best expressed to our excellent President, I must leave to others to decide. I am, etc., A MEMBER OF THE ASSOCIATION.

London, February 1863.

RUSSELL *v.* ADAMS.—The following is the verdict given by a competent tribunal—a jury of the defendant's own professional brethren—in the case of Russell *v.* Adams. On the occasion of the delivery of the Hunterian Oration last Saturday, at the Royal College of Surgeons, as the report runs—

"It deserves to be mentioned that as Mr. William Adams, Surgeon to the Orthopædic Hospital, the late defendant in an action, which terminated in his favour, and which is now considered a gross conspiracy, entered the theatre, he received quite an ovation."

TREATMENT OF ARMY MEDICAL OFFICERS.—The Horse Guards treats their medical men very much as they would the lower kind of the trading community. We understand that, *pour encourager les autres*, they make the medical officer who passes a recruit, defective in vision, liable for the payment of the value of the said raw recruit's kit!

MR. COULSON AS SHERIFF.—This is the first appointment of Sheriff made in the county of Cornwall by the Prince of Wales.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member rom his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, February 1863.

COMMUNICATIONS have been received from:—Dr. J. HUGHES BENNETT; Dr. J. MARSTON; Dr. E. T. R. TENISON; Dr. WILLIAM BUDD; Mr. W. E. C. NOURSE; Dr. T. J. WALKER; Mr. J. VOSE SOLOMON; Dr. DOBELL; Mr. S. WOOD; Mr. GRIFFIN; Mr. HUGH NORRIS; Mr. J. SPROWLE; Mr. WORDSWORTH; Dr. WILLIAM NEWMAN; Mr. H. GRAMSHAW; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. JONATHAN HUTCHINSON; Dr. LIONEL BEALE; Dr. CROMPTON; Dr. JAMES RUSSELL; and Mr. T. M. STONE.

BOOKS RECEIVED.

1. Illustrations of the Surgery of the Female Pelvic Organs. By H. Savage, M.D. London: 1863.
2. On Ringworm, Scald-Head, etc. By G. Ross, M.D. London: 1863.
3. The Twenty-Fifth Annual Report of the Suffolk Lunatic Asylum. By John Kirkman, M.D. 1863.
4. The Principles and Practice of Obstetrics. By G. S. Bedford, M.D. Third edition. New York: 1862.
5. Volumetrical Analysis. By Francis Sutton, F.C.S. London: 1863.
6. On the General Anatomy, etc., of Limax Maximus. By Dr. Lawson.
7. Memoir of Dr. E. Lyon.

The Medical Register for 1863

will be published on Saturday, 21st February, under the direction of the General Council of Medical Education and Registration of the United Kingdom, pursuant to an Act passed in the year 21 & 22 Vict., cap. 90, entitled "An Act to Regulate the Qualifications of Practitioners in Medicine and Surgery."

The MEDICAL REGISTER (price 4s.) can be had on application as follows:

LONDON.... Office of Medical Council, 32, Soho Square, W.;
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Or it will be sent by post to any person applying for the same at any of the above places, upon payment (per post-office order) of 4s. 10d.

Royal College of Physicians.—

The LECTURES of the present year will be delivered at the College, Pall Mall East, at Five o'clock on each of the following WEDNESDAYS and FRIDAYS.

GULSTONIAN LECTURES. Dr. PAVY. February 20, 25, 27. On the Amyloid (so-called) and Fatty Degenerations.

CROONIAN LECTURES. Dr. RISDON BENNETT. March 4, 6, 11. On some Points connected with Bronchitis, and its Results.

LUMLEIAN LECTURES. Dr. CHAMBERS. March 13, 18, 20. Formation of Mucus and Pus.

(By order of the President.)

1863. W. COPNEY.

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Remarks
ON
THE MOLECULAR THEORY OF ORGANISATION:
IN REPLY TO DR. BEALE.

BY
JOHN HUGHES BENNETT, M.D.
PROFESSOR OF THE INSTITUTES OF MEDICINE, AND SENIOR PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF EDINBURGH.

I HAVE carefully considered the second communication of Dr. Beale, denominated "facts and arguments opposed to my theory of organisation"; and with every desire to arrive at such facts and understand the arguments, I can see little of either one or the other that bears on the subject. "I am not aware," says Dr. Beale, "of any observations by Dr. Bennett or by any other observer, which tend in any way to show that the ovum is formed by the coalescence of the molecules of the ovary, or that spermatozoids and germinal vesicles disintegrate to form molecules." On these points, I refer Dr. Beale to the writings and figures of Dr. Martin Barry, Meissner, Nelson, Keber, and others. I do not wish him to regard their expressed opinions or theories; but the facts they have observed, and some of which I copied in my first lecture in the *Lancet*—Figs. 9, 10, 13, 14, and 15. If my interpretation of these facts be wrong, would it not be better for Dr. Beale, instead of calling such statements vague, and affecting to doubt whether I mean what I have deliberately stated, to point out the error in detail, and describe how they are otherwise to be explained?

Dr. Beale says he can see no logical connexion between my sentences; that I combine ideas which are quite incompatible with one another, and make assertions so opposite to each other that both cannot be correct. I should have liked Dr. Beale to have pointed out more particularly in what manner I have thus offended. Although it is possible I may have expressed myself obscurely, I have not generally been accused of either speaking or writing unintelligibly. Besides, what I wish to impress upon Dr. Beale is that, even supposing him to be correct in these statements, they do not constitute either facts or arguments on his side adverse to my theory, as the title of his paper would lead us to suppose.

Again, may not Dr. Beale's avowed incapability of comprehending my views originate in the strong bias he possesses in favour of his own doctrines, in consequence of which he is unable to regard mine from an independent point of view? If so, he cannot be expected either to criticise or understand them correctly.

"If," says Dr. Beale, "the matter is in a state of solution when it comes into contact with the living mass, there can be no *juxtaposition of molecules*." I ask why not? How can solid matters grow or increase in extent and density, unless from that very solution solid molecules are thrown down which, by aggregation, produce bulk? I have given many observations in my first lecture where this was seen to occur in viscous organic and inorganic fluids. What fact or argument has Dr. Beale advanced to refute them? Dr. Beale doubtless considers himself justified in thinking "that living matter must *always* increase in the same manner, and living particles must *always* multiply in the same way." But the reiteration of this opinion is no proof of its truth; still less is it fact or argument in opposition to my theory.

Dr. Beale has given a series of figures to show what no reasonable person will dispute; viz., that a minute body viewed with a magnifying power of 3000 diameters linear appears proportionally larger than the same body when magnified only 1800, 700, and 250 diameters. As an illustration of the utility of employing high powers, these figures must be regarded as unfortunate, seeing that no further information is to be derived from inspecting a large circle than from regarding a small one. I am quite prepared, however, to employ these high powers the moment Dr. Beale tells us he can by their aid see in molecules anything that has escaped previous observers.

Dr. Beale's figures of vibriones are quite correct, so far as the imperfect printing of his woodcuts will allow me to judge. He does not say that he has seen them in the act of dividing; and until he does so their supposed division must remain a mere opinion. He declares, however, that he can prove, by direct observation, that the smaller molecules do not coalesce or become aggregated to form larger masses. He also affirms that this process cannot occur in the case of particles so large as those figured by me. Now, if Dr. Beale can prove these statements, why does he not do so, instead of making affirmations? I am of the contrary opinion, and shall state the grounds from which it is derived. The question, however, is not whether molecules unite to form masses—although if a mass of molecules exist, it must be clear that they are aggregated together—but whether molecules unite to form the vibriones.

On making an infusion of flesh, and allowing it to putrefy, there will sooner or later appear, on the surface of the fluid, a delicate pellicle or scum. On examining this with a power of 800 diameters (which I have recently done, to satisfy Dr. Beale), it will be seen to present the structures figured below.



Fig. 1.—*a*. Structure of the scum on a putrid animal infusion on its first appearance. *b*. Structure of the scum six hours afterwards. The molecules separated. *c*. Structure of the scum on the second day. *d*. The same scum broken up. *e*. Filaments in the scum on the third and fourth days. (800 diameters linear.)



Fig. 2.—Presumed mode of developments of vibriones. 1. Primary molecules. 2. Larger molecules subsequently formed. 3. Aggregation of two molecules. 4. Their union. 5. Further coalescence of molecules producing vibratile filaments. 6. Still further aggregation, and coalescence of molecules in rows, to produce the highest degree of vibrional development. (800 diameters linear.)

The mode of development of the filaments, as derived from these appearances, is differently described

by Dr. Beale and myself. He says the molecules increase by absorption till they arrive at a certain size, and then divide. How he explains the formation of the filaments I do not know. But the molecules are formed first, and the filaments last; hence the latter must be produced from the former, in some way. To render my views intelligible, I have numbered what I conceive to be the different stages of growth; and I would ask Dr. Beale if, when the development has reached No. 2, the molecules divide, how it is the filaments can form at all. Surely a constant division of molecules at that period would be opposed to the formation of Nos. 4, 5, and 6. But it may frequently be seen that No. 3 is composed of molecules of exactly the same size as those of No. 2, which are floating loose—a fact in favour of the molecules coalescing, rather than dividing, as then they would be half their original size. My view, therefore, is, that the smaller molecules, although they may increase by imbibition of fluids, have yet a constant tendency to aggregate together and melt into one another. No. 3 is not a proof of No. 2 dividing, but of two molecules coalescing; and when they unite, they form No. 4. Two or more of these uniting form Nos. 5 and 6. When a similar process to this goes on in mineral bodies, as shown by Mr. Rainey, it cannot suggest division, but union; and this for the obvious reason, that the former would lead to disintegration; whereas it can be seen in one case, as in the other, that development is the result. In short, in the same manner as a tube is formed by a coalescence of cells, so is this minute vibratile filament formed by the coalescence of molecules. It may be argued, however, that each molecule elongates itself; that is, No. 2 is converted into No. 4; this into Nos. 5 and 6; and that No. 3 are sporules or ova, caused by the disintegration of No. 6. This view, however, is opposed by the fact that Nos. 1, 2, and 3 can be seen *before* Nos. 4, 5, and 6 are produced. Of this I have satisfied myself by frequent examinations of animal and vegetable infusions; and cannot, therefore, resist the conclusion that the development is such as I have described.

If, as Dr. Beale alleges, every one of my future lectures is likely to contain as many statements open to discussion as those which have appeared, it strengthens my conviction in the propriety of delaying further controversy until all are published. For although the task of criticism, as he thinks, would then be too great, I cannot help thinking that the labour of reply would be much diminished. Unless Dr. Beale, therefore, abandons generalities and assertions, and becomes more particular in his "facts and arguments", I cannot promise to continue the explanations to which he invites me.

Discovery of Skeletons. A sensation has been created at Guildford, and for several miles round, in consequence of the discovery of five skeletons on a piece of land about a mile from Guildford. The skeletons were discovered by a man who has been trenching the ground and getting flints. They were each lying in a hole, or sort of rough vault, dug out of the chalk. On the breast of one was a dagger or knife. The bones were much decayed, but one of the skulls was in a remarkable state of preservation, as were the whole of the teeth. The skeletons have been examined by Mr. Ross, surgeon, of Guildford, who has given it as his opinion that two were old men, two middle-aged, and one a young man. The bodies were all lying east and west.

Short Clinical Lectures
ON
THE FIRST PRINCIPLES OF MEDICINE.

Delivered at King's College Hospital.

BY
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I.—Some Observations on the Nature of Certain Healthy and Morbid Changes, and on Counterirritation.

[*Concluded from page* 184.]

Counterirritation has nothing whatever to do with allopathy, or any other special system. It rests upon a principle which, I shall now endeavour to show, is thoroughly sound, and confirmed by some of the most recent and most exact observations.

Let us, then, consider how a blister applied to the skin can produce any beneficial effect in a case where a quantity of pus, mucus, and fluid, are being formed upon the surface of the mucous membrane of the bronchial tubes—in a case of chronic catarrh. I shall not discuss the effects of moxa, the actual cautery, and the more violent forms of counter-irritation, in this lecture.

As to the above morbid condition, we know—

1. That the vessels generally of the mucous membrane are congested; that it contains more blood than in the healthy state. The muscular walls of the small arteries are relaxed; the elastic capillaries distended with blood. Their thin, transparent, permeable walls, being stretched, are necessarily thinner, and more permeable to certain fluid parts of the blood. A greater quantity of soluble matters, therefore, escapes through the vascular walls than in a normal state.

2. Much of this increased quantity of fluid is taken up by the epithelial cells. The young cells especially, being supplied with a greater quantity of nutrient matter, grow faster. The masses of germinal matter (nuclei) increase, divide, and subdivide; and the process proceeds so rapidly, that there is no time for the conversion of the oldest outer portion into the formed matter corresponding to the wall of the cell, as always occurs in normal nutrition. A vast number of imperfectly formed epithelial cells and pus-corpuscles result. The more or less viscid material which surrounds these is all that represents the more hardened substance which forms the walls of epithelial cells generally, and gives to the healthy structure its characteristic properties and regularity of arrangement.

With regard to the influence of counterirritation, we must bear in mind—

1. That, generally, the afferent nerves distributed to the skin may influence, through the centre into which they are implanted, the efferent fibres distributed to the vessels of an organ lying beneath and perhaps at a considerable distance. It is possible, therefore, that the calibre of the small arteries dis-

tributed to the mucous membrane of the bronchial tubes may be diminished in consequence of the terminal network of afferent fibres distributed to the skin being influenced by the counterirritation.*

2. In consequence of this contraction of the arteries, the walls of the capillaries would be relieved from the pressure of the blood; and, provided their elasticity was not permanently destroyed, they would recoil, and the blood they contained would be driven on to the veins. The effusion of fluid would be diminished. The cells would increase more slowly, and time would be allowed for the production of formed material (cell-wall) around each.

3. Crude matters in the blood may be taken up by cells which are multiplying with abnormal rapidity in any part of the body. Hence, when the cuticular cells are placed under conditions which facilitate their multiplication—that is, when they are supplied with an increased supply of pabulum—they grow very fast, and may separate from the blood materials which would otherwise form the pabulum of pus-cells that were multiplying upon the surface of the mucous membrane of the bronchial tubes. Thus, the increased nutrition in the latter situation would diminish while this state would be established in the skin.

Hence, counterirritation employed in such a case may act beneficially in two ways. First, by exciting through the afferent nerves in the skin an impression by which the efferent nerves distributed to the vessels of the mucous membrane are caused to contract, and thus a diminution in the supply of blood results; the direct consequence of this diminished supply of pabulum being a slower multiplication of the pus and imperfectly formed epithelial cells. In consequence of the increased flow of blood to the skin, the young cells of the cuticle grow and multiply at the expense of the pabulum, which would otherwise have gone to feed the structures formed on the surface of the mucous membrane. Secondly, such an increased action being established in the deep layers of the epidermis, crude materials in the blood, which would otherwise have been taken up by the pus on the mucous membrane, are appropriated here.

By giving diuretics and sudorifics in such a case, you promote increased action of the kidneys and skin, and the cells of these organs take up the crude pabulum, which has been accumulating in the blood; and thus, in another way, it is diverted from the mucous membrane of the bronchial tubes, and removed from the organism in the most rapid possible manner.

In this way the beneficial action of counterirritation may be explained.

But, if you have not permitted yourselves to be too much influenced by theoretical considerations, you will have felt inclined to say, ere this, "but counterirritation, applied directly to the skin or indirectly to the kidneys and other emunctories, is not the only thing to be thought of in the treatment of an ordinary case of chronic bronchitis, where a quantity of secretion is being formed upon the mucous membrane of the larger and smaller bronchial tubes."

Nor will counterirritation always relieve permanently; for it not unfrequently happens that the discharge of sputum increases in spite of the application of a blister; and, as the blister, if kept open, often exhausts a patient, you know we have recourse to turpentine stupes (turpentine sprinkled on flannel which has been soaked in hot water and wrung out nearly dry), because we can apply them every day, and twice a day if we desire it, with much of the benefit and with none of the exhausting effects of a large blister.

There is then another point which, although not connected with the subject of counterirritation, is so important that it must never be lost sight of in the treatment of such cases. Just at this time of year, we have many cases of chronic winter cough in the wards, and of these the great majority would remain in the hospital for months, if we only acted upon the principle of counterirritation, and some of the patients would die. In these cases, we have to administer support, and frequently to give alcohol; but I shall postpone the consideration of this part of the treatment until I have discussed some points of interest in connection with pneumonia, as the principles upon which the beneficial effects of alcohol may be accounted for, and the principles which guide us in administering it in both these affections of the respiratory apparatus, are precisely the same.

* Even in the substance of fibrous and other tissues I have demonstrated numerous very fine nerve-fibres, which are independent of the dark-bordered fibres. The fine fibres above referred to are numerous in the fibrous tissues, even of the frog; and in tissues which contain truly sensitive fibres, they are also to be demonstrated. I believe them to be the *afferent* fibres of the sympathetic ganglia; the vaso-motor nerves distributed to the muscular coat of the small arteries being the *efferent* fibres of the same ganglia. (See papers on the "Ultimate Distribution of Nerve-Fibres", in course of publication in my *Archives*.)

Bees. The *Agriculteur* contains the following remarks on these singular insects:—Bees do not pass the winter in a state of stupefaction, nor do they sleep much longer during that season than in any other; all that depends on the work they have to do. There are at all seasons some working bees alive and active in a hive, and at the time when provisions are being got in there are many at work day and night without taking any sleep at all. Their slumbers is very light at all times, for they sleep with their eyes open; the slightest noise, a vivid light, or a current of air, is enough to awaken them; but the warmer the hive is the easier it is for them to sleep. Hence they consume much less honey in a hive situated in a quiet place, little exposed to light and air, than in one more exposed. But if the outer temperature rises very high, this favours the laying of their eggs, and then a large quantity of honey is consumed. It is, therefore, easy to explain why in beehives placed close to each other the consumption of honey is different during winter, and this is a circumstance not to be neglected, because colonies which before winter seemed to have provisions enough to last them all through the month of March may be reduced to extremities before the end of January, in which case the agriculturist must come to their assistance. If the bees have been able to enjoy an excursion or two since Christmas they will easily partake of the liquid food, which may be offered them in a cup placed inside the hive, but if not, the food so administered may cause dysentery. To avoid this, honey-combs full of honey should be cut out of other hives where the supply is plentiful and transplanted into needy ones. This delicate operation is performed in a cellar, by the light of a lantern, and with the aid of smoke. The colonies thus assisted must be left in the cellar, if it be not too damp, until a fine day comes to allow of their flying out a little. The hives from which the honey-combs have been taken must also be left in the cellar for twenty-four hours at least, during which the bees feed on the honey that has exuded during the operation.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF RHEUMATIC PERICARDITIS.

Under the care of JAMES RUSSELL, M.D.

[*Concluded from page* 186.]

SINCE writing the preceding observations, two other cases of pericarditis have fallen under my notice, of sufficient interest to merit a brief record. The former of the two further illustrates the difficulty which may arise in discriminating between a rubbing sound and a valvular murmur. On more than one occasion in the foregoing cases, uncertainty has existed as to the nature of a particular sound, from the absence of anything sufficiently definite in the character of the sound itself. Expedients were employed to test its nature, whether pericardial or valvular, by noting its superficial position or the reverse, the extent of area over which it was audible, and the effect of pressure of the stethoscope in altering its character. But with every aid, it must sometimes happen that we are left in a state of uncertainty, and are reduced to waiting before we form a definite opinion.

In the following case, the occurrence of a very common complication, before the patient fell under our observation, nearly deprived us of any means of forming a diagnosis, excepting that which was afforded by the friction-sound itself; and we were then taught by experience that the evidence thus afforded may be very inconclusive.

CASE VIII. (Mr. F. H. Smith.) John Mears, aged 12, was admitted with pleurisy of the left side. The left side of the thorax was found perfectly dull, up to a line passing round the chest on a level with the seventh dorsal spine. The usual stethoscopic signs of pleurisy were present; but, in addition to these, a very distinct double sound, agreeing with the systole and diastole of the heart, was heard over the cardiac space. The character of the sound answered quite as much to that of a valvular murmur, as to that of a pericardial friction-sound; though plainly audible under the left clavicle, it was speedily lost on leaving the situation of the heart towards the right, and was scarcely distinguishable beneath the right clavicle, so far agreeing with a friction-sound; but, on the other hand, a systolic sound was distinctly audible over the posterior region of the left chest.

The history of the case did not afford any evidence of rheumatism, and justified the suspicion of the previous existence of valvular disease. Fortunately, however, for our diagnosis, the dulness occasioned by the pleuritic effusion did not reach a level sufficiently high to cover entirely the region occupied by a distended pericardium, which indicated its presence by a dull space bounded by a curved line, rising to the second rib, and descending across the sternum as far as an inch to the right of that bone.

In two days the effusion in the pericardium had greatly lessened, and the questionable sound then assumed a decided friction character; at the apex, on the contrary, a blowing sound developed itself more clearly, and in the course of a few days the presence of disease in the mitral valve, of old date, in addition to the pericarditis, was placed beyond a doubt by the discovery of coexistent hypertrophy of the heart.

The concluding case is one of *pyæmic* pericarditis. It occurred in the practice of my colleague Mr. Pemberton, who kindly permitted me to examine the specimen. Its interest lies in the confirmation which it affords to an opinion lately published by Dr. Kirkes (*Medical Times and Gazette*, October 25th), that in pyæmia pericarditis, when it occurs, is occasioned by so-called secondary abscesses in the tissue of the heart, strictly resembling in this respect the pleurisy which is often also present in the same disease. These deposits usually affect the surface of the organ, in which they are produced, and hence give rise to inflammation of the investing membrane, either by continuity of tissue, or sometimes by rupture, and the effusion of their contents into the serous sac.

The first case detailed in the foregoing series affords, with the following case, an interesting opportunity of contrasting two conditions which at first sight might seem analogous to one another, but which are in reality directly opposed. In the former case, undoubtedly, inflammation had affected the muscular fibre of the heart, having extended to that tissue from the pericardium. Here we find the *entire* superficial layer of the heart's tissue uniformly and equally affected, each ventricle also being implicated alike; in the case about to be detailed, on the contrary, isolated spots only were diseased, the intervening muscular tissue being healthy; and whilst the serous inflammation affected the entire surface of the heart, the disease of the muscular tissue was confined to the left ventricle exclusively. Again, by microscopic examination in the former case, a formation of cellulo-fibrous tissue and a copious deposit of fat was found to have taken place between the muscular fascicles, and appeared to have destroyed them by pressure; whilst, in the latter case, the fascicles were simply broken up, and their remains were intermixed with the *débris* of blood-cells.

This comparison at once establishes the totally different nature of the muscular affection in the two cases; and places the softened portions of the heart's tissue observed in the latter case in the same category with those present in the lungs, and with those which are frequent also in other solid organs, in cases of pyæmia.

I would also direct attention to the symptoms in the following case: presenting, as they did, a striking resemblance to rheumatic pericarditis in their apparent character, but widely differing from those usually manifested by that disease, in their tendency to early collapse, and in their rapid termination in death.

Mr. Bracey, the house-surgeon, has been kind enough to furnish me with a sketch of the history of the illness, from which the following report is abridged.

CASE IX. James Ward, aged 10, suffered a laceration of two fingers of his *right* hand, which rendered amputation of one finger necessary. The boy progressed favourably for three days, when he complained of pain in the *left* shoulder and upper arm; he had felt this pain before, and ascribed it to using his left hand in turning a windlass. The painful parts were swollen and reddened, and he complained when they were moved. Considerable feverish reaction rapidly established itself; his urine was scanty, and deposited a large amount of brown urates. In three days after the setting in of the symptoms, the physical signs of pericarditis were distinguished; the pulmonary sounds were normal. The boy had then become very feeble; his pulse was rapid and sinking, his heart's action tumultuous, his breathing quick and distressed, and his urine dark but clear. He died next morning.

The wounds were dark and inactive during the last illness, and did not discharge; nothing abnormal was noticed in the right arm.

SECTIO CADAVERIS. The entire surface of the heart was covered with a rather thin layer of soft lymph, most

abundant upon a portion of the *right* ventricle and at the base. On carefully scraping away this lymph, small irregular white patches appeared on different parts of the surface of the *left* ventricle, some raised like beads, others not projecting above the surface; two or three lay over the course of the coronary vessels, but the large majority had no relation to any vessel. These patches corresponded, each one to a small irregular cavity. The largest cavities were capable of containing a small pea, if reduced to a regular shape; some of these cavities were filled with a white puslike fluid, others with a pink pultaceous matter; their sides were very soft, and passed into the normal tissue by insensible gradations. I counted twelve of these cavities, and besides them there were also a few irregular dark livid patches, as if produced by ecchymosis. Most, but not all, were at the surface of the heart. None of them had undergone rupture; of this there could be no doubt. The coronary vessels were healthy, with the exception of one small branch, which was engaged in a cavity, and contained a puslike fluid.

One small ecchymosis was discovered in the tissue of the septum; with this exception the appearances now described were absolutely confined to the left ventricle. The pultaceous matter contained in the cavities, consisted of fine granular matter, and of irregular globules about 1-2500th of an inch in diameter; with these were intermixed *débris* of muscular fascicles, opaque, and without any appearance of striæ. In proportion as the patches were less softened, the remains of fascicles were more numerous, and in the ecchymosed patches the fascicles were distinct, and more or less deeply stained with blood. Around the cavities the muscular tissue presented its normal character.

Masses having all the appearance of pulmonary apoplexy were thickly scattered through both lungs, chiefly in the upper lobes; most were at or near the surface; their tissue was soft, but there was no appearance of suppuration. The other solid organs were perfectly healthy.

The joints of the left arm, the seat of the pain, were quite healthy, but considerable serous effusion had taken place into the cellular tissue around the elbow.

No disease could be discovered in any of the vessels; nor could any relation be ascertained between the morbid changes in the heart or lungs, and the branch of any vessel.

The Relations of Height and Weight in the Human Body. In the *Statistical Society's Journal*, of March last, a very interesting table is given, showing the growth of the human body from eighteen up to thirty years of age, indicated by weight and height. The averages were taken from upwards of 4,800 observations at all ages. Thus, a lad of eighteen, if he be 5 feet 4 inches in height, speaking in round numbers, ought also to weigh somewhere about 8 stone 10 lbs. Given the age of twenty-one, and the height 5 feet 5 inches, he should weigh 9 stone 5 lbs. Ascending still further, and assuming the age to be twenty-five, and the height five feet 6 inches, the weight would be 10 stone 5 lbs.; and at thirty years of age, with a height of 5 feet 6 inches, we ought to have the result 10 stone 1 lb. In fact, so clear and demonstrable is this "law of increase in the growth of man," as determined by very extensive measurements taken at different times by scientific gentlemen, that we can almost work, as it were, in a rule of three sum any one condition we like. Taking the converse of what we have already exhibited, we may say that if a lad of nineteen weighs 9 stone 4 lbs., he ought to measure in height 5 feet 4 inches, and a little more; if at twenty-two, 9 stone 12 lbs., he should be 5 feet 6 inches in height, and so on. (*St. James's Magazine.*)

Original Communications.

THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

By Thomas James Walker, M.D.(Lond.), etc., Surgeon to the Peterborough Infirmary and Dispensary.

It was the late Mr. Liston, one of the most eminent of our British surgeons, who, more than twenty years ago, first suggested the use, in diseases of the larynx, of the instrument to which I wish to direct the attention of our associates; and the researches as to the physiological and pathological importance of the laryngoscope, pursued of late years with such good results in Germany and France, received their impetus from a memoir read before the Royal Society, published in 1855 in the *Philosophical Magazine and Journal of Science*, by M. Garcia, Esq., a resident in England.*

Notwithstanding these facts, it cannot be denied that the great majority of medical practitioners in this country know little more of the laryngoscope than that such an instrument exists; and not a few were ignorant even of this fact, until the recent sojourn of Professor Czermak in London, and his demonstrations at several of the hospitals, were remarked upon in some of our weekly medical journals. Had the class of diseases, in the diagnosis and treatment of which this instrument yields such important aid, been constituted in this age of subdivision into a medical specialty, no doubt many medical men would have been found who, having persevered, and conquered without aid the difficulties which naturally attend the first efforts to employ an entirely new instrument, would have gladly made known by demonstration and otherwise to their brethren and to the public, that they were possessed of means which enabled them to treat with peculiar advantages that class of cases to which they specially directed their attention. The fact that the laryngoscope has not at once come into general use, will not be taken as an indication that it is wanting in practical value, by those who remember how long it was before the stethoscope made its way into the hands of the great bulk of medical men, or will consider how few there are among the members of our profession, who have made themselves sufficiently acquainted with the use of the ophthalmoscope to be able to employ it in practice, and yet its value in the diagnosis, and consequently the treatment of eye-diseases, is undoubted; and as regards this instrument, we must bear in mind that it is the subject of special courses of instruction, and that ophthalmologists have written treatises, by the assistance of which any one of us may understand its practical application. My own experience, however, with the ophthalmoscope, with which I in vain endeavoured to gain any useful information until I received from an accomplished master of its use a few practical hints, indicates, I think, the true reason why the laryngoscope is at present so little employed, although it might be readily applied with great advantage in cases which occur constantly in the practice of every medical man. It is, then, the want of clear practical directions as to the clinical application

* This paper was sent up to the Journal six months since; but, owing to unavoidable delay on my part in procuring the engravings, the publication has been postponed to the present time. Since it was written, Mr. Yearsley and others have pointed out that the late Mr. Avery had invented and constructed a laryngoscope in the year 1846. I purposely avoid entering into the controversy as to priority of invention and application of this instrument. I may mention that Dr. Merkel of Leipzic, in his work on *The Functions of the Pharynx and Larynx*, states that an artisan named Lelligues, a patient of Trousseau's, was the first to construct a laryngoscope, and used it on himself, about the year 1833.

of the larynx speculum which has led to its neglect; and it is this want which I shall endeavour to supply in this and subsequent papers on the same subject.

Having, during the summer and autumn of 1860, availed myself of the opportunities afforded during a sojourn in Vienna, to observe the practice of Stoerk, Semeleder and others, and having since that period been in the habit of employing the laryngoscope in my daily practice, I can confidently state that the difficulties spoken of by those who are practically unacquainted with the use of the instrument, are in a great measure chimerical; indeed, at this moment I cannot recall a single case of laryngeal disease in which I have wished to avail myself of the instrument, and have failed to obtain a view of the part affected. Let the practitioner persevere until he has learned to illuminate the pharynx, and hold the mirror in such a way as to display the larynx in the most tolerant of subjects; and he will then find that no more than very ordinary skill on his own part, and no extraordinary steadiness on the part of his patient, are requisite to his acquiring most valuable information from the laryngoscope in pathological cases. I have alluded to the stethoscope and the ophthalmoscope in comparison with this instrument; I may now state, that accurate observations may be made with the laryngoscope, with an exercise of far less study and far less skill, than that required by either of the former instruments. With this encouragement to those who, following the directions I shall give, will endeavour to explore these regions which have hitherto been hidden from our eye, I shall proceed at once to describe, first shortly, the principles of the laryngoscope; secondly, the instruments we employ; thirdly, the appearance of the normal parts when viewed by aid of these instruments; fourthly, the exact mode of applying the instruments, directions for which will be much more intelligible after the laryngeal image has been described than earlier; and lastly, I shall give cases illustrative of the pathological conditions in which these instruments are of value.

I.—Principles of the Laryngoscope.

The principles on which the laryngoscope is constructed and applied require but little explanation; they require for their comprehension no complex knowledge of optics; the only law that we must bear in mind being that when a ray of light is reflected from a plane surface, the angle of reflection is equal to the angle of incidence. A small mirror mounted on a long handle, having been previously warmed in order that the watery vapour expired from the lungs may not condense upon it, is held in the pharynx on a level with the soft palate, in such a position that the rays of light which it receives through the open mouth are reflected down into the larynx and trachea. An image of the parts so illuminated is formed in the same mirror, and is seen by the eye of the observer placed opposite the mouth, without the aid of lenses or any other medium. This image, of course, appears to be placed at the same distance behind the mirror as the object reflected actually is in front of it; and it is of the greatest importance when we are making and recording our observations in pathological cases, that we should remember that the image represents the parts in an inverted position. Although I should have imagined that any one giving the subject the least consideration would have comprehended at once the relation between the various parts of the larynx itself and of its reflection in the mirror, there appears so much confusion in the writings of some of the foreign laryngoscopists, that I introduce the accompanying diagram to make the matter clearer.

If the mirror were held in a vertical position at the back of the throat, the image of the larynx would be inverted antero-posteriorly, and the most anterior part of the larynx, the epiglottis, would be the furthest from us in the image; but, with the mirror in this position, the image would be out of the view of the observer. If, again, the mirror were held horizontally, an equally impracticable position, an image would be formed, in which the epiglottis would be immediately over the true epiglottis at the most anterior part of the image, and the arytenoid cartilages immediately over their actual position



Fig. 1.—A. Anterior view of larynx; *a*. Epiglottis. B. Opening of larynx as inverted in mirror; *a*. Epiglottis; *b b'*. Arytenoid cartilages; *r* and *l*. Right and left vocal cords.

at the hindermost part of the image. The mirror being held, however, in a position intermediate to these, an image is formed in which the parts, instead of being arranged from before backwards, are seen in a vertical plane; the most anterior part of the larynx, the epiglottis (*a*), being at the highest part of the image, and the arytenoid cartilages (*b*, *b'*) being the lowest. The antero-posterior version that is talked of does not, therefore, actually take place; and certainly, as we pass the mirror back into the fauces, the parts come into view as they are situated in the larynx, the epiglottis first, and then the other parts in the order in which they lie, back to the arytenoid cartilages. The lateral inversion is that which requires most consideration; but it will, I think, be at once intelligible on reference to the diagram, in which A represents the larynx under observation, B the image of the same as formed in the mirror. Now, *r* the right and *l* the left vocal cord, are seen on the right and left sides of the mirror exactly opposite to their true position (that is respectively on the *left* and *right* hand of the observer); but *r*, the true right vocal cord, is the left, and *l* similarly is the right vocal cord of the image, as we see if we turn the diagram upside down, and look at the image B as though we were looking at the front of the larynx and epiglottis; that is, if we suppose the image to be placed in the same position as the larynx A. The same inversion of course takes place of the right and left aryteno-epiglottidean folds, of the right and left arytenoid cartilages *b*, *b'*; and of all other lateral parts of the larynx. An ulcer or any other morbid appearance situated on the left vocal cord (*l*) of the larynx (A) appears to be on the right vocal cord of the image (B), although of course it is situated on the same side of the mirror as of the larynx under examination.

It is, I think, the confounding the position of the parts in the *mirror* with their position in the *image*

which has led to the confusion in the description of the relations between the larynx and its image to which I have alluded. Experience is necessary to enable us at once to correct the false representation given in the mirror; but with this experience, we make the necessary corrections with almost as little consciousness of mental effort, as when we mentally convert the inverted image which is formed upon the retina into the true representation of the various objects which surround us in every day life.

DIPHTHERIA.

By Wm. Newman, M.D.Lond., St. Martin's, Stamford.

Having already given to the readers of the British Medical Journal (September 14th, 1861) a statement of those cases of diphtheria which had occurred in my practice—then at Fulbeck, near Grantham—in the first six months of 1861, I wish now to lay before them the series noted in the second half of the same year. And I do this with the hope of some resulting good; since the instances thus put upon record, being the product of a widely spread agricultural district, offered to the same observer, subjected to the same external influences, and modified by an unvarying plan of treatment, may be supposed to exhibit a fair record of the disease throughout a year of its ordinary history.

No.	Sex and age.	Occupation.	When first seen.	Ill before first visit.	Result.
1	F., 6	Labourer's child.	July 6		Recovered.
2	F., 4	Farmer's child.	July 11	24 hours.	Died.
3	M., 22	Gentleman.	July 15	24 hours.	Recovered.
4	M., 14	Farmer's son.	July 29		Ditto.
5	M., 45	Gentleman.	July 31		Ditto.
6	M., 30	Labourer.	Aug. 1	2 days.	Ditto.
7	M., 13	Miller's child.	Aug. 5		Ditto.
8	F., 27	Labourer's wife.	Aug. 7		Ditto.
9	F., 19	Domestic servant.	Aug. 9		Ditto.
10	F., 44	Farmer's wife.	Aug. 21	24 hours.	Ditto.
11	F., 26	Domestic servant.	Aug. 28	3 days.	Ditto.
12	F., 20	Domestic servant.	Sept. 12		Ditto.
13	M., 33	Groom.	Oct. 7	1 day.	Ditto.
14	M., 65	Wheelwright.	Nov. 8		Ditto.
15	F., 19	Publican's daughr.	Nov. 9		Ditto.
16	M., 20	Butcher.	Nov. 10	3 days.	Ditto.
17	M., 15	Errand-boy.	Dec. 3		Ditto.
18	M., 28	Groom.	Dec. 26		Ditto.

Sex has little influence. Of the patients, ten were males, and eight females.

Age. The ages of the patients are shewn in the subjoined table:—

Age.	Number of cases.	Per cent.
0 to 5	1	5.55
5 to 10	1	5.55
10 to 15	3	16.66
15 to 20	4	22.22
20 to 25	1	5.55
25 to 30	3	16.66
30 and upwards	5	27.77
	18	99.96

Mortality. There was one death in 18; or 5.55 per cent.

In the data of age and mortality, the cases now noticed stand in almost direct opposition to those given in my last paper. The causes of this difference will be noticed further on.

To some of these cases, I would draw more direct attention; they are of interest, as much from individual peculiarities as from their combined value.

Case II. This was the only fatal one in the series—fatal, too, from direct affection of the larynx; death resulting within twenty-four hours. But for due examination of the throat, the case would have been looked upon as one of ordinary croup. There had been no history of prior illness, no failure in general power, until the clanging cough and stridulous breathing were noticed; yet there was enlargement and soreness of the submaxillary glands, and the *débris* of very well marked exudation on the uvula and tonsils.

If the writings of French physicians be consulted, they tell us that croup is, with but very rare exceptions, the sequel of, and dependent upon, pharyngeal diphtheritic deposit—a matter, in short, of local extension. This is the sole case I have seen tending to bear out this view.

Cases III and V. Both derived their affection from the same source. In both cases the local deposit and suffering were but slight; yet each of them had very characteristic depression and constitutional disturbance. Coincident inflammation of the parotid gland only on one side was also present.* Case III was well in three weeks or less. Case V was much more tedious in convalescence. The whole system was unhinged, and strength was very slowly regained by free administration of tonics and abundant supply of food. Six months later, a large abscess, with deep burrowing sinus, formed in the upper and inner part of the left thigh. I am strongly disposed to connect, certainly the severity of this local affection, if not indeed absolutely, its occurrence with the extreme debility consequent upon the throat-disorder.

Case VI. Local œdema and very rapid and abundant appearance of exudation were here noted. The man's state was for some days very precarious; and, though prior to this illness an athletic powerful man, he was very seriously prostrated. No nervous sequelæ showed themselves.

Case VIII presented partial loss of power in both lower extremities, sensation being more damaged than motor power. Some time passed over before this symptom disappeared; the throat-disorder having, however, been far from severe.

Case IX. I had seen, as reported in my last paper, one instance of secondary abscess in the neck. In this person abscess formed, three or four days after the exudation had cleared away, in the soft palate; and attained such a size as to produce very great inconvenience both in respiration and deglutition. The subsequent recovery, after the discharge of the pus, was rapid.

Case X is noteworthy, from the coincidence, almost from the very commencement of the throat-malady, of excessive sickness; no matter what was taken, it was immediately rejected. I could but trace its existence to some irritation of the par vagum. Internal remedies seemed of little or no avail; external counterirritation was certainly of some service.

But little of especial interest is attached to the other cases.

The rates of mortality noted in the two series of cases—1 in 5, and 1 in 18—differ widely enough; admitting, however, of easy explanation on reference to certain conditions.

a. Age. The majority of those reported on the last occasion were young children, having proportionally little vital power, and therefore succumbing rapidly to any form of blood-poisoning. On the other hand, most of those now mentioned were over fifteen years of age.

b. Varying Conditions of Access. In the earlier instances, in 23 out of 35, the disease was endemic, with a resulting mortality of 1 in 4·3; while, in the present group, the affection was uniformly sporadic.

These conclusions may, on the whole, be fairly drawn.

The severity of diphtheritic affections, and indeed

* A case of this kind was reported by Dr. Gibb to the London Pathological Society. (*Medical Times and Gazette*, Feb. 18, 1862.)

their duration also, stand in inverse ratio to the vital power of the patient. The mortality is in inverse proportion to the age of those attacked by the disease.

With regard to treatment, our efforts should be directed—

1. *To prevent the early access of exhaustion.* I have named this as one especial point, in order thereby to place very much stress on the necessity of thorough rest: for the adult, rest mental and physical; for the child, enforced abstinence from movement as far as possible. I have seen repeatedly increase of local mischief after even slight exertion, and nausea and faintness readily supervene. In all cases where it can be done, the recumbent or semirecumbent posture should be maintained; and the sufferer sedulously waited on—not even in trifles allowed to attend to his own comfort.

2. *To uphold and increase general power.* To this end, the room should be well ventilated by direct entrance of fresh air, if the season will allow of it; if not, then a good fire, with care in preventing direct draught, but in no case shutting up the patient either with antiquated close-drawn curtains or in an ill-ventilated room, thus allowing him to breathe over and over again air vitiated by the ordinary products of respiration and the special organic impurities of the disease.

Abundant and frequent supplies of nourishment should be given: meat, in whatever form it can best be taken; and stimulants. Perhaps, of these, port wine is best; next to it, brandy and water. By some patients, malt liquor is better taken. But yet I would make this the cardinal rule: give food from the first. The disease has a time when nourishment will not, cannot be taken; and, unless liberal supplies have before this been given, the patient will of necessity sink.

As diphtheria answers, in very many of its characters, to the type of a blood-disease, those remedies are most indicated which tend to improve the circulating fluid: the preparations of iron as a whole, specially, and perhaps in a measure from its local influence, the tincture of the sesquichloride has appeared to me to answer best. I have not unfrequently given it in combination with chlorate of potash, or with quinine. Some, who cannot take iron well, will derive advantage from the compound tincture of bark with hydrochloric acid. Ammonia has seemed to me to be of doubtful efficacy. Emetics, depressing remedies, and mercurials, have still their advocates; but neither from what I have seen, nor from the reported cases, should I be disposed to resort to the use of these agents.

3. *To arrest the local affection, and bar its extension from foci already existing.* The very common application of the nitrate of silver, I have little trust in. Its effects are not sufficiently marked in the clearing away of existing deposit, or in the prevention of its recurrence; while the white coating consequent on any free use of the salt materially obscures the condition of exudation. In the more severe cases, where there is much coincident and surrounding redness of tonsils and uvula, I would *once* freely apply the hydrochloric acid. As a subsequent application, or indeed as of primary advantage, I have had reason thoroughly to believe in the efficacy of Beaufoy's chloride of soda, used undiluted with a large camel hair brush two or three times a day, and more frequently as a gargle made up with glycerine and water—one part to six or eight parts of water. This application I learnt last year from Dr. Budd's comprehensive paper (British Medical Journal, June 1st, 1861), and each succeeding case makes me more confident in its power as a local agent.

I would close my paper by urging the propriety of the medical attendant personally, so far as he may, applying these and other local remedies, and also seeing to the thorough carrying out of the plans for giving medicine and food. In this disease there is no time to be wasted. Bad nursing will destroy many a sufferer; and remedial means powerful enough for good will prove simply nugatory, if inefficiently used.

CASE OF FATTY HEART.

By E. T. R. Tenison, M.D.

I think the following case worthy of notice, showing, as it does, how most serious heart-disease may exist without any marked disturbance of the circulation or respiration, or exhibiting, save in a very mild form, the symptoms usually accompanying cardiac affections.

On the 25th December last, I was hastily summoned to see Isaac Hoare, aged 57, living at Starch Green. He was reported to have "choked himself" by a morsel of food "going the wrong way." I found the patient in profound collapse, covered with cold sweat; respiration was performed by gasps, with long intervals between each breath; he was pulseless as high up as the axilla. On being placed in the horizontal position, he died without a struggle. On inquiry, I learned that the deceased had suffered fourteen years ago, from "inflammation of the chest," which confined him to bed five weeks, and from which he slowly recovered. Since that time, he had been unable to lie, save on his back, without an uneasy sensation, amounting sometimes to pain, referred to the heart; this being more annoying when he attempted to rest on the left side. Otherwise he made no complaint, seeming to enjoy good health, and being able in all weathers to pursue his ordinary work as a road-labourer. On sitting down to dinner on the 25th, he appeared as well as usual; but almost immediately afterwards fainted. I saw him a few minutes later, and found him as described above. I may mention here that the brother, sister, and son of the deceased all died suddenly; and, as far as I could make out, of heart affections.

Post mortem examination, eighteen hours after death. The larynx and trachea were, as I expected, quite free from any foreign body. The muscles of the chest were pale and covered with fat. Some old but unimportant pleural adhesions existed; but the lungs were healthy. On opening the pericardium, I found that cavity filled with dark coloured fluid blood. The heart was almost converted into fat; and a rent three-fourths of an inch long occupied the posterior portion of the apex of the left ventricle, from which no doubt, the blood contained in the pericardium had escaped. Besides this, the walls of the heart were thinned, especially those of the ventricles; the muscular structure was pale, greasy, and easily torn. The valves were healthy; except the aortic, which permitted some regurgitation. The ascending portion of the arch of the aorta contained several patches of atheromatous deposit.

Influence of Ozonised Air upon Animals. Dr. Ireland says: "These experiments were most carefully performed, and all sources of complication avoided as carefully as possible; and, as I felt satisfied of their correctness, I saw no reason to sacrifice the lives of more animals in repeating them. I submit to the reader the following conclusions:—1. Ozonised air accelerates the respiration, and, we may infer, the circulation. 2. Ozonised air excites the nervous system. 3. Ozonised air promotes the coagulability of the blood, probably by increasing its fibrine. In the blood, however, ozone loses its peculiar properties, probably entering into combination with some of the constituents of the circulating fluid. 4. Animals can be subjected to the influence of a considerable proportion of ozone in the air for hours without permanent injury; but in the end ozone produces effects which may continue after its withdrawal and destroy life." (*Edinburgh Med. Jour.*)

Reviews and Notices.

LECTURES ON SURGERY, DELIVERED IN ST. BARTHOLOMEW'S HOSPITAL. By WILLIAM LAWRENCE, F.R.S., Serjeant-Surgeon to the Queen, and Surgeon to the Royal Hospitals of St. Bartholomew and Bethlem. Pp. 632. London: 1863.

THE publication of these *Lectures*, we learn from Mr. LAWRENCE'S preface, was not undertaken by him without some reluctance; and it was only at the request of, and in consideration of an offer of aid from, his friend and colleague Mr. Holmes Coote, that he was induced to enter on the task. Before, however, the work had proceeded far, Mr. Lawrence "discovered that an undertaking like the present must be the work of one person"; and, therefore, he hastens to disburden Mr. Coote of any responsibility.

"In order to relieve him from responsibility in respect to any opinions or statements in which he may not coincide, it is right to mention that he neither saw the greater part of the manuscript before it went to the printer, nor has seen a single page in print before the publication of the book. I take this opportunity of thanking him sincerely for his ready and kind offer of cooperation on this, and for his valuable services on many other occasions."

That any attempt at literary cooperation between Mr. Lawrence and one of his younger colleagues should be found impracticable, is not surprising. To render it possible, one of two things must occur: either the senior must exhibit an amount of perseverance, and a capability for following up the numerous advances and changes in his art, very rarely to be met with in a man of Mr. Lawrence's years; or the junior must put himself back a quarter of a century or more. This, we take it, is the true state of the case: Mr. Lawrence could not go forward to the advanced views of Mr. Coote; Mr. Coote could not go back to accept, without question or qualification, the doctrines of Mr. Lawrence. No blame lies with either; on the contrary, they have acted sensibly and honourably in dissolving a literary partnership which was impracticable.

We have, then, Mr. Lawrence alone responsible for these lectures; and, from the observations made in the preface, we should not expect to find in them such an exposition of modern doctrines as is met with in most of the surgical works which have appeared within the last few years. A comparison of things of the past with the present confirms this opinion. Much of the present volume is identical in order and sentiment, and all but identical in expression, with a large portion of a course of lectures by Mr. Lawrence published in the *London Medical Gazette* for 1830. Here and there, indeed, notices of more modern scientific researches, and additions of practical importance from the stores of the author's large experience, are introduced; but still the basis of the lecture lies there, where we have indicated.

The reader of Mr. Lawrence's book must not, then, expect to find in it all they would look for from Syme, Paget, Erichsen, Miller, and other such men of the present time. He must take up the book as the work of a practical man, a worthy successor in his hospital of Pott and Abernethy; one who, more than thirty years ago, was able to put forth his views on surgical matters in such a form that even now, brought forward in a new guise and with some addition, but without essential alteration, they may instruct many.

The book commences with an Introduction on the Distinction between Physic and Surgery; in which, as in 1830, Mr. Lawrence expresses a distinct and forcible opinion in support of the unity of medicine.

"To assert", he says, "that surgery and physic are essentially distinct, is to say that there are two kinds of pathology; that the external and internal parts are to be treated on different principles. It would be as rational to say that there are two kinds of physiology, one for the outside, the other for the inside of the body. When you know that the component tissues, or organic elements of our frame, are the same throughout, can you suppose that the position of a part in the body can alter the nature and treatment of disease? It may cause differences in the mode of proceeding; thus you have less power of acting locally on internal parts; it may make the pathological investigation of one organ more difficult or easy than that of another; but it cannot alter essential principles. Inflammation, for instance, is the same kind of disturbance, whether in an external or internal part; and we treat it exactly on the same principles, whether it be in the eye, breast, or testicle; in the heart, lungs, or liver. The principles of pathology, therefore, are general; they are the same for all parts of the healing art. They result from our knowledge of health and disease generally, and must, therefore, be common to the physician and surgeon."

Again, after pointing out that the best preparation for a physician is the study of surgery—that is, of external diseases—he says:

"I consider a comprehensive acquaintance with medicine equally necessary to those who mean to practise surgery only. If the surgeon is to rank higher in public estimation than the general practitioner, will he rest his claim to this superior dignity on the circumstance of possessing a lower amount of medical knowledge? It is necessary that surgeons should apply, in their own department, the principles and modes of relief deduced from a survey of medicine generally. The manual part of surgery is far less important than the medical; and it would be indeed disgraceful to our profession if surgeons were not competent to the management of surgical cases without the assistance of any other practitioners."

The Council of the Royal College of Surgeons would do well, we think, to study and act on the sound doctrine which has thus been enunciated by one of the most eminent members of their body.

The body of the work consists of twenty-two chapters; viz.: 1. The Nature and Divisions of Disease; Arrangement and Classification; Nosology; 2, 3, and 4, Inflammation: 5, Spontaneous Inflammations, and the Unhealthy States of Constitution to which they owe their Origin; 6, Fever; 7, Suppuration; 8, Chronic Abscess; 9, Ulceration; 10, Mortification; 11, Wounds; 12, Poisoned Wounds; Hydrophobia; Venomous Serpents; Dissection Wounds; 13, Scalds and Burns; 14, Sympathetic Effects of Local Injuries; 15, Scrofula; 16, Gout and Rheumatism; 17 and 18, Syphilis; 19, Gonorrhœa; 20, Cancer; 21, Fungus Hæmatodes; 22, Melanosis.

This list consists mostly of subjects which are generally recognised as belonging to the medical rather than to the operative aspect of surgery; and they are subjects, too, on the nature of which investigation has been directed with the greatest energy during the last twenty or thirty years. Our readers

will perhaps now better appreciate the remarks we made in an earlier part of this notice, when we intimated that they must look for the practical rather than the scientific in Mr. Lawrence's book. The author has in his day done his share in the advancement of his science; and therefore we look on this work of his with respect, and with a feeling of gladness at seeing him again among us, albeit his dress be not of the most modern and approved fashion.

China from a Medical Point of View in 1860 and 1861. By C. A. Gordon, M.D., C.B., Deputy Inspector-General of Hospitals, etc. Pp. 464. London: 1863.

Dr. Gordon accompanied the late expedition to China, and had a favourable opportunity of observing the climate, manners, and diseases of one or two localities in that vast empire. These observations he now lays before the public and the profession; we say the public as well as the profession, because the matter contained in his volume cannot fail to be of interest and instruction to all classes of readers.

Dr. Gordon evidently made good use of his time while in the Celestials' country. Notwithstanding the onerous duties which fell upon him in his official capacity, and the villainous nature of the climate, he seems to have seized upon every occasion of making himself well acquainted with the manners and customs of the natives amongst whom he was, by his duties, temporarily thrown. His volume, therefore, whilst containing a large amount of valuable medical details and statistics, also contains a large amount of matter which will be found, as we have said, full of instruction to the general reader.

Dr. Gordon reached Hong Kong in June 1860. From thence he goes to Canton. Afterwards, he voyages on from Hong Kong up the Peiho to Tein-tsin, which he reached on December 16th, and where he remained until October of the following year. The greater part of his volume is, therefore, naturally occupied with a description of his experience of men and things as observed at Tein-tsin.

We need hardly recommend this volume to those of our medical brethren whose fortune or misfortune may bring them into these regions of the Celestials; for assuredly no wise medical man would depart thither without making himself master of the valuable lessons to be gathered from Dr. Gordon's experience, respecting hygiene, climate, diseases, etc. But we would also strongly recommend the perusal of this volume to those of our brethren whose avocations are not likely ever to draw them outside the limits of their daily routine of practice. They will gain pleasure, instruction, and profit from the perusal.

In his first chapter, Dr. Gordon gives an historical notice of China. In the second, he treats of Hong Kong. In the third, of Canton. In the fourth chapter, he takes us from Hong Kong to Peiho; and in the fifth, reaches Tein-tsin. Here he remains, and of the place discourses fully—of the people; of the topography; of the zoology; of the climatology; of the hygiene and of the mortality of the troops at Tein-Tsin, British and Native-Indian; and one chapter is devoted to the "pathology of diseases there."

It is, of course, impossible for us to follow the Doctor through these pages; but we may give the reader a few extracts from them to show what kind of information he may expect to find within, and how that information is imparted.

The "people" of Hong Kong he speaks of as energetic and active.

"In many respects the labouring classes at Hong Kong contrast favourably with the corresponding classes in Britain. In personal cleanliness they are certainly superior to the 'great unwashed' of our towns, and even of the agricultural districts. In quiet industry they beat the Englishman hollow. In propriety of demeanour, and in sobriety of habits, the contrast between the Chinaman and our own sailors and soldiers may be seen at Hong Kong at almost any hour of the day, and until a late hour at night." (P. 27.)

Small-pox, he tells us, plays havoc with the Chinese. He says:—

"Small-pox is also very prevalent, making terrible devastation among eyes, and leaving scars that are horrible to look at upon the faces of its subjects. As elsewhere stated, vaccination is not practised by the Chinese, but in its stead inoculation. The consequence is that the scourge small-pox is disseminated by art, in addition to the periodical visits it makes in an epidemic form. But these are not all the circumstances that aid in the production of blindness among the people in the north of China. A favourite method of treating diseases affecting the eyes consists in scraping the inner surface of the eyelid, which process is performed by a class of men who make this branch of native surgery their particular province. The result of the operation is that the eyelid becomes inverted, so as to bring the eyelashes in contact with the point of the eyeball itself; disease is thus induced, and after a short time the power of sight becomes destroyed." (P. 122.)

The practitioner of medicine at Tein-tsin is naturally an object of interest to us. Here he is as engaged in action:—

"At a retiring and comparatively quiet corner of the principal business street, this professor of the healing art has taken up his quarters. These quarters consist of an awning of blue cotton cloth, with white borders, upon which, in Chinese characters, are described at length the wonderful accomplishments of the presiding genius. The awning is extended upon four upright poles, so that secrecy cannot be observed here; not that this signifies much, for the Chinese are not naturally a modest race, and an artificial civilisation has not done a great deal to render them so, even to external appearances, as it is said to be the case in some western nations. The patient, accordingly, boldly walks up to the physician here, for none who are so ill as to be unable to walk ever seem to ask for medical advice. Here he relates his various ailments, and it may be some of the idlers who are to be met with upon the streets, close in to listen to his recital of bodily ills. There is equally little mystery about the examination by the Chinese Æsculapius, or about his prescription. A number of small phials filled with gilded pills, some pieces of a black-coloured plaster, and any number of old decayed stumps of teeth, are strewn about upon the table." (P. 125-6.)

The chapter on the Hygiene of Tein-tsin is a very interesting one. It tells us how the health of our troops was there watched over; and is full of valuable hints for the future resident there. He remarks here that "much has been said of late years of the supposed propriety of assimilating the hospital system of the British army to that of the

French." There was, he adds, plenty of opportunities of comparing the two systems; and, as the result, we are told that the "French officers, on reading our regulations, one and all expressed their sense of the superiority of our system to theirs." So it is not in all particulars that they manage these things better in France."

The twelfth chapter contains an account of a hospital opened in China for the benefit of the Chinese, and of its great success. One striking fact was noticed—the apparent want of sensibility to pain of the Chinese.

"A large proportion of those upon whom operations were performed had no chloroform given to them, and these, unless when the operation was more than usually protracted, neither cried nor winced; some did not even clench their hands or teeth, but lay upon the table perfectly motionless, while their muscles were being cut by the knife, and their bones divided by saw, forceps, or gouge.

"That this may be in some degree attributable to the circumstance of the sensibility of the nervous system being less acute in the Chinese than in the European is quite probable. That this is so, is mere matter of speculation; but were it an actual fact, it would be insufficient to account for the great degree to which indifference of pain is observable among them; a good deal is, therefore, no doubt due to moral training. From their earliest youth the Chinese are taught indifference to bodily suffering, or to life itself. Personal cruelty is instilled into their nature from their infancy; and so effectually, that I have seen bystanders and relations of a subject of operation smiling and joking as its details were being proceeded with, and I have seen a person just removed from the operating table, and placed for the time being upon a bed in the immediate vicinity, smile at, and appear to enjoy the agonies of his successor, as the knife was cutting its way through, and the blood trickling from his quivering flesh." (P. 430.)

The concluding chapter tells of the joy of the writer to escape from "that most filthy of filthy Chinese cities Tein-tsin," and of an almost romantic journey to Nagasaki, a Japanese port, where the vessel that bore him touched to take in coal.

Lunacy Murders, etc., in New York. Two suicides and one homicide were reported on one day as occurring at the hands of persons who have been recognised as of unsound mind, but who have been allowed at large. The first was the case of John Fitzgerald, a wealthy banker of Wisconsin, who came to this city for his health. One member of his family had died in a lunatic asylum, and he, fearing that he might become insane, had threatened his own life. He retired to his room at the St. Nicholas, and, after writing letters to his wife and friends giving instructions as to his burial, deliberately shot himself. The second case occurred at the Sailors' Snug Harbour, Staten Island. An inmate of that institution, named Ingalls, had been reproved for swearing by the chaplain, the Rev. Mr. Quinn. At this the sailor seemed to become alarmed lest he should be exposed for what he called "that horrible affair." He importuned the chaplain not to expose him, but the latter made light of his alarm, attributing it to a slight aberration of mind. On the morning of the murder Ingalls was noticed to act strangely. On leaving the institution after services on Sunday, the chaplain met the sailor, who said, "You will expose me, I know you will, if you live," and drawing a double-barrelled pistol from his breast first shot the chaplain dead, and then discharged it at his own head, inflicting a fatal wound.

Progress of Medical Science.

Removal of the whole of the Shaft of the Femur. Mr. Beaney, Surgeon to the Melbourne Hospital, relates the following case:—The patient, aged 21, had always had good health. In October, 1860, he walked a short distance after dinner on a wet day, but did not get wet. He sat down for a short time in a room, when, feeling cold, he went to the fire. He then felt pain in the leg near the knee, and walked lame. The lower part of the thigh began to swell, and the swelling gradually extended up the thigh; he had fever, with symptoms of inflammation of the bowels, and sweated profusely. At the end of six weeks, matter formed near the upper part of the thigh, and two or three weeks later a large quantity escaped. Other collections of matter ensued, and broke. The openings formed continued to discharge. The thigh-bone was very much enlarged, but the enlargement was most marked near the upper third; here he suffered from a dull aching pain; the pain had been very severe, relief following the escape of some thick yellow matter. The leg was twice as large as the opposite one; the skin, cellular tissue, muscles, and bone being united together. There were seven or eight openings—three or four very large ones—some discharging whey-like fluid, others thick pus. He had not had night sweats since the leg began to discharge. He had gained flesh during twelve months; his appetite was good, tongue clean, pulse 78, and lungs healthy. No diseased bone could be felt through any of the sinuses.

Amputation of the thigh had been advised by several surgeons; but feeling convinced that the case was one of acute inflammation of the shaft of the femur, followed by its death and the formation of a casing of new bone, Mr. Beaney determined to cut through the new bone and remove it. On the 24th of January, 1862, he was placed under the influence of chloroform; a semi-circular incision was then made in the centre of the outside of the thigh, and the flap thus made dissected from the bone. By means of a strong gouge and mallet, the new bone which was three-fourths of an inch thick was cut through, when about a fourth of a pint of watery pus escaped. The whole of the shaft of the femur was found necrosed. In some parts it was not thicker than a quill, in others as thick as the thumb. It was so closely embraced by the new bone, that the greatest difficulty was experienced in extracting it. Scarcely a tablespoonful of blood was lost. The wound was filled with wet lint, to prevent its closing. He had no bad symptoms. Several pieces of bone escaped from the wound which was kept open with considerable difficulty. One month after operation, the limb was very little larger than the opposite one, and the tissues felt soft; pulse 86; appetite good. He gained flesh. There was a prominence on the lower part of the shaft of the femur, and a small opening existed opposite the outer condyle. When a probe was introduced, roughened bone could be felt. Early in April, Mr. Beaney cut down on the outer side of the condyle, and removed two large thin pieces of the diseased external condyle. A sinus was then discovered passing through the new bone to the centre of the enlargement of the lower part of the femur, and loose bone could be felt with the probe. The new bone was cut through with the gouge, and a piece of necrosed bone, of the size of a large walnut, removed. The capsule of the knee-joint was not touched; the length of time the knee had remained motionless, had caused slight anchylosis of the joint, and the capsule to diminish in size. From this time he progressed most satisfactorily. For some time there was a free discharge of laudable pus, accompanied occasionally by small spiculæ of bone. The latter, however, ceased to come away in September,

and the wounds rapidly closed. In October, he left for the country with a good limb; motion was being gradually restored to the knee-joint—the opening made on the outer aspect of the thigh would scarcely admit a probe, and the whole limb was not larger than its fellow. He was in sound health, and gaining flesh rapidly. (*Medical Record.*)

New Tent for Dilating Purposes. Dr. Sloan, of Ayr, has discovered a new material possessing many and great advantages over the ordinary sponge-tent. It is the dried stems of the sea tangle (*Laminaria Digitata*); this, like all the algæ, being purely cellular in structure, possesses the property of drying readily at ordinary temperatures, and, in so doing, greatly diminishes in bulk, becomes firm, elastic, and tenacious; in this state it may remain for years, and by mere absorption of moisture, readily assumes its original size; it can easily be cut to any shape, and, being one of our commonest sea-weeds, exists always in abundance. It is readily recognised by its appearance of possessing root, stalk, and branches. In this climate it acquires a length of from two to twelve feet, with a diameter of from one to several inches. Dr. Sloan has not only tried this substance himself, but many of his friends have also used it, and found it very efficient for the purpose; one of them writes, "in every case in which the sponge-tent requires to be used the tangle tent can be used, and I have no doubt will, by and by, come into general use." One great advantage ascribed to it is, that it does not occasion anything like the fœtor which the use of the sponge gives rise to. The author thinks it may be used for dilating the os uteri, urethra, the lacrymal canals, and Eustachian tube. If freely exposed to moisture, it doubles its diameter in four hours. (*Glasgow Med. Jour.* and *Dub. Med. Press.*)

Cooling of the Body after Death. The following is a summary of Dr. B. W. Richardson's views, lately given on this subject:—

1. If the body is left dead with its vessels full of blood, the temperature of the blood being unaffected by the mode of death, the cooling is slow, but in the great majority of cases is completed in fifteen hours.

2. If the body is left dead from direct and absolute loss of blood, cooling to the temperature of the surrounding medium is completed, in regard to the external surface, in two hours.

3. If the body is left dead from sudden and profuse exudation, as in cholera, the cooling to the temperature of the surrounding medium is completed in two hours.

4. If the body is left dead from obstruction to the circulation, as from fibrinous concretion, the body, in so far as the external surface is concerned, will be chilled to the temperature of its surrounding medium in two hours.

5. In these last three named forms of death, if the death be slow, the heat of surface may sink to that of the surrounding medium, even before life has ceased.

6. The body, when dead, will sink steadily in temperature to the medium of its surrounding envelope: in the air to the air, in a stone tomb to the tomb; but it will not afterwards rise in temperature by the application of any external warmth, short of such as would destroy its texture.

7. After all forms of death, the age and corporeal condition of the person must be taken into account; youth and old age, great thinness of structure, deficiency of food, and states in which blood is diverted from its systemic course, quicken the decline of the animal heat.

8. In taking observations for medico-legal purposes, in any suspected case, the mere test of the hand is altogether unreliable; for as the terms heat and cold are relative only, and as between the hands of different observers the greatest natural difference may prevail—that which to one hand would signify warmth, to another would signify cold. If any observation in respect to temperature be made, therefore, it should be carried out with the thermometer, the points at which the temperature is taken being the flexures of joints, the mouth, or the nostril. (*Medical Critic and Psychological Journal.*)

A Reagent for Detecting Beetroot Alcohol. M. Cabasse proposes sulphuric acid as a precise reagent for beetroot alcohol. By mixing three parts, in weight, of this alcohol with one part of sulphuric acid, a red colour is immediately produced, which preserves its intensity for several months. No similar result is produced by operating with vinous alcohol. On operating with perfectly colourless alcohol, the liquid does not change directly, but after a shorter or longer time takes a slightly amber tint; this amber tint, which belongs to alcohols which have remained a certain time in cask, is heightened only by sulphuric acid, since it existed previously, but has no analogy with the red colour of beetroot alcohol. The following are the results obtained by the action of sulphuric acid on mixtures of definite proportions:—1. Vinous alcohol, three parts; beetroot alcohol, one part; red colour, apparent only with a white paper placed behind the flask. 2. Vinous alcohol, two parts; beetroot alcohol, two parts; decided red colour. 3. Vinous alcohol, one part; beetroot alcohol, three parts; red colour still more decided. It is then easy, by means of pure sulphuric acid, to recognise immediately beetroot alcohol and its mixture in various proportions with vinous alcohol. The coloration produced by using the reagent in the given proportion is due most probably to the action of the acid on the volatile oil, from which it has hitherto been found impossible to free the alcohol, to which it communicates its peculiar flavour and odour. (*Répertoire de Pharmacie*, and *Chemical News.*)

Radical Cure of a Case of Fistula in Ano, without the Use of the Knife. Assistant-Surgeon D. B. Hoffman, of California, relates the case of a man aged 38, who had a fistulous opening on the right side of the rectum, about three-fourths of an inch from the edge of the true orifice, in a highly inflammatory and painful state. No organic cause of any kind could be found. He objected to operation. Mr. Hoffman, therefore, directed him to remain in his room, and keep as quiet, and rest as much in a recumbent position as possible; to use a cold water bath to the affected parts frequently, and at the same time, throw cold water up the bowels freely with a syringe. He also injected the fistular opening once a-day with the tincture of iodine, and gave once a-day a tablespoonful of the following prescription:—Flowers of sulphur, powdered resin, of each ʒss; clarified honey, ʒj. This course of treatment cured him in twenty-three days. His diet, during that time, was altogether of a bland nature; no solids of any kind were allowed, and the use of tea and coffee was prohibited. Milk and strong beef soups were the principal food used. The cure took place three years ago. (*San Francisco Medical Press.*)

Recovery from Gunshot Wound of the Head. Charles McCarty, private, was wounded at the second battle of Malvern Hill, by a ball from a pistol in the hands of a rebel cavalryman. The wound was received while he was making a charge upon the rebel infantry, behind which the cavalry were posted. The infantry broke and fled, leaving the assailing party almost upon the sword points of the opposing force, at which time the wound was received, the distance being about three feet. So small was the intervening space, that the powder entered the skin, causing permanent discoloration. The ball entered at the inner canthus of the right eye, taking an irregular downward course, lodging under the skin of the opposite side, on a line with the posterior edge of the mastoid process of the temporal bone, and half

an inch below its inferior extremity, in which position the ball remained, until, a short time after the battle, he was placed under the care of a surgeon, who extracted the ball by a slight incision. The injury sustained by the eye was comparatively slight, causing opacity of the lower portion of the cornea and to a certain extent injuring the conjunctiva and sclerotica, causing a small track to slough out, which cicatrised, adhesion having taken place between a portion of the conjunctiva of the eye and that reflected upon the inferior lid. He was still able to distinguish large objects at a short distance. After he received the injury, he lost all consciousness as to what was being enacted around him; his only recollection being that of a severe pain in the head, which, however passed off in a few days. There was no other prominent symptom, and he suffered but little for some time. The counter-opening by which the ball was extracted healed, leaving a hard cicatrix. The treatment employed was cold water dressing to the part, with slight purgation. He was also given ten grains of Dover's powder at bed-time, from which he received great relief and a good night's rest. At the time of the report the patient was nearly ready to leave the hospital, though permanently unfitted for the duties of a soldier. (*Philadelphia Med. Journal.*)

British Medical Journal.

SATURDAY, FEBRUARY 28TH, 1863.

MEDICAL HEALTH ASSURANCE.

SEVERAL letters which we have lately received lead us to ask the question, do the members of our profession as a body need a society which would come to their aid in the hour of sickness? The correspondence to which we allude, and the social condition of the medical profession as known to all of us, can, we apprehend, leave but one answer to the question, and that is, that a society of the kind alluded to would be an immense boon to the profession, if it could be established on sound principles and honestly carried into action.

A certain percentage of our medical brethren are every year stretched on a bed of sickness. Our profession is notoriously a poor and an ill-paid profession. The great body of us are dependent on our daily labours for daily support; and they are the exceptions only who are enabled to realise world's goods enough to protect them against the accidents of fortune. In our profession, a man's income ceases to come in when he ceases to labour. The clergyman's stipend may run on, the lawyer's bills may still increase, the manufacturer's mills are not stopped, though the lawyer, and the clergyman, and the manufacturer be prostrated by sickness. But it is not so with the medical man; with a cessation of his visits ceases his income absolutely; so that, in an especial manner, is the medical man's income dependant upon his health. During sickness, whilst he and his family are still consuming, the renewal of the means of life is arrested. Consumption without reparation is his position then. And how many are there of our profession who have private means sufficient to meet the emergency? The necessary consequence is that, during his illness, the medical man is forced to mortgage his future exertions in order to meet the present difficulty. And when he rises enfeebled from his bed of sickness, he starts again in the battle of life weighted and oppressed by an accumulation of bills on the creditor side of his account.

Would not a friendly society—a society which would come to the medical man's aid at the critical moment—annually relieve a large number of our profession from this painful struggle? Would it not enable many a medical man who struggles on at his labours—fighting against the onset of sickness—to subject himself to the same suitable conditions as he would prescribe for his patient at the earliest approach of disease? Has not this struggle against impending sickness cost many a life, which might have been preserved had such a society been at hand to offer its protection and assistance?

Certainly, the proposal of Dr. Bryan and Mr. Gramshaw seems to us to be most excellent and reasonable. At all events, we consider it our duty to bring the subject prominently under the consideration of the profession.

We have done more than this; we have requested a friend, an eminent actuary, to give us his opinion as to the practicability of establishing such a society; and add his suggestions and opinions for the benefit of those who are interested in the subject.

"I see," he writes, "no reason why the scheme of health insurance should not work satisfactorily, provided you get it well supported, which is *indispensable.* It should be cautiously managed at first, and economically. It would, of course, be on the mutual principle, like the friendly societies for working men; in fact, it would be a friendly society of a higher class.

"I am decidedly of opinion that it should, *in the first instance*, be limited to the medical profession, and that at the outset all the allowances should be of the same amount. To illustrate this point, one medical man in large practice might consider £20 a week a proper allowance in case of incapacity through sickness, whilst another would, perhaps, think £5 a week a handsome sum. It would be inconvenient, and indeed hazardous, at first, to allow of such inequalities.

"The main point, however, is the amount of the subscription to be paid by the members; and to determine this with approximate accuracy, data of sickness should be obtained, and premiums computed, before any other actual step is taken. It is well known, to all who have looked into the subject, that the great majority of friendly societies are in an unsatisfactory—*i. e.*, insolvent—condition, because the

contributions of the members are insufficient for the benefits promised to them. I do not know what is the average rate of sickness; but if, on the average, each member of the medical profession has one week's incapacity in the year through sickness, then the annual subscription to provide for an allowance of £5 per week during sickness would be £5 *per annum*—leaving the expenses out of the question. If there are two weeks sickness in the year on the average, the subscription would be £10 *per annum*, and so on.

"It is obvious, however, that for such a society to be on a stable basis, the actual subscriptions should be considerably more than the amounts theoretically necessary; and the surplus at the end of each year should be applied to reduce the contributions of future years.

"I believe it is established that the average sickness increases slowly with the age, so that the older members would have to pay more than the younger ones; and no persons above a certain age—say 60 or 65—should be admitted as members, or allowed to remain members after attaining that age.

"I see no good and sufficient reason for the limitation that no demands should be made during the first twelve months; in fact, this seems to diminish the usefulness of the society for no good object.

"With regard to organisation: no expense should be incurred in the outset upon buildings, deed of settlement, etc. The directors should be content with nominal fees for a time; and it would suffice, I think, to have one moderately paid officer at first."

PHLEGMASIA ALBA: EMBOLIA.

M. Trousseau has lately made this disease the subject of a series of interesting clinical lectures, of which we here give the summary.

The cause of phlegmasia is obstruction of veins. This obstruction is caused by the spontaneous coagulation of the fibrine of the blood, and very rarely by what is called coagulating phlebitis. Spontaneous coagulation takes place more especially in cachectic states of the body and after confinement. The clots which produce the obliteration contain a large quantity of fibrine in a molecular or fibrillate condition, red and white globules, fatty matter, and hæmatine. These clots may become disaggregated, and disappear without leaving any trace of their existence in the obliterated vessel, and without producing any appreciable general disturbance of the body. Moreover, they may become organised, being converted into connective tissue. In such cases, the diameter of the vessel may be converted into a cavernous trabecular structure, and the circulation be still carried on through it in its altered state. Or, again, the vessel may be converted into fibrous or fibro-calcareous cord. These are different modes of termination of phlegmasia. The venous clots have two extremities—one peripheral, which is multiple, and ramifies in the origins of the veins; the other extremity may be called the cardiac. The cardiac extremity often assumes a special form—a serpent's head form. It may be of a cystic nature, the walls of the cyst being composed of stratified fibrine, and the contents of it being disaggregated softened fibrine, which has the appearance of pus. The head of the clots is generally non-adherent, and is situated at the opening of an afferent vein. Being more or less firmly attached *in situ* by a pedicle or neck, this extremity—the head—may be detached and carried away by the current of the blood, and finally arrested in one of the branches of the pulmonary artery, producing the symptoms of pulmonary embolia. These symptoms, of course, vary much, according to the general condition of the patient—the extent, the volume, and the composition of the embolic clots. Life may be quickly destroyed by these cardiac and pulmonary embolia; and in such case death is the immediate result of the passage of the clot into the heart, or into the trunk or large branches of the pulmonary artery. The clot may become fixed in one or other of the divisions of the pulmonary artery, and there undergo various modifications—absorption or molecular disaggregation; or it may occasion temporary or permanent obliteration of the vessel. Permanent obliteration will give rise to a third order of accidents in the pulmonary parenchyma; viz., most frequently local anæmia, œdema, pneumonia; and more rarely gangrene of the lungs.

ARTIFICIAL ILLUMINATION.

Dr. Frankland, in a lecture lately delivered at the Royal Institution, on the above subject, stated that, during the last ten years, very little improvement had taken place in the means of producing artificial light. Lately, however, a new illuminating agent had been introduced, and the magneto-electric light had received an important application. In gas-manufacture, again, very little improvement had been made in these ten years. Sulphur was still found in it in considerable and perhaps undiminished quantity. The Rev. Dr. Bowditch has, however, shown how it may be got rid of; viz., by passing the gas over hydrate of lime heated to 400°. Recently, a new illuminating body—acetylene—has been discovered in coal-gas; and the discovery may perhaps entirely revolutionise the manufacture.

"The use of animal and vegetable oils for illuminating purposes had received no new development in the past ten years; but a new source of light of the greatest importance has been discovered in the oils obtained by the distillation of coals and shales at low temperatures. This oil, however, has recently found a formidable rival in the oil distilled by Nature herself. The native oil of the

United States and Canada is obtained in immense quantities: from the latter country alone as much as 20,000,000 of gallons have been procured, which, it has been calculated, would give as much light as 180,000,000 of pounds of sperm candles."

THE WEEK.

We should like to inquire of those of our medical brethren who admire the system of gratuitous medical services whether or not they consider that the medical profession in Ireland are bound to give gratuitously certificates of the cause of death of the patients whom they have attended? We see under the Act for Registration of Births and Deaths in Ireland, now on its passage through Parliament, that the medical men are required to perform this bit of service gratis to the public. Would the government ask them to do it, except for the notorious fact of the unlimited gratis work done by the profession?

A large reduction is made in the medical establishment, services, and supplies of the army for the year 1863-4. The expenditure under these heads was, in 1862-3, £327,311; whilst for the forthcoming year the estimate is £255,993. There has been a general reduction in the army estimates for this year; but we believe that the screw has been applied with especial rigour in the medical department.

We read in the journals that last week a fee for making a *post mortem* examination was refused to a house surgeon of the London Hospital by the coroner on the following grounds, as stated by the "coroner, Mr. R. Walthew, who remarked that Mr. Humphreys had been obliged to refuse payment on the ground that *the medical officers were paid a general salary, and in their duty was included these examinations.*"

At the last annual meeting of the Cancer Hospital, we read:

"The surgeons' report stated that the completion of the eleventh year of the existence of the hospital strengthened the opinion previously expressed—that cancers may be cured. The large number of cases which had come under the care of the surgeons had enabled them to arrive at data which, without the existence of the special hospital, could not have been obtained. Many surgeons and physicians, who had signed a protest against the hospital on the ground of its special character, had since acknowledged its usefulness by sending patients from their own hospitals to receive its benefits."

We think the profession will agree with us that the light of this hospital should not be hid under a bushel. The surgeons, for example, who make these statements, are bound to tell the profession why their opinion as to the curability of cancer is strengthened year by year. All the medical world should have the benefit of this consoling hope. What are the data furnished to the surgeons of the hospital upon which they found this hope of cancer-curability? What, again, are the special facts here obtained which could not have been obtained at a general hospital? We are sure the surgeons' report was not mere vain assertion; and we, therefore, call upon those gentlemen, in the name of cancer-suffering humanity, to give the profession the benefits of their special experience at this special hospital.

Typhus appears to be raging in a part of the Vienna Hospital at the present moment. Six assistant-physicians are at the present moment suffering severely from the disease.

The Emperor and Empress of Austria lately paid a long visit to the Irrenanstalt, and expressed their high satisfaction at its excellent condition. On the following day, Dr. Riedel, the Director, received the Cross of the Order of Francis Joseph.

The faculty of Prague have just set an example which might well be followed by the Medical and Chirurgical and other Societies. It has issued a circular requesting all the medical men belonging to it to send in their *cartes de visite* before the end of April.

When shall we find, asks *L'Union Médicale*, the medical man rich enough in heart, in devotion, or in purse, ready to illustrate and immortalise himself by a foundation similar to that which has been established in England by Mr. Propert, and which Orfila was anxious to have in France?

The celebrated Professor of Clinical Medicine at the Faculty of Medicine in Madrid, M. Drumen, has died suddenly. He was President of the Royal Academy of Medicine and physician to Queen Isabella. He was remarkable for his high sense of professional dignity and honour as well as for his learning. On the occasion of the introduction of homœopaths at the court, he protested, and gave in his resignation, which was not, however, accepted. It is by such acts, says his chronicler, that medical men honour themselves and preserve the esteem of their clients.

M. Florence Prévost, a distinguished naturalist, has from time to time during the last thirty-five years, made a collection of the stomachs of different birds taken at different times of the year. The stomachs, with their contents, are dried and fixed on cards. His observations prove that birds in general are much more useful than hurtful to our crops; and, as regards the granivorous species, that the injury which they do at certain seasons is largely compensated by the destruction of insects which they effect at other seasons.

M. Riberi, by will, left a fund for the payment of a prize of 20,000 *francs* triennially for the next twenty-one years (seven prizes in all). The first of these prizes will be decided after December 31st, 1864. All works, whether in manuscript or published, written during the three years (from Jan. 1st, 1862, to Dec. 31st, 1864), on medical or surgical subjects, may be forwarded for competition. The Turin Academy of Medicine, who adjudicates, will give the preference to those works which indicate a distinct progress in the science of medicine. Of printed works, two copies must be forwarded. Printed works or manuscripts may be translated into Italian, Latin, or French. All works must be sent in before Dec. 31st, 1864, and will become the property of the Academy.

THE LATE DR. EDMUND LYON OF MANCHESTER.

Edmund Lyon was born in 1790, being the third son of the Rev. James Lyon, then patron as well as rector of the very valuable living of Prestwich, in Lancashire. He became the pupil of Mr. Benjamin Hutchinson, an eminent surgeon at Southwell, and author of the *Biographia Medica*, whose affectionate esteem and praise he won by his steady industry and exemplary conduct. He went thence to London, where he became a Member of the College of Surgeons; and afterwards he graduated in Edinburgh. He settled in Manchester; and on the retirement of Dr. William Henry in 1817 from the physiciancy to the Royal Infirmary, Dr. Lyon was elected in his stead. Notwithstanding the standing given to him by this appointment, and a most exemplary performance of its duties, his progress in general practice was exceedingly slow. Year after year of hard work brought hardly any accession of income. He was another example of the ever true remarks of Dr. Johnson, that "a physician in a great city seems to be the mere plaything of fortune; his degree of reputation is for the most part totally casual: they who employ him know not his excellence; they that reject him know not his deficience." It was not till about five-and-thirty years after he began the study of medicine that he obtained an income which, if it had been spread over many years, would have been a moderate remuneration for his toil and devotion. In 1841, after twenty-four years service, he resigned the physiciancy to the Infirmary, when the Board entered on the books their testimony to his "unremitting, exemplary, and zealous exertions," and elected him consulting-physician to the charities. In the year 1851, being in feeble health and possessing a competency, he retired from practice, and devoted himself to the business of three important public institutions—the Royal Infirmary, the Royal Institution, and Henshaw's Blind Asylum. Of the Royal Institution he was at his death the President. The committees of these three institutions have expressed in glowing terms their sense of the loss they have sustained in his death; that of the Infirmary speaking of his unremitting and exemplary services for nearly forty-six years; that of the Royal Institution, of his devotion of the energies of an accomplished mind to its management, and of his kind-heartedness and goodness; while the third speaks of the most extraordinary and exemplary manner in which he devoted his attention to his duties as a member of the Board of Henshaw's Blind Asylum.

He published very little. His most important papers are, *A Sketch of the Medical Topography and Statistics of Manchester;* and *Observations on Ileus.*

The medical profession has reason to be proud of one of its members who won so high a character by years of devotion to public service.

[The above is a summary of a memoir of the life of Dr. E. Lyon, just published by Dr. Crompton of Manchester.]

Association Intelligence.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the Journal cannot be sent to them.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 10th, 1862.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Lancash. & Cheshire. [Ordinary.]	Royal Institution, Manchester.	Thursday, March 12th, 3 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Pavilion Hotel, Folkestone, on Thursday, March 5th, at 3 P.M.

Thomas Boycott, M.D., *Hon. See.*

Canterbury, February 10th, 1863.

LANCASHIRE AND CHESHIRE BRANCH.

An ordinary meeting of this Branch will be held at the Royal Institution, Manchester, on Thursday, March 12, at 3 P.M. Notice of papers, etc., to be sent to the Honorary Secretary.

Dinner will be provided at the Clarence Hotel, Spring Gardens, at 5 o'clock.

A. T. H. Waters, M.D., *Honorary Secretary.*

Liverpool, February 16th, 1863.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of this Branch was held on February 12th; Henry Duncalfe, Esq., of West Bromwich, in the Chair. There were also present fourteen members and a visitor.

New Member. Dr. James Williams of Malvern was unanimously elected a member of the Branch.

Alteration of Law. Mr. Baker and Mr. Downes gave notice that, at the next general meeting of the Branch, they will move the following alteration in Law 4:—

"That instead of the words 'That a general meeting of the Branch be held thrice annually', the words 'That a general meeting of the Branch be held on the second Thursdays in October, November, December, January, February, and March,' be substituted."

Papers. The following papers were read.

1. On the Diagnosis of Retro-uterine Hæmatocele. By W. F. Wade, M.D.

2. On Two Cases of Cyanosis. By B. W. Foster, L.K.& Q.C.P. The patients attended.

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

At the *Royal Infirmary*, on Tuesday, February 3rd, Mr. Bickersteth operated upon a case of more than ordinary interest. A porter, aged about 40, was admitted in consequence of a tumour of considerable size which occupied the whole of the right side of the neck, and had been increasing gradually to its present dimensions for about two or three years. It was not painful, and had produced little or no inconvenience to the patient, until quite recently, when some difficulty in swallowing, buzzing noises in the ears, dizziness, and other indications of pressure upon the nerves and vessels, had begun to be felt. The tumour was round, firm, hard, and well defined, and presented all the characters of a solid growth; it was evidently deeply seated beneath the cervical fascia and the sterno-mastoid muscle; and from its size, situation, and connexions, so far as they could be judged of by palpation, it afforded the prospect that its extirpation would prove a tedious and formidable surgical undertaking. After careful and repeated examinations by Mr. Bickersteth and his colleagues, Mr. Stubbs and Mr. Long, it was concluded that it was a firm solid growth; and its removal resolved upon. A free crucial incision was made through the integuments, and the dissection of the exposed tumour was commenced, but had not been carried far before the sac was punctured; and a copious escape of purulent matter followed, showing at once that an error in diagnosis had been made, and that a large and very thick cyst, containing matter tightly bound down by the muscle and fascia, had been mistaken for a solid tumour. It was found that the cyst or abscess had dissected out the nerves and vessels of the region in which it was situated, leaving the sheath of the carotid artery exposed to the extent of nearly three inches. A portion of the anterior wall of the cyst, of about the size of a penny-piece, was removed; and, some lint being placed in the wound, the patient was sent to bed.

Mr. Bickersteth remarked that, notwithstanding the error in diagnosis, the operation so far had accomplished all that could be desired, by at once revealing the actual nature of the disease, giving exit to an accumulation of matter, and relieving the patient from symptoms that threatened to become formidable. As to the result, he thought there was a fair chance of the man's recovery; but of course, when the main artery was exposed to so great an extent, there was some risk from the possibility of ulceration taking place in the coats of the vessel. He had seen a very similar case in the practice of Mr. Syme, in which the same difficulties in diagnosis had existed, and in which the tumour had been entirely removed by a close and prolonged dissection from the vessels. Its exact nature was not discovered until an incision into the sac showed that it consisted, as in the present instance, of a thick membranous cyst filled with dirty brown pus. The case has since progressed favourably, the wound is granulating, and the patient out of all danger.

By a curious coincidence, I have to report another operation, at the *Northern Hospital*, by Mr. Hakes, in which also the result proved that an error in diagnosis had occurred. The case was one of what is conventionally called ovariotomy, but which may be more strictly defined as abdominal section for the removal of a tumour. The patient was a pallid, rather delicate-looking woman, 42 years of age, the mother of two children, the youngest aged 15. She first noticed the swelling about eighteen months ago, and came under Mr. Hakes's notice in February of last year. At that time the abdomen appeared to be full of ascitic effusion, with a moveable tumour at the lower part. She was tapped in the usual place, and several pints of amber-coloured fluid were drawn off; after which an irregular, nodulated, moveable tumour was plainly felt. The uterus was moveable, but less so than usual; and attached to the cervix was a small polypus. The case was now regarded as one of uterine tumour with ascites. About nine months afterwards—at the end of November—she was again tapped; and, after about a pint of fluid had been drawn off, the flow stopped, and the trocar came into contact with the tumour. Ten days afterwards, she was again tapped—this time above the umbilicus; and a large quantity of fluid was withdrawn. A large tumour, however, still remained, evidently consisting of some large cysts, as well as some solid matter. At a careful examination two or three weeks later, in which Dr. Grimsdale took part, it was concluded that it was an ovarian tumour, and a case in which the operation for its removal might be proposed; and the woman was admitted into the Northern Hospital.

The operation, performed on the 29th of last month, was commenced by an incision of the usual length, which was afterwards extended to about an inch above the umbilicus. The tumour was found to be covered by the attenuated and reticulated omentum, to which it was adherent at numerous points. There were also adhesions to the smaller intestines at two spots. Scarcely any pedicle could be said to exist; and the small band of tissue representing it, and by which the tumour was connected with the uterus, was tied with silver wires, first in two halves, and then by one wire encircling the whole; the wires were cut off short, and left in the cavity of the abdomen. When first exposed, the tumour presented almost the appearance of a collection of intestines matted together, and was found to consist of a mass of cysts of various sizes, with thin walls, and for the most part limpid contents; one or two of the cysts, however, contained half-solid bloody matter. The tumour was removed, of course, without using the trocar. One or more cysts were unavoidably ruptured, and there was a considerable escape of fluid into the abdominal cavity. The right ovary was seen to be enlarged; the left was not sought for, as it was supposed to have been involved in the diseased mass. A tumour, of about the size of a large walnut, was noticed on the body of the uterus. The cavity of the abdomen was carefully sponged out, and the wound closed in the usual way. The patient for several hours appeared to be doing

well; but she never completely rallied, and died thirty-three hours after the operation, apparently from simple shock. The *post mortem* examination showed that no inflammatory action whatever had occurred. The wound was firmly united. Both ovaries were found in their usual situation, each containing two or three small tumours; and in addition to the polypus on the cervix, and the tumour projecting from the peritoneal surface of the uterus, seen during the operation, one or two small fibrous tumours were imbedded in its walls.

It is not a little remarkable that this is the second case which has occurred in Liverpool within a year, in which a fibro-cystic uterine tumour (a disease so rare as to be almost denied an existence by some pathologists) has been removed in an operation commenced with the expectation of finding an ovarian cyst. The other case, your readers may remember, occurred in the practice of Mr. Fletcher in the workhouse hospital, and terminated in the complete recovery of the patient. It is fully detailed in the JOURNAL of November 8th, 1862, p. 499.

Within the last few days, an unusual form of fatal injury, which will, of course, become the subject of investigation in the coroner's court, has occurred here; and through the courtesy of Mr. Bickerton, the surgeon who has charge of the case, I am enabled to give the following interesting account of the matter.

A young man, while playfully wrestling with a companion, was thrown on his back, the other man falling with his knees upon his abdomen. The injured man got up, and immediately turned deadly pale, but complained of no pain, and was not aware that he had sustained any serious injury. He was, however, taken home in a cab, and soon became collapsed, and so remained from Saturday night until the following Wednesday, when he died. As he was unable to pass urine, a catheter was passed, and fully four quarts of bloody fluid were drawn off. He had stercoraceous vomiting a short time before his death. A *post mortem* examination at once revealed the cause of death. The fundus of the bladder was rent across from side to side, the wound being fully four finger-breadths in extent. There was scarcely any fluid either in the pelvis or in the abdomen, and the amount of peritonitis was much less than might have been expected under the circumstances. No injury to any other viscus could be discovered. It seemed probable that, at the time of the accident, the bladder was fully distended; and that the rent, from its situation, was caused by hydraulic pressure exerted by the contained fluid under the compression of the man's knees. The fluid drawn off by the catheter was evidently from the cavity of the pelvis.

CHEAP FOOD FOR THE WORKING CLASSES. Great public interest is being excited by the account of the working of the plan first brought out by Mr. Corbet, of Glasgow, for supplying wholesome and well-cooked food to the working classes at a really cheap and yet remunerative price. By this plan a good breakfast may be had for 3*d.*, a capital dinner for 4*d.*, and rations during any hour of the day for 1*d.* Thus a man may live like a prince on a shilling a day. The extension of the system to London and other large towns is now under consideration.

Reports of Societies.

ODONTOLOGICAL SOCIETY.

MONDAY, FEBRUARY 2ND, 1863.

SAMUEL CARTWRIGHT, JUN., ESQ., President, in the Chair.

DIAGNOSIS OF DENTAL NEURALGIA. BY W. A. N. CATTLIN, ESQ.

THE author of the paper commenced by a comparison of morbid conditions of the teeth, which have in his experience given rise to neuralgia with analogous pathological conditions in other organs, as well as with conditions not strictly analogous, but in which local disease had been shown to have had an etiological relation with neuralgia. He discussed briefly, the probable causes of the variety which every one knows to occur in the degree of pain suffered by different individuals under circumstances of local disease apparently very similar, referring it to variety in temperament, size of nerves, etc., and then passed on to the main topic, namely, an inquiry as to how far neuralgia due to a morbid condition of the teeth may be distinguished in practice from that dependant upon constitutional causes, or local mischief elsewhere. The conclusion arrived at is, that as in all other questions of difficult diagnosis, the surgeon must carefully examine not only the local condition of those organs and parts of the body most likely to originate the neuralgia, but into the general constitutional condition of his patient, and weighing carefully the facts he ascertains, exercise his judgment in determining the proper conclusions to be arrived at.

Before condemning a tooth as the cause of a local neuralgia, it is thus often proper to strive after the removal of other causes of reflex irritation, and the improvement of the general health. At the same time, the writer strongly deprecates the prevalent practice of retaining diseased teeth in the mouth to the sacrifice of health and comfort, after they have become useless for mastication or appearance. The paper is illustrated by a large number of interesting cases which have occurred in the practice of the author, some of them being cited to show that the symptoms of intermittent or regular paroxysms mainly relied upon by some authors in their diagnosis of constitutional neuralgia, frequently attend local neuralgia in patients of shattered health. He recommends stimulants in full doses as an antidote to nervous shock, and as the best remedy for the neuralgia which sometimes succeeds dental operations.

An interesting case is recorded, in which deafness was cured one hour after the extraction of a tooth.

HARVEIAN SOCIETY OF LONDON.

FEBRUARY 19, 1863.

HENRY W. FULLER, M.D., President, in the Chair.

ON THE USES AND VALUE OF GALVANISM AND ELECTRICITY IN GENERAL PRACTICE. BY HARRY LOBB, ESQ.

HE commenced by stating that it must not be supposed that galvanism was only useful in the hands of the specialist, but that there was a wide sphere open to its use in general practice; and, after a few remarks upon the resemblance of the nerve-force and the galvanic current, he proceeded to describe the apparatus he recommended for general purposes. These were magneto-electrical apparatus, worked by a powerful spring, whereby an energetic shock-current could be obtained without turning a handle; and was, in fact, self-acting, and would continue for twenty minutes without being rewound. This apparatus was made for the author by Messrs. Shaw and Son. The other was the Pulver-

macher galvanic battery, for the generation of the continuous current. These were all that were wanted by the general practitioner to produce the ordinary results in electro-therapeutics, and could be highly recommended, on account of their convenience, portability, cleanliness, and non-liability to get out of order.

Mr. Lobb then demonstrated the action of each apparatus, describing the necessary conductors and their application; and showed how the electric bath was administered. He then explained how valuable electricity was in diagnosing the seat of obscure diseases, stating that frequently the organ in fault was found to be quite remote from the one suspected.

The author then explained the great value of galvanism in all cases of chronic rheumatism, stating that he had frequently cured cases of rheumatic paralysis of long standing in one or two sittings. The method of application of the batteries was demonstrated. The treatment by galvanism of the following affections was then explained in order; namely, neuralgia and allied disorders; constipation; chlorosis; amenorrhœa; dysmenorrhœa; as well as its value in midwifery practice, in chest-affections, asthma, aphonia, indigestion, paralysis (functional, reflex, and organic), anæsthesia; in chorea and delirium tremens; in muscular debility, spinal curvature, knock-knees, bow-legs, inveterate ulcers, boils and carbuncles, and in malignant disease. He concluded with its great utility in drowning, chloroform accidents, poisoning, suffocation, etc.

The author hoped that the time was not far off when every educated practitioner would be as familiar with the application of galvanism to the treatment of disease as he now was with the administration of drugs. Each aided the other, and their judicious combination was now producing results hitherto undreamt of. Many cases, formerly abandoned as incurable, were now amenable to treatment; and advancing science constantly added to their number.

The author concluded by earnestly requesting the members to experiment upon the value of galvanism, promising them ample reward for their labour.

The Disease amongst Sheep in Wiltshire. The committee appointed to inspect flocks, during the late outbreak of ovine disease in Wiltshire, has been dissolved. At an aggregate meeting of the Society for Prevention of the Disease of Sheep, held at Devizes, the members of the committee reported that the disease was so far removed, that they had no further duties to perform. A vote of thanks was passed to the committee for its services.

Infant Mortality. There has been lately issued a return of the verdicts of coroners' inquests in England and Wales on children under two years of age during the year 1861 and the first six months of 1862. The following are the numbers in the respective counties: England: Metropolis district, 1,545. Bedford, 27; Berks, 63; Bucks, 37; Cambridge, 93; Cheshire, 134; Cornwall, 121; Cumberland, 26; Derby, 114; Devon, 83; Dorset, 23; Durham, 50; Essex, 60; Gloucestershire, 147; Herefordshire, 21; Herts, 16; Huntingdon, 10; Kent, 56; Lancashire, 758; Leicester, 76; Lincoln, 133; Monmouth, 39; Norfolk, 64; Northampton, 49; Northumberland, 37; Notts, 70; Oxford, 58; Rutland, 5; Salop, 39; Somerset, 143; Southampton, 85; Stafford, 222; Suffolk, 52; Surrey, 20; Sussex, 62; Warwick, 50; Westmoreland, 10; Wilts, 77; Worcester, 52; York, 287; total, England, 4,978. Wales: Anglesey, 6; Brecon, 6; Cardigan, 1; Carmarthen, 10; Carnarvon, 10; Denbigh, 17; Flint, 9; Glamorganshire, 55; Montgomery, 18; Pembroke, 1; Radnor, 2; total, Wales 135. Total, England and Wales, 5,113. Out of this total there are only 690 returned as above the age of one year.

Correspondence.

GRATUITOUS MEDICAL SERVICES.

Letter from Albert Napper, Esq.

Sir,—Your views on the subject of gratuitous medical services, so strongly expressed in the Journal of the 7th inst, in reference to its bearing on cottage hospitals, will require the most careful consideration from those engaged in their establishment. You ask on what grounds we tender our services gratuitously. My reply is, not that I am "only doing like all the rest of the professional world", but that it is the only means by which success is attainable; and, as their utility is so universally admitted, I think we are justified by attaining it even at a still greater sacrifice (if such it can be considered). If, then, it be admitted that these hospitals are desirable, and that there would not be the slightest chance of founding them if the surgeons determined to demand payment for their services, I think, in our case, the act of doing so would constitute the "suicidal folly". The inference, that it will be adding to the labour of the "hard and overworked surgeon", is not in accordance with my experience, which has proved it to be a means of greatly economising both labour and expense. It is true, lawyers do little if any work gratuitously; nor do the clergy do "gratuitous public work in our hospitals"; but do they not in schoolrooms, cottages, and in barns, give gratuitous extra services? Do not the instrument-makers (to whom I must express my obligations) liberally supply their goods to those institutions at little above cost price? Do not drapers supply clothing clubs on the same liberal terms? Do not Poor-law guardians, overseers, waywardens, and the like, give their public services without compensation? and is there not something due from us in return for our immunity from serving these offices? Admitting, then, that we foolishly do far too much gratuitously for the public, I would make this the rule of practice: Give your services to charitable institutions gratuitously, but require payment for all that entails a pecuniary cost.

You will, I trust, excuse me for expressing my opinion that your ardour in a good cause has carried you a little too far in condemning thus wholesale the liberal tendencies of our profession.

In reference to your appeal to the "medical supporters of these cottage hospitals to pause before they assist in the extension of this absurd system of professional spoliation", I must beg of my provincial friends not to be deterred by any such sophistry from carrying out a scheme which in a short time will do more to elevate the position of the provincial general practioner, both socially and professionally, than anything that has been done since the passing of the Apothecaries' Act in 1815. It is an indisputable fact, that we have amongst us numerous members who only want the opportunity these little hospitals will afford of proving themselves in all respects masters of their profession; and, with the improved system of education, the number is daily increasing. I hope to see the day when it will be an exception for a town to be without its hospital; for it is manifestly to the interest of the poor to have them brought home to their doors; and when there is a medical staff, there can be no insuperable difficulty in effecting it. I am, etc., Alfred Napper.

February 1863.

[Our correspondent appears to place surgical instrument makers who supply instruments, and drapers who supply clothing, *at only "a little above cost price"*, to clubs and village hospitals, on the same level (as regards the charitable nature of the gift rendered to

society) with medical men who place their gratuitous services, at all hours of the night or day, at the service of the community! Mr. Napper's *rule of practice* indicates that he considers medical services rendered to charitable institutions as of no *pecuniary* value. We again ask: What are the grounds upon which medical men should do this work of the community gratis? EDITOR.]

MR. FOSTER AND THE LICENSE OF THE COLLEGE OF PHYSICIANS.

SIR,—It seems to me that Mr. Foster, in replying to the temperate remarks of your correspondent Δ, has, whilst denouncing the comments of the latter as "absurd", been singularly forgetful of the homely proverb, "Those who live in glass houses should never throw stones". I will not say that Mr. Foster does not draw his conclusions upon the strictly Baconian system, but I must confess that his method of reasoning appears to my mind to be rather of the Hibernian than of the Saxon type. In his letter, he confounds two very distinct questions; and, by presuming a reply to the first, fancies that he has answered the second. The two questions are these:—

1. Has a Licentiate of the College of Physicians any claim to the title of Doctor?

2. If he be called Doctor, has he, as a *consequence*, the right to affix to his signature the letters M.D.?

I conceive, sir, that it requires very slight powers of observation to perceive that an affirmative answer to the first question by *no means* involves a similar reply to the second.

I waive entirely the *exact* consideration of the first query, merely remarking that I can see no reason why the title of Dr. should not be afforded to apothecaries as well as to physicians, for the former proceed to their license in much the same manner as the latter; and that it is a strange circumstance that, although the number of those on the General Medical Council who possess degrees is exceeded by that of those who do not, the non-graduate (and, therefore, in this matter impartial) body has not recognised the quasi-claims of the Colleges of Physicians.

Language, as Mr. Foster is perhaps aware, is but a collection of sounds which represent ideas; each sound is associated with a certain notion; and hence, where there is confusion of these recognised symbols, there is confusion of ideas; just as, when money does not stand for true capital, there is, as it were, a political-economy Babel. If Mr. Foster will consult any recognised authority upon the applications of English words, he shall find that the word *degree*, besides its signification as the unit of a scale, was, on the institution of universities some centuries since, distinctly employed to designate the steps by which a student rose from an inferior to a fixed superior position. The process of advancement was termed *graduation*, and the resultant a *degree*. This degree was represented by the initial letters of its Latin name; and now-a-days, instead of saying that so-and-so is a Doctor of Medicine, we not infrequently remark that he possesses the degree of M.D. In the public mind, these letters are associated with a constant idea—to wit, that the individual possessing them has been educated in some university; and, with deplorably bad taste, it prefers a man who has come from an university, and is therefore well educated, to one who by a simpler and more utilitarian mode has become a physician.

By usage, then, the letters M.D. imply that the person to whose name they are affixed has come from an university; has passed *several severe* examinations, professional and non-professional; and has studied under distinguished men of science. How, then, knowing this, can any Licentiate of the College of Physicians be so unscrupulous as to assume a position to which he has no claim? Why will he leave society under the impression that he has graduated, when he certainly has not done so in the accepted sense?

If it be allowable to attach to one's name the initial letters of one's calling (no matter what), how shall we discriminate between butchers' assistants and Bachelors of Arts, between Doctors of Divinity and donkey-dealers? I imagine that nothing shows more clearly the inferiority of the license of the College of Physicians to the *degree* of the University, than the struggle of those who have the former to be allowed to assume the *peculiar* title of the latter. I am, etc., ARISTOTLE.

February 1863.

[Our correspondent will, on consideration, find that he has not stated his case aright. An university education is not necessary now-a-days for the obtaining of a university degree. How many hundred Englishmen were a few weeks ago made Doctors off-hand at St. Andrew's? Moreover, the prefix of the title Dr. is no indication now-a-days, either with the profession or with the public, that the assumer of it possesses the degree of M.D. EDITOR.]

THE MEDICAL ACT.

SIR,—You, as the editor of our JOURNAL, upon the success of the last Medical Act, so thoroughly gave the Association the credit of it, that now, since it has been in operation long enough to test it by its fruits, you must by this time have lost some faith in it as a means of preventing unregistered men from practising medicine and surgery. My own humble opinion is, now that the Apothecaries' Company have abandoned the field, and do not enforce their fine in courts of law, there is no legal standing for one registered proceeding against another who chooses to gain a livelihood as one of our profession without any kind of license. The forty-shillings fine looked so well on paper, that I candidly confess I was weak-minded enough to believe it was an honest abstraction from our hard-earned labours, and that we might in future be protected from unregistered and illegal practitioners by the Council who so adroitly had their coffers replenished and their banker's account bear such a respectable appearance. Such, we know too well, is not the case. The Act is a dead letter as regards the protecting power for registered men. May I not ask: Is not the time arriving for petitioning for its alteration; at any rate, that we may not be placed in a worse position than before the Act was passed, if we cannot persuade the legislature to alter it for the better? Facts abundant, I have no doubt, could be brought forward to prove its present uselessness; and the open defiance of those who are practising on the credulity of the public too surely proves the regular practitioner has no chance against his opponent in a court of law.

I am, etc., AN OLD ASSOCIATE.

February 19th, 1863.

MEDICAL HEALTH ASSURANCE SOCIETY.

LETTER FROM HENRY GRAMSHAW, ESQ.

SIR,—It gives me much pleasure to find that a subject is broached in your columns this week of the greatest possible importance to by far the majority of the rank and file of the medical profession. I certainly am astonished that the question of health assurance has lain dormant so long, and indulge the hope that Dr. Bryan's letter is the first stroke of the pick, to be followed by simultaneous and united effort on the part of the British Medical Association towards establishing a good Mutual Health Assurance Society.

A few days ago, I had a conversation with Mr. Cubitt

of Norwich on this subject; and he tells me he has been deeply interested in the question for some time past, and possesses much valuable information concerning it. From him I am led to understand that any health assurance society ought to be general; *i. e.*, not entirely confined to the medical profession, but embracing certain other classes also. He likewise states that certain kinds of disease must be excluded (as blindness and insanity), to insure the safe working of a health assurance office; and that no demands must be made for the first twelve months. If, as Dr. Bryan suggests, we had "our worthy founder as treasurer and the present honorary secretaries as a staff, the thing might be done"; but I would venture to suggest that at the very outset we require the opinion of a good actuary; and if the scheme were set afloat, we should require a working board and a good business-like secretary.

I was unfortunate enough, about three weeks ago, to fall from my horse, and was for a short time unable to discharge the duties of my profession. It was some satisfaction to my mind to know I derived a certain amount weekly from the Railway Accident Insurance Company (who met the claim I made upon them with the greatest liberality and fairness); but I could not help reflecting that, whilst I did well to insure against accidents, and well to insure in a life office, I should do still better if I insured against sickness which might come suddenly, and, swamping myself and my income, render me dependent on a world whose wisdom is embodied in the adage, "He that goes a borrowing goes a sorrowing".

I am, etc., HENRY GRAMSHAW.

P.S. I shall be most happy to cooperate with Dr. Bryan in any way, and hope the subject will be mooted at all our Branch meetings this year.

Framlingham, February 1863.

BIRTHS, DEATHS, AND MARRIAGES IN SCOTLAND. The eighth annual report of the Registrar-General of births, deaths, and marriages in Scotland, just issued, states that the estimated population in 126 town districts for 1862 was 1,619,952, the number of births 60,808 the illegitimate births 5,793, the deaths 41,626, and the marriages 12,557. In 881 county districts the estimated population was 1,459,697, the births 46,330, the illegitimate births 4,441, the deaths 25,533, and the marriages 7,987—thus showing the total estimated population of Scotland to be 3,079,650, the births 107,138, the illegitimate births 10,234, the deaths 67,159, and the marriages 20,544.

ACCLIMATISATION. This month's *Bulletin de la Société d'Acclimatation* is not devoid of interest. During 1862 the Nilgau antelopes foaled twice; the lamas, Guanacos yaks, and Angora goats were equally fruitful. The sale of eggs yielded 11,036f. The mortality among the live stock in the garden amounted to one-eighth in the mammalia, one-fifth in the birds of the aviary, the same in the category of palmipedes (ducks, swans, etc.), and one-fourth among the poultry. The society has received a letter from Baron Anca, President of the Acclimatisation Society of Sicily, wherein he states that some cochineal sent to him by M. Hardy, Director of the Botanical Garden of Algiers, has begun to thrive and multiply on a plant of *Opuntia coccinellifera*, so that the introduction of the insect into Sicily may be considered a certainty. The Marquis de Fournès has been equally successful, at Marseilles, in his experiments on cotton-growing, and has been enabled to send the society three samples of cotton, viz: 1, Louisiana, or short staple; 2, Sea-island cotton, or long staple; 3, the *Kian-nam* quality. M. de Fournès is of opinion that the crop of 1862 is quite equal in quality to that he exhibited in London last summer, and which was considered the third, as to quality, of all the samples from other parts. (*Galignani.*)

Medical News.

APOTHECARIES' HALL. On February 12th, the following Licentiates were admitted:—

Beadles, Arthur, Broadway, Worcestershire
Bothwell, George Granville, Rathmuller, co. Donegal
Coombe, L. M., Lying-in Hospital, Dublin
Lyon, Isidore Bernadotte, 20, Euston Square
Osmond, Thomas, Thorpe-le-Soken, Essex
Ryder, Francis James, Royal Kent Dispensary, Greenwich
Williams, Thomas Edward, St. Bartholomew's Hospital

At the same Court, the following passed the first examination:—

Low, Alexander James, St. Bartholomew's Hospital

Admitted on February 19th:—

Blasson, George John, Billingborough
Mulock, John Berry, London
Robinson, John, Winterton, Lincolnshire
Wiglesworth, Arthur, Liverpool
Wright, Frederick, Stamford Bridge, Yorkshire

At the same Court, the following passed the first examination:—

Ashwell, Edward, Burnham
Puzey, Chauncy, Guy's Hospital

APPOINTMENTS.

BRADSHAW, John T., Esq., appointed Consulting-Surgeon to the Huddersfield Infirmary.
COWELL, George, Esq., appointed Surgeon to the St. George's and St. James's Dispensary.
DU PASQUIER, Claudius, Esq., appointed Surgeon-Apothecary to the Prince of Wales.
HUNT, William J., L.R.C.P.Ed., appointed Medical Superintendent of the Hoxton House Lunatic Asylum.
KIRKWOOD, William, M.D., appointed a Member of the Executive Council of the Bahama Islands.
SAUNDERS, Edwin, Esq., appointed Surgeon-Dentist to the Prince of Wales.

POOR-LAW MEDICAL SERVICE.

CHAMPNEYS, Henry M., Esq., to be Medical Officer for Districts 1 and 2 and the Workhouse of the Battle Union.
CRICKWAY, Edward, Esq., to be Medical Officer to the Weobly Union Workhouse, Herefordshire.
GRAYDON, S. J., M.D., to be Medical Officer for the Scotstown District of the Monaghan Union.
LODGE, Samuel, L.R.C.P.Ed., to be Medical Officer for the Bowling District of the Bradford Union.
MELLER, Charles M., M.D., to be Medical Officer for the Walham Green District of the Fulham Union.
RUSSELL, Edward, Esq., to be Medical Officer for the Sixth District of the parish of Liverpool.

ARMY.

BARKER, Staff-Surgeon F. O., M.D., to be Surgeon 90th Foot, *vice* W. Lapsley.
CHESTER, Staff-Assistant-Surgeon A., to be Assistant-Surgeon Royal Artillery, *vice* J. F. Longheed.
CRISP, Surgeon H., M.B., 63rd Foot, to be Staff-Surgeon.
CROW, Staff-Assistant-Surgeon J., to be Staff-Surgeon, *vice* A. Morphew.
DAVIDSON, Staff-Assistant-Surgeon P., M.D., to be Assistant-Surgeon 5th Foot, *vice* C. H. Leet.
HANBURY, Staff-Assistant-Surgeon J. A., M.B., to be Surgeon 63rd Foot, *vice* H. Crisp, M.B.
JONES, Staff-Surgeon H. H., M.D., to be Surgeon 86th Foot, *vice* J. Sawyers, M.D.
LAPSLEY, Surgeon W., 90th Foot, to be Staff-Surgeon, *vice* F. O. Barker, M.D.
OAKES, Staff-Assistant-Surgeon F., to be Staff-Surg., *vice* W. Skeen.
WELD, Staff-Surgeon W. W., to be Surgeon-Major, having completed twenty years full-pay service.

To be Staff-Assistant-Surgeons:—

LEET, Assistant-Surgeon C. H., 5th Foot.
LONGHURST, A. E. T., M.D., 13th Foot.

INDIAN ARMY.

DAVIDSON, Deputy Inspector-General H. G., to have the honorary rank of Inspector-General of Hospitals.

MILITIA.

CRIPPS, E., Esq., to be Assistant-Surgeon Royal North Gloucestershire Regiment of Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

KELLY, F., Esq., to be Surgeon 2nd City of London R.V.
MORRIS, G. S., Esq., to be Assistant-Surgeon, 20th North Riding R.V.
SAMS, J. S. Esq., to be Assistant-Surgeon 3rd Kent R.V.

To be Honorary Assistant-Surgeons:—
Bostock, J. S., Esq., 7th Surrey R.V.
Payne, E., M.D., 2nd Surrey A.V.

BIRTH.

*Brown. On February 22nd, at Rochester, the wife of John Dan Brown, M.D., of a son.

DEATHS.

Beddoes. On February 19th, at Shrewsbury, aged 15 months, Pryce Pughe, son of *William M. Beddoes, M.D.
Bullen. On February 17th, at Ipswich, aged 65, Elizabeth, wife of *George Bullen, Esq.
Craven. On February 22nd, at Hull, aged 62, Anne, widow of the late Robert Craven, Esq., Surgeon.
James, Job, Esq., Surgeon, at Pontmorlais, Merthyr Tydfil, aged 74, on February 11.
Jones, William H., M.D., Staff-Assistant-Surgeon Royal Army, at Torquay, aged 24, on February 11.
Lovett, Samuel, Esq., Surgeon, at 23, Clare Street, Lincoln's Inn Fields, aged 58, on February 19.
*Martin, George W., Esq., at Rochester, aged 25, on February 19.
Montgomery, Andrew, Esq., late Inspector-General of Hospitals, Bombay Army, at Bath, aged 69, on February 16.

The Income-Tax. Petitions for a readjustment of the income-tax have been presented to the House of Commons from the Royal Colleges of Physicians and of Surgeons, and from numerous practitioners in London.

Royal Society of Edinburgh. Dr. J. G. Wilson, of Glasgow, and Dr. Matthews Duncan, of Edinburgh, have been elected Fellows of the Royal Society of Edinburgh.

A Difference. Thirty-two firms sent in tenders for the Carmarthen Lunatic Asylum, ranging from £24,950 up to £45,944, and this with quantities supplied. (*Builder.*)

Social Science Association. At a meeting of the council of the association, held on Thursday last, Lord Brougham was unanimously elected president for the next annual meeting, which will be held in Edinburgh in October.

Better Treatment of the Insane in Victoria. The Government purposes bringing in a bill for the better treatment of the insane. In addition to several new asylums, every hospital in the country districts will have a ward for the reception of patients suffering from the disease in the first stage.

Dr. Morton, the alleged discoverer of the application of ether to practice, has again appealed to congress for compensation for the use of this agent in the army. It will be remembered that a similar claim was pressed through both houses several years ago, but failed to obtain the president's signature.

The Midland Society of Chemists and Druggists. The first annual dinner of the members of this society was held at Nottingham on the 12th instant, covers being laid for about seventy gentlemen, under the presidency of V. Wilcockson, Esq. The society is formed for the interchange of sentiment on the trade and the protection of interests. (*Nottingham Daily Express.*)

Royal College of Surgeons. Professor Huxley, F.R.S., who is lecturing to a crowded audience in the theatre of the above institution, will deliver his sixth lecture this day (Saturday). Bishop Colenso has attended all the lectures, in which he appears to take a great interest. A lecture will be given on Monday preceding the royal marriage day, instead of on that day.

University of Dublin Degrees. On the 17th inst., on the occasion of the installation of the Earl of Rosse as Chancellor of the University, the Degree of Doctor of Medicine was conferred, *honoris causa*, on Dr. Mackesy, the President of the Royal College of Surgeons of Ireland; Dr. Arthur Jacob, Professor of Anatomy and Physiology; and Dr. Butcher, Chairman of the Court of Examiners in the College.

Hospital Rations in the Federal Army. The value of the hospital ration supplied to the sick of the Federal army has been hitherto eighteen cents per day. It is now raised to thirty cents. per day. The patients have, it appears, been hitherto kept on starvation prices in the Yankee hospitals. "Senator Ten Eyck's remarks," says the *American Medical Times*, were, we fear, nearer the truth: "In some cases the meat set before the sick soldiers was not fit to eat, and he believed that many had actually died from lack of proper food."

Entertainment of Lunatics. On Friday week, Dr. Paul, of Camberwell House, gave an evening entertainment to a large party of visitors, and to about a hundred and fifty of the lunatics under his care. The proceedings consisted of an amusing lecture on Wit and Humour, by Dr. Richardson; together with songs and glees, and a dramatic performance, by amateurs. The effect of such entertainments on the mental condition of those for whom they are devised must be of a very beneficial character.

University College, London. At a session on Saturday last, the Council of this College filled up the vacant offices of physician and of Professor of Clinical Medicine at the Hospital, by the appointment of Dr. Hare; they also appointed Mr. Sidney Ringer to the vacant Professorship of Materia Medica. By the recommendation of the Senate of the College, the Council invited Dr. Walshe, lately Professor of the Principles and Practice of Medicine, to assume the title of Emeritus Professor.

A Hæmorrhagic Family. The son of a brewer's servant died at 1, Elizabeth Place, Ratcliff, by "hæmorrhage from a wound in the head, caused by a shell falling on him from the mantel piece." (Inquest.) The coroner adds, in his report to the Registrar, that the mother has lost five children in this way, two of whom died in the London Hospital from a scratch in the hand. If they bleed but the smallest quantity, they die. Dr. Arnold states that this is the consequence of a hæmorrhagic diathesis. (*Registered Reports.*)

The American Army and Homœopaths. The homœopaths have again appealed to congress to experiment with infinitesimals in the treatment of sick soldiers, and the committee to whom their petition was referred has asked to be discharged from its consideration. It was not surprising that homœopathy should clamour for recognition while a homœopathic commanding general was its patron; but now that he is superseded, and the medical staff is being thoroughly purged of all its incompetents, it is remarkable that the advocates of this delusion should presume to ask admission to the medical service. They would, if admitted, meet with a summary dismissal.

Honours of War. Rear-Admiral Dupont, in his official despatch on the Confederate attack on the Federal squadron off Charleston, writes:—"On the *Keystone State* about one-fourth of her crew were killed or wounded, and among the former is the medical officer of the ship, Assistant-Surgeon Jacob H. Gotweld, who was scalded to death while rendering surgical aid to one of the wounded men. Most of those who died perished from the escape of steam when the boilers and steam chimneys were penetrated, and among the wounded the greater number received their injuries from the same cause."

The Law of Lunacy. In the House of Commons on Monday last, Mr. Butt asked the Secretary of State for the Home Department whether his attention had been called to the recent case of "Hall *v.* Semple," in the Court of Queen's Bench, and whether it was his intention to propose any alteration in the law relating to certificates required in cases of alleged insanity. Sir. G. Grey was understood to say that the case in question did

ot, in his opinion or that of the Lunacy Commissioners, isclose any necessity for the alteration of the law, beause the law in that case was not observed. The certifiate, on the face of it, was an irregular one, and not in onformity with the law. The Lunacy Commissioners ad censured the keeper of the asylum, and they had ddressed a circular to the proprietors of licensed asyums, calling their special attention to the matter; and was hoped that the circular and the verdict in this ase—assuming that it would be sustained—would preent the recurrence of such a case.

St. Bartholomew's Hospital. A large meeting of ne governors of this institution was held on Wednesday n the Board-room, to elect a president in the vacancy ccasioned by the resignation of Mr. Cubitt, who, it may e remembered, held office, but resigned it when he disolved his connection with the City, at the same time ntimating that his resignation was owing to the objecons started by others rather than the free exercise of is own will. The Lord Mayor was put in nomination, nd Mr. Cubitt was then proposed for reelection, and on ne votes being taken was declared to be elected by a najority of eighty-seven votes over forty-four.

The Levée. The following members of the medical rofession attended the *levée* of H.R.H. the Prince of Vales on Wednesday, held by command of Her Majesty; amely, Sir Rutherford Alcock, K.C.B., Her Majesty's Envoy Extraordinary and Minister Plenipotentiary in apan; Sir Henry Holland; William Lawrence, Esq.; Villiam Fergusson, Esq.; Drs. Lavies, Pickford, Dalton, rthur Farre, Cape, Jeaffreson, J. S. Bushnan, T. De Ieschier, E. A. Parkes, G. T. D. Evans, F. G. Read, Breslin, E. Meryon, Robert Ferguson, Farr, Watson, ranville, Ramsbotham, Bryson, Goolden, Smith, Waller ewis, Forbes Winslow, Gideon Dolmage, T. G. Balfour, Iarsden, McCann, Ashley, Kirkman, Fraser, Routh; 'rofessor Owen, Deputy-Inspector General Thomas angmore; and Messrs. Wakley, Reeves Traer, White ooper, R. W. Tamplin, Dendy, W. S. Cox, Propert, T. 'itzgerald, B. E. Brodhurst, S. S. Scriven, G. B. Childs, udd, Erasmus Wilson, R. McCormick, R.N.

Poisonous Milk. The occupants of two of the principal hotels of Valetta, in Malta, besides a number of inabitants of that town, were recently seized with violent ymptoms of cholera one morning after breakfast. As, n inquiry, it was found that the only article of diet aken in common by the persons attacked was milk, the nference was that that article contained the poisonous ngredient. Similar cases had occurred before in the sland; towards the end of last year the family of a fieldfficer at Tliema, with the exception of one person, was o affected, as was supposed by goat's milk, and cases of lness occurred among the officers and men of several f Her Majesty's ships then at Malta, none of which, owever, terminated fatally. The natives attribute the esult to the goats browsing upon a particular plant beonging to the family of Euphorbiacæ, or spungeworts, hich they call tenhuta, and which they say possesses the roperty of rendering the milk poisonous to human eings without inflicting any injury on the animals themselves. The governor of the island has ordered an inquiry to be instituted.

The Hospitals of Bethlehem and St. Thomas. A neeting of the governors of Bridewell and Bethlehem as held last week, for the purpose of considering a proosal on the part of the governors of St. Thomas's Hosital for the purchase of the edifice now occupied by the nnatic patients of Bethlehem. The proceedings were ery animated, and the discussion at times warm; Mr. '. N. Laurie denouncing in strong terms the site at 'horton Heath, known as Peake's Land. Mr. Alderman 'hillips spoke in favour of entertaining the proposal hich had been made by the governors of St. Thomas's, and brought forward a resolution to the effect that the object of removing the patients of Bethlehem Hospital into the country be taken into consideration. The motion was seconded by Mr. Alderman Finnis. Dr. Webster, in supporting the motion, referred to the asylums for the insane now in course of erection in different parts of Europe, all of which were being removed from towns into rural districts. He had recently visited Madrid, Copenhagen, Stockholm, and other cities, where he observed new buildings in progress of erection for the insane which were superior to any in England. Bethlehem, he said, was well placed fifty years ago; for its present purpose both the building itself, as well as the locality in which it stood, were not in keeping with the improved treatment of the insane. He particularly dwelt on the insane hospitals of Ghent as an example for the governors of Bethlehem, and in an address of some length laid before the meeting most important information for their guidance. Sir John Musgrove also spoke on the same side, and ultimately the meeting came to an agreement that the proposal of St. Thomas's be received.

A Sad Death. It is with real pain that we have to announce to our readers the death of Mr. Lucas Barrett, the distinguished naturalist, who was accidentally drowned whilst investigating the structure of some coral reefs at Port Royal, Jamaica. All who visited the Jamaica Court at the International Exhibition will remember the enthusiasm and painstaking kindness with which this gentleman was ever ready to show and explain the various mineral and geological specimens collected and exhibited by him. Although one of the most active of the Jamaica Commissioners, he still found time to officiate as one of the local secretaries of the British Association, besides keeping a term at Cambridge. Before returning to Jamaica to renew his researches as one of the chief members of the West Indian Geological Survey, he ordered a diving dress and pumping apparatus of the latest and most scientific construction, for the purpose of personally examining the rocks and coral reefs lying in the neighbourhood of most of the West India islands. He first tried this dress at Port Royal, on December 17, in shallow water, and was so well pleased with the result that he determined to give it a trial in deeper water. Two days afterwards he took with him his servants and boat's crew, all of whom were negroes, and descended into the deep water between the reefs. The men in the boat continued to pump without intermission as on the former occasion, but they noticed that he remained longer in the water than usual. Suddenly, to their horror, they saw him floating on the surface at a little distance from the boat. They got to him as quickly as possible, but all was over. The cause of his death will remain a mystery. He was not drowned by the influx of the water, as the diving dress contained only air. The only explanation to be given is, that the air exit valves became permanently closed in some mysterious manner; but even this seems open to doubt, as the men continued to pump without interruption. Mr. Barrett, was only twenty-five years of age when he died; and the enormous amount of valuable work done by him during his brief career, gave promise of his speedily becoming one of the chief ornaments of the science he so ardently loved, and to the too enthusiastic pursuit of which he fell a victim. For three years before his engagement on the West Indian survey, he delivered most of the geological lectures for Professor Sedgwick, and was made by him curator of the Woodwardian museum at that university. His collection of *Radiata* in that museum is one of the finest in the world. (*Chemical News.*)

Russell *versus* Adams. A numerously attended meeting of the members of the medical and legal professions and other persons took place, on Tuesday last, at the Freemasons' Hall, Great Queen Street, for the purpose of expressing an opinion in the case of Russell *v.* Adams.

The chair was taken by Mr. W. E. Forster, M.P. He observed that it was gratifying to find that so large a number of gentlemen whose time was of value had met together to do an act of justice to a brother practitioner who had been unjustly assailed. He gave a brief recapitulation of the recent case, observing that, although it was tried in a civil court, yet the accusation against the defendant, that he had sought to use his professional position as a means of gratifying his passions, really amounted to a criminal charge. Ninety-nine out of every hundred men who had paid any attention to the trial were of opinion that Mr. Adams was entirely innocent; but he presumed that the other hundredth man must have been in the jury-box, and that the equivocal verdict returned was but a compromise. That verdict rendered necessary a new trial at the bar of public opinion, which was quite as serious, and involved as important consequences to Mr. Adams. The result of this second trial had been a complete and conclusive acquittal; but the necessity for publicly declaring this still remained. It was only by his own benevolence that Mr. Adams had laid himself open to the disgraceful charge brought forward; and no one indeed, however pure his conduct or exalted his character, could be considered free from similar perils. The danger applied, not only to the medical profession, but to society at large. Crime is infectious; and such accusations might again be made. Alterations in the law were, he knew, desired by some of the gentlemen present; but no legal reform that might be made would supersede the necessity for expressions of public opinion.—The following resolutions were unanimously passed:—1. Proposed by Dr. Lankester, and seconded by Dr. Joseph Rogers: "That all classes of society are interested in supporting those who incur great trouble, annoyance, and expense by resisting and exposing any attempt to injure their character by false charges."—2. Proposed by H. H. Cannan, Esq., and seconded by Dr. Richardson: "That a careful consideration of the charge of the judge, and of the evidence adduced, in the case of Russell *v.* Adams, should have led to an unqualified verdict for the defendant."—3. Proposed by W. L. Leaf, Esq., and seconded by Spencer Wells, Esq.: "That this meeting offers to Mr. Adams a vote of thanks for his manly conduct in courting the fullest public investigation into his conduct; expressing deep regret at the annoyance to which he has been subjected, and firm conviction that there was nothing in his behaviour which gave the slightest ground for any charge against him."—4. Proposed by J. Dangerfield, Esq., and seconded by John Churchill, Esq.: "That a petition be presented to Parliament, praying that a committee may be appointed to inquire into the reforms necessary in the present legal procedure; and praying especially that greater facilities may be given for prosecuting persons who make unfounded attacks upon character."—A correspondence between Mr. Mackrill, the solicitor to Mr. Adams, and Mr. Propert, was read, in consequence of a report that Mr. Propert had backed up Mrs. Russell in her proceedings against Mr. Adams. The correspondence certainly seemed to indicate that Mr. Propert had at some period of the proceedings been a warm partisan of Mrs. Russell. We do not, however, think it necessary to publish the letters, because Mr. Propert, in the following lines (which were also read at the meeting), gave the most unqualified contradiction to the insinuation which had been made:—"6, New Cavendish Street, Feb. 24th, 1863. My dear Churchill,—I think after the many years of uninterrupted friendship that has existed between us, you might strain a point to defend the hard-working Welshman; that is, *provided* you should have it said to-day at the meeting that I had brought the action, Russell *v.* Adams; when I say, so help me God, I had nothing to do with it; proceedings had been begun for *months* before I ever knew that such people existed in the world as Mrs. Russell and her beautiful daughter; *and that I never contributed, or ever promised to contribute, one farthing towards the expenses of the trial.* Ever most truly yours, JOHN PROPERT. J. Churchill, Esq."—The following letter from Mr. Lush, Q.C., indicates very clearly what was the real opinion of the Lord Chief Baron on the case:—"60, Avenue Road, Feb. 20th, 1863. My dear sir,—Pardon my delay in answering your kind favour, for which I thank you heartily. I can truly say I never was engaged in a case that gave me more anxiety; because I felt convinced that you were the victim of a foul conspiracy. It is a great comfort to me to know that my client is satisfied I did my best. There is but one opinion, in and out of court, as far as I can learn, as to the injustice done to you. Notwithstanding the inaccuracy and clumsiness of the report in the *Times*, the case, as reported, has impressed every one whom I have heard express an opinion on the subject, with the conviction that the verdict ought to have been entirely in your favour. I wished to know from the Chief Baron, before I advised you what to do, what his views were. I saw him yesterday. He complains, as I do, of the report of his summing up, and of the great injustice done to you by it; and when I told him that I meant to advise your publishing a shorthand, authentic, report of it *in extenso*, he at once said he hoped you would do so, and that he would revise it if I wished before sending it to the press. This I think you should do at once. Send it to me, and I will hand it to the Chief Baron. I am rejoiced to find that the medical body are taking it up. I have told more than one of that body that they ought to do so. I hope you will not—I do not think you will—suffer permanently from this unaccountable verdict. Believe me, my dear sir, yours very truly, B. W. LUSH. W. Adams, Esq."

Varieties.

WIESBADEN MINERAL WATERS. Perhaps no part of the world contains, within so small a compass, so many valuable mineral waters as this duchy of Nassau. Nor would it be easy to find a greater variety of beautiful scenery. Its thermal springs are described by Pliny in his Natural History, and there is no reason to doubt t they have been known and highly prized from a very mote antiquity. This certainly is a highly favou country in many respects. Its soil is fertile; its clim is admirable; its inhabitants intelligent, tempera honest, and industrious; education, being compulsor is universal; begging prohibited; taxes light; peace ar plenty everywhere abound. This small duchy would see to embrace an epitome of all the medicinal springs of the world; at Weilbach *e. g.* we have the sulphur; at Sollen, the cold saline; at Kronthal, the acidulous and chalybeate; at Baden and Wiesbaden, the hot saline; a Homborg, the cold saline and chalybeate; at Swallbach, the chalybeate; at Ems, the hot alkaline; the same at Sohlangenbad, etc. (*Prof. C. Lee.*)

THE "PERFECT CURE." A paper has been sent in to the French Academy of Sciences by Dr. Tridan of Laval, containing a most important discovery, if it is really so efficacious as the author asserts:—"In the midst of a severe epidemic," he says, "of diphtherite, which carried off from two to three hundred persons in the canton of Chaillant (Mayenne), I was struck with the idea of employing some powerful modificator of the mucous membrane, of a nature to change its vitality, and I selected copahu and styrax. From the first day I used them, I have cured five cases of croup and forty of diphtheri angina (sore throat), in the course of about five mont and a half. I have only lost a single patient. In mo cases the improvement takes place within twenty-fo

hours; the cure is usually effected within four or six days. I use copahu under the form of a syrup (Dr. Puche's formula), or else in a solid state. I also use the syrup of styrax of the codex. For adults, I prescribe a tablespoonful of copahu syrup every two hours, alternating with the syrup of styrax, also taken every two hours. For children, I prescribe teaspoonfuls taken in the same manner. In serious cases, the patient takes five *grammes* of copahu under the form of an enema twice a day. Copahu is generally well borne by the patient so long as the disease is not conquered."

Mummy Wheat. The *Presse Scientifique des Deux Mondes* contains a description of a series of experiments made in Egypt by Figari-Bey on the wheat found in the ancient sepulchres of that country. A long dispute occurred a few years ago, as to what truth there might be in the popular belief, according to which this ancient wheat will not only germinate after the lapse of three thousand years, but produce ears of extraordinary size and beauty. The question was left undecided; but Figari-Bey's paper, addressed to the Egyptian Institute at Alexandria, contains some facts which appear much in favour of a negative solution. One kind of wheat which Figari-Bey employed for his experiments had been found in Upper Egypt, at the bottom of a tomb at Medinet-Aboo, by M. Schnepp, Secretary to the Egyptian Institute. There were two varieties of it, both pertaining to those still cultivated in Egypt. The form of the grains had not changed; but their colour, both within and without, had become reddish, as if they had been exposed to smoke. The specific weight was also the same—viz., twenty-five grains to a *gramme*. On being ground, they yield a good deal of flour, but are harder than common wheat, and not very friable; the colour of the flour is somewhat lighter than that of the outer envelope. Its taste is bitter and bituminous; and when thrown into the fire, it emits a slight but pungent smell. On being sown in moist ground, under the usual pressure of the atmosphere, and at a temperature of 25 degrees (Reaumur), the grains became soft, and swelled a little during the first four days; on the seventh day, their tumefaction became more apparent, with an appearance of maceration and decomposition; and on the ninth day, this decomposition was complete. No trace of germination could be discovered during all this time. Figari-Bey obtained similar negative results from grains of wheat found in other sepulchres, and also on barley proceeding from the same source; so that there is every reason to believe that the ears hitherto ostensibly obtained from mummy wheat proceed from grain accidentally contained in the mould into which the former was sown.

Statistics of the Globe. The following curious facts are stated by the *Abeille Médicale*:—The earth is inhabited by 1,288 millions of inhabitants, viz., 369,000,000 of the Caucasian race; 552,000,000 of the Mongolian race; 190,000,000 of the Ethiopian, 1,000,000 of the American Indian, and 200,000,000 of the Malay races. All these respectively speak 3,064 languages and profess 1,000 different religions. The amount of deaths *per annum* is 333,333,333, or 91,954 per day, 3,730 per hour, 60 per minute, or 1 per second. This loss is compensated by an equal number of births. The average duration of life throughout the globe is 33 years. One-fourth of its population dies before the seventh year, and one-half before the seventeenth. Out of 10,000 persons only one reaches his 100th year; only one in 500 his eightieth, and one in 100 his sixty-fifth. Married people live longer than unmarried ones; and a tall man is likely to live longer than a short one. Until the fiftieth year women have a better chance of life than men; but beyond that period the chances are equal. Sixty-five persons out of 1,000 marry; the months of June and December are those in which marriages are most frequent. Children born in spring are generally stronger than those born in other seasons. Births and deaths chiefly occur at night. The number of men able to bear arms is but one-eighth of the population. The nature of the profession exercises a great influence on longevity; thus out of 100 of each of the following professions the number of those who attain their 70th year is: Among clergymen, 42; agriculturists, 40; traders and manufacturers, 33; soldiers, 32; clerks, 32; lawyers, 29; artists, 28; professors 27, and physicians, 24, so that those who study the art of prolonging the lives of others are most likely to die early, probably on account of the effluvia to which they are constantly exposed. There are in the world 335 millions of Christians, 5 millions of Jews, 600 millions professing some of the Asiatic religions; 160 millions of Mahometans, and 200 millions of pagans. Of the Christians, 170 millions profess the Catholic, 76 millions the Greeks, and 80 millions the Protestant creeds.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London. 7 P.M., General Meeting for Election of Officers and Council; 8.30 P.M., Dr. Routh, "On some Points in the Treatment of Prolapsus Uteri."—Entomological.—Asiatic.—Royal Medical and Chirurgical (Anniversary).—Epidemiological Society, 8 P.M. Dr. Smart, R.N., "On the Successive Epidemics of Malignant Fever in Bermuda."

Tuesday. Pathological.—Photographical.—Ethnological.

Wednesday. Royal College of Physicians, 5 P.M. Dr. Risdon Bennett. Croonian Lectures. "On some Points connected with Bronchitis, and its Results."—Obstetrical Society of London, 8 P.M. Dr. Shortt, "On Woman's Life in Southern India"; Dr. Clay, "Observations on Ovariotomy, Statistical and Practical; also, a Successful Case of Entire Removal of the Uterus and Appendages"; Dr. Broadbent, "On Displacement of the Bladder as a Cause of Tedious Labour."—Society of Arts.—Geological.

Thursday. Royal.—Antiquarian.—Linnæan.—Chemical.—Harveian.

Friday. Royal College of Physicians, 5 P.M. Dr. Risdon Bennett. Croonian Lectures. "On some Points connected with Bronchitis, and its Results."—Royal Institution.—Archæological Institute.—Western Medical and Surgical, 8 P.M., "Practical Evening for the Narration of Cases and the Exhibition of Specimens."

Saturday. Medical Society of London (Anniversary). 5 P.M., Oration by Dr. Habershon; 6.30 P.M., Dinner.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—February 21, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1012 / Girls..896	1908	1377
Average of corresponding weeks 1853-62		2030	1464

Barometer:
Highest (Mon.) 30.472; lowest (Sat.) 30.175; mean, 30.332.

Thermometer:
Highest in sun—extremes (Mon.) 100.2 degs.; (Th.) 48.9 degs.
In shade—highest (Sat.) 53 degs.; lowest (Wed.) 27.2 degs.
Mean—39 degrees; difference from mean of 43 yrs.+0.7 degs.
Range—during week, 25.8 degrees; mean daily, 17.5 degrees.

Mean humidity of air (*saturation*=100), 86.

Mean direction of wind, S.E. & S.W.—Rain in inches, 0.19.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MR. COOMBE AND HOMŒOPATHY.—In reply to Mr. Coombe, all we have to state is this:—Mr. Coombe has been publicly accused of practising homœopathy; consequently, there is only one possible way in which he can purge himself of the accusation and its attendant good or evil; and that is by publicly saying, he never has had, or if he has had, that he will in future have no further connexion with the thing. His letter does neither the one thing nor the other, and therefore we see no good to be derived from its publication.

DR. KIDD ON ASCARIDES.—Dr. Kidd writes to us to the following effect:—

"He feels aggrieved that a letter of his in this JOURNAL about a year since, on Ascarides in Children, subsequently noticed at the last meeting of the British Association at Cambridge, has been misrepresented in the *Lancet*, and he has been refused any explanation. Dr. Kidd adheres to what was stated in this JOURNAL; so that his truthfulness has only been questioned on *ex parte* letters. Science cannot be much advanced by hole and corner one-sided views. Dr. Kidd's theory is, that what are often treated as 'ascarides' by tin filings, cowhage, chloroform injections, etc., are larvæ of the blow-fly and other flies, something like 'bots' in the lower animals; and that the true remedy must be of a prophylactic kind. He did not say, as now suggested, that one is changed into the other, as may be perceived by referring to the original letters."

SEVERAL LETTERS on the "Title of Doctor" and on "Gratuitous Medical Services" are unavoidably delayed until next week.

DR. WALKER'S reports of surgical cases will be published soon.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

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PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, February 1863.

COMMUNICATIONS have been received from:—Dr. J. HUGHES BENNETT; Dr. F. J. BROWN; THE HONORARY SECRETARY OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. A. B. STEELE; Dr. JAMES RUSSELL; Mr. F. T. PONCIA; Dr. OGLE; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. COPEMAN; Dr. LIONEL BEALE; Mr. SAMUEL WOOD; Mr. LOWNDES; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; Dr. A. T. H. WATERS; Mr. J. SPROULE; Dr. WILLIAM BUDD; Dr. J. WEST WALKER; F.R.C.S.; THE HON. SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Mr. JOHN JONES; Dr. ASPINALL; and Mr. STONE.

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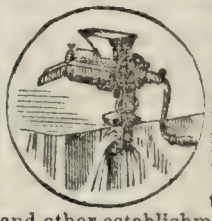
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Facts and Arguments

OPPOSED TO

DR. BENNETT'S THEORY OF ORGANISATION.

BY

LIONEL S. BEALE, M.B., F.R.S.

Dr. Bennett does not explain more fully the peculiar views he entertains ; but refers me generally to the works of Martin Barry, Meissner, Nelson, Keber, and others (!), and then qualifies his reference by saying, "I do not wish him (Dr. Beale) to regard their *expressed opinions or theories* ; but the *facts* they have observed, and some of *which* I copied in my first lecture in the *Lancet*—Figs. 9, 10, 13, 14, and 15."

I know Dr. Bennett has copied the figures of Dr. Nelson ; but Dr. Nelson's explanation of his own figures is quite different from Dr. Bennett's. Dr. Nelson says nothing about molecules of the ovary coalescing to form the ovum ; nor can I find in his paper any fact, observation, or drawing, in favour of Dr. Bennett's peculiar theory.

Dr. Nelson thus describes the first figure Dr. Bennett has copied from his paper in the *Philosophical Transactions* for 1852, Fig. 44 : "Contents of the cæcal portion of the ovary—*a*, the germinal spot, which is solid ; *b*, the germinal vesicle, *transparent, containing a fluid and the germinal spot.* The germinal particle is first thrown off, the swelling up of whose outer layer forms the germinal vesicle, while the central portion remains unaltered to form the germinal spot."

Dr. Bennett compresses this description and that of the two following figures into this sentence : "Figs. 9 to 12 represent the *histogenetic changes (!)* which take place among *the molecules deposited (!)* in the ovarian tube of the female worm, until the fully maturated ovum passes into the oviduct." Nor does he insert one of the letters of reference ! "Among the molecules" ! Every separate body represented in Figure 9 is an entire ovulum. Are these "*the molecules which coalesce to form the ovum*" ? All interested in this question should compare Dr. Nelson's description of his own figures in the *Philosophical Transactions* for 1852 with Dr. Bennett's explanation of these same figures copied into the *Lancet* of January 3rd, 1863, page 4.

Dr. Bennett complains that I do not point out the *errors in detail*, and says that unless I abandon "generalities" and "assertions", and become "more particular" in my facts and arguments, he cannot propose to continue the "explanations" to which I invite him.

It certainly appears to me that many statements made by Dr. Bennett are themselves generalities and assertions, and of the most positive kind. This was why I begged for further information.

1. Surely it is but an assertion to say that molecules aggregate together to form vibriones, since neither these molecules nor this aggregation have ever been seen. Because particles of phosphate or carbonate of lime unite, coalesce, or become aggregated together to form larger masses, it by no means follows that living structures are formed by the aggregation of molecules. This is no argument at all, until it has been shown that things living are governed by the same laws alone as things inanimate—that, for example, in the formation and growth of a living nucleus, and in the precipitation and increase of a particle of inorganic matter, the same, and only the same, forces are concerned.

2. It is an assertion, but simply an assertion, to say that the addition of the force we call *vitality* occurs *after* the molecules have become aggregated together ; and I do think that Dr. Bennett is bound, as a scientific man, to give facts and arguments in favour of so peculiar a view, or to abandon it. Would it not be very unreasonable to assert that a tree or an animal was first formed or built up, and was then made to *live ?*

3. It is an assertion to say that the perfect worm (ascaris) is formed "by a *third act* of histogenetic coalescence." It is an assertion to say that histolytic molecules "meet together, concentrate themselves, and form histogenetic molecules." There is not a shadow of proof in favour of the view that any one molecule, resulting from the disintegration of any substance whatever, becomes a living molecule. A molecule of oil or phosphate of lime may result from disintegration ; but as such molecule, it can never live. A *living molecule* of oil, phosphate of lime, or any other substance having a definite known composition, is a simple impossibility. We might as well speak of a living mass of iron, lead, or other metal.

4. It is simply an assertion, and, I maintain, unsupported by evidence, to say "the molecules of the ovary first coalesce to form the ovum" ; and Dr. Bennett must permit me to ask him the following questions upon this matter.

a. Does the assertion apply to ovaries generally, or to the ovary of ascaris mystax alone ?

b. Does the entire ovary consist of molecules ; or is there any tissue ?

c. Are the molecules free, or imbedded in any tissue?

d. How are the molecules of the ovary produced ? Do they all appear at the same time ? If not, how do they increase in number ?

e. Do all the molecules of the ovary unite to form one ovum, or are many ova produced ? If many ova result, what prevents them from becoming aggregated together to form *one large ovum ?*

f. Can ova be produced in any other manner than by the aggregation of molecules ?

g. Has Dr. Bennett himself *seen* the molecules in the ovary of ascaris, or studied the changes he describes in the constituent molecules of the ovum of this or any other creature ?

h. Why does he term some molecules in the ova figured by Dr. Nelson *histolytic*, and others *histogenetic*, as Dr. Nelson himself neither used the terms nor described the changes as Dr. Bennett describes them ?

I would also ask if the conclusions Dr. Bennett has arrived at with regard to the disintegration of spermatozoids and germinal vesicle to form *histolytic molecules* are derived from his own observation, or from other authorities, as I am not aware that any one has demonstrated that any molecules whatever result in this case. It is said that the spermatozoa *disappear* ; but Dr. Bennett is the only physiologist who has observed (?) that they become molecules.

Dr. Bennett asks : "How can solid matters grow or

increase in extent and density, unless from that very solution solid molecules (!) are thrown down which by aggregation produce bulk?" I answer that, even where pabulum does contain molecules, these molecules are prevented from passing into living matter. Insoluble inanimate particles may be precipitated from solutions, and will become aggregated together to form *inanimate masses;* but all matter serving to nourish living matter must be *in solution.* Where the food is insoluble, it must be reduced to a perfectly soluble condition; and any insoluble matters present are invariably filtered off before it is appropriated by anything living. The vibriones grow and multiply in a solution which is perfectly clear, and in which not a visible molecule besides themselves can be discerned.

These vibriones can hardly be termed *solid molecules.* What then, according to Dr. Bennett, is a solid molecule? Any one who was acquainted with the subject of cell-growth, as explained in modern text-books, might have advanced the same objections, and asked for further explanations upon the very same points. Dr. Bennett must bear in mind that the view he advocates has been advanced by him alone; and he must admit that the *onus probandi* rests with him. His view has now been before observers, both in this country and on the continent, for many years; and surely, if the statements he has made are founded upon facts capable of demonstration, they have been verified and received by many anatomists by this time.

Surely, all anatomists are not so biased as to be incapable of accepting what they can see or what can be shown to them. Dr. Bennett evidently considers that *my objections* result from prejudice in favour of my own views; and, as I am anxious that he should have the advantage of any adverse impression that can be excited upon this head, I will simply reprint Dr. Bennett's question and answer without comment.

"*Again, may not Dr. Beale's avowed incapability of comprehending my views originate in the strong bias he possesses in favour of his own doctrines, in consequence of which he is unable to regard mine from an independent point of view? If so, he cannot be expected either to criticise or understand them correctly.*"

I propose to devote a separate communication to the important question of the development of vibriones, and I thank Dr. Bennett for expressing his views upon this point so definitely.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

INFANTILE SYPHILIS.

Under the care of J. Vose Solomon, Esq., F.R.C.S.

Case. *Primary Syphilitic Ulcer of the Eyelid in an Infant Eight Months old, followed by Secondary Symptoms; Inoculation of the Breast of the Mother, followed by Secondary Symptoms.* On the 11th of September, 1860, an infant (L. L.), 8 months of age, was admitted under the care of Mr. Solomon, for a small unhealthy ulcer, with an indurated base, situated at the inner extremity of the lower lid, close to the roots of the eyelashes. It had been there a fortnight.

The child was somewhat strumous-looking, fairly nourished, and could not be said to be unhealthy. It had not suffered from "snuffling" or any sort of disease, The mother, who brought the patient to the hospital. was in appearance healthy, and close questioning failed to elicit a syphilitic history. The father also was healthy, and denied having suffered from sore-throat, falling off of the hair, or disease of the skin. The ulcer on the infant was considered by Mr. Solomon to be syphilitic; but, in the face of the foregoing facts, soothing topical applications only were ordered. In three days later, no amendment having taken place, quinine was ordered, and the sore to be dressed with diluted citron ointment. Change for the worse, rather than the better, having taken place, inquiry was made whether any one had been in the habit of nursing or fondling the child who was suffering from a skin-eruption or sore-throat. It was replied, "Yes; her aunt is so affected." When this lady presented herself at the hospital, she was found to be covered with copper-coloured blotches; and her tonsils were fissured with ulcers, which afforded a discharge. These diseases had been attributed to bathing in the sea, and permitted to run a natural course. The inference Mr. Solomon drew from this examination was, that the aunt, in kissing the infant, had inoculated its eyelid. The inner extremity of the lid, close to the muco-cutaneous margin, is, according to his experience, more susceptible to primary syphilis than any other part of the palpebra. Any one who has once seen syphilitic tubercle of the eyelid could not mistake it for a primary ulcer.

Small doses of mercury were now given twice a day, in combination with Dover's powder and sugar. Nevertheless, on the 28th of September, six weeks from the first appearance of the primary affection, which had healed, the child's buttocks presented well-marked syphilitic blotches; and on the 23rd of October, a rather large, ill-conditioned, and deep ulcer had invaded the external labium. Syrup of iodide of iron had been ordered on the 19th, in addition to the mercury, which was given once a day only.

After a while the child's mouth presented a fissure at its commissure. An ulcer appeared on the mother's breast, and she had secondary symptoms.

The case of the infant was carefully watched by my friend and late pupil, Mr. Walker, now of the firm of Bull and Walker, of this town; and that of the mother by Mr. Baines, who attended the family, and to whom the case was referred for treatment.

Remarks. The fact of this little patient having attained nearly the eighth month of its age before the appearance of the primary chancre, excludes all grounds for believing that the disease was contracted during the parturient process. How then was the inoculation effected, and from what source?

The answer is found in the common practice among some women of fondling children, by *sputtering* upon their faces, and, so strange is taste, upon the genitals and nates of infants. By these acts, the secretions of the mouth are frequently deposited upon the place of contact. It was probably in this way that the discharge from the aunt's tonsils was conveyed to the eyelid of her infant niece.

In opposition to this theory, we have the high authority of Dr. Diday, who declares he has been unable to discover evidence of the occurrence of a primary syphilitic sore as a result of inoculation from a secondary disease. The case before us is, in this respect, *unique,* inasmuch as the affection of the mouth of the suckling was a secondary non-congenital disease, and by it the nipple of the mother was inoculated. The specific character of that infection having been placed beyond dispute by the occurrence of secondary symptoms. We therefore conclude that the discharge from a secondary sore has given rise to a syphilitic ulcer, which, in its turn produced secondary symptoms.

Addresses and Papers

READ AT

THE THIRTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LONDON, AUGUST 5th, 6th, 7th, and 8th*, 1862.]

OBSERVATIONS ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND: ILLUSTRATED BY NUMEROUS FATAL CASES.

By WILLIAM BUDD, M.D., Clifton; Honorary and Consulting Physician to the Bristol Royal Infirmary.

"Le médecin doit, dans ses premières études, jeter un coup d'œil sur les animaux qui se rapprochent le plus de l'homme."—*Chaussier.* (Adopted from Régnier.)

[*Continued from page* 161.]

As I have never had an opportunity of observing this malady on the continent, where its characters are well known and universally recognised, it may perhaps be expected that I should state the grounds on which I have been led to identify the foregoing cases with it.

To those who have once seen a case of this kind, and are also acquainted with the literature of malignant pustule, these grounds must be sufficiently obvious.

Foremost among them stands the seat of the malady in the subjects whose histories have here been given. It can scarcely fail to strike every one as, in all ways, a deeply significant fact that in the whole series the parts attacked were the only parts of the body which in this country are habitually uncovered. Had the face been the only part to suffer, the case had been less striking. In that event, it might have been argued with some plausibility, however erroneously, that the course and chief characters of the disease had their root in some structural peculiarity. But the fact that in the only two in which the pustule did not appear in the face, it appeared in the hands, and in the hands, too, of working people, getting their living by manual labour, not only excludes this idea, but renders the meaning of the whole history difficult to misinterpret. We have already seen what stress the continental writers lay upon this characteristic as suggestive of inoculation from without. But whatever its import may be, as a part of the natural history of malignant pustule, it has not only obtained universal recognition, but has been put in the foremost rank by all the best observers.

"*Immer erscheint der* (*milzbrand*) *Karbunkel an unbedeckten Stellen.*"—"Malignant pustule always appears on uncovered parts"—is the universal remark of the German writers.

"It is never seen but in the face, neck, and hands; in parts, finally, which are habitually uncovered, and which lie open to the impression of an external agent"—is the pointed expression of Enaux and Chaussier.

Speaking of the different points which malignant pustule may attack, Bourgeois says:—"These points are, in the immense majority of cases, seated on those parts which are habitually uncovered, and which, in consequence of this, may easily be put into relation with the numerous vehicles of this malignant virus."

In another passage he adds:—"The application of the charbon virus to the skin being indispensable to the development of malignant pustule, it is readily conceived why the uncovered parts of the body should be its almost exclusive seat; thus, the face, the neck, the hands, the arms, and the legs, are almost the only parts on which it appears. When by chance it developes itself on other parts, we may be sure that the poison has been carried there directly by the fingers or other agents impregnated with it."

In one form or another, these statements are echoed by every foreign writer of any eminence who has treated of the malady. But if the foregoing cases agree with malignant pustule in a peculiarity so significant as that here defined, their agreement with it in all that regards the course and character of the morbid changes is not less striking. The more, in fact, we enter into detail in pursuing our comparison between the two things, the more perfect their identity becomes. To one of two alternatives, indeed, this comparison necessarily drives us. Either the cases which have been described in this paper are identical with the specific disease which Chaussier, Bourgeois, and others, have described under the name of malignant pustule, or it is not possible to convey a knowledge of a disease, striking beyond most others, by description at all.

The phenomena which these cases exhibited, from their first minute beginning to their terrible and unexpected end, were, in every particular, identical with those which, in farriers and others who have the charge of cattle in continental countries, have been seen, in numberless instances, to proceed from the accidental but direct inoculation of the "charbon" virus.

The commencement of the disease in an affection resembling the bite of a gnat, and, at first sight, not at all more serious, in outward seeming—the importunate itching or the equally characteristic stinging and burning of the early stage—the formation, within a few hours of the well known vesicle—the hardening, blackening, and death (the "mummification," as the French and Germans express it) of the textures immediately around it—(hardening so extreme and death so entire that in more than one instance the knife of the surgeon creaked in the flesh, inflicted no pain, and gave issue to no blood)—the diffuse and erysipelatous swelling of the wider area—the crop of secondary vesicles—the chains of inflamed lymphatics—the fœtor of the breath—and, lastly, death amid all the indications of septic poisoning—were incidents common to them all. In the one or two cases, indeed, in which some of these circumstances fail, I have especial reasons for believing that their absence from the record is simply due to their not having been noted.

Taken in their whole succession, it may be safely affirmed that these are incidents which are diagnostic of malignant pustule, and belong to no other malady. Its characters in its advanced stage are, in fact, so marked and distinctive that to confound it with any other disease would seem to be well nigh as impossible as it would be to do the same with small pox or glanders.

Striking as are the positive signs, the negative signs are scarcely less so. Among these, especially noteworthy for a malady so rapid and severe, are the absence or slightness of pain, and still more so, the entire absence of common suppuration. In not one of the whole series of cases was there any visible trace of pus. These things are important, not only because they are well known and distinctive characteristics of malignant pustule, but because they have no doubt a fundamental relation, as such, to the peculiar mode of action of the specific poison.

If any doubt still remained on the subject, it should be dispelled by the fact that my friend Mr. Green, the experienced senior surgeon of the Bristol Royal Infirmary, at once recognised the disease of which his three patients died, as the same with the malignant pustule which he had formerly seen in Paris.

By those who refuse to admit the force of these considerations, it is no doubt *possible* to take another view of such a history. It might, for instance, be argued that these cases have nothing specific in them at all;

but are simply cases of pyæmia originating in some local change, however arising. And such an argument would not be altogether without support. Most practitioners must have seen at some time or other, examples of pyæmia, issuing in rapidly fatal general infection which originated in some trivial injury without the presence or intervention of any virulent agent. In such an event, personal predisposition, and what passes by the name of epidemic constitution (whatever that may mean) might one or both be supposed to play a part. The most common seat of the affection, and the comparative youth of the greater number of the subjects, might also be regarded as having each a hand in the result.

It is well known from what slight as well as various causes the lips swell to a degree that is observed in no other part, and how especially strong this tendency is in early life. In these two conditions, an explanation more or less plausible might be found of some of the peculiarities which most challenged attention in the cases before us. As a matter of fact, it is known to me that the view here put forward in this hypothetical form is the view actually entertained of these cases by more than one eminent observer, who has had many similar ones to treat. After having myself given it the fullest consideration, I am not the less convinced that it is not the true one.

This much, at any rate, is certain; that the two facts on which those who take this view chiefly rely—the seat of the affection in the face and its preference for early manhood—so far from being in their favour, must be read the other way. For these very two are among the best known of the characteristics of malignant pustule itself.

"*La face est, on peut dire, le siége de la prédilection de la pustule maligne*"—"the face is the favourite seat of malignant pustule"—says Bourgeois; a remark which is strikingly illustrated by the records of the disease, and which, I may add, is especially true of those cases in which it occurs in persons who are not by their calling exposed to direct inoculation. In pushing the analysis further, it will be found that, in the great majority of these cases, the disease was seated in the lip or in the near neighbourhood of it.

Its greater frequency in early manhood (although, as the foregoing cases show, it is by no means confined to this period of life) has not only been often remarked, but various writers have taxed their ingenuity to account for the fact.*

To occur mostly in the face, and to attack chiefly persons who are comparatively young,† are marks which, so far, therefore, from indicating, as some suppose, a non-specific origin, of themselves constitute a strong presumption in favour of the identity of the cases which present them with the malignant pustule. The course of the disease and the character of the morbid changes are all that remain to be taken into account, and we have already seen how perfectly and minutely identical in all the most striking of their very striking peculiarities were the foregoing cases with the disease which is derived from the "charbon" of cattle.‡

Assuming the question of diagnosis to be settled, the next that arises is, in what way did the persons whose cases have been related become inoculated with the "charbon" virus?

Here, I regret to say, as regards the majority at least, facts altogether fail me. In the greater number, the specific nature of the disease was not recognised, and the possibility even of its having been derived from diseased cattle did not once enter the mind of the observer. With the exception of some five or six cases already specially referred to, nothing came to light to indicate in any way the origin of the disorder.

As in regard to this point I have nothing but conjecture to offer, I will be as brief as may be. In the absence of direct information, two principal modes occur to me, in which the subjects of the foregoing cases may have received this contagion. One is by eating the flesh of animals slaughtered while affected with quarter evil or blood; the other by being inoculated by insects which have previously been in contact with animals or the carcases of animals affected with this disease. All that I know of the former mode of communication is that the material conditions for it are not wanting among us. That the flesh of oxen and sheep so affected is not an uncommon article in English markets, I have been assured by persons who have been themselves parties to the traffic. The information I have received leaves no doubt, in fact, that nearly the whole of such flesh is disposed of as food. The testimony of the many graziers and butchers I have consulted is unanimous as to this point.

In cases in which the malady is far advanced, the diseased quarter is rejected, and the other three only are sent to market. But where it is in an earlier stage, the whole carcase is often sold.

In these last I am told that a peculiar method is adopted to obliterate the marks left by the morbid change. Wherever the meat looks black or discoloured, it is dipped into boiling water, and its surface is then rapidly seared with a red hot iron. The effect of this is to cause a superficial whiteness, which in a great degree masks the mass of putrescence beneath. My authority for this statement is a grazier, who assured me that he had himself often witnessed the process.

To such a height, indeed, has immorality of this kind risen that a class of butchers has sprung up whose chief trade lies in the purchase, and sale for food, of cattle and other live stock affected with this and other diseases. In this matter of unsound meat, the inhabitants of large towns are the chief sufferers. Although too many farmers have no scruple in selling to others the flesh of diseased cattle, instinct has given them a whole-

* Much more precise data than any now existing would be required to show what the fact really implies. Heusinger believes that it is simply a matter of more frequent exposure. In his chapter on the influence of age, the following passage occurs:—

"In Beziehung auf der Menschen meint Erdmann, Kinder würden nicht befallen. Regnier sah den Milzbrand nicht in frühesten, und im höchsten Alter. Glanström sagt, selten litten Kinder und Greise. Ich glaube das rührt nur daher, dass sich das mittlere Alter im Allgemeinen am haufigsten der Ansteckung aussetzt, und es scheint mir eben nicht dass das Alter einen Unterschied in der Anlage begründe, denn ohne viel zu suchen bieten sich gleich Beispiele von höchsten und jüngsten Alter dar."

That adults are much more exposed to the chances of inoculation than children is obvious enough. May not the greater frequency of the disease in adolescence than in elderly persons be due to the greater delicacy of the skin in young persons?

† It is not a little remarkable that, except in times of great epidemics, the "charbon" scarcely ever attacks any but comparatively young cattle. "Le charbon," says Chabert, "n'attaque guère que les jeunes animaux." (P. 154.) The same observation has been made universally of the quarter evil here. Yearlings and two-year olds are, as a a rule, the chief sufferers. In man and in beast alike, therefore, adolescence—if I may use such a word in common—would appear to be the period of greatest liability. The greater delicacy of the skin in young cattle may also possibly come into play here. But that would not explain why it is that young calves so generally escape. It is not impossible that, as in so many other contagious diseases, there is a certain period of life in which the specific liability is much greater than at others. As the disease is readily propagated by inoculation, it might be determined by experiment how far the greater liability of adolescent cattle depends on constitutional causes.

‡ In this discussion, I have altogether left out of account the perfect resemblance of the morbid changes in these patients to those which occur in the animal; a resemblance so strikingly brought out in my friend Dr. Steele's narrative. The early and entire death of the inoculated part, and the blackness, dryness, and insensibility of the immediately surrounding tissues in both, constitute a series of relations which is, in all ways, of very great interest. In any future cases, it might be well to put the identity of the two diseases to a still further test by inoculating some one or more of the animals subject to "charbon" with morbid products from the infected man. Virchow states that of these products the serum of the characteristic vesicles is the most virulent. In the French experiments, however, this serum always failed, while the whole blood from the spleen appears to convey the poison the most surely. To ensure success, a young animal should be chosen, and more than one should be inoculated.

some dread of its possible effect on their own persons. But the infected carcase which cannot be disposed of to neighbours is readily sold to the unsuspecting inhabitants of the great city which lies some miles away.

The development of railways has opened new facilities for this sort of traffic, not only by offering greater secrecy for it, but by vastly enlarging, through increased rapidity of transit, the area from which such unwholesome supplies are sent.

It is well worth considering whether the increase which has certainly taken place of late years in the number of cases of malignant pustule in London and other large cities may not be in great part due to this circumstance.*

That every year, in most large cities, a considerable number of persons may be found who have eaten the flesh of animals affected with quarter evil or blood may be considered as all but certain.

On the other hand, I have ascertained, by careful and repeated experiments, that the temperature to which meat is generally subjected in the operations of roasting and baking, in no wise, except perhaps at the exposed surfaces, impairs the powers of animal poisons.*

Suppose now that a person eating such infected meat roasted or baked, has a chap or abrasion on the lip, and we have at once all the material conditions that would seem to be required for an effective inoculation. Seeing how common such abrasions are, it is by no means improbable that now and then all these conditions may be found together. On the whole, however, I incline to the supposition that in the case of persons whose calling does not bring them into direct contact with the virus, the inoculation is generally effected by flies.

In two of the cases mentioned in this paper, there seemed to be direct evidence of the fact. In these two, the disease undoubtedly followed the bite of a fly and occurred in the seat of the puncture.

Great numbers of similar cases are on record,† and the fact that these insects intervene largely in the propagation of the disease is now generally admitted.‡

Some writers are even of opinion that the human subject is inoculated by them in the great majority of cases; an opinion that would go far to explain the well known greater frequency of the disease in hot and dry sum-

* These remarks were written more than three years ago. The following extract from Dr. Letheby's Quarterly Report on the health of the city of London, which appeared in the *Times* on the day following that on which this paper was read, will show how well founded they were. The confirmation of what I had suggested as to the effect of railways is especially striking:—

"The markets and slaughter-houses have been duly inspected, and the officers have seized 39,315 lbs. of meat and 765 head of game and poultry as unfit for human food. It consisted of 171 sheep, 14 calves, 43 pigs, 271 *quarters* of beef, and 235 joints of meat; 32,098 lbs. were diseased, 4147 lbs. were putrid, and the rest was from animals that had died from natural causes. In the course of the quarter, five persons have been convicted, at the sessions of the Central Criminal Court, for sending diseased and unwholesome meat into the city markets, and sentenced each to six months imprisonment. Their names are—Thomas Stevenson, of Millstone Lane, *Leicester;* John Jarvis, Towcester, Northamptonshire; Daniel Cotton, Belgrave Gate, *Leicester;* George Hill, Mansfield Street, *Leicester;* and George Warrens, Belgrave Street, *Leicester.* Four out of five of these persons were from Leicester, where it is to be feared the practice of sending diseased meat to the London markets is very common; and in every instance the persons were butchers, and therefore must have known the illegality of the practice."

The following extract from the next subsequent report from the same distinguished hand shows that the evil still continues. Speaking of the sanitary action of one week only, Dr. Letheby says:—

"The markets and slaughter-houses have been duly inspected, and the officers have seized 4525 lbs. of meat and 73 head of game and poultry as unfit for human food. It consisted of 16 sheep, 10 pigs, 32 *quarters* of beef, and about 50 joints of meat. *Three-fourths of it was from diseased animals;* and I recommend that in five cases the matter be submitted to the solicitor for further investigation. The inspectors inform me that much of the diseased meat of Newgate Market finds its way to the *sausage makers* of Cow-cross. Last week the inspectors seized the carcases of a diseased sheep and a pig which were being carried to a sausage maker in that locality. The sheep had died from rot; and the pig was covered with small abscesses like boils, many of which had burst through the skin and the rest were still full of matter. Both of these animals were in a shockingly diseased state, and but for the interference of the inspectors would have been converted into *sausages.* I have also to state that the slaughter-houses of Cow Cross, which are just outside the city, are a source of great anxiety to the inspectors, from the circumstance that diseased animals are frequently slaughtered there, and brought into the city markets. Last week there were two such instances. Two diseased bullocks had been killed in the slaughter-house of a Mr. Crosse, and then carried to Newgate Market, where they were seized by the inspectors. In like manner, at Whitechapel, it is a common practice with some of the butchers who are outside the city boundaries to traffic in diseased meat; and the city butchers and salesmen *complain that they have not the same chance for the disposal of inferior meat that their neighbours have, and that the rigorous supervision of the city is unjust to them.* Only last week, the carcases of several bullocks, about a dozen or so, that had died on shipboard, were sold in Whitechapel. Meat of this description is disposed of to the poor at night, when it passes for wholesome meat, and realises from a penny to five farthings a pound."

What is here stated in regard to *sausages* has a special importance, not only because of the obvious facilities which they offer for the disposal of unsound meat, but because, from the mode in which they are cooked, the temperature to which they are raised in being prepared for table, must often be insufficient to destroy the powers of zymotic poisons. Under these circumstances, any rudimentary entozoa that may happen to be present survive the operation; and for the same reason, I am led to believe that sausages are often the source of disease in men by the introduction of tapeworm and other parasites.

So much for the London commissariat. The following extract from the *Western Daily Press* of Oct. 3rd will show that the evil is by no means confined to the metropolis:—

"Diseased Meat in Bristol. Yesterday at the Council House, before the sitting magistrates, Messrs. J. Poole and W. Naish, John Cann, jun., was summoned for having in his possession and offering for sale a quantity of unwholesome meat, unfit for human food. Mr. Heaven, clerk to the Local Board of Health, appeared in support of the information, and said it was brought under the 126th clause of the Nuisances Removal Act, which prescribed a fine not exceeding £10. He further said that in the present case it was not one bad piece that was complained of, and which might have been accidental, but several pieces, both of mutton and beef, and also of lamb; and he, therefore, should press for a severe penalty being inflicted. Mr. Yates, inspector of nuisances, said on September 20th he visited the defendant's board in the St. Nicholas Market, and there saw the whole of the fore half of a sheep in a dreadful state. It was in a basket, put a little aside, and the defendant told him it had just been left there by some one. He also saw some beef in a bad condition, covered over with a cloth. Afterwards he saw a poor woman at the board, with a piece of this beef in her hand, about to purchase it. On further looking about, he found a loin and a leg of lamb, both bad. He seized the meat; and on taking it before the magistrates on the Monday morning, they ordered it to be destroyed. Defendant said he bought the meat as being good, and owing to his defective sight, he did not know but that it was so. Mr. Yates, however, said anyone could have known it was bad by feeling it. The magistrates said they thought the case was clearly proved; and they fined the defendant 20s. and costs, or, in default of payment, one month's imprisonment. They also wished it to go forth that all cases of that sort which came before them would be punished."

It seems probable, from the account, that some of the meat here referred to was taken from animals that had died of quarter evil. It is worthy of remark that the meat would probably have been undiscovered had it not been for the increased vigilance of the police in regard to these matters, excited by the panic as to small-pox in the Wiltshire flocks.

* These experiments will form the subject of another communication.

† The following paragraph which occurred in the *Times* on Nov. 11th, 1858, evidently relates to a case of this kind:—

"Extraordinary Death. Madame Moet, the celebrated proprietor of the champagne vineyards, whose daughter was married the other day, has just met with her death in a most extraordinary manner. She was gathering flowers in her garden, when she felt herself bitten by a fly. She thought nothing of the slight puncture; but in the evening her face began to swell, and a few days afterwards she died in intense agony. It is supposed that the fly must have fed upon putrid flesh."

A few months later, an exactly similar account was given in the *Times* of the death of the wife of our ambassador at Brussels.

‡ I may cite, in confirmation of this, a paragraph which appeared in the Paris correspondence of the *Times* on Sept. 26th last:—

"Cases have lately been very frequently cited in the French papers of persons becoming extremely ill, and even dying, in consequence of the stings of venomous flies, the said venomous quality being contracted by the insect from putrid substances on which it has settled. Near Soissons, a shepherd lately died in four days in consequence of one of these bites or stings. He took no heed of the first inflammatory symptoms, and when he applied to the doctor it was too late. Two other persons *in the same neighbourhood* were similarly attacked, the symptoms being great swelling and inflammation; but fatal results were not anticipated. Some of the French provincial newspapers have published strong recommendations to all persons who may be stung by suspicious flies or insects, to resort at once to a medical man, who alone is able to judge how far the apparently trifling injury may be serious."

mers, and in countries where insect life is active and teeming.

It would go far to explain, for instance, the much greater frequency of the malignant pustule in Burgundy than in England and the north of France, as, also, its greater frequency in Siberia and Lapland, where insects of the mosquito tribe are the great pest of the traveller.

In Lapland, indeed, before the identity of malignant pustule with the "charbon" of animals had been finally established, the popular belief was universal that the former was caused by a peculiar insect, which suddenly descended from the air and as suddenly disappeared.*

Such consistency had this view acquired in the middle of the last century, that the illustrious Linnæus, on the strength of information received from Solander, even went so far as to admit this hypothetical creature into his systematic zoology under the significant name of "furia infernalis." (*Amenitates Academicæ*, vol. iii, p. 322.)

Virchow, who has made malignant pustule the subject of special investigation, and who fully admits the agency of flies in its propagation, makes the following remark:—"Most commonly insects with piercing probosces effect the inoculation, such as gadflies (bremse); *but flies which make no wound, may, also, implant the poison on the skin by their soiled wings and feet.*" (*Handbuch der Speciellen Pathologie und Therapie.* Article, Milzbrand—Karbunkel.)

Bourgeois expresses himself to the same effect:—"The different parts of animals (he says) are not the only vehicles of the virulent principle. Certain insects, after having sucked the putrid juices of dead or sick animals, and then settled on the persons of men, may communicate the infection. I have frequently met with cases of 'charbon' in persons *living near tanners and fellmongers.* I have also seen, in one case, the disease caused by the puncture of a gadfly which came out of a fleece of wool."†

As the bite of those flies to which malignant pustule may be often traced is generally perfectly harmless; as these flies are endowed with no venomous powers of their own, and, finally, as the pustule to which they now and then give rise is perfectly identical with that which springs from direct inoculation, the inference seems very sure that the only part they play in the propagation of the disease is in conveying the specific virus from the infected animal to man.

That they should be frequent carriers of this virus would seem to follow necessarily from their gastronomic habits. Wherever there is a bullock or sheep, dying or dead of this contagion, especially in summer or autumn, flies of several kinds may be seen in swarms attacking the diseased part, and feasting on the stinking profluvia which often issue from the anus, mouth, and nostrils, of the diseased animal.‡

When the animal is flayed, they show the same fondness for the carcase, also, and (in virtue of the instinct which gives them a peculiar relish for stinking things) especially, it would appear, for that part of it which is most affected.

The only link needed to complete this chain of relations is found in the fact, of which Heusinger quotes many examples, that butchers, farriers, and others, have been bitten by flies which a moment before were seen to be so occupied, and have had malignant pustule in consequence.

I once thought that the usual situation of the pustule was almost decisive in favour of its being communicated by direct contact with tainted meat. It is certainly a very remarkable fact that in twenty of the twenty-four cases referred to in this paper, the disease began in the lip, or in the near neighbourhood of the lip: of the organ—that is to say, that seizes the food. But the fact tells, in reality, almost as much in favour of one mode as of the other. In the first place, the skin of that part being thin and delicate, is more easily pierced than other parts of the face.* In the next place, it is, from various causes, much oftener denuded of its cuticle; and for this reason (as indeed from its greater natural tenuity, also) more open, to the accidental absorption of foreign matters. And, lastly, particles of sugar and other things attractive to flies are apt to collect about the edge of the mouth, so as to make it a favourite spot for their attack.

If it be objected to these considerations that they are too speculative, I would reply that we may, at any rate, draw this practical inference from them: not to think more lightly of a suspicious looking boil because it was known to originate in the bite of a fly.†

In considering the origin of any individual case, it is, I need scarcely add, important not to lose sight of the

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* The following paragraph, which was published in the *Times* in the autumn of 1860, shows that this is still the popular belief in the north of Europe:—

"Venomous Flies. More than four hundred persons have lost their lives in the south of Russia, and in the province of Kiew, from the sting of a venomous fly, which has come from Asia. It made its appearance in the same country about sixty or seventy years ago."

† In the same passage, he adduces some other modes of infection which deserve mention. After relating the fact given in the text, he adds:—

"In another case, I saw it communicated by a splinter detached from a piece of wood taken from a shippen. In some cases, it is enough to touch the garments of persons belonging to the callings previously referred to (tanners, shepherds, farriers, etc.), or to hold relations with them, although they themselves may remain unharmed."

‡ In regard to this point, Hintermayer, in a very interesting account of a remarkable epidemic of quarter evil, which raged in the summer and autumn of 1846, among the deer of the park of Dutzstein, makes, from his own observation, the following important statement:—

"Als wesentlich habe ich hier noch zu bemerken, dass die Bremsen, und zwar (*a*) die grosse Rind-bremse (*Tabanus bovinus*), (*b*) die Regen-bremse (*Tabanus pluvialis*), und (*c*) die Blind-fliege (*Tabanus coecutiens*), welche im verflossene Sommer in unzähliger Menge vorhanden waren, wohl mit Recht als die theilweisen Träger des Contagiums anzusehen sind, und daher einere grössere Ausdehnung der Seuche verursachten. Diese setzten sich gewöhnlich *zu Tausenden*, auf die Cadaver der gefallenen Thiere, saugten die aus Maul, Nase, und After kommenden Profluvien ein, verliessen sodann die Leichen, begaben sich sofort auf gesunde Stücke, stachen ihren von Contagium Saugrüssel in die Oberfläche der Haut ein, und inoculirten auf solche Weise das Seuchengift." (Kreutzer, *Central Archiv*, b. iii, p. 437.)

It will be seen that Hintermayer ascribes to flies the chief part in the propagation of the disease among animals also.

* I have already referred to the part which delicacy of skin probably plays in predisposing to the disease. But, as in other contagious diseases, other and less appreciable conditions no doubt intervene. Vincenzo Malacarne, in speaking of the disease in men says:—

"Fra i quali passa gran differenza nella suscettibilità del morbo, vedendosi fra i compagni del lavoro nel macello de Buoi infetti, nella scorticatura, nelle medicature, per cui tutti sono di sangue, di sanie ugualmente aspersi, ed imbrattati, eppure certuni contraggono il carbonchio, ed altri ne vanno esenti." (Vincenzo Malacarne, *Op. cit.*)

† This is not the only human disease in whose propagation flies play an important part. The Egyptian ophthalmia and the frambœsia, or yaws (another malady indigenous to Africa), will occur to the reader as familiar illustrations. Alibert's observations on the frambœsia will bear quoting in connection with this point:—

"La contagion du Tian (Frambœsia, *Anglicé* Yaws) est à ce qu'on assure, singulierement facilitée par une espèce de mouches que l'on nomme 'Mouches Frambœsia,' et qui sont très abondantes dans les pays chauds; les mouches se reposent à tous les instans sur les horribles pustules qui proviennent de la maladie, et elles vont inoculer le virus aux individus sains, qu'elles piquent jusqu' au sang. Est ce aussi par cette voie qu'elle a pû se transmettre aux animaux domestiques, comme on pretend l'avoir observé? Lœffler assure qu'il y a des endroits en Amérique, où la loi defend aux malades attaqués du Pian de sortir, et qui leur interdit même tout accés dans les hôpitaux. On trouve en effet que cette précaution a considerablement diminué la propagation de la maladie." (Alibert's *Maladies de la Peau*, p. 164.)

Curiously enough, in all these cases, the flies themselves do not seem to suffer at all from the poisons which exert such a virulent effect on the higher organisms. In helping to perpetuate these specific contagions, they perform a function which may be compared to that which Mr. Darwin, in that wonderful piece of natural history poetry, "The Fertilisation of Orchids," assigns to other winged insects in the propagation of that peculiar tribe of plants.

many other ways in which this poison may find access to our bodies. In our daily life, we come so incessantly into contact with animal products which are known vehicles of it, that it is not surprising that among the numerous persons who die of malignant pustule every year in England, the disease should often come in, like so many other contagions, through paths which it is impossible to trace.

[*To be continued.*]

Progress of Medical Science.

The Diagnosis of Eczema. Professor Hebra attaches a different meaning to the term eczema from that which has been generally accepted. He does not restrict the term to a disease characterised by the formation of vesicles followed by desquamation of the epidermis; but includes in it all disorders of the skin which are attended in either their earlier or their later stages by the presence of vesicles and serous discharge.

Eczema may be produced by artificial irritation of the skin. In this case, however, the results are not only vesicles and serum, but sometimes also mere redness and desquamation, sometimes small papular elevations of the size of pins' heads, sometimes even pustules and scabs. Again, there are a considerable number of cases in which the same person has on one part of his body desquamation from a reddened surface, on another red elevations as large as millet-seeds, and on another epidermic elevations filled with watery fluid; while other parts of the skin are partially denuded of their epidermis, and moistened with exudation. There may also be here and there yellow purulent points, of which some afterwards form brown or green scabs. Thirdly, the observation of the course of individual cases of eczema shows that many begin with the development of large and small vesicles, of which some become pustules, others burst, leaving exuding spots, while others are covered with yellow scabs, around which are formed papules and red desquamative spots. Towards the close of the disease, the whole of the pustules have formed scabs, which partly or entirely fall off after the drying of the exuded fluid, leaving red spots, more or less infiltrated, and covered with fine scales.

These facts Professor Hebra believes sufficient, in conjunction with clinical observation, to support the conclusion that the term eczema includes five distinct forms of disease. In support of this idea, he brings forward the following considerations.

1. The identity of the different forms of eczematous eruption may be proved by a simple experiment, which any one may make on himself or on persons at his disposal. Let an agent capable of producing artificial eczema (such as croton oil) be rubbed into corresponding parts of the skin of two persons, or into different parts of the skin of the same individual; the same quantity—say five drops—being applied to each part. In a few hours the effects will be manifested, but differently in different parts. On the scrotum and penis there will be œdematous swelling and redness, accompanied in many cases by innumerable vesicles; on the face the swelling will be more marked and the vesiculation less; while on the skin of the extremities the hair-follicles are swollen and raised above the level of the skin, and red elevations appear also here and there. If the application be not repeated, the swelling, vesicles, and red elevations disappear in a few days, leaving only slight redness and desquamation as indications of the inflammatory process that has been set up. But if the croton oil be again applied to the same parts on two, three, or more days in succession, the disease produced is increased in intensity as well as in extent. The eruption on the parts themselves is increased, the red elevations being increased in number, and forming vesicles in consequence of the greater amount of subepidermic exudation; and the parts surrounding those in which the application has been made also become covered with an efflorescence similar to that which followed the application made on the first day. When artificial eczema has reached this degree of intensity, it does not end in simple desquamation; but in most cases the vesicles burst, and leave exuding spots; while the contents of other vesicles become purulent. As a consequence of the formation of the pustules, the skin surrounding them becomes more red, swollen, and painful. Having reached this point, the eruption recedes. The vesicles and pustules gradually dry and form scabs, which are thrown off by the new epidermis, leaving red patches, more or less infiltrated, and covered with desquamation.

If these results of the application of croton oil be analysed, they will be found reducible to five principal forms; viz., red elevations and vesicles, produced by the first application; red exuding patches, produced by the continued operation of the same irritation; pustules and crusts, arising from the metamorphosis of the elevations and vesicles; and finally, the red desquamating patches left after the removal of the other forms of efflorescence. These conditions are represented in several species of eczema to which authors have given names, and which Professor Hebra thus arranges in the order of their intensity: 1. Eczema squamosum or Pityriasis rubra; 2. Eczema papulosum, also called Eczema lichenoides and Lichen eczematodes; 3. Eczema vesiculosum—the Eczema solare of Willan; 4. Eczema rubrum seu madidans; 5. Eczema impetiginosum—Eczema crustosum of some authors.

Whether the same irritant will produce the same form of eczema, depends on the quantity and strength of the application, as well as on its duration. Differences arise also from the part to which the irritant is applied—the skin of the genital organs, the face, and the flexures of the joints, being most susceptible; and from the state of health of the individual, it being often impossible to produce an eruption by irritating the skin of a person in health, while, if he fall into a diseased state, an eruption is readily called forth.

2. When eczema is spread over the scalp, face, trunk, and extremities, either continuously or in patches, it rarely happens that the same form of eczema is developed on each part. For example, the scalp and the skin of the face may be the seat of impetiginous eczema, while the integument of the muscles of the ears, the nape of the neck, the axilla, and the flexures of the joints, are covered with eczema rubrum, the limbs with eczema papulosum and vesiculosum, and the trunk with eczema squamosum. It is more reasonable, Professor Hebra holds, to regard these as forms of one and the same disease, than to diagnose the eruption on the scalp as porrigo or tinea mucosa or granulata, and that on the face as porrigo larvalis, impetigo faciei rubra, crusta lactea, crusta serpiginosa, or melitagra flavescens and nigricans; while the word eczema is confined to the vesicular exudative eruption on the trunk and extremities. The terms impetigo and pityriasis rubra he regards also as having been adopted without reference to the eczematous appearances preceding the conditions which have received these designations.

3. Clinical observation affords the most satisfactory confirmation of the view here adduced. In one case, eczema begins with the eruption of vesicles; in another, the formation of vesicles is preceded by the appearance of red desquamative spots or papules. Or both papules and vesicles may be simultaneously developed; and of the latter, most rapidly form pustules, the contents of which as rapidly dry into yellow crusts. Hence it is also evident that vesicles cannot be regarded as the sole

form in which eczema at first appears. The appearance of the eczema also undergoes changes in the course of the disease. After the falling off of the crusts, the appearance known as eczema rubrum may be left; while, where vesicles have been at first developed, the outer layers of the epidermis are thrown off, leaving the rete mucosum denuded and throwing out exudation. Again, when the exudation ceases, the parts pass into the infiltrated, red, desquamating phase, known as eczema squamosum or pityriasis rubra. Professor Hebra observes, in conclusion, that this view of the metamorphosis of eczema is more probable than the idea which some have held of the conversion of one disease into another—of eczema into impetigo, porrigo, tinea, pityriasis rubra, melitagra flavescens, and the like. (*Wiener Medizin. Wochenschr.*, 27 December 1862.)

Tubular Pregnancy, followed by Recovery and three subsequent Natural Labours. Professor Fabbri relates the case of a woman at Ravenna, who, after having had four ordinary labours, became pregnant for the fifth time. The movements of the fœtus were felt earlier than usual; the abdomen enlarged on the right side. At the ninth month, labour pains set in, and there was a serosanguinolent discharge from the uterus. These symptoms ceased in a few days; but the usual discharge after delivery and the secretion of milk continued several days longer. After this, severe symptoms set in, which confined the patient to bed, unable to move herself, for three months: they were relieved by bloodletting, aperients and clysters, and the application of emollient poultices to the abdomen. In the course of two years, the tumour, being diminished somewhat in size, became stationary. After this, she recovered sufficiently to have three successful pregnancies and deliveries. She died at the age of 55, of an acute disease, leaving directions that her body should be examined. Dr. Fabbri found at the right side of the abdomen a tumour lying behind the intestines; it was free from adhesions, but was attached to the uterus by the Fallopian tube and broad ligament. It was formed of a cyst containing a female fœtus, apparently at the ninth month. (*Bulletino delle Sc. Med. di Bologna;* and *L'Imparziale*, 1 Feb. 1863.)

The Local and General Effects of Tar. Dr. J. Neumann of Vienna observes that the effects produced by tar may be divided into those arising from its application to the skin, and those resulting from the contact of air impregnated with its vapour. The effects of tar applied externally are either general or local. The general symptoms are not always present. They consist, when the application has been extensive, of fulness of the head, pain in the stomach, vomiting of dark fluid, and evacuation of dark fæces. If tar be applied to at least one-third of the surface of the body, the urine assumes a dark colour, the portion first passed being the darkest. On the addition of sulphuric acid, a strong tarry odour is developed; and the addition of chloride of iron gives a beautiful blue colour. The same appearances are observed after the use of beech-oil or *huile de cade*. It is not necessary that there should be any abrasion of the skin. The changes in the urine occur especially during the first days after the inunction of tar; while a repetition of the application produces but very slight changes in colour. Individuals also, who have been subjected to a water-bath for several days, will exhibit no change of colour in the urine, although the whole surface of the body be anointed with tar. The local changes either consist of swelling, redness, and inflammation, or in the sudden appearance of an acute eczema, which extends beyond the parts where the tar has been applied. It is impossible to know beforehand which of these conditions will be produced; and the benefits of tar in skin-diseases are so great, that the practitioner cannot reasonably be restrained from its use by the fear that this or that effect may be produced in single individuals. The long continued inunction of tar is followed by another class of changes. Every dermatologist knows that frequently, although the skin-disease is already in course of cure, collections of pus take place under the tar, and raise it when adherent. The effects of vapour of tar were observed by Dr. Neumann in a patient who was affected in a similar manner to fifty-nine others in a spinning-factory. The face was covered with numerous pimples: there were also spots of acne, and pustules; the conjunctiva of the bulb was injected on both sides. The chest and back were free; the lower extremities presented eruptions similar to those in the face—some of the pustules being as large as hazel-nuts. It was found that, since the wheels of the instruments were smeared with tar instead of fat, this diseased condition had appeared; and that it ceased when fat was again used. Dr. Neumann has subsequently seen three other cases in which acne was produced by air impregnated with tar-vapour. He does not think that the effect is produced by inhalation; because the parts most closely covered by the clothes remain free. (*Wiener Med. Wochenschr.*, Dec. 20, 1862.)

Erysipelas of the Face in Intermittent Fever. M. Desguin states that he observed, in the end of September and beginning of October 1861, a large number of cases of erysipelas of the face complicating intermittent fever. In every instance there was well marked gastro-intestinal disorder—white furred tongue, constipation, severe headache, more or less intense febrile reaction, etc. In some cases, the patients had the erysipelas at their entrance into hospital; it was here consecutive on the appearance of the fever, and accompanied it. In another class of cases, the erysipelas appeared only some days after the patients were admitted; sometimes it was moderate, but often very severe. It appeared to be simple; but, in two or three days, well marked paroxysms of fever appeared. As in the other cases, the two diseases ran a concurrent course, presenting the same periods of aggravation and remission. By the use of purgatives, followed by sulphate of quinine, both the intermittent fever and the erysipelas were removed. If the erysipelas were at first apparently unaccompanied by intermittent fever, and were treated alone, the paroxysms of fever soon appeared, and the use of quinine became unavoidably necessary. (*Arch. Belges de la Méd. Militaire;* and *Gazette Méd. de Paris*, Nov. 1862.)

Formation of Images in the Eye. M. Vulpian, at the end of a memoir on "monocular polyopia", states that the study of this subject leads to the following conclusion, which has also been expressed in very explicit terms in a work by M. Trouessart. The eye is so constituted, that the rays of light which penetrate it form several pencils, and thus tend to produce several images of the object from which they emanate. If the object be placed within or beyond the distance of distinct vision, the pencils are more or less separated when they reach the retina, and several images are formed on that membrane—there is, in a word, polyopia; but if, whether naturally or by the use of concave or convex glasses, it be at the distance proper for distinct vision, the pencils converge, the images are united into one on the retinal focus, and the object is seen simple. (*Gaz. Méd. de Paris*, 20 Decembre 1862.)

Strangury from Cantharides. As a remedy for strangury arising from the use of cantharides, Dr. Ameuille recommends the liquor potassæ of the English *Pharmacopœia*, in twenty-minim doses. He says that its use is immediately followed by marked improvement in the symptoms. Generally in about half an hour

after the second dose, and always after the third, the symptoms are completely relieved. (*Union Méd.*; and *Bulletin Génér. de Thér.*, 30 Nov. 1862.)

Rebiews and Notices.

A Treatise on Gall-Stones: their Chemistry, Pathology, and Treatment. By J. L. W. Thudichum, M.D., Member of the Royal College of Physicians. Illustrated with Plates. Pp. 323. London: 1863.

The pages of this Journal, as well as of contemporary medical and scientific periodicals, have within the last few years from time to time contained accounts of the results arrived at by Dr. Thudichum, from his investigations into the nature and mode of origin of gall-stones. These results, with a quantity of other matter derived from literary research and from work in the laboratory, he has put together and arranged in the volume before us.

The book consists of six chapters. In the first, the author gives a Digest of the Historical Literature of Gall-Stones; referring to all who have described or written on them from Alexander Trallianus down to Frerichs. This chapter is apparently most complete, and must have cost the author much searching among old books; notwithstanding the assistance which he acknowledges in his preface to have received from Mr. Chatto, the courteous librarian of the College of Surgeons.

Having disposed of the literary portion of the work, the author turns to the scientific and practical aspect of the subject, and treats in the remaining five chapters of the Physical Description of Gall-stones; their Chemistry; the Origin and Theory of Gall-stones; the Anatomy of Gall-stone Disease; and its Pathology and Treatment.

The chapter on the Chemistry of Gall-stones is, as would be expected from Dr. Thudichum's well known chemical skill, very full. The author first gives an outline of the attempts which have been made from time to time to determine the composition of these bodies, and then describes the process which he has followed in their analysis. Next, he offers some general considerations on the ingredients existing or said to have been found in gall-stones, whether constant or accidental; speaking in order of cholesterine, cholochrome, the biliary acids, their derivatives and salts, fatty acids and their salts, uric acid, a new organic substance, epithelium, mucus and albumen, water, mineral acids, earths and alkalies, and metals and their oxides. He then gives a classification of gall-stones, arranging them in the following seven series.

"1. Pellucid or pure cholesterine calculi.
"2. Mixed calculi, with prevalence of cholesterine.
"3. Calculi with prevalence of cholochrome.
"4. Calculi with prevalence of modified cholochrome.
"5. Gall-stones with prevalence of bile-acids.
"6. Gall-stones with prevalence of fatty acids.
"7. Gall-stones with prevalence of carbonate of lime."

He then notices the occurrence of gall-stones in the various classes of vertebrate animals, and describes at some length the chemical processes to which he has subjected gall-stones derived from the ox.

Before proceeding to notice Dr. Thudichum's theory of the origin of biliary calculi, it will be well to explain what he means by the term *cholochrome*.

"The word *cholochrome* is intended to designate colouring matter of bile and all its varieties. For the brown colouring matter I retain the name *cholophæine*; for the green variety I adopt the name *cholochloine*. The older names of cholepyrrhine, biliphæine, and bilifulvine, may be considered as synonymous with cholophæine. Biliverdine and cholechlorine are synonyms of cholochloine.

"Cholophæine seems to be a mixed form of colouring matter secreted by the liver. It occurs in gall-stones in a free state and in combination. In its free state it makes up the greater part of the bulk of ox gall-stones; it is deposited in casts of the biliary ducts found in the centre of human gall-stones, and also occurs in the nuclei and layers of these latter in an amorphous state; a certain part of it contained in gall-stones is always combined with lime or with carbonate of lime. Cholochloine, in combination with bases, is present in the darker variety of human gall-stones, giving them a green and sometimes an almost black colour. In the free state it is soluble in alcohol, and may be isolated thereby." (Pp. 90-91.)

In the chapter on the Origin and Theory of Gall-stones, Dr. Thudichum commences by comparing briefly the composition of human gall-stones with the concretions from the ox. In gall-stones from man, there is a small amount of free biliary acids, cholochrome (combined with earths when in moderate quantity); and a large amount of cholesterine in most cases. In ox gall-stones, the quantity of biliary acids (cholic and choloidic) is large, a small proportion being combined with lime; the cholochrome is mostly free; and there is no cholesterine. Hence, by a process of elimination, and retaining only the common factors of the gall-stones of man and of animals, Dr. Thudichum observes that

"Cholochrome, cholic and choloidic acids, and earthy salts, thus present themselves as substances without the concurrence of which the more common forms of gall-stones would rarely be formed; they are, in other words, essential ingredients of gall-stones." (P. 166.)

Cholesterine, which forms so large a proportion of human gall-stones, is, then, only a secondary ingredient. It is absent altogether in the biliary concretions of the ox, and sometimes in those of man; while occasionally the latter consist almost entirely of cholesterine.

The ordinary process of the formation of gall-stones is believed by Dr. Thudichum to be analogous to that which produces phosphatic or fusible calculi in the urinary passages.

"It is a decomposition of the bile, akin to putrefaction. The compound amido-acids" (taurocholic and glycocholic, which exist in combination with soda) "split up into their constituents" (taurine, glycocoll, and cholic acid combined with soda), "under the influence of a cause which remains to be ascertained, but is probably a putrid ferment assorbed from the intestinal canal. Under the influence of a little acetic acid, formed out of glycocoll and some other new acid produced by the putrefactive change, perhaps valerianic acid, cholochrome, a quantity of cholic acid, and a portion of choloidic acid, together with some salts and a little fat, are deposited. This is the process in the ox, and sometimes in man. But the bile of man differs in this respect from that of the ox, that it contains cholesterine, while that of the ox contains, at the most, only a small quantity as compared to the other. This cholesterine is dissolved in the tau-

rocholate of soda. But, as soon as the acid of this salt is decomposed, the cholesterine is set free, crystallises, and deposits upon any particle that may happen to be within easy distance, in the manner of all crystals, which like to post themselves upon prominent bodies." (P. 167.)

These remarks are followed by an account of the results of investigating the products of the decomposition of bile, kept in well-stoppered bottles for one and two years. This examination was undertaken with great care by Gorup-Besanez, an account of whose experiments and conclusions Dr. Thudichum gives, at the same time stating certain points in which he had been led to differ therefrom after a similar series of investigations. The following diagram is given by Dr. Thudichum as illustrating generally the stages through which bile passes in the course of decomposition; although he does not assert it to be "an absolute syllabus of a variable process."

"*First Stage.* The bile is neutral or alkaline.

"Taurocholate of soda yields cholate of soda and taurine.

"Glycocholate of soda yields cholate of soda and glycocole.

"Margarate (palmitate) and stearate of lime, and phosphate of lime and magnesia, are deposited.

"*Second Stage.* The bile becomes acid by the supervention of a new (valerianic?) acid, whose origin is undecided.

"Cholate of soda deposits cholic acid.

"Soda salt of new acid is formed.

"Cholochrome is precipitated; a part only remains dissolved, giving to the fluid a crimson colour.

"Glycocoll yields acetic acid and ammonia.

"*Third Stage.* The bile contains acid.

"Cholate of soda is transformed into choloidate. The latter deposits some choloidic acid (?)

"Choloidate of soda yields fatty acids, products of decomposition; among them, probably derived from glycocoll, is found acetic acid." (P. 171.)

Thus we have, as the result of the decomposition of bile, a deposit of the same nature as that which Dr. Thudichum finds to be essential to gall-stones; viz., stearate and palmitate of lime, cholic and choloidic acids, cholochrome, phosphate of lime, and mucus.

Having disposed of his chemical investigations, Dr. Thudichum describes *seriatim* the different positions in which gall-stones are found, their real or supposed causes, the symptoms produced by them, the modes in which they escape, and the diagnosis of gall-stone disease.

He then proceeds to notice the treatment. To relieve the symptoms produced by the passage of gall-stones—during the occurrence of which medical aid is generally called in—he has found a combination of anæsthetics with anodynes the most useful remedy. Regarding anodynes, he offers some cautions which should be borne in mind. The pain is sometimes so great as to be scarcely affected by large doses even of such remedies as tincture of opium or solution of morphia; but, if the pain (whether from the action of the remedies used, or spontaneously) suddenly cease, the symptoms of opium-poisoning occur, and may become highly dangerous. In illustration of this point, Dr. Thudichum refers to the case of a member of Parliament (the late Mr. A. Stafford), which caused considerable stir in the profession a few years ago.

The treatment which Dr. Thudichum follows for the relief of the colic caused by the passing of gall-stones is thus described by him.

"It is, under all circumstances, advisable that the practitioner, when once at the bedside of a patient with severe colic, should remain there, and administer the medicines himself, until some relief has been obtained. He may administer twenty minims of chloroform upon a piece of sugar, to be washed down with the necessary quantity of water. This may be repeated every twenty minutes, until a drachm has been used. If the patient is inclined to be sick, the taste and salivation excited by the chloroform are apt to cause an increase of the sickness, or to produce vomiting. This should be foreseen, and slightly alluded to as possible in the conversation with the patient. It is not to be regretted, but necessitates the application of the remedy by inhalation, or its entire abandonment. Along with the chloroform a solution of morphia may be given; one-eighth of a grain every half-hour, or, according to circumstances, at longer intervals, until half a grain—in strong and hale persons up to a grain has been given—is a proper dose. Laudanum must be given more empirically in doses of from five to ten minims at proper intervals, largely diluted with water, as its effects vary more than those of the solution of morphia.

"The anodyne effect of the chloroform can also be obtained by sulphuric ether, which, like chloroform, may be used mixed with equal parts, by measure, of the strongest spirit of wine. This anodyne liquor of Hoffmann is also best taken upon sugar, in small, often-repeated doses. It is not so apt to favour vomiting as chloroform, and in cases of lowness of the vital powers has a most satisfactory collateral effect upon the pulse, and the powers of the voluntary muscles." (Pp. 278-9.)

After the relief of the pain, purgative medicines and enemata, emetics, the application of warmth to the painful region, warm water-baths, moderately stimulating drinks, sundry mineral waters, etc., are to be used under conditions for an account of which we must refer the reader to the book itself. Dr. Thudichum does not seem to have much faith in the theory of Frerichs, that very alkaline bile can break up gall-stones by dissolving out their connective material; but he admits that there is still room for therapeutical experiments in this direction, especially by the administration of phosphate of soda.

We have read Dr. Thudichum's book with pleasure and profit. He has not, it is true, succeeded in bringing science and practice into complete harmony in the matter of the treatment of gall-stones; but in constructing as a chemist a theory of the formation of these bodies which bears a strong aspect of probability, and in furnishing at the same time the results of his observations as a practical physician, he has made a valuable contribution to scientific medicine.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., late Professor of Practical Chemistry in University College, London. Ninth Edition, revised and corrected. Pp. 820. London: 1863.

There is not one volume in Mr. Churchill's excellent series of manuals, which has gone through so many editions in so short a space of time as the *Manual of Chemistry*. Its able editors, Drs. Bence Jones and Hofmann, have, in each issue which has appeared under their auspices, incorporated the additions made to our chemical knowledge; and hence,

in the present edition, the reader will find an outline of the two last great discoveries in chemical philosophy—the spectrum analysis, and Mr. Graham's researches on dialysis or diffusion analysis. Certain additions have also been made in organic chemistry; and in animal chemistry we have a notice of some remarkable experiment of Pettenkofer on respiration.

The part of the work which treats of Animal Chemistry does not appear to us to be equal in merit to the other parts of the book. The editors make little or no reference to the investigations made by Englishmen in this department; at all events, we miss any allusion to the researches of Edward Smith on respiration, of Richardson on the function and evolution of ammonia, etc. Should not the animal chemistry department be more expanded—perhaps into a separate manual? Our knowledge of the subject, both physiologically and pathologically, has grown so immensely, that it cannot well be compressed within less than fifty pages at the end of a general treatise on chemistry.

Having administered a little blame, we must not omit, in conclusion, to say that the praise due to the editors is much greater. No one expects so much in a manual as in larger treatises; but in the parts which treat of Physics, of the Chemistry of Elementary Bodies, and of Organic Chemistry, Drs. Bence Jones and Hofmann have left little or nothing to be wished for.

British Medical Journal.

SATURDAY, MARCH 7TH, 1863.

UNLICENSED PHYSIC.

COMPLAINTS are frequently made against the Medical Council and the Medical Act, that they do not, or are powerless to, put down unlicensed practitioners of medicine. Now, we may perhaps venture to doubt whether the Medical Council has used all the powers invested in it for this and for other purposes. We may fairly say, indeed, that the Council likes its ease too well to dabble in the muddy field of discord and litigation; and that it has not yet put itself in a position of saying: "We have done all that we possibly can to purge the profession of illegitimate practitioners—all that the law allows us; and can, therefore, do no more." There is too great a leaven of conservatism and quietism in the Council to expect any great energy to be exerted in its proceedings in this direction or any other. To fight against the iniquities which hang about the medical profession is what we can never expect such a body to do. Combats of such a nature indicate struggles and violent efforts, and energies to be exerted, and base things to be overcome. But it is only fair to add, that we fear no efforts on the part of the Medical or any other Council would avail to put down irregular practitioners and quacks, notorious or obscure. Free trade is the motto of this country; and the public will have free trade in physic, as well as in corn and cotton, or any other dry or moist goods. The habits and manners of the English Saxon are such, that it is impossible to prevent any British lion or lioness from placing their faith and their bodies in the hands of the most villanous quackeries and quacks. Any pretender in this country may physic or set the broken bones of any one who is idiot enough to subject himself to the pretender's tender mercies. The pretender, it is true, is amenable to the law if he makes a mistake, but only just as the regular practitioner is; the only difference being, that judge and jury invariably favour the brutalities of the quack when he falls into their hands, and severely punish the errors of the doctor. The enormous amount of rampant quackery in this country, the thriving tribe of those who practise it, show how dearly we cling to our freedom of opinion. And besides this, as we well know, there is no class of men who more deeply indulge in this vein of quackery than the class who legislate for us. It is, therefore, impossible to hope that the legislature will ever assist the profession in attempting by any summary process to put down irregulars.

But, again, if we cast our eyes across the Channel, we shall not find in France much to encourage us in hoping by legal enactments to stay quackeries. In France, no man nor woman is permitted by law to practise medicine, unless regularly authorised by diploma. Yet, do we find the law efficacious in this respect? Nothing of the kind. Bone-setters, urine-doctors, wise men and women, diviners, *les religieuses*, and all the infinite tribe, *ambubiarum collegia*, are as thickly strewn through France as they are through England. Spite of the law against irregular practisers, even in Imperial France the people, from the highest to the lowest of them, will have their pet quacks and quackeries. They have their Docteur Noir, curer of cancers, just as we have our friend of puccoon fame, curer of cancers. Eugenie has her nerves soothed or excited by the spiritualist and table-rapper, just as freely as we have our fashionables' nervous systems enlightened by Mesmerico-kineopathists, etc. In a word, we cannot for a moment doubt that quackery has just as fine a field to sport over in France as it has in England. And what does the law in France do, or can it do, to stop the thing? There is there, as our readers know, a Medical Association, of late and yet of very vigorous growth; and, amongst other things, this Association has of late taken in hand the attempted suppression of quacks. In the French medical journals, consequently, for some few years past, we continually read of the processes made and carried against le sieur Casse-Os, or against la dame Noire, as being irregular practisers of medicine and sur-

gery. We read a long *procès-verbal* and a long judgment, which always end in a fine of five *francs* and damages. Nay, we often read that this is the third or fourth time that the bone-setter or the wise woman has been brought before the tribunals; and that, so far from arresting their progress, the notoriety obtained by previous prosecutions and convictions has enormously increased their practice; and that they, therefore, pay their fines with pleasure, and are thankful to their prosecutors for advertisement and increase of fame and practice. More than this, we lately read in a French journal that M. le juge, before whom one of these irregulars—these Bashi-Bashouchs of society—was brought and fined his petty fine, was actually, at the time of his giving judgment, under the hands and treatment of the quack whom in his legal capacity he had fined. It is, therefore, felt that these prosecutions in France are failures; and, indeed, several of the journals there have given it as their opinion, that the profession is acting a very undignified part in constantly making itself the prosecutor (or, as the public regard it, the persecutor) in such cases, more especially as its efforts to keep down the hydra are so manifestly abortive.

If, then, in beaurocratic and well-*préfét* France, with the law to aid, attempts to suppress irregular practisers fail, can we hope that they will ever succeed in England? We fear not; and we therefore cannot look with any hope for aid in this direction to the Medical Council. We must be contented in this matter to rest upon our character as a professional and learned body; and we need not fear that we shall ever lose the confidence of the public at large. In the meantime, one thing we may do; and that is, suppress all quackery within the profession itself—the most dangerous of all the enemies which we have to encounter in this line—the quackery of homœopathy; the quackery of advertisement, whether by newspapers or public appointments; the quackery of pretending to cure whilst we only administer to nature; the quackery of competition; the quackery of gratuitous charitable medical services. The suppression of these, and of a dozen such abnormities which we could mention, will, we suspect, do more to elevate our profession, and to put down outside irregularities, than any Act of Parliament will ever do for us.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Annnal Meeting of the Medical and Chirurgical Society was held at the Society's rooms, on the 2nd inst., when the following gentlemen were elected officers for the ensuing year:—*President*—Mr. R. Partridge; *Vice-Presidents*—Dr. Hodgkin, Dr. West, Mr. John Hilton, Mr. William Fergusson; *Treasurers*—Dr. Pitman and Mr. James Dixon; *Secretaries*—Dr. Sieveking and Mr. John Birkett; *Librarians*—Dr. A. Stewart and Mr. Henry Lee; *Other Members of Council*—Dr. Cotton, Dr. Gream, Dr. George Johnson, Dr. Markham, Dr. Sibson, Mr. G. V. Ellis, Mr. Holt, Mr. Holthouse, Mr. E. Newton, Mr. Toynbee.

The Report showed that the Society was in all respects in a most flourishing condition—rich in members, and rich in wealth. We need hardly add, that the late efforts of the Society to advance the science of medicine have also made it rich in reputation. Last year, a Committee investigated the subject of Suspended Animation; and this year another Committee, composed of gentlemen of the highest scientific acquirements and of great practical knowledge, has been appointed to inquire thoroughly into the History of Chloroform, its best mode of administration, its therapeutical and its toxic actions, its right uses, etc. It may be safely asserted that the Society was never in a higher state of efficiency and power than it is at the present moment.

The retiring President (Dr. Babington) delivered a very eloquent address, which will appear in the *Proceedings* of the Society, and which received the warmest approbation of the members present. In the conclusion of his address, the President made some excellent remarks, or rather gave very judicious advice, to gentleman who take part in the Society's discussions. He thought, and most of us will agree with him, that a word of rebuke was required to check the inclination, too often observed of late in the discussions, of indulging in *tu quoque* sort of rejoinders, for we cannot call them arguments. In a scientific society, personalities and acrimonious language are things to be especially eschewed. They manifestly cannot forward the objects of science; and they certainly do not exalt our profession either in its own eyes or in the estimation of the public. We would especially call attention to these remarks of the President, who so wisely protested against sensation subjects of discussion and sensation speeches.

The question of enlarging the Society's rooms also came before the meeting; but the Society did not see its way to take any steps in this oft debated matter. This much, however, appears certain: the rooms are not worthy of the Society, and are quite unequal to the accommodation of the splendid collection of books which is daily and rapidly increasing within its walls. But the difficulty to be met is a financial one. A very large sum of money would be required to enlarge the rooms; and it does not appear certain, even if the rooms were enlarged as proposed, that the Society would possess a fitting habitation. This is just one of those cases which is sometimes happily provided for by a wealthy and benevolent individual, who would in this case earn

the lasting gratitude of his professional brethren, and hand his name honoured down to posterity, by making provision for the erection of a dwelling worthy of the first medical society of the country. Surely there is nothing chimerical in the hope that such a luck may one day fall upon this Society.

THE INDIAN ARMY MEDICAL SERVICE.

We think it right to give a prominent position in our pages to the following remarks on the condition of the Indian army medical officers. It is from the pen of a gentleman who knows well the subject on which he writes. The thanks of the profession are due to him for his clear exposition of the present position of the Indian army medical officers, and of the shameful and cruel treatment to which they have been subjected by authority. The lines are headed, A Few Words of Warning to the Medical Students of Great Britain.

"Among the large body of medical students now qualifying themselves in the various schools of the United Kingdom for the practice of their profession, there are members who look forward with confidence to a future career of honour and emolument in the army medical service. The British Government, on the other hand, expects with equal confidence, that the needs of the public service will continue to be supplied, as they have hitherto been, by a never-failing tide of skill, energy, and devotion. But each party may find itself mistaken, when the rising generation of medical students learn, as they may, that military medical officers, so far from being honoured and cherished by the Government, are treated as of light estimation; that their rights and privileges, acknowledged and granted by the Crown, and guaranteed by Act of Parliament, may be set aside and held in abeyance; while false hopes of benefits to come, ever seeming near at hand, and ever fading away in the distance, are held out to them, to cover broken faith and cold indifference.

"Medical students of Great Britain, listen to the voice of one who now speaks to you from India, in the hope that you will, as you can, unite to obtain justice and fair treatment for your professional brethren now—for yourselves hereafter; justice and fair treatment, which are denied to the officers of the Indian medical service today, and which may be refused to yourselves at a future time. The Indian medical service, it is true, is closed, and you may think that better treatment awaits you in that of the royal army; but pause and reflect, ere you put faith in a Government, which, wishing to be rid of a service that has ever done its duty nobly, can cast it away with ingratitude and contempt; which can raise hopes only to disappoint them; scatter to the winds privileges secured by Act of Parliament; nullify and make void a royal warrant.

"That such has been the action of the Government towards its medical officers in India, let the following statement prove.

"In the year 1858, when the government of India passed from the hands of the Hon. East India Company into those of the Crown, there existed in India two distinct medical services, the Queen's and the Company's. Each had its own privileges and advantages, and was in all things independent of the other. The latter service, with the military and naval forces of the Company, was then transferred to the Crown; the pay, pensions, and privileges as regards promotion and otherwise, which they had enjoyed in the service of the Company, being guaranteed to them by Act of Parliament (21 and 22 Vic., cap. 106).

"It was determined to amalgamate the two medical services, and to make them equal in pay, promotion, and pension; but various difficulties were found to stand in the way; and, as a temporary measure, a royal warrant was issued bearing date February 1st, 1859, which was supposed to confer upon the Indian medical officers certain advantages, which had, in the preceding year, been conceded in like manner to the royal service.

"This warrant, by some of its provisions, altered existing rules with regard to promotion in the Indian medical service, and might, therefore, be regarded as an infringement of the covenant under which the Indian officers enlisted, and a breach of their privileges guaranteed by Act of Parliament. Professing to place both services on the same footing, it in reality gave an inferior position to the Indian, and it was, in consequence, regarded as not entirely satisfactory. Nevertheless, it was accepted as an omen of promise, an evidence of goodwill, an earnest of better things to come. Time only was wanting to show that the royal warrant was but 'a mockery, a delusion, and a snare.' Four years have passed away since it was penned, and it remains an empty unfulfilled promise.

"Nominally, indeed, the warrant is in force; its titles are conferred, but the rank, precedence, and pay, which they should carry, are all withheld.

"Surgeons, after twenty years service, are appointed surgeons-major, and should, according to the original warrant, hold the rank of lieutenant-colonel, but junior of that rank. Regimental surgeons should rank with majors according to the dates of their commissions. Such relative rank should, in the words of the warrant, 'carry with it all precedence and advantages attaching to the rank with which it corresponds,' and should 'regulate the choice of quarters, for age, and prize money.' Actually, however, it carries none of these advantages.

"The surgeons-major are not even recognised as a separate class in the official Army List. A reissue of the warrant by the Horse Guards decrees that the surgeons shall rank as majors, *but junior of that rank;* precedence is refused to them; it has been ruled that they hold only brevet rank, and they are allowed to draw only captain's pay.

"Thus is the shadow only given where solid advantage has been promised; but the substance is freely conferred when the provisions of the warrant are injurious to those for whose benefit it was designed. Henceforth, in the words of the warrant, 'No assistant-surgeon shall be eligible for promotion to the rank of surgeon, until he shall have passed such examination as our principal Secretary of State for India in Council may require, and shall have served in India with the commission of assistant-surgeon for five years, of which two shall have been passed in or with a regiment.' And 'a surgeon, whether on the staff or attached to regiments, must have served ten years in India, of which two must have been passed, with the rank of surgeon, in or with a regiment, before he will be eligible for promotion to the rank of deputy inspector-general of hospitals.'

"These rules, applied, as they are to be, to officers who entered the service prior to the date of the warrant, are breaches of faith; alterations of existing rules for promotion, the continuance of which had been guaranteed by Act of Parliament, as above stated.

"Every assistant-surgeon who enlisted prior to the date of the warrant, entered a seniority service, and understood that promotion would be his when he arrived at the head of the list, without reference to the nature of his past employment; and he has as just a right to promotion by seniority as he will have to pension on the completion of his service.

"Under the new rule, assistant-surgeons who have been transferred to the civil department before completing two years of military service, who have held charges of the most responsible nature, and have enjoyed the advantages of a far wider field of practice than is generally offered by a regimental hospital, must resign their appointments and seek military service, or indefinitely forfeit their promotion. Pecuniary loss and great personal inconvenience will thus be the reward of years of useful service; and every officer who comes under this regulation, will have reason to complain that faith has not been kept with him, and that he has been subjected to what in former years would have been considered as the punishment of a fault. Recently, as if in mockery of the wrongs under which these officers smart, the option of resigning their appointments has been offered them. They have been invited, 'should they desire it,' to arrange for fulfilling the period of army service required; to reduce themselves, probably, from positions just fairly remunerative and no more, to the smallest military allowances while doing duty with a regiment, to the ruin of themselves and their families. Hereafter, when the promotion, which should be theirs by good service and by right, is denied, they will be told, 'It is your own fault, you were duly warned.'

"The rule which requires two years military service as full surgeon as a necessary qualification for the rank of deputy inspector-general of hospitals is equally objectionable. Among the surgeons of the Indian medical service are many who have spent their whole time in civil employ. After having given their best energies to the service of government for years, after having held appointments entailing the most onerous professional duties, these officers are to be considered unfit for the rank of deputy inspector-general of hospitals unless they forfeit their appointments and perform the required amount of regimental duty. A similar rule to this, indeed, formerly existed in the Indian medical service, but, owing to its injurious action, it was wisely repealed. Such regulations, while they effect no public good, serve only to irritate and annoy individuals, to raise a general feeling of discontent, and to make every officer feel that he belongs to a service which the Government delights to dishonour.

"The examination of assistant-surgeons to ascertain their fitness for promotion, has not yet been brought into practice. It cannot be enforced in the case of officers who entered the service prior to the date of the warrant without interfering with their privileges guaranteed by Act of Parliament. In any case it would be as absurd as it is insulting to the profession at large. The proposal to examine men, whose fitness has been proved at the commencement of their career by proper authority, and subsequently, by years of successful practice and unchallenged good repute, is preposterous. The universities and examining boards are in duty bound to protest against such treatment of their graduates. Assistant-surgeons should unanimously refuse promotion offered to them on terms so derogatory to the honour of their profession; and properly qualified medical men should decline to enter a service which threatens them with so degrading a condition.

"While some portions of the warrant have been dealt with in the manner before described, others have been kept entirely in abeyance; but it is not necessary to take notice of these: enough has been said to shew, that the original warrant, designed in a spirit of liberality has been so tampered with, that it tells against, rather than in favour of, those who expected to receive in it a boon. The officers of the Indian medical service asking for bread, have received a stone; they have trusted to a broken reed and it has pierced them. There are at least four years arrears of the pay of their rank promised in the warrant due to them, and they may justly complain that they have been treated with injustice and contempt, and that they have purchased their commissions at the cost of their birthrights as Englishmen.

"Lastly, during the four years which have elapsed since the warrant was signed, what has been the conduct of the government towards the service? Well knowing the anxiety felt by the Indian medical officers, has it vouchsafed them one word of explanation and encouragement? In all its futile deliberations concerning the amalgamation of the services, has it called to its councils any of those most interested? The answer must be 'No.' Military officers have been employed to draw up schemes for the amalgamation, and to officiate as amateur actuaries in winding up the affairs of the Medical Retiring Fund. That fund, a private association for the grant of annuities to retiring officers, to which subscription was made compulsory by government, is now dying of inanition. The closure of the Indian medical service has nipped its roots; no new subscribers are added to its list, while its expenditure in annuities increases yearly. It is said, indeed, that the government guarantees the advantages of the fund to the present subscribers, but of what value is a government guarantee to men with whom government has already broken faith?

"It is unfortunately a fact too well established to be doubted, that medical officers of all branches of the service have ever been hardly treated by the Government; and that what consideration they now enjoy has been granted to them only by degrees and under pressure. But a few years ago, the position of the medical officers of the navy was so degraded, that no candidates could be found for employment in that service. The students unanimously refused to enter the navy; and at length the Secretary of the Admiralty reported that no surgeons were forthcoming to fill the vacancies. Then, and not till then, were naval medical officers treated as gentlemen and members of a learned profession.*

"Such a crisis is now at hand; a paucity of medical officers is becoming felt in India; many of the seniors, disgusted with the treatment they have received, are anxious to retire;—let their want and their worth be felt. Now is the time for the students of medicine to assist their elder brethren, and to secure their own future prospects. Let there be a cry for military surgeons, and no response; then, and then only, will military surgeons receive the treatment which is their due. Let vacancies in the army medical service remain unfilled until an order of Government is published and communicated to the schools, promising that the original warrant, prepared in a true spirit of liberality by the late lamented Sidney Herbert, shall be strictly and faithfully observed; that the rights and privileges of the medical officers in India shall be respected; and that they shall receive, in accordance with the terms of the warrant, their proper pay and staff allowances, and *bonâ fide*, not brevet rank.

"Let it ever be remembered, that the rank and position of the army medical officer must be established on the firm and permanent basis of the Royal command; not on a sand so shifting and treacherous as the favour and good will of any subordinate authority.

"So long as a Royal warrant may be altered at the pleasure of a Secretary of State, so long will it be unworthy of the name; so long will the position of the medical officer be uncertain and unsatisfactory, and dependent only on the urgency with which his services are required. So long, in fact, will it be undesirable to become

"An Army Medical Officer."

* The Naval Medical Warrant, however, has been indirectly tampered with, and is susceptible of amendment. The rank of the executive officers relatively with the army has been raised so as to keep the medical officer below. A lieutenant of eight years standing in the navy now ranks with a major in the army, and so obtains precedence of a medical officer of the same standing.

THE WEEK.

Dr. Philbrick has, we are informed, yielded to the pressure of circumstances, and settled the action which has been brought against him. Our readers are aware of the history of this case. Never, in our opinion, was a more unjust action brought than this against Dr. Philbrick, and thanks to his professional brethren. That Dr. Philbrick has not been able to face the uncertainty of the results of a trial, and the anxiety attending it, we must sincerely regret for the sake of truth and justice; but we cannot blame him after what we have recently witnessed of the vagaries of a jury in a court of law. One question, however, there is of a scientific interest, which has been brought forward through this action, and it is well worthy of the attention of the profession; viz., what is the right and proper practice to be pursued in the case of twins, when the second child is retained beyond the ordinary period after the delivery of the first? Ought the accoucheur to interfere, no urgent symptoms pressing; or ought he to leave nature to accomplish the second delivery. It would appear that authorities have laid down no distinct line of practice; and that those who recommend interference when a certain time has elapsed after the delivery of the first child have not shown good grounds for the interference. We have received some communications on the subject; and as it is one of practical interest, perhaps those of our profession who have had large experience in midwifery will give us the benefit of their opinion upon it. What are the rules which should guide the practitioner in dealing with a case of twins, when the second child is retained beyond the ordinary period?

It is well that members of the Medical and Chirurgical Society should know that the ordinary meeting of the Society, which should take place on the 10th inst., will be allowed to lapse away quietly. That day is, as we need hardly say, a day of national excitement; and few members of the Society will be calm enough to settle down in the evening of it to a quiet discussion of topics medical. The meeting must, nominally at least, according to the laws, be held; but, of course, the members need not attend, and so it will fall through.

The Manchester Medico-Ethical Society held its annual meeting on January 27th last. We are glad to find so useful a society still flourishing. Its report tells of the activity of the members and of its earnest desire to promote the honourable standing of the profession and to watch over its interests. Its work may be judged of from the following extract of the report:—

"Misunderstandings and mutual jealousies are extensively rectified; medical coteries are usefully invaded, and their exclusiveness mitigated, by the assembling, not less than four times a year, of members of the profession of all grades and professional standing, at a repast worthy of the profession and of the city in which they assemble, free of extra cost; petitions and memorials are prepared, forwarded, and printed for circulation to the Legislature, the Medical Council, city corporations, life insurance societies, and wherever required by the honour or interests of the profession; illegal practice and dishonourable practices are put down so far as possible; not less than three times a year the whole body of members is invited to the discussion of subjects of passing or permanent interest; and, altogether, an *esprit de corps* is maintained, which has been of incalculable benefit to the profession."

The report also tells us that a medical society has been formed at Bury; and that the following resolutions have been lately adopted there:—

"That, in the opinion of this meeting, no practitioner ought to meet in consultation any gentleman who is not duly qualified." And, "That the members of this Society will not call in consultation any gentleman who is known to meet unqualified or unregistered practitioners."

In reading the report of the Bourton-on-the-Water Village Hospital for the year 1862, which has just been presented to us, we are struck by its remarkably economical nature. During the past year, 29 in-patients have been treated in the hospital and 311 out-patients, and the total expenditure was £88, of which sum the patients themselves paid £23. These village hospitals bid fair to open a new era in the administration of medical charity.

We should like to know upon what principles of justice or common sense medical men are to be compelled to give the following services gratuitously. The following is the clause in the Medical Bill (now passing through Parliament) for the Registration of Births and Deaths in Ireland, under which medical men are bound to give certificates gratis of the cause of death:—

"45. *Medical Attendant to transmit Certificate of Death to Registrar.* Whereas it is expedient to establish on reliable information, for sanitary and scientific purposes, a registration of the causes of death: be it therefore enacted, the registrar shall furnish from time to time, gratis, to every duly qualified medical practitioner within his district, the necessary forms of certificates of deaths in the form (D) hereunto annexed, which certificates the registrar-general shall cause to be printed and forwarded from time to time to every registrar for that purpose; and the medical practitioner who shall have been in attendance during the last illness and until the death of any person dying after the said 31st day of December, 1863, shall, within seven days after the death of such person, transmit to the registrar of the district in which the death occurred a certificate of the cause of death in the form mentioned, the particulars of which shall be entered by the registrar in the register; in case such certificate shall not be so transmitted, the registrar shall transmit to such medical practitioner a form of such certificate, and by a written or printed requisition under his hand shall require such medical practitioner forthwith to return to him such certificate duly filled up, and such medical practitioner shall, within three days after the receipt thereof, return such certificate duly filled up to such registrar."

SUICIDE IN THE UNITED STATES.

The preliminary report of the eighth and last national census of the United States gives statistics of suicides occurring during the year ending the 31st May, 1860. Although no doubt the number of suicides is considerably understated in the census returns, yet it is notorious that the moral atmosphere of America is more favourable to the crop of homicides and murders than to that of suicide. M. Magee, in his work on suicide in Bavaria, lays it down that the frequency of suicide is in inverse ratio to the frequency of crimes of violence. Where, therefore, (as in the United and Confederate States,) homicide is a common occurrence, we may expect to find a scarcity of suicides. The census records 1,002 cases of suicide occurring in the year 1859-60, which gives only 3·2 to every 100,000 of the population; in England and Wales the proportion is 6·7 to every 100,000; in France the rate averages 8·3; in Prussia the rate is about 11 or 12 per 100,000; in the New England States, taken separately (whose returns are as accurate as those of Europe), we find the rate per 100,000 is 7·7. But we must remember this is the great "suicide field" of America: while in our London suicide field the rate is 9·7; in our midland suicide field, 8·4.

Of these 1,002 suicides, 794 were committed by males, and 208 by females; that is, only a little more than a fifth of the whole were females. America has often been said to be the paradise of the female sex. These figures confirm the statement. The proportion of female suicides in England and France, is to males as three to five: in the United States it is but little more than one to five. In the Old World a cast-off mistress commits suicide; in the New she shoots her paramour amid the applause of the community. In some States a woman can compel the father of her illegitimate child to marry her or go to prison. Not only the law, but public opinion and the juries everywhere, espouse the cause of the woman in the United States.

Has this anything to do with the small proportion of female suicides in America? Have our bastardy laws, so severe upon the woman, anything to do with the high proportion that rules among us?

Next as to the method of suicide. We find that hanging is the favourite suicidal resort with both sexes in the United States. This is also the case in every country of Europe of which we have an account, except Sardinia and Geneva, which give the palm to fire-arms. Poison, which occupies the fourth place in English and the seventh in French statistics, holds the second place in the United States. We presume that in that "free country" the laws against the indiscriminate sale of poisons are neither so universal, nor, where existing, so well carried out as in Europe. In England cutting the throat; on the Continent, generally speaking, drowning holds the second place. The fashionable poison in America is strychnine, next arsenic; in England, opium or one of its preparations, then prussic acid. Fire-arms, which stand second with the Saxon, and fifth with the English, stand third with the Americans, as with the French, Belgians, Danes, and many parts of Germany.

On the relation between the rate of suicide and the degree of instruction among any given community, these American returns tell an instructive tale. They entirely corroborate the dicta of M. Lisle, Mr. Radcliffe, and M. Mejan, that the greater the diffusion of instruction the higher the rate of suicide. Thus, take the States where common and collegiate instruction has struck its roots most deeply, where literary tastes have been most cultivated, viz., the New England States and New York, and compare their rate of suicide with the six most populous slave-holding States. The rate of suicide in the former group is as seven to three in the latter in the ratio of their population.

Doubtless, the returns are more accurate for the first group of States than the second, but it would be straining the point too much to contend that this alone will account for such an immense difference of rate—a difference, too, which throughout the whole list of the thirty-four States varies uniformly with the degree of civilisation each State has reached. (*Social Science Review.*)

Special Correspondence.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

It seems strange that there should be a paucity of general medical intelligence to communicate from such a large and important centre of population as this; yet such I find to be the case, more especially since the Medical Society has begun to report its own proceedings in your columns. I by no means wish to be understood that the material for many a valuable addition to medical science is not to be met with both in Manchester and in our other large cities; but that, unfortunately, that material is at present scarcely available. It would be a great achievement if the numerous cases of interest in our provincial hospitals and dispensaries could be brought together into one fund; and I have made some exertions to see if this could not be done here. Two general hospitals, two hospitals for children, one for female complaints, and one each for the eye and ear, with a lock hospital, and four or five dispensaries, would furnish no slight amount of interesting matter. I find a general willingness on the part of all the medical officers of these institutions whom I have consulted to aid in such a scheme; but the whole thing falls through from the almost entire absence of general and accurate case-reporting at the institutions themselves, it being manifestly beyond the power of one individual to undertake the task. Perhaps, some day, this may be remedied; and, in the meantime, as I have formerly said, I have an objection to recording even very interesting cases that may occur merely to myself or my own more immediate acquaintance.

The late debate on Dr. Noble's paper on Diabetes was of some interest. The cases to which he drew attention had been pronounced, upon good metropolitan authority, to be diabetes from the mere existence of saccharine urine in tolerably large quantity; but there was a complete absence of the usual attendant symptoms, and the cases eventually did well under ordinary regimen and care, and under the cessation from severe head work, to which he entirely attributed the disease. In the present state of our knowledge, it would appear unadvisable to apply the term diabetes to such cases. As maintained by Dr. Roberts, one of the links in the chain of production of diabetes is undoubtedly to be found in the nervous centres; but the links anterior or posterior to this may perhaps vary considerably, and thus alter the whole complexion and gravity of the case.

Our two societies have been holding their annual meetings, and taking stock, as it were, of their doings; and I rejoice that the Medical Society has at last been bold enough and honest enough to raise its subscrip-

tion, and that it will thus be able, while it pays its debts, to increase the value of its library, and generally so to increase the attractions of the institution, as to make it a sort of depôt for the medical talent and intelligence of this great provincial metropolis.

The Medico-Ethical had also a pleasant assembly, and, though the numbers have slightly fallen off, there is an evident determination to propagate their excellent code of laws, and to follow up their views on medical reform and on the amendment of the functions of coroners. On this latter matter, I trust they will persevere as they have begun. I hope to see the day ere long when this society, while preserving some of its individual social features, shall enter into more intimate alliance with the British Medical Association.

Some of your readers will doubtless be puzzled at the contradictory accounts, emanating from various sources, as to our sanitary condition here under the present distress. The subject is rather too complicated for full discussion now. The *Times* is, of course, at sea on the matter, as it seems impossible to avoid being on anything and everything connected with Lancashire. While it gives very undue prominence to Dr. Buchanan's remarks on the existence of typhus—much more than he does himself—it must needs at the same time write a leading article to show that we are either in the best of health, and spirits, and circumstances, or that, as with Mark Tapley, our difficulties are only evidenced by our "jolly" demeanour. I am glad to be able to say with great confidence, apart from statistics, that there is not a large amount of sickness prevalent in Manchester, and this is strongly borne out by the very low death-rate. The statistics of admission to hospitals and dispensaries are, of course, no criterion of the amount of illness, as they vary with the poverty of the people. The relative forms of sickness are more important. Thus, contrary to what might be expected, diarrhœa seems to have been unusually low; for, comparing Manchester with St. Marylebone, I find the proportion to the whole, during September, October, and November, to have been 5·8 per cent. in the former, and as much as 14·8 per cent. in the latter. I regret that I have no means of ascertaining the comparative proportion of tubercular complaints, as they are not separately tabulated by our Sanitary Association returns; but under the combined heads of pneumonia, pleurisy, bronchitis, and catarrh, I find that, during the same months, Marylebone showed a proportion of 13·7 per cent. against 23·1 per cent. in Manchester. Making allowance for our northern climate, this would tend to show a greater severity of pulmonary complaints, many of which must doubtless be connected, as cause or effect, with tuberculosis.

I have noticed myself an infrequency of rachitis among infants, and I find that others have observed the same thing. Doubtless, the greater supply of maternal milk has to do with this, and, perhaps, also, in a small degree, the unusual frequency of oatmeal as an article of diet. I am greatly mistaken, however, if this benefit be not more than counterbalanced by the greater frequency of tuberculosis in children a little older. They are the greatest sufferers by the present distress, as the relief committees do not generally include in their supplies such articles as milk, arrow-root, or other things suitable for a change of diet in childhood. The results of this are to be looked for in the death-rates of future years, or even of a future generation.

The question of typhus has been much discussed in the pages of your own and other journals, and the report of Dr. Buchanan sharply criticised. There can be no doubt that there is nothing like an epidemic of true typhus in Manchester. But that there have been several cases, seen by Dr. Buchanan himself, and reported on trustworthy authority, is also undoubted. This is sufficient to make us watchful without undue alarm; for true typhus has for some years been very rare here. In five years of dispensary practice, I have not seen a single case; and I attach no importance whatever to the annual return of a few cases, unless it were stated that the diagnosis between typhus and enteric fever had been carefully insisted on. I myself know of several instances of the latter returned as typhus by a gentleman who, though a very sound practitioner, will maintain that there is no distinction between the two; and I suspect there must be many others so returned for the same reason, or from indifference. If it be not so, at any rate, our Manchester practitioners must, as a body, be considerably ahead of their brethren in exactitude. Our infirmary physicians are decidedly of opinion that true typhus began for a time to show itself in very undue proportion to enteric fevers; and I believe they are also agreed that this proportion has again fallen to something like its normal limits. I think also it might be shown that this fall in the number of cases of typhus took place just about the time that the relief committees began to raise their scale above the mere average of two shillings per head, and also when the distribution of clothing was made. On the whole, these bodies have done their work well, and have hitherto maintained the health of the operatives at a far higher standard than might have been expected; and I must close my remarks by assuring you that the medical profession has not been behind in assisting to promote their endeavours.

A Magazine devoted to the science of botany is about being started by Mr. Hardwicke, to be called *The Journal of Botany, British and Foreign*, edited by Dr. Seemann.

London Fever Hospital. On Friday week, the annual general court of this charity was held at the Freemasons' Tavern; the Right Hon. the Earl of Devon in the chair. The total number of admissions, which in 1860 did not exceed 391, and in 1861 did not exceed 646, in 1862 amounted to 2699, being 938 in excess of the largest number of patients admitted in any previous year since the foundation of the hospital. The great increase was mainly due to the prevalence of typhus fever. The report alluded to the reprehensible practice of employing street cabs for the conveyance of patients suffering from infectious diseases. The hospital had for several years been provided with a carriage especially adapted for this purpose, which could be sent to any part of London; the committee, however, regretted that, owing to the limited funds, they were compelled to charge patients for horse-hire on each occasion, and that, consequently, the carriage was less used than it ought to be. The public were therefore invited to contribute towards a special fund for the maintenance of such carriage.

Association Intelligence.

NEW MEMBERS OF THE ASSOCIATION.

THE following new members have joined the Association since the publication of the list on August 23rd, 1862; most of them since the commencement of the present year.

BUCKINGHAMSHIRE.

Death, Robert, Esq., Buckingham
Duke, Frederick, Esq., Buckingham
Knight, Thomas, Esq., Brill
Nixon, Daniel, Esq, Stony Stratford
Savory, John Thomas, Esq., Wendover
Walker, William G., Esq., Brill
Warren, Thomas A., Esq., Princes Risborough

CHESHIRE.

Renshaw, Charles J., M.D., Altrincham
Stevenson, John F., M.D., Birkenhead
Thompson, Moses D., Esq., Staleybridge
Weaver, Frederick P., M.B., Frodsham

DERBYSHIRE.

Shore, Offley B., M.D., Physician to the General Infirmary, Derby
Webb, William, M.D., Wirksworth

DEVONSHIRE.

Bennie, Andrew, L.R.C.P.Ed., Lympstone
May, John H. S., Esq., Plymouth
Scott, Andrew J., M.D., Tiverton

DORSETSHIRE.

Hingeston, William, Esq., Lyme Regis

DURHAM.

Bennett, Francis, Esq., Surgeon to the Dispensary, Gateshead
Parker, Thomas P., M.D., Consulting Physician to the Infirmary, Sunderland
Watson, Henry W., Esq., Burnopfield

ESSEX.

Gimson, William G., M.D., Witham
Hamilton, Jno. B., L.R.C.P.Ed., Caroline Villas, Leytonstone Road
Reynolds, Robert, Esq., Steeple Bumpstead

GLOUCESTERSHIRE.

Brush, James R., M.D., Stoke Bishop, Clifton, Bristol
Clark, Thomas E., Esq., Lecturer on Botany in the Bristol Medical School, Clifton
Fegen, W., Esq., H.M.S. *Dædalus*, Bristol
Graves, Ryves W., Esq., Surgeon to the Infirmary, Gloucester
Keddell, George, Esq., Bristol
Rogers, George, M.D., Bristol
Wilson, Edwd. T., M.D., Physician to the Dispensary, Cheltenham

HAMPSHIRE.

Case, William, L.R.C.P.Ed., Fareham
Harvey, J. A. R., M.D., R.N., Southsea
Norman, Henry B., Esq., Surgeon to the Portsmouth, Portsea, and Gosport Hospital, Southsea
Parson, Edward K., Esq., Senior Surgeon to the Portsmouth, Portsea, and Gosport Hospital, Southsea

HEREFORDSHIRE.

Beavan, James, Esq., House-Surgeon to the Infirmary, Hereford
Smith, Joseph E., Esq., Ewins Harold

HERTFORDSHIRE.

Russell, William A., L.R.C.P.Ed., St. Alban's
Whately, Thomas, Esq., Berkhampstead

HUNTINGDONSHIRE.

Wright, Samuel, Esq., St. Neot's

LANCASHIRE.

Coveney, James H., Esq., Prestwich
Davies, Thomas P., Esq., Pendleton
Leete, Edward S., Esq., Newton-le-Willows
Lowndes, Henry, Esq., Junior Surgeon to the Northern Hospital, Liverpool
McNicoll, David H., M.D., Southport
Parks, John, Esq., Bury
Roberts, David L., M.D., Surgeon to St. Mary's Hospital, Manchester
Samelson, Adolph, M.D., Surgeon to the Eye Hospital, Manchester
Smart, Robert B., Esq., Surgeon to the Hospital for Children, Manchester
Williams, John, M.D., Alderley Edge

LINCOLNSHIRE.

Garnham, Devereux J., Esq., House-surgeon to the General Dispensary, Lincoln
Harvey, Richard S., Esq., Lincoln
Hewson, John S., Esq., Senior Surgeon to the County Hospital, Lincoln

MIDDLESEX.

Atkins, J. R., M.D., Grove House Asylum, Stoke Newington Green
Barker, Alfred J., M.D., Upper Holloway
Blackstone, Joseph, Esq., Gloucester Road, Regent's Park
Bridgeman, George W., Esq., 73, Margaret Street
Bryant, Thomas, Esq., Assistant-Surgeon to Guy's Hospital, Finsbury Square
Burrows, William A., Esq., Quadrant Villa, Islington
Cahill, Thomas, M.D., Albert Terrace, Knightsbridge
Challice, John, M.D., Great Cumberland Street
Clark, Alfred, Esq., Twickenham
Clark, Andrew, M.D., Assistant-Physician to the London Hospital, Montague Street, Russell Square
Cormack, John Rose M.D., Bedford Square
Dick, Henry, M.D., Wimpole Street
Dixon, Thomas, M.D., Porchester Place, Bayswater
Dow, John, Esq., St. Martin-le-Grand
Edwards, D. O., Esq., Gilston Road, Brompton
Eyles, Richard S., Esq., St. Andrew's Court, Holborn
Forbes, John Gregory, Esq., Devonport Street, Hyde Park
Forsyth, John, Esq., C.B., late Bengal Medical Service, Oriental Club
Fraser, Donald, M.D., Harrington Square
Galton, Robert Cameron, M.D., Harley Street
Gibson, Jno. R., Esq., Surgeon to Newgate Prison, Russell Square
Grant, Alexander, Esq., late Bengal Medical Service, Park Road, Haverstock Hill
Hawkins, Francis, M.D., Registrar to the Medical Council, Bolton Street
Hayward, Henry H., Esq., Queen Anne Street
Headland, Edward, Esq., Upper Portland Place
Holt, B., Esq., Surgeon to the Westminster Hospital, Savile Row
Hunt, Alfred, Esq., Hammersmith
Kelly, Hubert E. C., M.D., Pinner
Kisch, Joseph, Esq., Circus Place, Finsbury
Kitching, George, M.D., Enfield
Langmore, John C., M.B., Oxford Terrace
Latham, Peter M., M.D., Grosvenor Street
Leared, Arthur, M.D., Physician to the Great Northern Hospital, Old Burlington Street
Lee, Newton B. C., Esq., Talbot Terrace, Westbourne Park
Mackmurdo, Gilbert, Esq., F.R.S., Surgeon to St. Thomas's Hospital, New Broad Street
Mapleton, Henry, M.D., Inspector General, Army Medical Department, Whitehall Yard
Mushet, William B., M.B., Fulham
Norton, Robert, M.D., Westbourne Grove West
Pearse, George, L.R.C.P.Ed., Regent Street, Westminster
Phillips, Richard, Esq., Leinster Square
Randall, John, M.D., Medical Officer to St. Marylebone Infirmary, Portman Street
Rose, Henry Cooper, M.D., Hampstead
Sankey, William H. O., M.D., Asylum, Hanwell
Skey, Frederick C., Esq., Surgeon to St. Bartholomew's Hospital, Grosvenor Street
Slyman, William D., Esq., Wellington Road, Kentish Town
Smith, Thomas, Esq., Demonstrator of Anatomy at St. Bartholomew's Hospital, Montague Street
Smith, Wm. A., M.D., Physician to the City Dispensary, Doughty Street
Stone, Thomas A., Esq., Grosvenor Street
Witten, Edward W., Esq., Gibson Square

MONMOUTHSHIRE.

Davies, Benjamin, M.D., Newport

NORFOLK.

Aldred, Charles C., Esq., Great Yarmouth
Clouting, John R., Esq., Shipdham
Johnson, W. H., Esq., Thetford
Palmer, Charles, Esq., Surgeon to the Hospital, Great Yarmouth
Penrice, David S., Esq., Tombland, Norwich
Rump, Hugh R., Esq., Wells
Smyth, Spencer T., M.D., Senior Surgeon to the Hospital, Great Yarmouth
Vores, William, M.D., Great Yarmouth

NORTHAMPTONSHIRE.

Bolland, Edward H., M.D., Daventry
Dudley, Edward, Esq., Yardley Hastings

NORTHUMBERLAND.

Candlish, Henry, M.D., House-Surgeon to the Infirmary, Alnwick
Gibb, Chas. J., M.D., Surgeon to the Infirmary, Newcastle-on-Tyne

NOTTINGHAMSHIRE.

Stevenson, Frederick, Esq., Nottingham

SHROPSHIRE.

Beddoes, William M., M.D., Shrewsbury
Brook, Henry, Esq., Bishop's Castle
Eddowes, William, jun., Esq., House-Surgeon to the Infirmary, Shrewsbury
Willing, George F. B., Esq., Cressage

SOMERSET.

Gaine, Charles, Esq., Bath
Kinglake, Hamilton, M.D., Taunton

STAFFORDSHIRE.

Girdlestone, William T., Esq., Penkridge
Proctor, Herbert E., L.R.C.P.Ed., Wednesbury

SUFFOLK.

Blackett, Edwd. R., M.D., Physician to the Dispensary, Southwold
Elliston, William, M.D., Ipswich
Smith, Charles C., Esq., Consulting Surgeon to the Suffolk General Hospital, Bury St. Edmunds

SURREY.
Clark, F. Le Gros, Esq., Surgeon to St. Thomas's Hospital, St. Thomas's Street, Southwark
Rendle, James D., M.D., Medical Officer to the Government Convict Prison, Brixton Hill
Spitta, Robert J., M.D., Medical Officer to the Clapham Dispensary, Clapham Common

SUSSEX.
Adey, Charles A., M.D., Physician to the East Sussex Infirmary, St. Leonard's-on-Sea
Dill, Richard, M.D., Brighton
Taylor, William E., M.D., Pulborough

WARWICKSHIRE.
Foster, Balthazar W., L.K. & Q.C.P.I., Medical Tutor, Queen's College, Birmingham
Robinson, Edmund, Esq., Birmingham

WILTSHIRE.
Vicary, Charles, Esq., Warminster

WORCESTERSHIRE.
Roden, William, M.D., Kidderminster

YORKSHIRE.
Dadley, John W. F., Esq., Patrington
Harrison, Samuel N., Esq., Patrington
Roberts, Edward S., Esq., Hull

WALES.
Covernton, Charles J., L.R.C.P.Ed., Knighton
Gilbertson, Richard, Esq., Aberystwith
Harrison, Reginald, Esq., Merthyr Tydfil
Jones, Richard, M.D., Newtown
Jones, Watkin W., Esq., Ruthin
Phillips, George, Esq., Haverfordwest

SCOTLAND.
Alexander, James, Esq., Leslie, Fife
Bramwell, James P., M.D., Perth
Christie, James, M.D., Consulting Physician to the Royal Infirmary, Dundee
Dougal, Daniel, M.D., Strathaven, Lanarkshire
Dunbar, Henry, M.D., Glasgow
Dyce, Robert, M.D., Senior Physician to the Royal Infirmary, Aberdeen
Easton, John A., M.D., Professor of Materia Medica in the University, Glasgow
Fairless, William D., M.D., Medical Superintendent of the Old Royal Lunatic Asylum, Montrose
Ferguson, John, Esq., Oak Bank, Mull, Oban
Gilchrist, James, M.D., Medical Superintendent, Crichton Royal Institution, Dumfries
Kelly, Adam L., M.D., Glasgow
Lister, Joseph, M.B., F.R.S., Professor of Surgery in the University, and Surgeon to the Royal Infirmary, Glasgow
McColl, Hector, Esq., Tobermory, Argyleshire
Mackie, George, M.B., Insch, Aberdeenshire
Macrae, Donald, Esq., Harris, Stornoway
Prichard, William, M.D., Partick, Glasgow
Ritchie, Charles, M.D., Physician to the Royal Infirmary, Glasgow
Scott, Thomas A. F., Esq., Lochmaben, Dumfriesshire
Sloan, Charles F., M.D., Ayr
Spence, James, Esq., Surgeon to the Royal Infirmary, and Lecturer on Clinical Surgery, Edinburgh
Thomson, Allen, M.D., F.R.S.L. & E., Professor of Anatomy in the University, College, Glasgow

IRELAND.
Beamish, William, M.D., Physician to the Fever Hospital, Cork
Berry, Parsons, Esq., Mallow
Corry, Thomas C. S., M.D., Belfast
Croker, Charles P., Esq., Consulting Physician to Steevens' Hospital, Dublin
Hegarty, William, M.D., Kinsale
Neilson, Charles, Esq., Killala, Mayo
Ormston, Henry B., M.D., Bandon, Cork
Payne, Christopher J., M.D., Roundstone, Galway
Sproule, Jacob, Esq., Arvagh, Cavan
Stephenson, Robert, M.R.C.P.Lond., Belfast

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
LANCASH. & CHESHIRE. [Ordinary.]	Royal Institution, Manchester.	Thursday, March 12th, 3 P.M.

NOTICE REGARDING NEW MEMBERS.

By desire of the Committee of Council, the General Secretary requests that the Local Secretaries will be good enough to forward to him the names of all New Members who join the Association through the Branches; as otherwise the JOURNAL cannot be sent to them.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, November 10th, 1862.

LANCASHIRE AND CHESHIRE BRANCH.

AN ordinary meeting of this Branch will be held at the Royal Institution, Manchester, on Thursday, March 12, at 3 P.M. Notice of papers, etc., to be sent to the Honorary Secretary.

Dinner will be provided at the Clarence Hotel, Spring Gardens, at 5 o'clock.

A. T. H. WATERS, M.D., *Honorary Secretary.*

Liverpool, February 16th, 1863.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

AN ordinary meeting of the Bath and Bristol Branch was held at the Athenæum, Bristol, on February 26th, 1863; W. J. CHURCH, Esq., President, in the Chair. There were present forty-four members and thirteen visitors.

The minutes of the last ordinary meeting were read and confirmed.

New Member. George Rogers, M.D., was elected a member of the Association and of the Branch.

Papers. The following papers were read:—

1. Case of Obstruction of the Bowels. By J. Beddoe, M.D.
2. Case of Cæsarian Section. By R. W. Coe, Esq.
3. Cases of Puerperal Convulsions, with remarks. By J. G. Swayne, M.D.
4. Case of Puerperal Convulsions. By S. H. Swayne, Esq.
5. On the Use of Metallic Ligatures. By W. M. Clarke, Esq.

Several other papers had to be postponed on account of the late hour of the evening.

The papers read will be sent to the JOURNAL for publication.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

FEBRUARY 5, 1863.

A. B. STEELE, ESQ., Vice-President, in the Chair.

Small-Pox. The CHAIRMAN remarked that he had just had a fatal case of small-pox. The patient, who had never been vaccinated, had the disease in its completest form; and the eruption appeared in great intensity on the body and limbs. A man in the same house who had been vaccinated, had the disease in a mild form, and was recovering when this patient was taken ill.

Mr. FLETCHER said that there was no case of small-pox at present in the workhouse, and that there had been very little of late; but fever was still very prevalent, and twenty-nine cases were admitted into the Fever Hospital last Wednesday.

Malignant Disease of the Eye. Mr. BICKERTON shewed an eye affected with malignant disease, which he had extirpated.

Fibro-cystic Tumour of the Uterus. Mr. HAKES shewed a specimen of this form of disease which he had removed from a married woman, aged 42. She had two children, the youngest of whom is about 15 years old. She first noticed the tumour in September 1861, and she came to be tapped in February 1862. [The case was reported in the letter of our Liverpool correspondent last week.]

Mr. Hakes thought it almost impossible to diagnose in some cases between uterine and ovarian tumours.

Mr. FLETCHER said it was singular there should have been two fibro-cystic tumours of the uterus removed in

Liverpool in one year. In the case he himself had operated on, there was more solid matter in the tumour. These cases were very rare. This fatal case of Mr. Hakes did not much affect the question as to whether we should operate in cases of uterine tumour. Failure of strength seemed the only cause of death, and the state of the peduncle and other parts concerned in the operation was encouraging.

Mr. Higginson suggested that in tying the peduncle, in some cases, a thread might be included in the ligature, with which the wire might be brought out if the woman lived.

Mr. Fletcher thought the thread itself would be a great source of irritation, whereas we have no evidence of any disturbance being caused by the presence of the wire.

The Chairman said that, out of eleven cases, operated on in Liverpool for ovarian disease, there had been five recoveries and six deaths.

Mr. Denton observed that we are told that an age past the meridian of life is favourable, and that so is also a moderate amount of inflammation. In this case there were both of these requisites, and still a fatal result.

Hydatidiform Degeneration of the Ovum. Dr. Graham shewed a specimen.

Ligature of the Internal Iliac Artery. Mr. Higginson shewed a portion of the internal iliac artery to which he had applied a ligature in a case of hæmorrhage in the gluteal region. A man named Thomas Carroll was admitted into the Liverpool Southern Hospital, on January 4th, 1863. Five weeks previously, he had fallen off a railway bridge and received severe contusions about the hips and back. He was under the care of Dr. Thomson of Aigburth, and recovered so far as to be able to walk a mile to mass; but this exertion was followed by considerable pain and swelling in the gluteal region, with much irritative fever. A small opening was made on December 21st, in the most prominent part, and a little sero-purulent matter escaped, without any diminution of the swelling. Four days after, as the man was attempting to get out of bed, a copious discharge of blood took place from the incision, but was easily stopped by pressure. For some days there was a copious discharge of bloody pus, and on January 2nd, there was a second sudden gush of blood, which was again easily checked by pressure. Dr. Thomson now sent the man to the Southern Hospital.

On his admission, Mr. Higginson removed the compress, and great hæmorrhage immediately ensued. He found a deep space full of gangrenous tissue and blood; on examining the surrounding parts, he found a spot which was soft and inflamed, and into it he passed a grooved needle, and a little bloody fluid oozed out. Soon afterwards, a great gush of blood took place; Mr. Higginson then passed his finger into the wound and turned out a clot, and found that the wound extended deeply down towards the sacro-sciatic notch. He now plugged the wound; and, in consultation with Dr. Nottingham, decided to perform ligature of the internal iliac artery. The man was very low and weak. The operation was performed at 8 P.M. by Mr. Higginson, without much difficulty, and without any loss of blood. The man died at 10 the following morning. Mr. Higginson said that, if he had known how rapidly the man was sinking, he would have performed transfusion. On examination after death, Mr. Higginson found there was a fracture of the sacrum near the attachment of the sacro-iliac ligaments; the tissues about were much infiltrated with blood, and the gluteus maximus was much separated from its attachments. The exact point from which the bleeding had proceeded could not be discerned.

Mr. Higginson remarked that, if he regretted anything in regard to this case, it was that he had not resorted to transfusion of blood, and, in support of the propriety of this proceeding, he cited the following instance of its successful employment.

J. C., aged 51, a ship-carpenter, came into the Southern Hospital on May 18th, 1860, with inflammation of the front of the left forearm. On the 12th, an incision was made through tissues tense with infiltrated serum, but no pus flowed at the time. The discharge soon became purulent, and great burrowing of matter, and sloughing of cellular tissue throughout the forearm took place, and free openings were made from time to time. He had two sudden attacks of hæmorrhage from these sinuses prior to June 16th; but on that day a more alarming gush took place, and the brachial artery was tied at the elbow. He lost no more blood, but the state of the arm pointed to the necessity for amputation; while, on consultation, the patient was thought too much prostrated to bear it.

On the 17th, as he had not at all rallied, but rather the reverse, transfusion was performed by Mr. Higginson, by injecting into the sound arm about twelve ounces of blood taken from the man's daughter-in-law. The patient now improved so satisfactorily that on the 18th, the diseased arm was removed above the elbow. He made good progress until the 24th, when the left leg and thigh became enormously swelled and of a purple hue, and the circulation in the limb seemed arrested. This swelling gave way, however, to frictions with lard, and the free use of rum and milk as diet. He left the hospital, cured, twelve weeks after admission.

Dr. Thompson mentioned two other cases, that had come under his notice, of severe hæmorrhage in the gluteal region. In one, a marine received a wound which was followed by alarming bleeding, but this was arrested by pressure. In the other, a boy, four years old, was wounded with a knife, and the hæmorrhage that ensued could not be completely stopped by pressure; Dr. Thompson would have tied the internal iliac, but the child's parents would not consent. The boy was taken to Dublin, and was under the care of Colles and others, and they would have tied the internal iliac, had not the child died in the meantime.

The Chairman asked if the great principle of cutting down to the bleeding vessel, and tying it above and below the bleeding point, could not be applied to these cases.

Mr. Higginson said this case must be considered almost aneurismal in its nature. If any one had attempted to search for the wounded vessels, what difficulties he must have encountered; the man was fleshy and the cavity deep; the gush of blood would have been excessive unless the abdominal aorta were compressed.

Mr. Hakes said that often, where there are large collections of blood and great hæmorrhage, laying the cavity freely open will suffice to stop the bleeding. He had seen such the case in abscesses in the neck and scrotum. In this case, perhaps, some little vessel might have been found bleeding, and secured. He thought this would have been better than proceeding to so serious an operation; or, again, it might have been better, as the bleeding was stopped for the time, to have done nothing, and waited for further indications.

Mr. Fletcher alluded to the case of Mr. Seaton, in Mr. Liston's practice. He thought in a case like that of Mr. Higginson we ought to tie the gluteal artery, if possible; with regard to compressing the aorta, Mr. Syme cut into an aneurism, and tied the external, internal, and common iliac, compressing the aorta in the meantime.

Mr. Higginson could not agree that it would have been safe or prudent to open out the cavity and search for the vessel; the blood welled up copiously from a great depth, and might have proceeded from some vessel quite within the pelvis.

Empyema in a Child, for which Paracentesis was Performed. Mr. Hodgson read a case. The child had re-

cently had scarlatina and measles, a very short time before. The empyema appeared to have come on without any very acute symptoms of pleurisy. On November 20th, 1862, the child was sitting erect, with great dyspnœa, and on examining the chest, Mr. Hodgson found the left pleura full of fluid, the heart pushed to one side, and great distension of the abdomen. The presence of pus was diagnosed from some appearance of pointing. The operation was performed by Mr. Higginson, on December 13th, and a pint of pus evacuated with great relief; on the 24th, the operation was repeated, and the child died two days afterwards.

The left lung was found to be compressed against the vertebræ, and completely condensed; the heart pushed to the right side. There was a mulberry calculus in the right kidney. Mr. Higginson thought the operation had been deferred too long in this case. The lung was excessively compressed, and the walls of the thorax rigid.

Dr. Vose alluded to the hopeless nature of these cases in general. The lung was shrunken, carnified, more like the sole of an old boot than a lung; its tint is all of lung that remains. As an operation for the cure of empyema, paracentesis was most unpromising; but where there is hopeless dyspnœa, and syncope is threatened, we have no alternative but to give what relief the operation affords.

Dr. Callon mentioned a case in which paracentesis had been performed, with only a partial escape of the fluid. After death, the pleural cavity was found divided into two by adhesions, and the surfaces covered with medullary cancer.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 24th, 1863.

B. G. Babington, M.D., F.R.S., President, in the Chair.

REMARKS ON TWO CASES OF KELIS. (WITH PHOTOGRAPHS AND COLOURED DRAWINGS.) BY DEPUTY INSPECTOR-GENERAL T. LONGMORE.

The writer referred to the paper by the late Dr. Addison, in the thirty-seventh volume of the Society's *Transactions*, on the Keloid of Alibert, and on that form of Kelis which he (Dr. Addison) considered to be of a distinct character, and which he designated True Keloid. The two cases now brought to the notice of the Society were very striking illustrations of these two forms of keloid disease; but the writer was led to question whether evidence was not afforded by them that they were only simple varieties of one and the same affection, dependent upon the same keloid constitution of the dermal tissue, and owing their different features solely to the differences in the exciting causes.

In the first case the disease was developed after punishment by flogging, of a comparatively light nature. There was scarcely any laceration of the skin. About three months after the date of punishment the soldier noticed a growth upon the spot where the flogging had been chiefly received. This growth gradually increased from a small round tubercle to a large flat mass, nearly as large as a man's hand. It was not accompanied with pain, but there was irritability, itching, and tenderness, when the part was subjected to the pressure of the cross-belt and weight of the knapsack. On the front of the patient's chest were several small tumours, evidently of the same nature, but the date of the first appearance of those growths could not be ascertained.

The disease in the second case was more extensive than had been described by any writer hitherto, and presented a most remarkable appearance. It was of the kind which Dr. Addison considered should be separated from the former variety under the name of "true keloid." The patient, a cavalry soldier of strong powerful frame, went to India with his regiment in November, 1857. Five months afterwards, at the commencement of the hot season, he began to suffer from lichen tropicus, in common with all the other men of the regiment. About a month afterwards the keloid disease began to show itself, in the form of a few prominent red tubercles on the right forearm. It next appeared over the middle of the sternum, and thence extended gradually towards the two sides of the body. At the same time it appeared on the left shoulder and various parts of the back, and continued to spread until it had covered the entire dorsal surface of the body. The skin of the face was also affected.

The physical characters and accompanying symptoms of the disease in both instances were fully described in the historical accounts of the cases presented to the Society. Their characteristic features were represented in the drawings and photographs.

The writer urged that no two more striking examples of the two species, "true keloid" and "spurious keloid," according to those who designate them as distinct species, could be met with than the cases brought to the notice of the Society. He argued, however, that, in the case in which the kelis was excited by flogging, the comparative slightness of the punishment, the rarity of such a consequence, but more particularly the presence of the keloid spots in their favourite habitat—the skin covering the anterior part of the chest,—established the constitutional nature of the disease, just as fully as it was established in the second case, where it appeared to follow the excitement of the prickly heat. The fact, too, that the general characters of the diseased growths in both instances were alike, and that in each instance the hypertrophy was greatest where the pressure of the cross-belt was chiefly exerted, confirmed still further the identity of their nature. The deduction was hence drawn, that, both the patients being of a keloid diathesis, the difference in the mode of distribution, and in some of the features, of the diseased growths in the two cases could be accounted for by the different natures of the exciting causes.

No treatment had appeared to exert permanent beneficial change in either case. The fact that the pressure of the cross-belt acted in each instance as a stimulus to increased growth was held to be a sufficient argument against treatment by continued pressure, which had been recommended by some surgeons. The evidence of the constitutional origin in the case where the chief tumour was isolated upon the left shoulder, as well as the nature of the immediately exciting cause, had counter-indicated any attempt at cure by extirpation.

AN ESTIMATE OF THE EXTENT TO WHICH HUMAN LIFE HAS BEEN PROLONGED OR ABRIDGED BY OVARIOTOMY. BY ROBERT LEE, M.D., F.R.S

Dr. Lee, after stating that statistical tables of ovariotomy had been compiled with great labour at different periods by various eminent individuals, proceeded to analyse the tables of Dr. Clay published in 1860, which comprised in all 567 cases. Of these, 242 were considered successful, and in 235 the patients died from the direct effects of the operation. If 477 cases were deducted from 567, there remained 90 cases. Whether, however, life was prolonged or abridged in these cases, Dr. Lee could not state, as he had been furnished with no information on the subject. The author averred that since 1860 the operation of ovariotomy had been performed in numerous cases in Great Britain, and that a number of fatal cases had occurred of which no report had been published. In illustration of this statement, he gave brief accounts of thirteen unsuccessful cases, not hitherto published, of which he had obtained information. Dr. Lee concluded his remarks with the statement that he considered it demonstrated that ovariotomy was an unjustifiable operation where the life of

the patient was not in immediate danger, and where there was not a great probability of the life of the patient being saved by the removal of the disease.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, FEB. 20TH.

M. BAINES, M.D., Vice-President, in the Chair.

ON THE THERAPEUTICAL VALUE OF COD-LIVER OIL IN CHRONIC CONVULSIVE DISEASES.

BY F. E. ANSTIE, M.D.

THE author's attention had first been directed to cod-liver oil as a remedy for affections of this class, in consequence of his obtaining some years ago an unexpected success with it in a case of chorea which had resisted all the ordinary modes of treatment. The convulsive diseases in which the author has employed cod liver oil are paralysis agitans, simple epilepsy, chorea and mercurial tremor, and in all these affections it has appeared to be more constantly useful than any other medicine. Of paralysis agitans, four cases were detailed, of which three were very decidedly improved and one of them may have been said to be cured, although the affection had been very severe. Of chorea, one case was detailed, and others were alluded to in which the benefit produced was very marked. Of mercurial tremor, one most remarkable case was related, in which the cause of the mischief was a very unnecessary salivation inflicted by medical authority some thirty years previously; the patient was attacked immediately afterwards with dreadful tearing pain in the muscles of the fore arms and calves, and with violent muscular tremors; and, ever since that time, she has been liable to a recurrence of the symptoms when much fatigued or depressed from any cause. On application to Dr. ANSTIE, at the Chelsea Dispensary, cod-liver oil was prescribed and persisted with for five weeks, at the end of which time, all the symptoms had perfectiy disappeared; the patient declared that she had never been cured before in less than six or eight months, and she doubted whether any other medicine than the oil had ever really done her any good. Twice since she has had slight recurrence of the symptoms, but a short course of cod-liver oil has, on each occasion, given complete relief. Of simple epilepsy, twenty cases were given, in which the treatment had been confined to the use of cod-liver oil. Of these, there were five upon whom no good effect whatever was produced; seven had completely recovered; two had disappeared from supervision at a time when they were rapidly improving, although they could not be said to be cured; in two others the mental symptoms had greatly improved, but the fits remained as before; four patients remain still under supervision; in two, fits have ceased, although there are still frequent prodromata; and in the remaining two but little good has yet been effected. Besides this general summary of results, Dr. ANSTIE detailed the particulars of three cases which, from their severity, might be said fairly to test the remedial power of the oil. The patients were respectively a girl aged 17, a boy aged 13, and an infant aged 7 months, in all of them the fits were very frequent and severe, and the nervous system exhibited signs of great depression. The case of the infant was specially noticeable, because it was proved by microscopic inspection that the milk of the mother was very deficient in oily matter, and it appeared that in a former infant of the same mother precisely the same train of symptoms had appeared, and had terminated fatally. In all these three cases, the treatment had proved perfectly successful, and the author commented strongly on the fact, that in all these cases the general nutrition of the body had been excellent, and only that of the nervous system had appeared deficient, and said the conclusion appeared inevitable, that the oil had expended itself in enriching the nervous centres. This, indeed, was the principal point of the paper. The author directed attention to Dr. Radcliffe's remarks on the necessity of fat to the nutrition of the nervous centres, and mentioned the fact that that gentleman had found cod-liver oil of the highest value in the treatment of convulsive diseases. He observed also, that the beneficial action of cod-liver oil was quite consistent with what we know of the action of the few other remedies which careful therapeutical investigation has credited with a really beneficial action in chronic convulsive diseases. Steel, arsenic, quinine, all these may fairly be spoken of as foods.

With regard to sedatives, the author remarked that, in the first place, the good effects which could be expected from them were chiefly temporary and such as result from breaking through for a time the evil habit, so to speak, of convulsive action. Secondly (and this was most important), there was strong reason to believe that it is not the really narcotic effect of these remedies which are of service in preventing or arresting convulsive action, but merely the stimulant effects which can be obtained from small doses; for there is no class of remedies which is more useful in preventing or arresting convulsions than the pure stimulants. The author concluded his paper by deprecating strongly any return to the absurd system of hunting about blindly for specifics for chronic convulsive diseases. The progress of clinical observation was blasting the reputation of one after another of the strange out of the way remedies, which had once been accepted with the blindest faith, and was pointing unmistakably to a rational treatment of convulsive diseases by means of medicines whose actions it is possible to understand.

Correspondence.

GRATUITOUS MEDICAL SERVICES.

SIR,—Though I have read with interest the papers that have from time to time appeared in our JOURNAL on the subject of Gratuitous Medical Services, I must own that they have generally failed to approach the subject in the right direction; and that consequently, their influence on public opinion is productive of nothing more than a placid assent to the unquestionable and just conclusions of the writers. But this is not what the profession requires. We consider that our kindness and forbearance are abused, and that the system of gratuitous medical services has grown into one of the most monstrous anomalies of our times. We have allowed the axiom that "the labourer is worthy of his meat" to be ignored, and are now suffering the consequence of our own indiscretion and apathy. We, who are on the working staff of public hospitals, feel that we are at the same time doing injury to ourselves as a profession, by affording gratuitous relief to thousands who ought to be ashamed to appear in our hospitals, and misapplying public bounty to the loss—yea the robbery—of the poor. Most who have undertaken the honourable but cheerless task of ministering their profession under the Poor-law, feel how inadequate is the consideration that they receive for the endless labour and sacrifice demanded of them.

But all this is freely admitted by a discerning public, that only contemns an indifference to our just rights as a profession; while we confess, by our actions as well as by our words, that we have neither courage nor confidence in ourselves, sufficient to enable us to claim and assert our own.

What then can come of our grievances, and of our demonstrations of right, so long as we are content to grumble as individuals, and still bear our burdens; while as a body we quietly leave our case to time, and any re-

former of abuses who has leisure and inclination to help those who will not help themselves?

We waste our energies in persuading the public that our onerous duties in its service claim some adequate and proportionate subsidy, so long as we are not true to ourselves, and unite to demand it.

Think we that they will be paid for their services who are contented to work for nothing, or are too indifferent to ask for wages? No! we are not united enough to be true to ourselves, and so, as we have ever been defrauded, we must be till as a body we cooperate to resist imposition.

The time surely has come for us to demand that the managers of hospitals shall no longer require us to administer our alms, as well as theirs, to recipients of public bounty, adorned in velvet mantles, hats and feathers, and bespangled with gold chains, and earrings. It is time that the hypocrisy of well-to-do tradesmen and their families, who elbow out our poor patients, and indigent, under the mean guise of seeking "the best advice" at our hospitals, cheat us of what we are expected to give to those who cannot otherwise have our help, be exposed. It is time that our Poor-law Medical Officers should be paid as well as "the leech" who drenches or administers a bolus to an old or infirm quadruped. Instead of the pittance which barely pays "the bar," and which Tony would decline for running an errand a-foot.

Then let the profession awake to a just sense of what is due to its members; let it determine to dispense its gratuitous services to those only who would ask advice gratis of a lawyer; the *poor* will never ask in vain of the neediest of us; let it no longer tolerate gratuitous advice to Life Insurance Offices, that are mean enough to pay commission to agents, but ask us for information on which thousands of pounds are risked, or not risked, and we are unpaid; let it maintain the right of its members to live by the exercise of its various functions, for assuredly there is little fear of people wasting *all* their *substance* on physicians now-a-days; let its members rally round one who, in seeking to sustain the status of the profession, has to bear persecution or loss; and, lastly, let the scandal that we are ever ready to supplant one another and take advantage of a brother practitioner's difficulties, cease from among us; let it be remembered that where one suffers, all suffer, and that the honour of one is the honour of all. I am, etc., F.R.C.S.

February 1863.

RUSSELL *v.* ADAMS.

Letter from F. C. V. Pike, Esq.

Sir,—Certain statements having appeared in some of the medical journals in reference to the late action of Russell *v.* Adams, to the effect that I was professionally engaged and my costs paid by Mr. Propert, I beg to state most unequivocally that my services were engaged by Miss Russell and her mother, with the latter of whom I had become professionally acquainted upwards of eighteen years previously.

The action of Russell *v.* Adams was commenced so far back as November 21st, 1861. It was not, however, until after incessant solicitations by Miss Russell and her mother that I, with the consent of Miss Russell's then attorney, assented on January 22nd *in the present year* to become the attorney for the plaintiff in that action.

I have not, directly or indirectly, received, nor do I expect to receive, any portion of my costs in such action from Mr. Propert; and I may add that I had no communication whatever with Mr. Propert with reference to my undertaking the prosecution of the action on behalf of Miss Russell. I am, etc.,

F. C. V. Pike.

6, Serle Street, Lincoln's Inn, March 4th, 1863.

PREFERMENT BY AFFECTION.

Sir,—In a recent number of the British Medical Journal, you did me the favour to insert a letter in reference to the appointment of a non-resident, recently qualified gentleman as certifying surgeon at Oldham. As I have reason to believe the subsequent proceedings of the medical practitioners here have been watched with considerable interest and anxiety by our brethren in other towns where similar appointments are in the gift of the inspectors of factories, I ask your indulgence whilst I give your readers, either as a guide or a warning, the concluding chapter of this disgraceful episode.

At a numerously attended meeting of the medical profession resident in this town and neighbourhood, it was unanimously resolved that a deputation should wait upon the Home Secretary, for the purpose of laying before him the whole circumstances of the case, and of urging him, on the grounds of equity, to revoke the appointment. A memorial to the Town Council of Oldham was also signed by every medical practitioner in this borough, except by the gentleman who holds the corresponding appointment to the one in question, bringing the matter prominently before them. This appeal, to the honour of the Council be it told, was most heartily responded to. Not only was our memorial favourably received, but, by every gentleman who spoke, the appointment was severely animadverted upon; and the Council unanimously adopted, on public grounds, the following memorial; and resolved that J. M. Cobbett, Esq., and J. T. Hibbert, Esq., the members of Parliament for the borough, should be requested to present it.

"*To the Right Hon. Sir George Grey, Bart., Her Majesty's Secretary of State for the Home Department.*

"The memorial of the mayor, aldermen, and burgesses of the borough of Oldham, in the county palatine of Lancaster, in council assembled, under the common seal,

"Sheweth,—That this Council views with much dissatisfaction and regret the recent appointment made by Alexander Redgrave, Esq., of Mr. Robert William Coles, jun., to the office of certifying surgeon to the factories, lately held by Mr. Earnshaw, inasmuch as there are numerous resident practitioners in the borough of standing and experience, eminently qualified to serve the office.

"That it is manifestly unjust to the whole profession resident and practising in the borough, that their claims and qualifications should be overlooked in favour of a young gentleman entirely unknown to the public, non-resident, and only recently qualified; and your memorialists humbly pray that you will revoke the appointment of Mr. Coles, and give directions that the same be conferred on some resident medical practitioner."

This memorial was accordingly presented; and a deputation, consisting of Messrs. Abraham Leach, A. Thom Thomson, and Dr. S. H. Armitage, accompanied by the members for Oldham, afterwards had an interview with Sir G. Grey at the Home Office. They were courteously received and attentively listened to; but were given to understand that, unless they could advance some legal or moral objection, he (Sir G. Grey) did not think he could interfere with Mr. Redgrave's nomination. The only legal ground the deputation were prepared to urge, and they had authority for thinking it fatal to the appointment, was this: that the Act of Parliament (7 and 8 Vict., c. 15) provides that the person receiving the appointment shall be *practising* medicine or surgery; and that, as Mr. Coles was only acting as an assistant to another surgeon in a neighbouring town, he could not be considered to be practising within the meaning of the Act. This point Sir George Grey reserved for consideration, and promised an early decision. That decision has now reached us, and, as we anticipated, is unfavour-

able. Avoiding altogether the question of justice or equity, he merely, through his secretary, states that, having referred the complaint of the appointment of Mr. Coles, jun., to Mr. Redgrave, the inspector, and having received his reply, he (Sir G. Grey) does not think there are any grounds which would justify him in revoking the appointment which the inspector was authorised by law to make, and which could only be properly revoked by him, on clear evidence of some legal or moral disqualification, of which he considers there does not appear to be any proof in the present case.

So end our efforts—not altogether futile, let me hope, in this, the *first* clear case of nepotism in the patronage of these factory appointments. It is to be hoped it may not form a precedent.

Hitherto, we have had reason to boast that the rank weeds of nepotism have found no congenial soil in our profession. More favoured in this respect than our clerical sister, patronage in life and limb has been held too sacred a trust to be lightly exercised; and the relative or friend has had to find his natural level in the hard race for public preferment. So much the more is it our duty, jealously to watch for and expose any deviation from the strict path of rectitude, where a public trust is in question.

In almost all the manufacturing towns, where the position of certifying surgeon is within the reach of the profession, the great bulk of the population necessarily consists of the working classes. In such towns, however high a reputation a medical man may attain, he finds it necessary to build up his practice with such material as exists around him. There are no aristocratic or select practices, by which a competency may be realised from a comparatively limited number of patients; but, as a rule, the work is heavy and the remuneration light. Physical and mental toil soon tell their story;* "the snow appears early on the mountains"; and the appointments connected with the factories—the only appointments of value in these districts, and arising, as it were of necessity, out of the very evils from which we suffer —are looked forward to as a haven, after the heat and burden of the day.

If patronage is to be exercised, as it has been by Mr. Redgrave in the case at Oldham, a serious question must sooner or later arise between our profession and the civil service. Subordinate officers will educate their sons with a certainty of preferment; the workshop and the foundry will give up their youth; some complaisant member of our profession, holding, or *expecting* to hold, a factory appointment, may be found willing to accept them as pupils without a fee; and a gross professional wrong, maturing for years, may find its consummation so soon as the fortunate neophyte has crossed the portals of the medical profession. It behoves all of us, therefore, to watch narrowly subsequent nominations emanating from the same quarter. The whole tribe of incompetent mediocrities and subservient hangers-on may in this instance sing a pæan over our failure; but, if any future Redgrave or Coles, trusting to this as a precedent, should contemplate the perpetration of a similar injustice, there shall at least be found on record the indignant protest of an outraged profession.

I am, etc., BETA.

Oldham, March 2nd, 1863.

* In the town of Oldham, the mortality amongst medical men has been perfectly appalling. Only three of those practising eleven years ago are now alive. During that period twelve have died: nine of these died before attaining the age of 46 years; and nine, either primarily or secondarily of brain-disease.

DR. GUGGENBUHL. The death of the famed physician of the Abendberg in Switzerland, the manager of a cretin establishment there, is announced. If report speak truly, his philanthropy has not interfered with his amassing of much money.

Medical News.

APOTHECARIES' HALL. On February 26th, the following Licentiates were admitted:—

Armstrong, James Hunter, Gravesend
Nash, George Branston Valentine, Royal Infirmary, Liverpool
Slade, Robert, Poole, Dorset

At the same Court, the following passed the first examination:—

Wicksteed, Frank William Slow, St. Bartholomew's Hospital

APPOINTMENTS.

BIGGS, Robert, Esq., appointed Deputy Coroner for North Somersetshire.

HOGG, Jabez, Esq., appointed Surgeon-Oculist to the Royal Masonic Schools.

*PRIESTLEY, William O., M.D., elected Professor of Midwifery in King's College, in the room of Arthur Farre, M.D., resigned.

SANDERSON, John B., M.D., appointed Assistant-Physician to the Middlesex Hospital.

THOMSON, John, Esq., appointed Certifying Surgeon under the Factory Act, for the district of Kilmarnock.

COLEMAN, Alfred, Esq.
FORSYTH, Frederick, Esq.
GREGSON, George, Esq.
*HAYWARD, Henry H., Esq.
HILL, Alfred, Esq.
WALKER, Joseph, M.D.
} Appointed Asssist. Dental Surgeons to the Dental Hospital of London.

POOR-LAW MEDICAL SERVICE.

CREAN, Thomas J., L.K.Q.C.P.I., to be Medical Officer to the Marlfield District of the Clonmel Union.

FITZGIBBON, Patrick, L.K.Q.C.P.I., to be Medical Officer to the Clonmel District of the Clonmel Union.

KNILL, James, L.R.C.P.Ed., to be Medical Officer to the Nettlebed District of the Henley Union.

ARMY.

ANDREWS, Staff-Assistant-Surgeon R. F., to be Staff-Surgeon, *vice* W. Snell.

GALBRAITH, Surgeon-Major G. T., M.D., 53rd Foot, to be Staff-Surgeon-Major, *vice* R. McNab, M.D.

MCNAB, Staff-Surgeon R., M.D., to be Surgeon 53rd Foot, *vice* G. T. Galbraith, M.D.

RUTHERFORD, Surgeon C. C., 99th Foot, to be Staff-Surgeon, *vice* U. W. Evans, M.D.

SNELL, Staff-Surgeon W., to be Surgeon 99th Foot, *vice* C. C. Rutherford.

To be Staff-Assistant-Surgeon:—

HAMILTON, Assistant-Surgeon J. B., 3rd West India Regiment.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

POCOCK, C. J., Esq., to be Assistant-Surgeon 1st Sussex A.V.

BIRTH.

FLETCHER. On March 1st, at Manchester, the wife of *J. Ogden Fletcher, M.D., of a daughter.

DEATHS.

BORLAND, James, M.D., Inspector-General of Army Hospitals, at Teddington, aged 88, on February 22.

BOYCE, William, M.D., at Edinburgh, on March 1.

CAMPBELL, John, M.D., Surgeon R.N., aged 69, at Southsea, on February 24.

HESTER. On December 2nd, 1862, at New Orleans, Jeaffreson, third son of *James T. Hester, Esq., of Oxford.

HUTCHINSON. On March 2nd, at Scarborough, aged 52, Jane Innes, wife of R. S. Hutchinson, M.D.

M'NICOLL, Thos., Esq., Surgeon, at Liverpool, aged 41, on March 1.

SERCOMBE. On March 2nd, at Bournemouth, aged 3, Annie E., third child of *Edwin Sercombe, Esq., of Brook Street.

STUART, John Graham, M.D., H.E.I.C.S., at Edinburgh, aged 65, on March 2.

WILLIS. On March 2nd, at Barnes, Eleanor, wife of *Robert Willis, M.D.

BEQUESTS. The late Marquis of Lansdowne has left by will to Lord Monteagle and the governors of Barrington's Hospital, in Limerick, the sum of £3,000, to be expended by them for the benefit of said hospital, provided that it shall be open at all times for the natives of the county of Kerry. The late Mr. William Block, of Muswell Hill, has left £500 to the Royal London Ophthalmic Hospital.

BIRTHS AND DEATHS REGISTRATION (IRELAND) BILL. his bill has been read a third time and passed in the ouse of Commons.

UNIVERSITY OF OXFORD. In a convocation holden on ie 26th ult., a proposal that the sum of £1,000 be anted from the university chest towards the new build- gs at the Radcliffe Infirmary was agreed to.

SOUTH HANTS MEDICO-CHIRURGICAL SOCIETY. The fol- wing officers have been appointed for the ensuing ar:—*President*, John S. Bushnan, M.D.; *Vice-Presi- nt*, John Wiblin, L.R.C.P.Ed.; *Secretary*, Henry alk, M.D.

ARMY HOSPITALS. The entire staff connected with ie Royal Artillery and Royal Engineer hospitals at rompton Barracks, Chatham, together with the patients id attendants, vacated the hospitals on Saturday after- oon and took possession of Fort Pitt Hospital, which ill in future be used as a general hospital for the entire arrison, on the removal of the Army Medical School id staff to Netley Hospital. A portion of the hospital itherto used at Brompton barracks is still to be re- ined for the purposes of a hospital, in which the sick oops will be received and inspected previous to their moval to Fort Pitt.

THE LEVÉE. The following are the presentations of embers of the medical profession which took place last eek:—Mr. J. Moncrieff Arnott; Assistant-Surgeon Ag- s; Surgeon H. Baillie; Dr. Butler; Mr. William Bow- an; Mr. William Coulson; Assistant-Surgeon J. C. orbyn; Sir Daniel Cooper; Dr. Acland; Dr. A. Ander- n; Dr. T. K. Chambers; Staff-Surgeon-Major Dr. W. ick; C. F. Du Pasquier; Surgeon W. C. B. Eatwell; Dr. . J. Foster; Surgeon R. Gilborne; Dr. Gallagher; Sur- on-Major A. Grant; Dr. Francis Hawkins; Mr. C. H. awkins; Dr. E. Hilditch; Surgeon-Major Jee; Dr. W. nner: Dr. R. O'Shaughnessy; Dr. G. E. Paget; Mr. mes Paget; Dr. E. Phillips; Mr. George Pollock; Mr. . Quain; Surgeon H. Martin; Dr. G. C. Millar; Dr. J. . Minter; Dr. Sieveking; Deputy Inspector-General C. Smith; Dr. G. Sykes; Assistant-Surgeon R. Turner; ssistant-Surgeon E. J. Vivian; Dr. Forbes Watson; Dr. Grant Wilson; Surgeon Young, and Surgeon-Major yatt.

OPERATION DAYS AT THE HOSPITALS.

ONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

ESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

EDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

URSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

IDAY..... Westminster Ophthalmic, 1·30 P.M.

TURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

ONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion. Dr. Thudichum, "On Cancer of the Pancreas; and on Purulent Disease of the Kidney, complicated with Disease of the Bladder"; and other communications.—Royal Geographical.

EDNESDAY. Royal College of Physicians, 5 P.M. Dr. Risdon Bennett. Croonian Lectures. "On some Points connected with Bronchitis, and its Results."—Society of Arts.—Microscopical.—North London Medical.

URSDAY. Royal.—Antiquarian.

IDAY. Royal College of Physicians, 5 P.M. Dr. Chambers. Lumleian Lectures. "Formation of Mucus and Pus."—Astronomical.—Royal Institution.

TURDAY. Statistical (Anniversary).—Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MEDICAL HEALTH ASSURANCE.—We are obliged to defer the publication of some letters on this subject till next week.

UNLICENSED PRACTITIONERS.—We would refer "An Old Associate" to something we have said in this day's JOURNAL on the subject of irregular practitioners. It does appear that in the present state of the law, any man, woman, or child, can practise medicine or surgery, if they can only find subjects to practise on. We see no way to arrest the course of the irregular person to whom our correspondent refers. This, however, we would add: that any practitioner of medicine who knowingly meets an unlicensed man in consultation is utterly without excuse, and deserves the severest condemnation of the profession. The laxer the law is, the more severe ought our ethical laws to be. We hope our correspondent is in error when he says that the person to whom he refers "is met in consultation by physicians of high repute, and yet withal is unlicensed, unregistered, and laughs in his sleeve at the medical profession".

COMMUNICATIONS have been received from:—Mr. J. VOSE SOLOMON; Mr. THORLEY; Mr. H. GRAMSHAW; AN ARMY MEDICAL OFFICER; Dr. CROMPTON; Dr. C. KIDD; Dr. J. O. FLETCHER; AN OLD ASSOCIATE; Mr. T. P. DAVIES; THE HONORARY SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Dr. LIONEL BEALE; Dr. SIEVEKING; Mr. CARTER; Dr. BRYAN; Dr. THOMAS J. WALKER; Mr. R. W. COE; Dr. J. HEYGATE; BETA; Dr. HENRY MARSHALL; Mr. J. A. PEARSON; Mr. RADCLIFFE; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. OGLE; Mr. PIKE; Mr. J. H. S. MAY; and Mr. T. M. STONE.

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The London Medical Review

(enlarged eight pages) for March

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2. Dr. Inman, "Essays on Therapeutics."
3. Thomas Orton, M.R.C.S., "On Poisoning by Arsenical Paperhangings."
4. Dr. Haughton, "On the Science of Medicine."

ANALYTICAL AND CRITICAL REVIEWS.

5. "Diseases of the Chest." By Henry Wm. Fuller, M.D.Cantab., etc.
6. "The Renewal of Life: Clinical Lectures, illustrative of a Restorative System of Medicine, given at St. Mary's Hospital." By Thos. K. Chambers, M.D., F.R.C.P.
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Royal Medical Benevolent College, EPSOM.

—Notice is hereby given, that no applications on behalf of persons desirous to become candidates for admission to the College as PENSIONERS or FOUNDATION SCHOLARS at the next ensuing Election can be received by the Council after the Morning of the 18th of March inst., when the list of candidates will be finally closed, in order that the Balloting Papers may be printed. The Election will take place, as usual, in May.

By order of the Council,

ROBERT FREEMAN, Secretary.

Office, 37, Soho Square, London, March 4, 1863.

Royal Medical Benevolent College.

—The Council have the pleasure to announce that the Right Hon. the EARL MANVERS has kindly consented to take the Chair at the ELEVENTH ANNUAL FESTIVAL of the College, which will take place at Willis's Rooms, King Street, St. James's, on Wednesday, the 29th of April next, when it is earnestly hoped that there will be a large meeting of the friends of the Institution.

The following Gentlemen have already undertaken to officiate as Stewards on the occasion, and a further list will be published shortly. Gentlemen who are willing to serve are requested to forward their names to the Treasurer, JOHN PROPERT, Esq., 6, New Cavendish Street, W. There is no liability attached to the office.

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By order of the Council.

ROBERT FREEMAN, Secretary.

Office, 37, Soho Square, London, March 4, 1863.

Remarks

ON

DR. BEALE'S CLINICAL LECTURE ON "THE RENEWAL OF LIFE".*

BY

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WHEN a professor at King's College deems certain opinions of sufficient influence for him to give a clinical lecture on the subject, warning his pupils against them, I think he may fairly claim a considerate reply.

The professor tells his class that *The Renewal of Life* gives an unfair representation of the doctrine of counterirritation, when it states that "the idea of counterirritant practice is to substitute one *disease* which is less dangerous and painful, or whose disorganising tendencies are but temporary, for another *disease* which may be dangerous or painful, or which tends to disorganise the body." His italics point his objection to this use of the word *disease*, which he says is not applicable to purgation and excessive diuresis. He has hit upon this as the fallacy which affects my argument.

Now, it is a well-known and an honest rule with controversial writers (among whom I suppose I must be classed in the introductory lecture above quoted), when stating the doctrines which they impugn, to take the wording from the best upholders of such doctrine. This rule I was careful to observe in the instance before us; my description of counterirritation is that given by Dr. Pereira, who calls it "the production of an artificial or secondary *disease* in order to relieve another or primary one." Again, he says, "one *disease*, whether artificially or spontaneously generated, will often, but not invariably, supersede another." (Pereira's *Materia Medica*, vol. i, part i, chap. 9.) I am not quoting Dr. Pereira as an authority in lieu of argument, but as an authoritative historian. Dr. Pereira saw clearly enough, as did also Dr. Parry and Dr. Pring, whose opinions he is elucidating, that every state of body which is not health is disease. It is quite indifferent to the pathologist, when investigating peculiar states in question, whether they are produced by a physician's drug, or a felon's poison, or an epidemic malaria, climatic influences, or organic changes in the patient's body. No progress in pathology can be made till this is clearly understood. And, what is of more importance, we should be very bad practitioners if we did not act upon it. In how large a proportion of our patients can that for which we prescribe be described by the nomenclature of the Registrar-General or any other nosologist? In half?

In one of Miss Young's delicate sketches of character, a strong-minded and strong-limbed young lady is described as having "no sympathy with unclassified diseases." She could pity a case of apoplexy or measles; but being "out of health" or "*ill*" found no favour in her sight. I fear the learned professor has a tendency towards the same condition of mind; for he further objects to my saying that drugs "make a sound man *ill*." Has he never heard of people being "ill of the doctor"?

He further says that it is dangerous to try and draw a line between healthy and diseased states. Yet he himself draws one; "ascertain," he says, "with accuracy what is going on, and contrast it with what physiology teaches us *ought* to go on." The latter is health; the former, if it differs, is disease; as I have taught, only in fewer words. This test will certainly include the operation of purgatives and diuretics as diseased actions.

Dr. Beale's next objection is a most serious one, and I am anxious to draw special attention to it, because it touches the real point my little volume was designed to raise. The clinical lectures there reprinted are put together with a view of illustrating, by bedside teaching, my proposition that all disease is best treated as a deficiency of life, as a degeneration from complete vital functions, and that all our most trusted remedial agents are beneficial, directly or indirectly, by restoring life. I grant that the proposition is a novel one, and that Dr. Beale is right, as a teacher, to look at it with suspicion. He is right, too, from the position he occupies, not to flood the question with quotations from authorities; but to handle it manfully and boldly himself. He upholds the converse proposition; viz., that disease may "consist of an excess of action"; that a diseased tissue may "exhibit greater evidence of vital activity than the same bulk of healthy tissue"; and, of course, he goes on to infer that the aim and intention of a physician should often be "to weaken life," though he does not go quite so far as Van Swieten's statement that this is all our art can do. He gives, as his instances, cancer and purulent or fibrinous pneumonia; so that I had better take them, as they doubtless tell more for his propositions than any others which could be given.

The fact that diseased parts are often increased in solid bulk is of serious import, and suggests two questions, both of very practical bearing:—

1. Does augmented bulk imply augmented general life in the individual?

2. Does it imply augmented local life in the part affected?

To the first question, a sufficient answer may be found in any of the medical or surgical wards of a hospital. It is not the burly, full-pulsed, red blooded man of large appetite and great muscular power that is most likely to exhibit a specimen of solid morbid matter, but the starved anæmic, quivering at a breeze or a blow.

In what corpse do you find the greatest weight of fibrine thrown out in the peritoneum in the shortest possible time? In one dead of puerperal fever—that is, in the weakest sex at the period of its greatest weakness.

In whom is rheumatic fever most likely to cause pericarditis, with its great masses of morbid matter? In the young overgrown person, especially if a female, more especially if an overworked, underfed maid-of-all-work, and still more especially if vital power is lowered (as M. Edwards has shown it to be) by cold.

* See BRITISH MEDICAL JOURNAL, February 21st, 1863.

In whose heart do the consequences of this pericarditis most rapidly induce enlargement? Not in the well-fed and well-clothed; but at the same weakly time, in the same weakly sex, and under the same debilitating circumstances as the original lesion occurred.

Cancers and other tumours are found of quickest growth and most frequently in the least lively bodies, in the least lively parts, in the idle uterus, in the unused breast, in the cellular tissue, in scars, in parts half killed by wounds, injuries, or previous disease.

Take now the second question, and let us concede the possibility, that, while the general vitality of the individual is lessened, some part might exhibit an extra amount. But morbid processes are not evidences of it; they rather resemble developments of a lower form of life; their products, though abundant, are less vital than the normal growth whose place they take; their existence is temporary, and "they are not capable of becoming permanent constituents of the body, or of lasting as long as the individual." (Virchow's *Cellular Pathology*, p. 456.) Examine a patient with thickened heart during life, and the pulse does not strike your finger vigorously, the apex of the organ does not beat sharply against the ribs; indeed, the thicker it becomes, the less powerful is both pulse and beat, and the less actively does the blood course through the vessels. Examine it after death, and you will seldom fail to find a pale tissue with microscopical evidences of commencing fatty degeneration. Still more evident is the same degenerative tendency in cancer. The tissue of malignant tumours, directly it ceases to grow rapidly, begins to decay, to shrink, and be converted into fat. It is difficult to imagine local strength or local excess of life producing such a weakling crop.

In cancer, truly, there is a continuous reproduction of new foci of growth, a new progeny of prolific cells, which certainly does look like an extension of local life over a larger space, if not of the production of fresh local life. But when we should reflect that the highest and most vital function of nutritive growth is the retention of the form of the body or its separate parts; that in morbid augmentations of size this is lost; the regulating and forming power is absent, and the more so the more morbid and the larger the augmentation is.

The formlessness of cancers and of so-called hypertrophic tissues refers them to a lower grade of organic life than normal growth.

Size proves nothing; surely the professor would not maintain that there is more vitality in a jelly-fish than in a sprat, in a mushroom than in a flea.

This is not a mere question of verbal criticism or Sorbonnic controversy; it is a matter of life and death to our patients. If we treat cases of pneumonic consolidation by weakening life, by bleeding *coup sur coup*, by antimony, by starvation, we are doing our best to kill them; if we supply life by food, warmth, moisture, etc., we are doing our best to save them. If Dr. Beale tries to "weaken the life of a cancer" in the same way, it will grow all the quicker; if he will give the patient tonics, food, oil, and other restoratives, it is much more likely to become dormant.

Dr. Beale says that "few will agree" with me. He should not have used the future tense; for I fully expect that soon not only all the class he was addressing, but the professor himself, will cordially agree with the theses he has made me responsible for. They must daily become more and more the guide to medical practice, and I should be glad to see them in the hands of teachers more influential than myself. In the meantime, I do not think he ought to have objected that they are "not supported by observations"; for I have done my best by illustrations from the patients at the time under the eyes of my pupils, and have appended twenty-seven lectures thus illustrated to the Introductory on which he comments.

Short Clinical Lectures

ON

THE FIRST PRINCIPLES OF MEDICINE.

Delivered at King's College Hospital.

BY

LIONEL S. BEALE, M.B., F.R.S.,

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II.

On the Vital Changes Occurring in the Mucus-Corpuscle.

In my last lecture, I was compelled to speak of *living* cells, changes occurring during *life*, *vital* phenomena, etc. It is right, therefore, that I should endeavour to explain what I mean by a *living* cell. I ought to tell you what goes on in a living cell, and how this living cell gives rise to other living cells. As long as our views upon these fundamental questions remain unsettled, we shall be unable to give an intelligible account of the simplest changes occurring in the very simplest structures in health or disease.

The words *life*, *vitality*, *vital* power, are used so vaguely and so carelessly in speaking of a patient's state, that it is my duty to attempt, at least, to describe to you what meaning I attach to them. Moreover, these terms have been used in very different senses. They have been applied to the organism as a whole, as well as to the separate elementary parts or cells of which the tissues are composed. Our life may be destroyed, but many of our tissues may exhibit vital actions for some time afterwards. Many of our tissues live longer than we ourselves live. In this lecture I restrict myself to the consideration of the *vital* changes which take place in individual "cells."

I have shown that a cell always consists of *living matter*, and matter that *has lived* (of germinal matter and formed matter), and that no structure exists *which is composed entirely of living matter*.

It is true that, in the present state of knowledge, we cannot explain how some of the simplest phy-

siological changes which occur in the body in health take place. Nor have we much positive knowledge even of the actual phenomena which occur in some of those states, which, though scarcely to be called morbid, nevertheless can be distinguished from those characteristic of health. For example, how ignorant are we of the precise order of the occurrence, and of the exact relation to each other, of the changes which take place in the course of a common cold. We do not know how the very unpleasant chilly sensation which marks its accession is produced; neither are we acquainted with the condition of the blood which precedes and is undoubtedly connected with the dry congested state of the mucous membrane; nor are the precise causes of the increased secretion which soon takes place from the nasal or bronchial mucous surface accurately determined.

If, however, the changes which occur upon the surface of the mucous membrane be carefully watched, many highly important facts which have no slight bearing upon the question of the nature of vital changes generally, will be revealed. And we can actually demonstrate the transition from normal structure of a very simple kind, to what is spoken of as a morbid product.

Every one knows that upon the surface of the mucous membrane of the air-passages, even in health, there is a small quantity of a soft viscid matter generally termed *mucus*. This mucus, said to be *secreted* by the mucous membrane, contains certain oval or spherical cells or corpuscles, which are transparent and granular. From the change of form which takes place in them, it is certain that the matter of which they are composed is almost diffluent. These corpuscles or cells are *mucous corpuscles*. They have no cell-wall. They are embedded in, and separated from each other by, a more or less transparent, viscid, tenacious substance termed *mucus*. This viscid mucus bears to the corpuscles the same relation that the matrix of cartilage bears to the so-called cells, or the fibrous tissue of tendon to its "nuclei," and it is considered by many to be an *intercellular substance*.

The specific character of the mucus depends upon the presence of a peculiar substance called *mucin*, which exhibits certain well-known chemical characters. Now, neither mucus nor mucin can be made from albumen or any other constituent of the blood, lymph, or chyle; nor does it exist ready-formed in those fluids; nor can it be prepared artificially. What is, then, the origin of this peculiar substance characteristic of mucus? Its elements must be, directly or indirectly, derived from the blood. It never exists without the corpuscles, and when it increases in quantity the corpuscles are found in increased number. There is, therefore, reason to infer that the formation of the mucus is in some way connected with the presence of the corpuscles. You may have masses of germinal matter without the tenacious mucus; but you cannot have mucus without the masses of germinal matter being present at the time of its formation. This fact has never yet been explained by those who still maintain that the so-called intercellular substance is formed by changes taking place in an exuded plasma independently of nuclei or cells (germinal matter).

Moreover, it is important to observe that the chemical characters and physical properties of the mucus are not dependent upon the life of the corpuscles. The germinal matter of the mucus-corpuscles may be living and active, or dead and even disintegrated, without any observable immediate change upon the viscid mucus, so that it would appear that the mucus-corpuscles exert no direct influence upon the mucus *after its formation*.

Mucus, which is formed in health in very small quantity, is produced more rapidly and in larger amount in a slight cold or catarrh; but it still retains its transparency. If, however, the catarrhal state increase in severity, the mucus becomes more opaque. It is formed still faster, so that in the course of an hour more than a thousand times as much material, possessing definite chemical characters, may be produced upon the surface of the membrane, as is formed by it in the perfectly healthy state, which existed perhaps but two or three days previously. Examination will show that the opacity is due to the increased number of the granular corpuscles it contains, just as the creamlike appearance of laudable pus depends upon the multitude of corpuscles suspended in the fluid.

If you examine a little transparent mucus from the nose or windpipe upon a warm slide immediately after its removal, and under a very high power (not less than 1200 diameters), you will observe some very important facts which bear upon the general question of *life*, *growth*, and *formation*.

You see a great many of the corpuscles I have alluded to, which vary somewhat in shape and size; but their form is generally oval, their outline even, and most are about the one-thousandth of an inch in their longest diameter. I will not discuss whether they are cells, nuclei, or corpuscles; but will call them masses of living or germinal matter, because I shall show you that they are alive and that from them new corpuscles are formed. These bodies, like pus-corpuscles, the "nuclei" of epithelial cells, and fibrous tissues, etc., are coloured by carmine.

Let us watch very carefully one of the oval masses of germinal matter under a power of 3000 diameters. It seems to be composed of soft semitransparent matter, which exhibits delicate spherical particles varying in size in every part. These particles are in constant motion, and the movements are like those so well known in the salivary corpuscles. About the central part, two or more nuclei will be observed. These appear smoother than the rest of the mass; but even in them, indications of the existence of smaller spherical particles may be discerned with a power magnifying 3000 diameters when the light is well arranged.

In a few moments, an oscillation of the particles is observed at some portion of the circumference of the mass. Then one or many bulgings occur, and parts of the circumference become quite uneven by the formation of a number of little processes which move from the general mass, and often assume the form of little spherules which still remain attached by narrow pedicles to the general mass. Such changes occur at different points of the circumference, and from time to time some of the protrusions recede into the mass. Occasionally two or more processes coalesce, and a ring may be momentarily produced at some part of the circumference.

[*To be continued.*]

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

OBSERVATIONS ON THE TREATMENT OF TÆNIA, ESPECIALLY BY THE USE OF THE OIL OF MALE-FERN.*

By JOHN W. OGLE, M.D., F.R.C.P., Assistant-Physician to, and Lecturer on Medical Pathology at, St. George's Hospital.

AT page 960 of the second volume of the *Elements of Materia Medica and Therapeutics* (3rd edition), by Dr. Pereira, that authority, speaking of the oleum filicis maris, observes as follows: "The dose is from half a drachm to a drachm, in the form of electuary, emulsion, or pills: an hour afterwards, an ounce or an ounce and a half of castor oil should be exhibited. . . . *I have tried it in several cases of tapeworm, but without effect.*"

It is with reference to the latter statement by Dr. Pereira that, seeking to add to the information which various authors have supplied on the matter, I have put together the following observations regarding certain points related to the treatment of that form of the tænia which we meet with the most commonly in England. These I am enabled to give in connexion with short notes which I am in the habit of making of any cases amongst my hospital out-patients which may appear to offer more than ordinary interest. From what follows, it will be seen that I have generally given the oil of male-fern in doses varying from half a drachm to two drachms, considering a fair medium dose for the adult to be about a drachm and a half. In almost all cases this has been administered in combination with the acacia mixture of the *Pharmacopœia*, and in some aromatic vehicle (chiefly pimenta or peppermint-water) on a fasting stomach. This draught has been ordinarily given at bedtime, and followed up, on the following morning, by a dose of castor oil or "haustus sennæ". It will be remarked that, as Dr. Gull observed in a paper in the *Guy's Hospital Reports* (vol. i, p. 1, 1855), there is probably no absolute necessity for the dose of castor oil or senna, inasmuch as the male-fern oil is sufficient in most cases both to poison the offending worm and summarily to lead to its disposal. Its administration is, however, perhaps desirable, in order the more strictly to secure evacuation of lingering portions of the worm, if such there may be.

In the following tables, consisting of an epitome of twenty-four cases, I have not sought to give the symptoms accompanying the presence of the worms in the bowels, nor in any way to arrange the cases. I have merely, in an indiscriminate manner, recorded them with reference to the age of the patient, the length of time for which the worm was known to exist, the character of the previously used remedies, and the doses of the male-fern oil used, with the results following its administration; in this, observing the order adopted by Dr. Gull in his paper before quoted. The results of an examination of these details are given at the close of the table.

No.	Age.	Duration of symptoms; habits of life.	Former remedies used.	Dose and effect of the male fern.
1	32	Tape-worm known to have existed ten years.	Had taken turpentine as many as twenty times; and as much as twelve yards of the worm passed at a time in consequence. Had never known the head to pass.	Castor oil, 1 oz. at bed-time. In the morning, oil of male-fern, 2 drachms; acacia mixture, 3 drs.; peppermint water, 2 oz. Twelve yards of the worms passed five hours after the draught with male-fern. "Nothing unpleasant" to the patient in the action of this medicine. The worm "*ran from a large* thickness to quite a small point." The small part was said "by those who had seen others to be the head and tail."
2	16	Was under my care for tænia three times, on each occasion with an interval of about two years. After each visit, he failed to appear at the hospital until necessity compelled him. Not seen since last visit.		When first seen, the following draught was given:—Oil of male-fern, 2 drs.; acacia mixture, 3 drs.; peppermint water, 2 oz. Eight yards of the worm were evacuated shortly afterwards. On *second* visit, a similar dose: 25 yards evacuated by it. On third visit, a similar dose; but he has never been since to the hospital. No head ever brought.
3	28	Tape-worm known for eighteen months.	Had taken turpentine.	Oil of male fern, 2 drs., with acacia mixture and pimenta water at night; an ounce of castor oil in the morning. About 30 yards of tape-worm passed shortly after the castor oil, without uncomfortable effects.
4	45	Tape-worm known to have existed eighteen months.	Had been in the habit of taking every second week 3 grains of calomel at bed-time and 5 drops of turpentine in water next morning, with the effect of bringing away about from 200 to 300 pieces for the next two or three days.	Oil of male-fern, 2 drachms, in decoction of quassia and acacia mixture at bed-time; castor oil in the morning No worms were passed after these doses. They were therefore repeated, and then 5 yards were brought away. Two doses were subsequently given, but no more passed, though their action was abundant. No complaints as to the medicine.
5	46			Oil of male fern, 2 drachms, with acacia mixture and pimenta water at bed-time; castor oil in the morning. Large "tape-worm" brought away shortly after the draught.
6	14	Tape-worm known to have existed about eighteen months.	Passed two large tape-worms a year ago after turpentine and castor oil. Two drachms of turpentine with acacia mixture and mint water given recently, but without effect.	Oil of male-fern, 2 drachms, in mint water and acacia mixture at bed-time. A very large tape-worm was passed shortly after the fern draught. The head was looked for by the patient, but not found, "though very near it."
7	20	Tape-worm for many months, and passed three within the last six months.		Oil of male-fern, 2 drachms, in acacia mixture and pimenta water at bed-time; castor oil the next morning. "Large tape-worm" passed 12 hours after the castor oil.
8	13	Tape-worm known for two years; passed one two months ago, of eight yards in length; and another, of the same length, one week previously. Whether the head had been expelled on either of these occasions, was unknown.		Three doses of castor oil on alternate nights; and 1½ drachm of oil of male-fern in acacia mixture and pimenta water on each of the following mornings. No tape-worm passed after any of these doses.

* Being part of a lecture delivered at St. George's Hospital.

TABLE (*continued*).

No.	Age.	Duration of symptoms; habits of life.	Former remedies used.	Dose and effect of the male fern.
9	21	Tape-worm known to have existed eighteen months. Not known to exist in other members of the family. Not in the habit of taking ham or bacon or sausages.	Has taken oil of turpentine on two occasions. No worm brought away by it; but "the water stopt" each time.	Oil of male-fern, 1½ drachm, in pimenta water and acacia mixture, followed by castor oil. Ten feet of the worm evacuated after the castor oil had been taken. The draught was repeated, but no more of the worm expelled.
10	21	Tape-worm known for four months.	Taken "all sorts of medicine" without effect, including turpentine.	Half an ounce of castor oil at bed-time. Oil of male-fern, 1½ drachm, in pimenta water and acacia mixture next morning. Several yards of the worm passed, "one end being very small indeed."
11	57	Symptoms, such as pain and gnawing at the epigastrium, voracious appetite, etc., for six months; but no tape-worm or parts seen, though suspected. No members of the family known to have it.		An ounce of castor oil at night. Oil of male-fern, 2 drachms, in pimenta water, etc., next morning. In less than four hours after the fern draught, six yards of the tape-worm were passed. Patient was "made ill all over" and "so weak and trembling" by the draught. It acted four times, and the worm passed after the last evacuation. Head looked for, but none found. No more tape-worm seen afterwards.
12	40	Tape-worm known for nine years.	Had taken turpentine and castor oil without any result; no worm being voided by it.	Oil of male-fern, 2 drachms, in pimenta water and acacia mixture at night; castor oil next morning. Fourteen yards of tape-worm passed two hours after the fern draught. The castor oil brought away about twenty-four disjointed segments.
13	42	Tape-worm of "two or three years standing."		Senna draught immediately. Oil of male-fern, 1 dr. in pimenta water, etc., at bed-time; and repeated next morning. Eight yards passed after the second dose of the fern oil. Turpentine and castor oil given afterwards, but no more tape-worm passed.
14	20	Tape-worm several months.		Oil of male-fern, 1½ drachm, in pimenta water. Six yards of the worm passed about an hour and a half after the draught.
15	10½	Tape-worm known above a year and a half ago; and twice brought away within that time.	Had for a time taken compound scammony powder on alternate nights. Also some powder with calomel, and turpentine and castor oil, repeated four times without result.	Oil of male-fern, 20 minims, in acacia mixture, 2 drs., and pimenta water, 6 drs., at bed-time. Half an ounce of senna draught in the morning. A "very large" tape-worm passed shortly after the senna was taken.
16	38	Tape-worm known for one year. Had four brought away, of which one was twenty yards long.		Oil of male-fern, 2½ drs.; acacia mixture, 4 drs.; pimento water to 1½ oz., at bed-time. Castor oil, 1 oz., next morning. "Large worm" brought away before the castor oil was taken. The fern oil draught caused pain in the bowels one hour after it was swallowed, but nothing more.
17	20	Tape-worm known for eight months. One passed of two feet in length.		Oil of male-fern, 2 drs., acacia mixture, 3 drs., peppermint water to 2 oz., at bed-time. Castor oil next morning. Several yards of worm passed before the castor oil was taken.
18	3½	Tape-worm known for one year. Four months ago passed a worm of four yards in length, after taking the syrup of senna. Fragments seen daily.	Syrup of senna, without any important result.	Oil of male-fern, half a drachm, in pimenta water, at bed-time; 3 drachms of castor oil next morning. The result not known.
19	20	Tape-worm known for two years.		Oil of male-fern, 2 drs., in pimenta water and acacia mixture at bed-time; castor oil, 1 oz., next morning. A "very long" tape-worm passed ten hours after the fern draught, and before the castor oil was taken. No uncomfortable effects.
20	21		Had taken a drachm and a half of kamæla powder, followed by castor oil; but only a few segments of the worm brought away.	Oil of male-fern, 2 drs., in pimenta water and acacia mixture at bed-time; 1 oz. of castor oil next morning. About 3½ yards of the tape-worm brought away after the castor oil was taken. The draught and the oil were repeated; and about the same length of the worm evacuated. The draught and oil were given a third time, and "another long worm" passed.
21	26			Oil of male-fern, 2 drs., in pimenta water and acacia mixture at bed-time; castor oil in the morning. "Two strings of three or four yards each" of the tape-worm passed before the castor oil was taken.
22	21	Tape-worm several months.		Two drachms of oil of male-fern in pimenta water brought away a "large number" of the joints. Thought herself well. Not seen again for 3 months, when the "worms returned." Took 2½ drs. of the oil at bed-time, and a "very large" tape-worm brought away before the castor oil was given on the following morning.
23	34	Tape-worm known to have existed above four months; and three or four feet had been passed at a time without medicine. Accustomed to eat much bacon, but no raw meat. Not known to exist in any other members of the family.	Had taken gin and rue on a fasting stomach, but only a few occasional joints of the worm passed afterwards. Took the oil of turpentine and castor oil after colocynth pills, and a quantity of yellow stuff brought away like the yolk of an egg, but in a "stringy state".	One ounce of castor oil at bed-time; and on the following morning, two drachms of the male-fern oil with acacia mixture and pimenta draught. The castor oil acted twice before morning, but no worm was passed. Three hours after the male-fern draught was taken, the bowels acted five or six times, and six or seven feet of the worm were voided, but no head was discoverable. There was "a good deal of pain" in the abdomen before the worm came away, but none afterwards. The back has, however, been weak since. The castor oil and male-fern draught were again given, but no fragments of the worm parted with.
24*	56	Tape-worm known to have existed for upwards of a year.	Had taken "every kind of medicine".	One ounce of castor oil at night, and a drachm and a half of the oil of male-fern with the mucilage and water the following morning. A very large tape-worm was evacuated in the course of the day; and now, for above a year, there has been no return.

* This case was not a hospital one, but that of a private gentleman, to whom, at my recommendation, my colleague, Mr. Tatum, gave the oil of male-fern.

On reviewing and considering the above table of cases, it will be at once obvious that the oil of male fern was, at any rate, most useful in causing the death and expulsion of long lengths of the worm. In many cases, the patients had not measured or estimated its length; but it will be seen that in one instance the worm expelled had been twenty-four yards long (Case 2), and in another no less than thirty yards long (Case 3). In a few instances, the existence of the worm had been known for a number of years, as for nine years (Case 11), for ten years (Case 1), etc.; but, in the average number of cases, they had been experienced from between one and two years. The ages of the patients will be seen to vary from 3½ to 57 years.

I regret much that my information is so deficient as to whether or not the root of the worm—the anchoring part, as Dr. Gull aptly terms it—that commonly termed the head—had been passed. In two cases (1 and 6), it is most probable that the head or root was passed. The extremely small size of this, the attached extremity of the worm, the carelessness and inefficiency with which it is of course often sought for, the scanty domestic accommodation enjoyed by the poor, are all circumstances which may fairly be supposed likely to obscure our attempts at determining whether this part has been at any time voided along with the general mass of the worm. I can entertain no doubt that the fine and comparatively pointed termination of the tænia is often got rid of—the entire worm, in fact, passed—without the fact being absolutely established.

As respects the action of the oil of male fern, the table, I think, shows pretty well what may be expected of it.* Out of the whole of the twenty-four cases in which it was given, in only two cases was there any doubt as regards its poisonous and expellent action on the intestinal worm; and in one (Case 8), seeing that eight yards had been passed but a short time previously, it is not unlikely that there was no worm to be expelled.

As regards the period at which, after the male-fern oil had been swallowed, evacuation of the worm was produced, it appears that out of the twenty-four cases (excluding the two cases 4 and 8, before denominated as being doubtful as regards the action of the male fern, and one case, 18, in which no information whatever upon this point was gathered from the patient), in twelve cases the worm was expelled within a short time after taking the remedy, and before the castor oil or other subsequent dose was given; in one case (13), it brought away the worm in one hour and a half after having been swallowed; in another case (18), in two hours afterwards; in another case (23) in three hours.

Touching the action of the remedy upon the patient, irrespective of its vermicide and vermifuge properties, it will be seen that, in by far the majority of instances, this action was not in any degree or manner troublesome or disagreeable. In Case 10, the patient, aged 21 years, was described as having been rendered "very ill" by the medicine; in Case 11, as being made "ill all over", "weak, and trembling"; in Case 23, a "good deal of pain" was complained of when the worm was voided; and in Case 16, pain was experienced in the bowels about an hour after the male-fern had been taken. But, in by far the majority of the cases, it is expressly stated that no discomfort resulted from the medicine; and in none other were any complaints of it made. In Case 11, that wherein so many unpleasant effects were experienced during the action of the drug, it is noticeable that the worm was only expelled after four doses had been taken.

Cases 1, 10, and 12 would appear to show as decided a superiority in the vermicide action of this medicine, compared with turpentine, as it is superior on the score of taste and agreement, etc.*

Such are the results which may be elicited by a consideration of the table, regarding the utility of the oil of male-fern in the treatment of tænia. I hope to continue to give this remedy in such cases; taking care, if possible, to learn all particulars regarding the mode of life, kind of food used by patients, and specially with reference to the eating of raw meat, ham, bacon, sausages, etc.† I shall also take the precaution, which I would recommend to others (following the custom adopted with the nurses at Guy's Hospital), of promising a premium upon every "root" or head of the worm brought to me by the patient, so as the better to secure them; and, when possible, to admit the patients as in-door patients for a day or two, for the purposes of observation.‡

I will now pass on to make one or two observations which my notebook suggests respecting the uses of other remedies in tape-worm. Thus I find, amidst a great number of other cases of which I have record (but so imperfect in various ways that I could not adduce them along with those placed in the table), that the oil of male-fern has certainly acted vigorously and abundantly in the destruction and expulsion of long lengths of the tænia when the kamæla (written also kamayla, kamala, and kamela) has failed. The form of kamæla which I used was the tincture, two drachms being the medium dose for an adult. In one case—a child, aged 4 years—after in vain trying the tincture of kamæla, forty drops of the male-fern oil, in mucilage, syrup, and mint-water, caused the expulsion of ten yards of the worm within three or four hours after the medicine had been administered.

I have also given the powder of the rottleria tinctoria, in about two-drachm doses, mixed with honey or mucilage, with the effect of expelling lengths of the tænia. In this dose it has been longer, for the most part, before producing its specific action, than the male-fern oil. In one case in which I gave the rottleria tinctoria, it is not unworthy of remark that the patient complained that, when the tænia caused intestinal irritation, in addition to a "mistiness in eye-sight", a gnawing pain at the upper part of the abdomen and pain in the forehead, he very frequently experienced "red blotches", to use his own expression, on the forehead and nose. In this case, I find from my notes that no sickness or uneasiness ensued on taking the rottleria tinctoria powder. In other cases, also, this drug has been noticed as acting without griping or discomfort of any kind.

Again, I have given the kousso in ample (half-ounce) doses, but with variable (in some cases quite unsatisfactory) results; also the santonine, with, as yet, negative results. But I have reason to think that my doses of the latter drug have been too small for the purpose. I propose trying it in larger quantities. I believe it may be safely given in ten or fifteen grain doses.

On one occasion, I found that a two-drachm dose of the extract of taraxacum brought away a large number of the tænia joints, the presence of which within the intestines had been unsuspected. It is possible that this vegetable may be rendered available, in suitable doses

* Had my notes afforded me all the necessary materials, I should have constructed my table of cases in accordance with the scheme or table drawn up and introduced into this JOURNAL (see November 22nd, 1862) by Dr. Fleming.

* I am having capsules containing the oil of male-fern made by Messrs. Bullock and Reynolds.

† I cannot forbear referring to a case related in *Virchow's Archiv*, Bd. xxv, and quoted by myself at page 255 of the number of the *British and Foreign Medico-Chirurgical Review* for January 1863, in which the existence of trichinæ in the body might probably have been connected with the patient's frequent habit of killing pigs and placing the bloody knife in his mouth, in addition to his custom of eating sausages, etc.

‡ Dr. Hyde Salter tells me that he takes the precaution of having the fæces passed through a muslin bag or sieve, so that they can be most completely scrutinised; and this plan is worthy of imitation.

and form, for the expulsion of intestinal worms; to which, indeed, all "bitters" appear to be inimical. In another case, a tapeworm was expelled after a large quantity of very strong coffee had been drunk.

There is another remedy of which I am about to try the effects, in consequence of its strong recommendation by Friedrich of Heidelberg; and that is the picronitrate of potash (*Kali picronitricum*).*

I may remark, that it would appear that in certain cases there is an attempt on the part of the bowel to dislodge the worm, apart from medicine exhibited. Thus I know of one, a private case, in which for many years the patient has had the tapeworm, and who, every few months, experiences violent griping, with nausea (never vomiting) and diarrhœa, for about half a day, with concomitant expulsion of several yards of the worm. He has never found the root or head of the animal; but he does not appear ever to have sought for it very systematically. In another case of which I have notes, the patient observed that, contrary to what is usually thought to be the case, he had had three worms of large size expelled within a short period of each other, in each of which the head was found. This observation, though stated honestly by the patient, may, of course, have been erroneous.

More than once I have found that the tænia and the ascaris lumbricoides have existed in the human bowel at the same time.+

With one more remark I will conclude, and it is one which may possibly have a practically beneficial effect; and that is, that I think there may be reason for believing that the tænia may be communicated to infants and children from others, and in the following manner. In almost all cases, there is reason to think that a tænia does not exist very long within the intestine without portions or joints being passed, not only by stool—*i.e.*, with the fæces—but also by their spontaneously working their way through the anus, and "skedaddling" (to use an expressive Scotch phrase) from the person, adhering to the garments, or falling on the ground. Now, I have known cases in which there is reason to think that these fragments, which soon desiccate, shrivel, and become reduced to a small brownish-coloured mass, may have been picked up by children, often crawling infants, who are ever ready to pounce upon and put in their mouth every crumb or crumb-like substance which they can see, and thus have been introduced into the digestive organs. I have no certainty of this; but I think it is a point worthy of consideration and attention, and one to be mentioned to parents in cases where the tænia is known to exist in any members of a family.

I hope shortly to be able, if permitted, to produce through the medium of this Journal some observations with regard to the use of strychnia in the treatment of disease, gathered from hospital notes.

* See the case before quoted from *Virchow's Archiv*, etc.

+ On one occasion, a patient was induced from some cause or other to bring me, in addition to the tænia-joints which he had really voided, a large earth-worm, which he pretended to have passed along with the other. The deception was recognised without trouble, to the surprise of the patient.

Munificent Legacy. The Marquis of Lansdowne, the late Lord-Lieutenant of the county of Wilts, has, by a codicil to his will, bequeathed the handsome sum of £3,000, free of legacy duty, to the Salisbury Infirmary.

Cæsarean Operation. This operation has been lately performed by Dr. Greenhalgh, at St. Bartholomew's Hospital. Delivery *per vias naturales* could not be effected, in consequence of a tumour attached to the sacrum. The woman was at the seventh month of pregnancy. The child was alive when taken out; but survived only a short time. The mother died about sixteen hours after the operation.

Original Communications.

THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

By Thomas James Walker, M.D.(Lond.), etc., Surgeon to the Peterborough Infirmary and Dispensary.

II.—Instruments Employed in Laryngoscopy.

The instruments which I am now about to describe include not only the very simple laryngoscope itself, but also certain accessory apparatus, which is occasionally required to enable us to throw a sufficiently strong light on to the mirror placed at the back of the fauces; much of the success of laryngoscopic observations depending on the attention which we pay to the illumination of the pharynx. Though the same mirror which we use as a laryngoscope serves to reflect the image of the upper part of the pharynx and the nares, an additional instrument, which we may call a palate-spatula, is required for the examination of these regions; and a combination of this spatula and of the mirror into one instrument constitutes a rhinoscope. The most useful form of this instrument, together with other apparatus for the local treatment of laryngeal, pharyngeal, and nasal affections will be also described.

The laryngoscope is simply a small mirror, placed on a stalk attached to its margin at an angle of from 120° to 150°. The stalk is of metal for about three inches and a half from the mirror; the remainder being a small wooden or ivory handle about three inches long, into which the metallic portion slides. Usually the stalk is straight through its whole length of about six inches and a half, but made of flexible metal in order that it may be bent at the will of the operator; in the margin the laryngoscope is figured which I constantly employ, and I recommend an instrument with similar curves in the stalk as the most useful. (Fig. 2.)



Fig. 2.—Laryngoscope mirror. (The engraver has incorrectly made the handle straight instead of curved, and has represented the angle between the mirror and the stalk too abrupt.)

The mirror itself admits of variety in form and size Czermak and his pupils use commonly a square one with the corners rounded off and the stem attached at one of the angles; others employ an ovoid mirror, the

stem being attached to the round end of the oval. The most generally applicable form, however, is the circular; and with two mirrors of this form, one about an inch, the other an inch and a quarter in diameter, the practitioner will succeed in examining the interior of almost any larynx.

In selecting the instruments, moreover, attention must be paid to the material of which they are formed. The mirrors are made of polished steel, and of glass coated with amalgam. The former material forms an excellent reflector as long as it remains bright, and is, perhaps, less obnoxious to damage by heat than the latter; but it requires great care to prevent its rusting, and it too readily parts with its heat; on the whole, therefore, a mirror made of thin glass coated with carefully prepared amalgam, and backed with German silver or some similar material, is best. Careful preparation is requisite, or the amalgam becomes cracked from the frequent exposure to heat to which the instrument is subjected. A certain amount of solidity is necessary; otherwise the mirror, cooling too rapidly when placed in the fauces, becomes dull from the deposit of moisture upon it.

This is the only instrument essential to obtaining a view of the interior of the larynx, when circumstances admit of our having the sun's rays falling direct on to the back of the fauces; it is seldom, however, that their direction is satisfactory without the aid of some simple reflector to turn them from their normal course. The most excellent illumination is obtained by placing a looking-glass about eight inches square on a table or the window-sill, about a foot or so below the level of the patient's mouth, and at a few feet distant from him, sloping at such an angle that it catches the sun's rays, and reflects them on to the back of the pharynx in a line corresponding with the axis of the buccal cavity, when the head is held erect, and the mouth opened as widely as possible. Although, for reasons which I shall give directly, the illumination of the fauces by the sun's rays is much to be preferred, it is evident that, unless we are able to apply the laryngoscope under other circumstances than those of sunshine and a convenient window facing the sun, etc., the instrument is of but little practical value. Garcia employed only the sunlight in his observations; and it was Czermak who first conceived and carried out the idea of concentrating diffused daylight and the light from a lamp, so as to make it available for illuminating the larynx. There are two distinct plans for concentrating the light: the first, when the patient is placed with his back to the source of light, the rays from which falling upon a concave mirror placed in front of him are thus concentrated and reflected into the pharynx; the second, where the lamp is placed in the front of the patient, and the light passes through a lens or other concentrating medium direct into the mouth of the patient. The concentrating apparatus of Czermak consists of a slightly concave glass mirror, about three inches in diameter, and having a small hole in the centre of it, through which the observer looks, when the mirror is held before the eye. This mirror may be supported in the hand, as is the ophthalmoscope; but it is much more conveniently attached to the head in some method. Czermak at first used it attached to a strap which he buckled round the forehead; but he now employs the mirror set on a short metallic stalk, which is fixed by a screw to a short piece of wood, the mouth-piece, held between the teeth at such a height that the hole in the centre is on a level with the pupil of the eye. None of our associates should be tempted by the circumstance that this contrivance bears Czermak's name, to choose it as the one they will employ. Even those with perfect teeth will find the fatigue of holding the jaws firmly closed, the interference with speech, and other inconveniences, sufficiently great to check them at the very outset of their laryngoscopic researches. Much more convenient than this apparatus is that of Semeleder, in which the mirror is attached to a spectacle-frame by a stiffly working ball and socket joint; in the eyes of the spectacle-frame, glasses can be inserted to suit every sight. A plan, which I suggested in 1860 to a Viennese instrument-maker, which has since been carried out, is to have the mirror attached by a ball and socket joint to a spring which fastens on to the head; one pad having the mirror attached pressing on the forehead, the other resting at the back of the head as in a fencing mask.

In all of these instruments the mirror is of glass coated with amalgam and backed with metal; it is slightly concave, so that the most brilliant illumination is obtained when the object is placed about eighteen inches in front of it. In using this mirror the patient is placed to the side and a little in front of the lamp or other source of light, the rays from which, passing by his shoulder, strike the mirror in front of the eye of the observer, and are concentrated by it in the pharynx. Much to be preferred, for reasons which I shall subsequantly give, to this mode, of illuminating the fauces by reflected light, is that in which, the light from a lamp or candle being placed in front of the patient, its rays are concentrated and fall directly on to the fauces, without the use of a reflector to alter their direction. This was the plan adopted by Dr. Stoerk of Vienna, and also by Tuerck; the concentrator they employed being a globe of glass about six inches in diameter, and filled with water.

The engraving (Fig. 3) shows the mode in which I have had this fitted into a frame of metal, which is much more convenient than the cumbersome wooden affair used by Stoerk. By means of the screw (*a*), the cross-bar (*b*, *b*), and with it the globe (*c*), which constitutes our lens, is raised or depressed. This globe must be placed close to and immediately in front of the lamp placed on a table behind the observer. A very brilliant light is thus obtained, which is most concentrated at about twenty inches from the globe, but is sufficiently bright to light up the larynx, both much

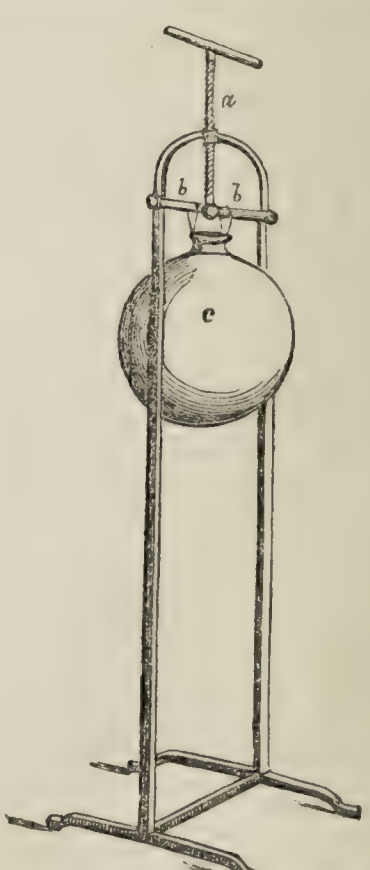


Fig. 3.—Apparatus for concentrating light.

nearer to and at a greater distance from the globe; of course, by altering the relative heights of the lamp and the concentrator, we can cause the rays of light to fall higher or lower as we please. The objection to the use of this concentrating lens in place of a reflector is simply that it is too cumbersome to carry about with us to our patients' houses; we may, however, often replace it, when the examination does not take place in our own consulting-rooms, by a plain water-bottle, which, when filled and raised to the level of the lamp and placed in front of it, on a box, or books, or something equally within reach at the majority of houses at which we visit, is an efficient substitute for the globe and frame.

The practical advantages of the direct illumination of the fauces as compared with that by means of a reflector attached to the head of the observer are very great. In the first place, the illuminating apparatus being altogether independent of the body of the operator, he can, as long as he does not bring his head immediately in front of the lamp, move his head and body as may be required, and he can bring his eye nearer to, or remove it further from, the object he is examining, as he wishes. On the other hand, with the reflector attached to the head, the observer cannot move without withdrawing the light from the fauces, and he cannot bring his eye nearer than about eighteen inches to the pharynx without diminishing the intensity of the illumination; and, since the part of the larynx which he is examining is still further from him than the laryngoscope, it must be beyond the range of ordinary accurate vision—a circumstance which interferes seriously with the observation of minute points of difference in structure, colour, etc. Secondly, even supposing that the reflector did not labour under the disadvantages just alluded to, there is the fact that the same flame will give, with the concentrating apparatus to which I give the preference, a much more brilliant light than when concentrated by the reflector.

The inconveniences attached to reflectors for illuminating the larynx, have induced Dr. Moura-Bourouillou, the author of a work on *Laryngoscopy*, to employ a concentrating lens of glass. This is about two inches in diameter, and has its principal focus at about three inches distance. It is attached to a lamp by means of a collar of copper, on which it is supported by an arm having two joints. The lamp, of course, in employing this instrument, is placed in front of the patient as with the globe of water above described; but the focal distance of the lens being so short, not only the concentrating lens, but the lamp itself, must intervene between the mouth of the patient and the eye of the observer; hence a screen is necessary to prevent the bright light of the lamp from interfering with the view of the larynx seen beyond it; this is attached to the collar of copper on the opposite side to that to which the arm supporting the lens is fixed. Although I have no practical experience of this instrument, it appears to me that it possesses many disadvantages as compared with the globe concentrator which I have described. A perfect apparatus would be a glass lens properly mounted, the focal distance of which should be the same as that of the globe of water, which should condense the light to an equal degree, should be as cheap, more portable, and altogether more convenient than the apparatus I have described. Although I have thought it right to mention the several modes of illumination employed by those who are devoting special attention to the laryngoscope, I recommend only certain instruments for purchase by those who wish to pursue the examination of the larynx.

As I have already said, the brightest image is obtained when the sun's rays are thrown into the larynx. For examination with such light, we require simply our laryngoscope, and a common looking-glass to change the direction of the rays. The sunlight failing us, we should employ the glass globe of water, supported in a convenient frame. And, lastly, in cases where we can neither employ our own globe of glass, nor extemporise a similar condenser from a water-carafe, we must avail ourselves of a concave reflector, which should be either that attached to the spectacle-frame of Semeleder, improved as it has been by our own and the Parisian instrument-makers, or that attached to the spring crossing the head, as suggested by myself.

[*To be continued.*]

Reviews and Notices.

STATISTICS OF INSANITY; EMBRACING A REPORT OF BETHLEM HOSPITAL FROM 1846 TO 1860 INCLUSIVE. By W. CHARLES HOOD, M.D., Resident Physician of Bethlem Hospital, etc. Pp. 122. London: 1862.

THIS work is an amplification of a decennial report presented to the Governors of Bethlem Hospital in 1855. The statistics of the subsequent five years have been added; and those already given for the preceding ten years have been carefully revised.

The tabular statements and commentaries given in this volume refer to the following subjects: Patients admitted as Curable; Age; Sex; Domestic Condition; Social Condition; Education; Religion; Residence; Apparent and Assigned Causes; Duration of Disease before Admission; Number of previous Attacks; Influence of the Seasons; State of the General Health of the Insane; Form of Insanity; Causes of Death and *Post-mortem* Appearances of the Insane; and the Treatment of Insanity.

During the fifteen years embraced in these statistics, we find that 3668 patients were admitted as curable, of whom 2018, or 55.01 per cent., were cured; while 222, or 6.05 per cent., died. In the last five years—1856 to 1860—the admissions were 939; the cures 539, or 57.40 per cent.; and the deaths 48, or 5.11 per cent. These results show a favourable contrast with the aggregate of the hundred years ending December 31st, 1860, in which the recoveries were 43.45 per cent., and the deaths 7.53 per cent. of the total number of admissions—19,649.

Dr. HOOD has given, as the most correct, although only approximative, standard of comparison at his disposal, a table drawn up in 1854 by Dr. D. H. Tuke, exhibiting the comparative statistics of various asylums in Great Britain and several continental countries. From it we gather the following data as to recoveries.

Eleven Dutch Asylums for pauper and private patients, gave 1000 recoveries in 3087 cases, or 32.40 per cent.

Nine English County Asylums receiving paupers only, 5746 recoveries in 15,548, or 36.95 per cent.

Six English County Asylums receiving private and pauper patients, 3627 recoveries in 7738, or 46.87 per cent.

Metropolitan Licensed Houses, 1839-43 (more than half paupers), 1501 recoveries in 5850, or 25.65 per cent.

The York Asylum (one-third paupers), 1814-44, 475 recoveries in 1375, or 34.54 per cent.

The York Retreat, 1796-1847, 292 recoveries in 593, or 49.24 per cent.

Seven Scotch Chartered Asylums (more than half

pauper), 3021 recoveries in 7130, or 42.37 per cent.

Ten Irish Asylums (pauper), 4957 recoveries in 10,255, or 48.33 per cent.

Five American Asylums (private and pauper), 4062 recoveries in 8675, or 46.82 per cent.

Charenton (private patients), 1826-33, 518 recoveries in 1557, or 33.26 per cent.

Siegburg, 1825-40 (only curable patients), 347 recoveries in 1129, or 30.73 per cent.

It must be remembered, that the results would be probably more favourable if the statistics of these institutions were brought down to the present day. Still the proportion of recoveries at Bethlem Hospital is great; and this result is in part accounted for by the rules of the institution, which

"Render ineligible all applicants who have been insane for more than twelve months; all who are afflicted with paralysis, epilepsy, or any other form of convulsive disease; all who have been discharged uncured from other hospitals; and all aged and weak persons, and pregnant women."

Another regulation provides for the discharge of the patients, if uncured a year after their admission. Dr. Hood informs us, however, that practically this rule is often set aside on the recommendation of the resident physician, so as to allow those whose cases allow a hope of recovery to remain in the hospital fifteen or eighteen months. He believes that many patients discharged uncured would recover if allowed to stay in the hospital above twelve months; and gives in support of this view a table from Esquirol, who has shown that, of 2005 patients, presumed to be curable, admitted into the Salpêtrière during a period of ten years, 604 recovered during the first year, 497 in the second year, 71 in the third, and 46 during the succeeding seven years. Sometimes even more patients were cured in the second year than in the first. After some further observations on the svbject, Dr. Hood expresses his opinion that

"There is no doubt that the rule which limits the time of recovery must operate unfavourably with regard to the interests of some of the patients now discharged uncured, a considerable number of whom might possibly have recovered, if an *indefinite* time of residence in the hospital had been allowed them."

The book contains much more valuable statistical matter, which, however, we must be content with commending to the study of those who are interested in psychological medicine.

A Systematic Handbook of Volumetric Analysis; or the Quantitative Estimation of Chemical Substances by Measure. By Francis Sutton, F.C.S., Professor of Practical Chemistry, Norwich. Pp. 282. London: 1863.

The volumetric analysis of substances is a process which, from its simplicity, promises to find universal favour among chemists in general, and especially to those interested in the determination of the composition and value of the agents and products used or met with in manufacturing processes, certain of the fine arts, medicine, pharmacy, agriculture, and general commerce. The author of the work before us, impressed with this idea, endeavours to describe the general application of a mode of quantitative analysis which has hitherto been in partial use among us. Volumetric analysis is indeed not altogether unknown to the English chemist; for, as Mr. Sutton observes, it appears to have been first suggested by Mr. J. J. Griffin and the late Dr. Andrew Ure; and our chemical treatises have for years past described partial applications of this kind of analysis, under the titles of acidimetry, alkalimetry, and chlorimetry. It has also been successfully applied to the determination of the quantities of various ingredients of the urine.

Volumetric analysis is then, according to Mr. Sutton, of English origin; but the working out of the system is due to continental chemists, especially Mohr of Coblentz.

"Mohr has worked out a most elaborate and extensive system of analysis, which must be an inestimable boon to all who concern themselves with scientific and especially technical chemistry. Not only has Mohr done this, but, in addition to it, has enriched his processes with so many original observations, and improved the necessary apparatus to such an extent, that he may with justice be called the father of the volumetric system. His *Lehrbuch der Chemisch Analytischen Titrirmethode* is the most complete treatise on the subject, and well deserving the thanks of all students of the science." (P. 17.)

The process of volumetric analysis, as described by Mr. Sutton, consists in the determination of quantities by means of standard or titrated solutions. The word *titrated*, which seems likely to come into common use in chemistry, is applied to solutions whose strength or chemical power has been accurately found by quantitatively testing it by means of other solutions of known strength. In the processes of analysis by measure which we have hitherto employed—such as alkalimetry, acidimetry, etc.—a great variety of standard solutions have been used; but, in the present system, the titrated solutions are prepared on an uniform plan, so as to contain a chemical equivalent of the required test in a thousand parts of solution.

"For instance, suppose it is desired to prepare a normal alkaline solution for acidimetry; the atomic weight of carbonate of soda is 53, therefore 53 *grammes* of pure and dry carbonate of soda are weighed, introduced into a *litre* flask and dissolved, so as to make exactly the measure of one *litre*. It is manifest that every 100 cubic *centimètres*" (1000 c. c. being = 1 litre) "of this solution will contain 5.3 *grammes* of carbonate of soda, and every 10 cubic *centimètres*, 0.53 *gramme*. Therefore 100 cubic *centimètres* will exactly neutralise 4 *grammes* of anhydrous sulphuric acid; etc."

The standard solution may also be prepared on the ordinary English or grain system; the proportion in the case of the soda solution, for instance, being 53 grains in 1000, so that the solution would be chemically of the same strength as that prepared on the decimal system.

The solution, whether prepared on the grain or on the *gramme* system, should be of such strength that a thousand grains or a *litre* is exactly capable of neutralising or saturating an atomic equivalent of the substance to which it is applied as a test. Solutions of the strength described above are called *normal;* but, to obtain greater delicacy in certain cases, it is sometimes necessary to reduce the strength of the solution to one-tenth; and the solution thus reduced is termed *decinormal*.

The process of volumetrical analysis is sometimes direct, sometimes indirect.

"The direct method includes all those analyses where

the substance under examination is decomposed by simple contact with a known quantity or equivalent proportion of some other body capable of combining with it, and where the end of the decomposition is manifested in the solution itself.

"It also properly includes those analyses in which the substance reacts upon another body to the expulsion of a representative equivalent of the latter, which is then estimated as a substitute for the thing required.

"Examples of the first kind are readily found in the process for the determination of iron by permanganate of potash, where the beautiful rose colour of the permanganate asserts itself as the end of the reaction.

"The testing of acids and alkalies comes, also, under this class, the great sensitiveness of litmus allowing the most trifling excess of acid or alkali to alter its colour. The second is exemplified in the analysis of binoxide of manganese, and also other peroxides and oxygen acids, by boiling with hydrochloric acid. The chlorine evolved is estimated as the equivalent of the quantity of oxygen which has displaced it. We are indebted to Bunsen for a most accurate and valuable series of processes based on this principle.

"The indirect or residual method is such that the substance to be analysed is not estimated itself, but the excess of some other body added for the purpose of combining with it or of decomposing it, and the quantity or strength of the body added being known, and the conditions under which it enters into combination being also known, by deducting the remainder or excess (which exists free) from the original quantity, it gives at once the proportional quantity of the substance sought.

"An example will make the principle obvious:—Suppose that a sample of either native carbonate of lime, baryta, or strontian is to be tested. It is not possible to estimate them with standard nitric acid in the exact quantity they require for decomposition. There must be an excess of acid and heat applied also to get them into solution, if, therefore, a known excessive quantity of standard acid be first added, and solution obtained, and the liquid then titrated backward with litmus and standard alkali, the quantity of free acid can be exactly determined, and consequently that which is combined also.

"In some analyses it is necessary to add a substance which shall be an indicator of the end of the process; such, for instance, is litmus in alkalimetry, chromate of potash in silver and chlorine, and starch in iodine, estimations.

"There are other processes, the end of which can only be determined by an indicator separate from the solution; such is the case in the estimation of iron by bichromate of potash, where a drop of the liquid is brought into contact with another drop of solution of red prussiate of potash on a white slab or plate, when a blue colour ceases to form, by contact of the two liquids the end of the process is reached.

"The latter is somewhat less reliable, in point of delicacy, than the others, but nevertheless, with care and practice, is susceptible in most cases of very tolerably accuracy." (P. 21-22.)

Having given a general outline of volumetrical analysis, Mr. Sutton proceeds to describe in detail its application to special instances, arranged under the heads of Analysis by Saturation (including acidimetry and alkalimetry); Analysis by Oxidation and Reduction—a process of very extensive application; and Analysis by Precipitation. He also describes at some length the applications of the volumetric system to the analysis of urine, soils, manures, and water.

We can recommend Mr. Sutton's book, as giving a very good explanation of a process which, if well mastered, will remove most of the difficulty which has hitherto attended attempts to make quantitative analyses. The apparatus required are neither elaborate nor expensive. Care must, of course, be taken to ensure accuracy in the graduated measures, etc., and purity in the reagents. With these precautions, and with the application of ordinary mental accuracy on the part of the operator, volumetrical analysis appears likely to become extended in application, in proportion as its simplicity and utility become more widely demonstrated.

British Medical Journal.

SATURDAY, MARCH 14TH, 1863.

DEATH OF THOMAS SIMPSON, M.D.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

We regret to learn the death, on February 28th, of Dr. Thomas Simpson of York, one of the permanent Vice-Presidents of our Association. Dr. Simpson filled the office of President during an eventful period in the history of the Association, and will be remembered by many for the ability and courtesy with which he conducted the proceedings of the meeting at York in 1855. Dr. Simpson was in his seventy-fifth year.

LEGAL ACTIONS AGAINST MEDICAL MEN.

We should have been glad to have heard that something in the shape of a protective medical association had arisen out of the late medical meeting which was held at Freemasons' Tavern. The persecution to which members of our profession have lately been subjected by actions at law most unjustly brought against them by individuals, who do or do not think themselves aggrieved in reference to medical treatment, etc., is really becoming a serious affair. Week after week, cases of this kind are brought under our notice. And who is safe from liability to such persecution?

The position of the medical man in reference to his patient, and the very nature of the services in which he is engaged with him, render the medical man most obnoxious to persecution of this kind. A patient with a broken leg rises from his bed with a leg not set to his taste, and brings an action at once against his medical man, who may be perfectly innocent of the bad cure; and yet how hard it is to persuade a jury that he is so! And still more, alas! how easy is it to bring half a dozen medical brethren into court to swear that, in their opinion, if the leg had been properly managed, it would not have been shortened, etc.!

A woman dies from apoplexy twenty days after delivery; during the delivery she suffered from severe

hæmorrhage ; but made an excellent recovery, until struck down by the apoplexy. Hereupon, medical brethren rush to the coroner's inquest, and give their opinion that the *post partum* hæmorrhage had indirectly caused the apoplexy, and that a medical man, who was accidentally called in during the confinement, was responsible for the hæmorrhage which caused the apoplexy, which killed the woman! Hereupon the husband brings an action ; the medical man, frightened at the possible results, compromises the action. Never was there more shameful persecution.

Now, again, we hear of another action to come off during this March assizes at Hereford, against Dr. Lingen. From what we can hear of the case, we believe it to be on a par with those we have already referred to—most unjust and without any kind of justification. We refer to it now, because we do earnestly hope that members of our profession will not be found to enter the witness-box and give evidence affecting the interest and character of one of their profession merely because they are summoned to do so. Heaven forbid that we should interfere with the due course of justice, when any member of our profession renders himself liable to be properly visited by the whips of the law. No ; in such case, it would be our duty to assist in bringing the offender to justice. What we enter our strongest protest against is that thoughtless and ready way in which members of our profession are so often found to come forward and assist in the prosecution of a medical brother in distress, however unjust and unwarrantable that prosecution may be. We cannot but feel convinced that it is within the profession itself that we must look for the cause of this frequency with which actions have of late been brought against medical men.

Our conviction is founded on the facts which lie before us. How many of actions of this kind which have of late been brought against members of the profession are there in which the antagonistic finger of a medical man may not be seen ? And an especial hardship to which the defendant is subjected in the case is this, that even if he wins his cause he is deeply injured in pocket ; for the prosecutor is for the most part a pauperised individual, and the action not unfrequently what is called a lawyer's action.

What is the use of our calling out for Jove to assist us—complaining of defective medical Acts of Parliament and an inefficient Medical Council—so long as this want of *esprit de corps*, or rather as long as this intra-professional spirit of persecution, exists amongst us. What Medical Council or Acts of Parliament can provide us with brotherly love and the spirit of acting with fairness towards our medical brethren ? We sincerely trust that we may not have soon again to record histories of the kind here alluded to.

MEDICAL FRIENDLY SOCIETY.

The correspondence which we receive on the subject of a Medical Friendly Society shows the interest which is felt about it in the profession. We cannot for a moment doubt that a society of this nature is one very much wanted, and to be desired by medical men. The reasons are obvious, and we have already mentioned the chief one.

The want, or rather the necessity for the thing, being granted, then comes the important question : How is it to be practically worked ? What is the kind of machinery best adapted for the carrying into action and the working of such a society ? Now it so happens that our Association is by its organisation admirably fitted for its promotion and its working. What we would therefore suggest is, that the Presidents and Secretaries of the different Branches should take the matter into consideration, ascertain the wishes and feelings of the profession in their several districts ; and then, fortified by the information thus obtained, should endeavour to establish some joint central power for the purposes of carrying out the objects desired. It is clear that, if such a society is to answer well and thoroughly, it must be wide and comprehensive, and not limited to any particular locality. We shall, therefore, be very glad to learn from the Presidents and Secretaries of Branches any suggestions which they may think well to offer on the subject.

PROFESSOR GAMGEE ON DISEASED CATTLE.

Professor Gamgee, in the last number of the *Social Science Review*, gives us some interesting details about diseased cattle in this country, which will interest our readers :—

"Before 1842, the mortality amongst farm stock in this country was slight, and did not exceed one per cent. When the importation of foreign stock was sanctioned by Parliament, cattle plagues were prevailing on the continent, and one contagious malady, the foot and mouth disease, was first introduced. It was carried to the British Isles by breeding stock as early as 1840. The lung disease reached us in 1842, and the losses led to general alarm and the institution of insurance offices. These offices have been established in large numbers as mutual and as proprietary companies ; but notwithstanding that every attention was paid in preparing proper tables of premium, in starting with a very large capital, and notwithstanding the encouragement given them, they have all failed. Insurance statistics prove that the general loss over the country amongst cattle amounts sometimes to seven per cent., and at least fifty per cent. of this loss depends on imported diseases. The money loss *per annum* in the United Kingdom varies from seven to eight millions sterling, and by pleuropneumonia alone stock to the value of between three and four millions is annually carried off.

"The dairy cows kept in all large towns in the United Kingdom die off at a rate varying from fifty to seventy-five per cent. *per annum*. In the city of Edinburgh, in one year, 1075 diseased animals were slaughtered out of

1800 head of cattle; of these, 971 were slaughtered as human food and 284 sold as pigs' meat. In London alone, the money loss by disease amongst dairy stock amounts to considerably above £80,000 *per annum*. The loss amongst eighty-eight dairymen in Edinburgh amounted to not less than £12,000 in one year. The importation of foreign stock into this country has been the sole cause of the losses by the lung plague, the foot and mouth disease, and the sheep pox; and the trade in diseased animals is disseminating these plagues and perpetuating them on British soil.

"The produce of diseased animals is sold all over the United Kingdom. It is only in exceptional instances that dying or dead cattle are buried. Good evidence* is supplied to show that this produce is inducing a large amount of disease in man; but as no one buys diseased meat or milk from choice, and is always defrauded when such material is supplied, it is evident that a check should be put on the practices of dishonest tradesmen.

"The contagious maladies might readily be prevented by stopping the admixture of diseased foreign with British stock; and by prohibiting the exposure of diseased animals in our public markets.

"Government should have a Veterinary Department in connection with the Privy Council Office, through which all information as to diseases amongst stock at home, or in the countries with which we trade, should be made available.

"All slaughter-houses should have a professional inspector to facilitate this system; no private slaughtering places should be allowed; and all town dairies should be under a rigid system of professional inspection."

THE WEEK.

The appointment of the consulting (really consulting and examining) physician and consulting surgeon to St. Bartholomew's Hospital at Rochester will take place on April 7th. Upon what grounds are such appointments to be made without salary? We would strongly recommend the members of the profession in that city to memorialise the Lord High Chancellor, asking for a revision of the scheme in such respect that the medical officers may be duly salaried. At present, the trustees purpose, as we understand, to appoint the medical officers in accordance with the scheme propounded; pretending that the Lord Chancellor will expect them to try the scheme before applying for any alteration of its details. The Metropolitan Counties Branch of the Association is at present engaged with the subject of gratuitous medical services. Why should it not also memorialise the Lord Chancellor, asking him to alter the custom. Here is a new hospital, well-endowed. Watts's charity contributes £1000 a year at present to help St. Bartholomew's Charity; but Watts's Charity could contribute more if the Lord Chancellor should think proper. The present seems an excellent opportunity for attempting, at least, to do something in the way of breaking through the "villanous" custom of gratuitous medical services.

* On this point we must beg to differ with Professor Gamgee. What he states *may* be true, but assuredly the *good evidence* of its truth has not yet been supplied. Editor.

Our readers may remember that last year a Mrs. Gillespie was destroyed by a dose of strychnia, which had been accidentally supplied to her as medicine by the assistant of Dr. Fenwick of North Shields. Dr. Fenwick wrote the prescription, which did not contain strychnia. An action was thereupon brought against Dr. Fenwick; and it would seem that he was by law undoubtedly liable in this way for the mistakes of his dispenser. To save further litigation, therefore, Dr. Fenwick thought it well to come to an amicable arrangement with the plaintiff, paying £500 and costs. It thus appears that medical men are as much liable for the acts of their assistants and dispensers as railway directors are for the acts of their servants; and we suppose that the law holds good, whether the assistant be or be not a qualified man. On the face of it, the law certainly seems (as applied in such a case) most harsh and unfair; for what more can a medical man do than provide an efficient dispenser? He cannot be ever at his elbow to see that no errors occur. We apprehend that the fair solution of the case would be this: that no medical man should be liable for the mistakes of a dispenser or an assistant who was *legally* qualified to dispense medicines. The following report of the case speaks volumes in favour of the highly honourable feeling of Dr. Fenwick and his partner, Mr. Peart.

"Mr. Manisty remarked that he had the honour to appear for Messrs. Fenwick and Peart. His learned friend, Mr. Maule, had done justice to them, and had done it in terms which entitled him to the thanks of the defendants, although he had just done what he expected of him. A more painful case than the present had probably never occurred; and it was because of its painful character, and because of the feelings entertained by both his clients, and because of the sympathy which they had for the man who had lost a wife and the children a mother, it was upon those grounds, and those alone, that they had told him to arrange the matter with no niggardly or illiberal spirit. He might have exceeded the bounds; but he thought it right to deal liberally. He had also been instructed, at the same time, to express, on the part of the defendants, their deepest sorrow at the loss which had resulted from the act of some one whom they were responsible for. His learned friend had done that which he need not do now—he had acquitted the defendants of all personal negligence in the matter. He therefore trusted that their reputation would still be upheld, for there had not been the least shadow of a shade to implicate them. The prescription was right, but the medicine made up was wrong. His clients had considered their servants competent as they had proved them to be, but still they were answerable in the eyes of the law. They had agreed to give £500 as compensation, which would be apportioned, £400 to the plaintiff, and £50 for each of the children, one of which the deceased had by a former husband. He trusted that that would would be satisfactory to all parties. The jury having given their assent to the offer, the case was concluded."

Among the candidates for the vacant Examinerships in the University of London, is our associate, Dr Birkbeck Nevins of Liverpool, who has applied for

the office of Examiner in Materia Medica. We do not know what other candidates come forward for this important post; but we may say without reserve, that we believe that no more competent man than Dr. Nevins could well be selected. Having distinguished himself as a student at the medical schools of Guy's Hospital, Leeds, and Dublin, he graduated at the University of London, taking honours in chemistry; and has subsequently been engaged in Liverpool for nineteen years as a lecturer on materia medica, chemistry, and botany. In addition, a hospital experience extending over fifteen years has afforded him ample opportunity for the practical study of therapeutics. Dr. Nevins is also the author of a translation of the *London Pharmacopœia* for 1851, and of numerous scientific and practical papers, some of which have appeared in the pages of this Journal. There is every reason to believe that the duties of Examiner at the University would be efficiently performed by him.

The *American Medical Times* tells us that when measures were lately brought before Congress to improve the defective condition of the medical department of the army, the senators, instead of fairly judging and advancing the measures,

"Played upon each other's sympathies by relating incidents of the cruelty of medical men to sick soldiers, of their incompetency, and even of their knavery. Not a surgeon was spoken of in a complimentary manner. Of the large number who have been killed while caring for the wounded on the field of battle, there was not a breath of praise. The narration of cases of amputation against the wish and judgment of the parties afforded more congenial topics for senatorial declamation."

The treatment of the Indian medical officers has excited a feeling of universal disgust in the service. One gentleman, who has been about twenty years in the Medical Department of the Army, and has seen much service, writes:

"I can scarcely find words to express my feelings on the subject. I bitterly regret having ever entered a service in which one is subjected to such uniform want of consideration. It is useless to trouble you with a long string of complaints and grievances; all I ask for now, above everything else, is to be relieved from this state of uncertainty, that we should at once know what our fate is to be in the so-called amalgamation. One can then make up one's mind as to whether or not it is worth while to remain longer in India."

In his address, just delivered at the fifty-sixth annual meeting of the United States Medical Society, the President said:—

"Our profession is now, I believe, in a more sound condition than at any previous time. The standard of education in our principal medical schools is higher, and pupils go forth much more thoroughly educated than a few years ago. The war, with all its evils, is exercising a salutary influence in the medical profession. The examinations for admission to the medical service of the army and navy set up a high standard of excellence, and as this service presents a most desirable career for young men, a strong inducement is held out to students to strive to come up to it. The benefit of these examinations is thus made to reach not only those who are successful in their application, but also all those who, though they fail, yet have tried to prepare for them. Their influence on the medical colleges is also most excellent, for students wishing to prepare for difficult examinations, will go to those colleges which afford the most instruction and not to those in which degrees are most easily obtained. They have already led to the establishment of a chair of hygienic and military surgery in some of our colleges."

The mania for new medicines at the present day is surprising, especially when we consider how little we know of the actions of the hundreds we already possess. Here is another—*elatine*—an aqueous solution of tar. "It has a fine topaz-colour, a pleasant taste and smell, and is an energetic remedy."

Dr. Pauli of Landau, while engaged in an operation of strangulated hernia, in a case where the intestine was gangrenous, pricked his finger with a needle. The medius of his left hand began to inflame in the course of a few hours, and so also the lymphatics of the arm. On the following day his finger was amputated. Happily, he afterwards recovered from the unusual accident.

M. Boudin confirms the statement made by many observers before him respecting the influence of the relative age of the parents over the sex of the children. He finds that the male sex predominates when the father is older than the mother; and that the female sex predominates when the mother is older than the father; and that the sexes are about equal—that of the female, however, slightly predominating—when the father and the mother are of the same age.

M. Diday of Lyons has announced the delivery, in Paris, of three lectures on the Natural History of Syphilis.

Dr. Joret recommends the following way of administering croton oil internally. A drop of the oil is dropped upon a piece of sugar, which is then pulverised and mixed with a certain quantity of starch. The mixture is then divided into six or eight powders.

Professor Zippe, the veteran of Austrian mineralogy, died a few days ago at Vienna. The small band of mineralogists which Austria possesses is made still smaller by his loss.

A new journal has been started in Angoulême, entitled *Le Journal du Médecin de Campagne*—the Journal of the Country Doctor.

Dr. Guggenbühl, who lately died at Basle, has left a sum of 600,000 *francs* to the Moravian Brothers (Frères Moraves), on condition that they keep up the establishment founded by him for cretins, under the name of "L'Hospice Guggenbühl".

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, FEB. 2ND, 1863.

B. G. BABINGTON, M.D., F.R.S., in the Chair.

ON DISEASES OF THE SKIN DEVELOPED IN SCHOOLS, WORKHOUSES, AND FACTORIES, FROM DEFECTIVE HYGIENE. BY THOMAS HUNT, ESQ.

THE author wished prominently to bring forward the effects of congregating and incarcerating many children or young persons under one roof, of feeding them on one and the same diet, and thus promoting locally the more or less permanent inroads of certain cutaneous diseases; which diseases often subside spontaneously upon the removal of the sufferer from the locality.

These diseases are chiefly the common ringworm (*porrigo scutulata*) and scabies; the former being usually aggravated by the presence of a vegetable, the latter by an animal parasite. He had never visited a workhouse, or a detachment of pauper children, or a large boarding-school occupied by the poor, without observing many cases of ringworm and scabies; one of these two diseases prevailing at one time, the other at another period, and both showing a tendency to pustulation.

These cutaneous plagues will often persist month after month, in spite of the most careful treatment and the most scrupulous attention to cleanliness and ventilation. He had already published an account of an endemic scabies, which infected, for many months together, a large girls' school in the neighbourhood of London, where cleanliness, ventilation, good drainage, good nursing, and good medical care, were conspicuously apparent; but nothing was of any permanent service until an entire change of diet was introduced, together with the daily exercise of the inmates away from the premises.

Accounts of similar endemic difficulties reached the author from medical practitioners who had the charge of institutions of the same character in different parts of the country, and the same kind of treatment proved equally effectual in all of them. In those factories where children are employed, and boarded and lodged on the premises, like occurrences are observed, involving the clean and the dirty, the well-fed and the ill-fed. The doctrine of contagion fails to explain the cause; nor, indeed, is any one imaginable cause to be named that is capable, *per se*, of accounting for all the peculiarities of the case. But it appeared to him that, by duly reflecting upon all the sanitary circumstances in which these children are placed, we may be able to discover an aggregate of influences, so to speak, which not separately, but concurrently, may combine to produce these morbid conditions.

Atmospheric impurity, unnatural diet, deficient exercise, and contagion, are the four conditions which appear to unite their several forces to perpetuate these loathsome affections of the skin. And yet not one of these causes alone ever presents a formidable difficulty in the treatment; neither does either of them exist in any prominent degree in these establishments. There is no sensible vitiation of the atmosphere, no bad smell, no defective drainage, no neglect of ventilation. The diet is excellent in quality, plentiful in quantity, wholesome in character, and correct in its chemical elements. Exercise is allowed and encouraged within the walls of of the institution, and contagion is, for the most part, antagonised by care and cleanliness, and very often by individual segregation. So that, considered apart, these causes of disease exist, if at all, in scarcely an appreciable degree. And yet, together, they are capable of establishing a most formidable cachexia. They poison the blood, producing not only their immediate effects in the form of parasitic skin-disease, but laying the foundation probably of more serious disorders, manifested in after life by the presence of lumbrici, ascarides, tape-worms, pediculi, fungi, hydatids, tubercles, and perhaps cancerous germs, in the various organisms which, under morbid changes, become capable respectively of nourishing these distinctive parasites.

The author then considered the causes referred to singly, and of sameness of diet he said: There is a daily dole of potatoes with boiled mutton, or potatoes without boiled mutton; there is the eternal pea-soup or oatmeal gruel, with so many ounces of bread and so many grains of salt. Oh, what a luxury would a red herring be to those poor creatures, or a lettuce, or an apple, or dish of greens, or carrots, or turnips. Man was made capable of living upon a variety of food, animal and vegetable, fish, flesh, fowl, root, leaf, stem, fruit, and seed. But no man can live on bread alone; nor on mutton chops alone; nor on any two or three articles alone. The life supported by half a dozen changes only, is in a feeble, imperfect, half-poisoned condition.

It appeared to the author, then, that these four causes, atmospheric impurity, sameness of diet, insufficient exercise, and contagion, all of them trifling in degree, are yet capable of working together for evil, and may thus become powerful agents in the promotion and perpetuation of disease. The blood becomes vitiated from the unvarying character of the diet, from impure and stagnant air, from deficient perspiration, and restricted activity of limb, and the agents of contagion triumph over the low degree of vitality which results.

If this be sound pathology, these combined evils will probably be found to play a busy part in the production or aggravation of other diseases, endemic or epidemic in their character. Fortified by an ample, generous, and varied diet, free ventilation, active exercise, and cleanly habits, our junior population might set at defiance cholera, diphtheria, dysentery, and typhus, and probably half the physical "ills which flesh is heir to."

Mr. FRENCH said that his experience of the itch in a London workhouse; viz., that of St. James, Westminster, did not accord with that of the author of the paper that the disease was produced by an uniform diet, or the other circumstances to which he alluded. In that establishment there were about 200, who were fed unvaryingly upon boiled mutton every day, and had been so dieted for many years, who took little or no exercise, and were, in every respect, so circumstanced as to favour the occurrence and maintenance of the disease according to the view expressed by the author; yet these were the very people among whom the disease did not occur. It was a disease frequently admitted into the workhouse for the purpose of being cured, and only spread when sufficient care was not bestowed on the separation of the infected, and this very rarely happened. On the other hand, at the Parochial School at Wandsworth Common, where the diet was varied, where fresh vegetables of every description were freely used, and exercise in the open air was abundantly taken, where no fresh comers were admitted with the slightest papulæ upon them, here the disease would continually break forth, unless the most rigid inspection were constantly observed, the patients with papulæ immediately separated, and active treatment adopted. It is true that neither vesicles nor pustules ever appeared, except in cases where the treatment was purposely deferred in order to afford conviction of its necessity; indeed, nothing but ample experience can convince the mind of a medical observer of the necessity of dealing peremptorily with symptoms of so slight a character as those which furnish the first evidence of itch. He thought that the author attached too much importance to some of the circumstances

which accidentally surrounded the patients as the cause of the disease; and the same remark applied to the conjectures which he hazarded as to cholera being influenced by the same causes.

Mr. HARRIS agreed fully with the author of the paper as to the primary importance of improved diet in all cases of scabies, when occurring in a large number of children, wherever collected. He also cordially subscribed to the opinion that next to an improved diet (especially avoiding all boiled meats), fresh air, and exercise in it, were of primary importance. Cleanliness was essential; but to prevent overcrowding was not less so. Mr. Harris resorted, as the correct treatment of what he believed to be true scabies (but only acknowledging a vesicular or pustular form), to the wash recommended by the Poor-law Board to their medical officers; but which he had used long prior to his reception of their printed formula, in preference to sulphur ointment either simple or compound. The form of wash was thus: "Two pounds of sublimed sulphur, one pound of quick-lime recently burned, and three pounds of water" (to which Mr. Harris added a small quantity of sulphuric acid and common salt when boiled); but the above three ingredients, in these specified proportions, were boiled together for one hour, or until a green colour was produced; then pour off without straining, and keep in stone jars well-stoppered; and this wash applied after a warm bath in which soap had been used would cure scabies in the vesicular form in two days, with only one dressing *per diem*, and the pustular form in four days; and no sheets, blankets, or clothes, would be messed or spoiled; for if rubbed in with a bit of sponge or tow before the fire, it would dry in ten minutes, causing some shrinking of the skin and a smarting warmth; but the cure was most satisfactory. Yet scabies becoming endemic in wards and schools compelled the non-return of the cured patients to their old ground or it would quickly recur. Mr. Harris alleged that numbers alone would not render scabies endemic; but the persistence of a succession of cases in the same ward; and he instanced the workhouse of St. Luke, to which he was medical officer. He was also medical officer to the Orphan School, Haverstock Hill, wherein, with nearly always 400 children, he had never seen a case of scabies, and very little ringworm, the other disease specially mentioned by the author of the paper. Ringworm, like itch, was another term so loosely applied that to Mr. Harris it appeared all children's eruptions were called either ringworm or itch; fifty per cent. of ringworm (so-called) was eczema of the scalp; thirty per cent. was impetigo; and twenty per cent. only was tubercular, strumous, or true favus; frequently commencing as the disease called porrigo decalvans, and passing on into true tubercular ulcers, minute, clustering, confluent. Of the treatment here, he would not speak under such uncertainty that each meant the same thing; but to corroborate Mr. Hunt's views, he would say that an improved diet of roasted and broiled meats was imperative; much exercise out of doors; and but few children in any one apartment, however large. These, conjoined with free ablutions with hot water and soap, would go a long way to effect cures; and the specific treatment might be safely left to each individual medical attendant; never forgetting that in strong solutions of nitrate of silver and iodine we possessed the main elements of local success, and that in steel we had a most energetic and valuable constitutional auxiliary.

Dr. Murchison, Dr. Buchanan, Dr. Hillier, Dr. Seaton, also took part in the discussion.

ON RECENT TYPHUS IN LANCASHIRE.

BY G. BUCHANAN, M.D.

Since the great typhus-epidemic in Lancashire at the time of the Irish famine in 1847-48, there has been scarcely any of this disease in the cotton towns. In 1862, however, positive maculated typhus has made its appearance. The disease has been most prevalent at Preston, and next at Manchester. Several cases have been met with in Chorley, a town not far from Preston, and more recently at Accrington, and scattered attacks, still of true typhus, appear to have been observed at Salford and Blackburn.

As the chief interest centres in Manchester and Preston, Dr. BUCHANAN confined his remarks to the outbreaks in these towns. He had visited Preston late in October, under the directions of the Privy Council. The earliest case of distinct typhus he could trace had occurred on July 7th, in a four-roomed cottage, 17, Castle Street, at some distance from the centre of the town. It was not known that the first patient had been exposed to contagion. In this cottage, eight persons had crowded by night into a room whose utmost cubic capacity was 800 feet. They were dirty, underfed, and the boy who first felt ill had also been much exposed to the weather. The boy was removed to the hospital, and returned home on his convalescence. In the last week of August, six other persons were attacked in this house. They were removed and the house closed. Meanwhile, new cases of typhus had occurred in another part of the town, apparently without communication with the former. These were in a district that was afterwards subjected to the chief violence of the epidemic. The locality consisted of very confined and dirty courts, lying low, near the canal, and densely inhabited.

At the end of August, a third neighbourhood, distant from either of the other two, became affected with typhus. A fourth outbreak, apparently unconnected with the rest, was seen in another central part of the town in the middle of September. By the end of this month, cases had occurred in five out of six wards into which the town is divided.

The general progress of the outbreak in the town may be estimated from the following return of reported cases of typhus:—Cases occurring in July, 2; August, 8; September, 23; October (five weeks), 109; November, 89; December, 38; week ending January 3rd, 13—a third more than in the previous week, and double the number occurring in the week ending December 20th; week ending January 10th, 15; and since then a still further increase, though not to any great extent.

At the time of Dr. Buchanan's visit, at the end of October, the House of Recovery (fever hospital), which was constructed for forty patients, contained fifty-two cases of typhus. Afterwards, there were upwards of sixty inmates at one time. In some wards the space for each bed fell short of 600 cubic feet, and the air was here very foul.

At the beginning of November, a wooden building was erected in contiguity to the House, capable of containing sixty patients, with a space of 1500 cubic feet to each. This building was put up in ten days; but there was a lamentable delay before the patients were removed into it at the end of December. In the meanwhile, upwards of twenty persons in attendance on the sick had caught the fever, the medical officer and the master of the House of Recovery being among the number.

It deserves mention, for the sake of those who refuse to acknowledge an epidemic influence that does not show itself on the general death-rate, that in the September quarter of 1862, the mortality from all causes in Preston was very markedly below the average, 464 deaths only being registered, against 607 in the corresponding quarter of 1861. This subsidence was entirely among children under six years, and resulted, there is reason to believe, from the greater care bestowed by mothers on their infants during the time of industrial depression.

The following returns from the parish fever hospital will indicate the progress of the outbreak of typhus in Manchester. In July, 7 cases of the disease were admitted; in August, 8; September, 12; October, 20;

November, 25; December, 17. From December 29th to January 13th, not one case; but on the last-named day, two cases, and since then a few who had contracted the fever in adjoining wards of the workhouse. Scattered cases of typhus have probably occurred in Manchester from time to time, but very rarely since 1847-48. The earliest instance of true typhus in the Infirmary occurred at the end of May, and two cases were admitted in June. At present there is very little typhus in Manchester; but it would be premature to reckon on the complete subsidence of the disease.

Dr. Buchanan referred to his recent report to the Privy Council, "On the Health of the Operatives in the Cotton Towns of Lancashire affected by the Prevailing Distress," for a detailed account of the circumstances contributing to the outbreaks of typhus in Preston and Manchester and other towns. He was at a loss to explain why the typhus influence should have fallen chiefly on Preston. Manchester was exposed to the danger of imported typhus. The limitation of the fever to these towns chiefly was to be ascribed to the strict removal of cases to hospital; the maintenance of a high standard of relief, increasing almost every month; the liberal distribution of bedding and clothing as the winter has advanced; and the almost unprecedented mildness of the weather since November. November, which was the coldest month since the distress began, witnessed the maximum of typhus cases both in Preston and Manchester.

Dr. MURCHISON observed that the society was under great obligations to Dr. Buchanan for the important facts which he had brought before it. The points of especial interest in the communication were two; viz., 1. The circumstances under which the epidemic of typhus commenced; and 2. The circumstances under which it began to subside. As to the first, he could corroborate Dr. Buchanan's statement that true typhus had not been met with at Preston and most of the other large towns of Lancashire for many years before the autumn of 1862. The fever which had prevailed in these towns was typhoid or enteric fever, which was very frequently confounded with, and, when fatal, returned to the registrar of deaths as typhus. In proof of this, Dr. Murchison read an extract from a letter, which he had received in May 1862, from a very intelligent surgeon at Preston, who was well versed in the distinctions between typhus and enteric fever. During four years that the writer had been in extensive practice among the poor of Preston, he had only seen a single case of typhus; but though typhoid fever was far from uncommon, the deaths from typhus, as returned to the registrar, far exceeded the deaths from typhoid fever. Characteristic cases of typhoid fever, which had come under the writer's own notice, had been reported to the registrar as examples of typhus. Dr. Murchison observed that the epidemic of typhus did not commence until after the population had been for many months in a state of great destitution, and that it was unquestionably the indirect result of this destitution. He did not pretend to say that any amount of starvation would in itself produce true typhus; but destitution led to overcrowding, and it was this which generated typhus. In the *Times* of October 13th, it had been stated that numbers of cottages at Preston were untenanted, from the inability of the inhabitants to pay the rents, and that it was the practice for several families to congregate into one house. As many as six different families had been said to be collected in one house scarcely above the ordinary size; and now the society had been informed by Dr. Buchanan that the first cases of true typhus observed at Preston had been in a family of four persons, who had been living in a small room with only 600 cubic feet of space, and who were in a state of extreme want. It was important to observe that there was no evidence that any of these persons had been exposed to the poison of typhus, nor that typhus had been imported into Preston. In the next place, Dr. Murchison observed that the epidemic at Preston began to subside at the beginning of December, at the very time that the condition of the people began to improve, as shown by the diminished numbers in receipt of relief. Whether the disease, once generated, might not spread by contagion, remained to be seen; but every effort had been taken, on the part of government and of the local authorities, to prevent it spreading. The immense amount of pecuniary relief which had been sent to the distressed operatives in Lancashire, the ability with which this relief had been distributed, and the energetic measures adopted by Dr. Buchanan and others for arresting the spread of the fever after it had commenced, had alone prevented an epidemic of typhus like that which resulted from the Irish famine in 1847. The epidemic of typhus which had been raging for the last fourteen months in London would no doubt also have been prevented, if the condition of the poor in the metropolis had attracted the same amount of public attention as that of the suffering operatives in Lancashire.

Mr. Harris also took part in the discussion.

LIVERPOOL MEDICAL INSTITUTION.

FEBRUARY 19, 1863.

JAMES HAKES, ESQ., Vice-President, in the Chair.

Disease of the Tibia. Mr. HIGGINSON shewed a specimen, for which amputation was performed. The whole shaft of the bone was very much thickened and the structure condensed; there was a history of syphilis many years ago, and mercury and iodide of potassium had both been given largely without success.

Uterine Hydatids. Dr. HANNAH shewed a specimen.

The Stimulant Treatment in Inflammation. Dr. VOSE related two cases that had been recently under his care at the Royal Infirmary, as favourable examples of the treatment of inflammation by stimulants. The first case was that of a man, aged about 20, attacked with pneumonia involving the whole left lung. When brought to the Infirmary, he had been under no treatment, and the disease was in its first stage. The treatment adopted consisted of perfect rest in bed, wine, and carbonate of ammonium. Rapid recovery took place and the crepitating râles disappeared. The patient was here then a young man, in the prime of life, the subject of no exhaustion before, and he was treated with stimulants from the very first.

In the second case the patient was a female, aged 21, and was suffering from acute articular rheumatism. She had been under no treatment before admission to the Infirmary. Dover's powder at night, a mixture containing nitrate and bicarbonate of potash, and a little brandy were given. She did not improve, and in a few days a very strong and distinct friction-sound was heard in the cardiac region. The mixture was continued, and half-a-grain of opium every six hours, and a tablespoonful of Hollands gin every hour were also ordered.

After some days the friction-sound became fainter and less diffused, and has now disappeared, as have also all her other distressing symptoms. The case had not been meddled with before admission, and the patient had recovered under the use of stimulants.

Mr. STEELE said that from these cases we might infer that inflammatory disease may disappear under the use of stimulants: but may it not also disappear without their use? He thought we might come to treat cases with less stimulation.

Fatal Cases of Jaundice in Early Infancy. Mr. DENTON read a paper on this subject, and recorded several cases that had come under his care. In the first four cases the subjects of the disease were all children of the same parents. In each case jaundice appeared within two

days after birth, but there was no absence of bile in the stools. The fifth and sixth cases occurred in another family. In the sixth case an abscess formed in the arm, the bursting of which was followed by hæmorrhage, that was controlled at length by laying open the cavity, and applying the pernitrate of iron, but the child did not long survive. The remarkable features in all these cases were the presence of bile in the stools, and the number that occurred in the same family. The symptoms that manifested themselves in some or all of these cases were, jaundiced appearance, in a greater or less degree, drowsiness, languor, fainting, inability to suck, paralysis, twitching, convulsions, hæmorrhage, abscess and fatal exhaustion.

Jaundice in an Infant. Mr. HODGSON read a case. A lady, who had previously lost a child from jaundice and convulsions soon after its birth, was confined on November 22nd, 1862, of a fine healthy son, at 4 A.M., after an easy labour. At noon of the same day, the child presented a jaundiced appearance. His bowels had acted; a grain and a half of calomel was administered, and Dr. Grimsdale was called in consultation. No further medicine was given, but cold water was given occasionally for a drink, and the feet were placed in mustard and water, and afterwards wrapped in cotton-wool. He improved; but a month after birth an abscess of unhealthy aspect appeared on the right margin of the anus; at the same time a spot of blood exuded from the navel, to which the cord was still attached. The abscess was opened, and a dark bloody fluid constantly exuded from it; during the night the navel began to bleed freely, and caustic and compresses were applied in vain. Next day the navel, from which the cord had now separated, was transfixed with a needle, and secured with a worsted thread. The bleeding ceased; an ointment containing bismuth, and having powdered tannin sprinkled freely on its surface, was applied to the abscess. Chlorate of potash and a little tincture of muriate of iron were administered, and a few drops of brandy in the intervals of nursing.

In a week the needle came away, and left a healthy surface. The abscess gradually healed. A sudden effusion of blood took place into the left tunica vaginalis, and was slowly absorbed. The jaundice by degrees disappeared, and the child got well.

Dr. GRIMSDALE mentioned similar cases which he had seen, in two of which death took place from hæmorrhage. The cases in which there is a complication of jaundice with hæmorrhage are very fatal. In Mr. Denton's cases there seemed very little tendency to bleed, and in the one case where this feature was seen the bleeding was from an abscess, not from the umbilicus. These cases seem also distinct from the milder form we frequently see, where there is absence of bile in the stools, and from which recovery generally takes place.

Mr. DENTON, in answer to the Chairman, said that in one of these cases the mother was a highly nervous woman, with a tendency to heart-disease; the other was a very delicate woman.

Mr. IRVING mentioned the case of three children of the same parents who all died of jaundice.

Mr. DENTON drew attention to the remarkable feature in his cases, the presence of bile in the motions.

Dr. VOSE said the want of uniformity in the alvine appearances in the cases of jaundice mentioned to-night, made any explanation of these cases almost impossible. In cases where there is any uncertainty as to the presence or otherwise of bile in the motions, it would be very well if an analysis were made.

Dr. WATERS said the pathology was very obscure. Is the bile formed in the blood or in the liver? If it is formed in the blood we may have the biliary apparatus free from obstruction, and still the system in general gorged with bile. The disease may be then in the blood itself.

Mr. SKINNER thought this a blood-disease connected with a hæmorrhagic diathesis.

Mr. HIGGINSON would suggest a remedy for some cases, viz., madder, for which we are indebted to the late Dr. Darwen. It increased the secretion of bile, and might be found useful where obstruction is caused by inspissated bile.

Mr. SWIFT spoke of the usefulness of turpentine in restraining hæmorrhage.

Correspondence.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

SIR,—I was much gratified to read in your impression of this week such an able leader on the *quæstio vexata* of the title of Dr. You have given a most clear and dispassionate *resumé* of this subject of discussion; and, as a member of the Irish College of Physicians, I have personally to thank you for having more than once in your article done justice to that time-honoured institution. You are perfectly correct in stating that the King and Queen's College of Physicians claims that its charter contains special powers, under which it is enabled to grant the title of Doctor of Medicine. You are also quite right in saying that the College has expressed its readiness, and indeed is quite prepared, to defend this privilege of its Licentiates, if any authority or individual desire to try the question legally.

The London and Edinburgh Colleges, on the contrary, have no legal right whatever to confer the title of Dr.; and still less, of course, to make use of the M.D. appendix; nor, as you justly observe, do these Colleges make any pretence to a claim of the latter kind. I believe I am correct in stating that the Licentiates of the London College have to sign a document, in which they promise not to use the title of Dr. unless they are graduates of an university. If this be true, the non-diplomatised Licentiates cannot surely grumble at their right to the title of Dr. being disputed or even denied; because they have, with their eyes open, accepted the parchment of the College with certain definite conditions that they shall not assume the title of Dr.

It is not, however, my wish to discuss the apparent inconsistency of the London and Edinburgh Colleges, who in former days allowed their Members and Licentiates quietly to assume a title to which they had no right, and now, since the year 1859, which has been aptly termed the year of (*dis*)grace, have suddenly withdrawn it. It is not my desire to comment on the way in which the herd with their £10 notes rushed into the gaping doors of those Colleges, and came out full-fledged physicians. Unquestionably, however, the older members of those Colleges (especially London), who had gained their license by a *boná fide* examination, have a just cause of complaint to feel that their names should be enrolled amongst a list of men who have gained the same honour for £10, by having it pinned on to the tail of some Scotch diploma during that famous—no, I should rather say that infamous—year 1859. But this is not my affair; the London and Edinburgh Colleges of Physicians have found themselves on the horns of a dilemma. This must be patent to the whole profession; let them get out of it as best they can.

My chief object now is to assure your readers that the Irish College has got into no such scrape; and if its charter contains privileges which the other two Colleges do not possess, it is only right that your readers should know that in many other ways it is very differently constituted. In the first place, it does not grant its diploma to Licentiates of any Apothecaries' Company. This

rule does not hold good with either of the other Colleges. Again, every Licentiate is required to promise solemnly and sincerely that he will neither "compound or dispense medicines for sale, nor engage in any trade in any part of the United Kingdom."

You know, Mr. Editor, probably as well as I do, that there are many Licentiates—at least, of the Edinburgh College—living in London, who not only dispense medicines for sale, but even trade in sponges and toothbrushes, etc.; nay, more, I have seen an advertisement in such a "physician's shop", where the letters have been composed of rotten teeth tacked on to a blue cardboard. Happily, the King and Queen's College of Physicians have kept aloof from all this; and they do not obtain practice or attract public notice by any unworthy means. They have kept themselves undefiled; and it cannot be denied that the Irish College is now the only pure College of Physicians in the kingdom.

Lastly, without wishing to make any invidious distinction as to the examinations of the respective Colleges, I may perhaps be permitted to say, and it is only just that I should do so, that the King and Queen's College has never opened its doors to Licentiates without examining them; and if any one doubts the nature of the examinations, let him go and try them. The numbers of those who have been rejected out of those who have been examined for the diploma, will contrast strongly with the "low mortality," as it has been called, of the great St. Andrew's rush, and will further show, I believe, a higher ratio than, perhaps, any examining board in this country. The total number of those examined at the King and Queen's College in 1861 was thirty-eight, out of whom seven were rejected; and out of forty-eight who were examined last year, eleven were rejected. Whenever, therefore, you meet a member of the Dublin College of Physicians, you may be sure, that he is not a tradesman, and that he has at least once visited the Irish capital; you may also be certain that he has obtained his diploma by having gone through a more searching examination (even if he were already M.D. of the London University) made by some of the most distinguished and leading members of our profession; for who would not feel proud to have such names as Corrigan, Stokes, Fleetwood Churchill, Neligan, and Hudson, on their diploma?

In conclusion, I will merely congratulate those who, like myself, possessing the diploma, must feel that they have gained one of the first, if not the first, medical qualification to be obtained in the United Kingdom.

I am, etc., EMERALD ISLE.

February 23rd, 1863.

SIR,—Permit me, through you, to thank those gentlemen who have replied to my letter, respecting the alleged powers of the King and Queen's College of Physicians, Ireland, to confer the degree of M.D. It is not my wish or intention to cast the slightest discredit upon the Licentiates of this College, who must be regarded as persons misled by representations commonly received and acted on, which they could not fairly be expected to investigate before paying their money for a supposed medical *status*. I have only one object, and that is truth. I trust, therefore, that both Dr. Foster and L.K. & Q.C. will assist me in eliciting it.

I started with the assertion, that the K. & Q.C.P.I. had assumed the power to confer the degree of M.D., which was not warranted by their charter, nor had they the right to confer such degree by any Act of Parliament. Also, that their license *per se* gives no medical status in England.

The object of the charter was to create a corporate body, which should *examine* into, regulate, and correct the practice (including that of physicians) and sale of physic in Ireland, and not elsewhere, and nothing more. I found these assertions on the following grounds.

1. That their charter contains no clause giving to this corporation the power to create a Doctor of Medicine or Physic. [An abstract of this charter will be found in a letter published in our JOURNAL of April 27th, 1861.]

2. That the medical corporations have no power to confer degrees. [*Vide* Judgment of Lord Chief Justice, in case of Mr. Barker.]

3. The form of the license of K. & Q.C.P.I. is worded: "To grant, so far as rests with them, full license to exercise the art of medical science so long as he (the Licentiate) shall well conduct himself." Not saying whether as physician or apothecary, because originally framed so as to suit both.

4. The pseudo M.D. of this College was struck out from the *Medical Register;* and K. & Q.C.P.I. failed by their mandamus to get it restored, or even to shew any right to the title, or that they had or could confer it.

5. I have seen a letter from a late Registrar of K. & Q.C.P.I., in which, in reply to an inquiry touching this question, he says that the prefix of Dr. is merely a courtesy title; but as such, it has never been refused.

6. Sir Hugh Cairns, the late English Solicitor-General, gave it as his opinion, that this College had no power to confer the degree of M.D.

7. In the judgment that was delivered in the Court of Queen's Bench, Ireland, when the K. & Q.C.P.I. tried the question (the Lord Chief Justice and Justices Hayes and Fitzgerald being on the bench), the Lord Chief Justice said: He (Mr. Barker) contended that there was a diploma which entitled him to what he sought; but suppose there was, and supposing the College of Physicians had a right to grant a degree of M.D., they had not granted it.....The applicant had failed to show primary qualification as a Doctor of Medicine by virtue of a degree, and a mere titular qualification would not do.

1. The Acts of Parliament, though they regulate the number, etc., of the Fellows and Professors and their salaries, and appoint visitors of the College, yet they give it *no power* to confer degrees; so that the result clearly deducible is, that the College was not intended to have, and have not lawfully, the power of *creating* physicians, apothecaries, or druggists, but merely of ascertaining that persons so practising were sufficiently skilled to prevent injury to the public health.

The Lord Chief Justice calls the applicant throughout *Mr.* Barker; and I feel sure that so high a legal authority would not do this offensively. Besides, he says that K. & Q.C. had not conferred a degree in this instance. Now, as this was the case, the College selected for a mandamus to compel the Registrar to restore the letters M.D., signifying Medical Doctor, it is fair to infer that all they could confer, and all that their charter empowered them to enforce, was done in this particular instance; and that if from any cause the College had failed from any technical error, they would have applied for a mandamus in the case of another Licentiate.

Let us turn for a moment to the only published authority upon which the College claims this, to a College unique power, the thought of the Attorney General for Ireland, "I think, etc." This is not sufficient to satisfy, and ought not to satisfy, the medical profession or the public; what we require, and what alone can set this question at rest, is the publication of those clauses in the charter upon which this College claims the power to confer the degree of M.D. As your correspondent L.K. & Q.C. & M.D.I. offers to afford me every facility to try this point in a court of law, I trust he will not object to meet the question fairly by the more satisfactory and far readier course; which is, to publish in your pages those clauses in the charter of K. & Q.C.P.I. upon which the expression of the Irish Attorney General is founded and alleged claim of College based.

I have honestly, and I hope fairly, given the grounds upon which I made my statement. I have no wish to detract from the merits of Fellows or Licentiates of this

College; but I believe it a duty to bring this question before the profession, and I have done so.

I am, etc., A.

March 1863.

THE TITLE OF DOCTOR.

Sir,—If the vexed question of medical titles admit of being settled on the side of the Licentiates of Royal Colleges of Physicians, your editorial remarks of last week must certainly attain that end; for truly you have not failed to make use of every possible argument which can be adduced in support of their claim. I think, however, you will find that so much remains to be said and felt on the other side, that the difficulty will still longer remain *sub judice*.

There can be but two ways by which non-graduated Licentiates of Colleges of Physicians can claim the title of Dr.; either by right or by courtesy. Dictionary meanings of words, and comparisons between the professional merits of graduates of medicine and Licentiates of Colleges of Physicians, I hold to be altogether idle and foreign to the question.

With regard to the claim by right. It is now generally admitted that no one can legally assume the title of Dr. unless he have obtained the degree of Doctor of Medicine (or of some other branch of study) from a University capable of granting such degrees. The College of Physicians, at least of London and Edinburgh, distinctly acknowledge that they possess no such power; and consequently, that their licentiates have no legal claim to the title or Dr. Hence, the idea of settling the dispute in a court of justice, as has been proposed, seems to me simply absurd. The battle would be between the Universities on the one hand, and Colleges of Physicians on the other, on the ground of a corporate right for which the latter set up no claim.

The claim by courtesy rests on the fact, that it has long been a custom with the public to designate all physicians, even if non-graduated, by the title of Dr. But really, are the circumstances which gave rise to such a custom in any way comparable with such as surround our present difficulty? The non-graduated physician, or, as they are more commonly called, Doctor of Advice, who then received our courtesy, was the exception rather than the rule; he had to undergo an examination and agree to a certain mode of practice which at once shewed him to belong to a different order of the profession from the general practitioner. He was a physician indeed, not only in name—a totally different genus from the Edinburgh Licentiate of the ever memorable year of (aptly called) *dis*grace. As matters now are, the title of Dr. in the eyes of the public gives to its holder a sort of professional superiority; and, when we reflect upon the circumstances and mode in which the Edinburgh qualification was obtained; when we know that many of those who received it were men with but one qualification, and not in any way worthy of a superior designation than their less ambitious neighbours; when we find that the qualification was sought after, not so much to enable its holder to practise as a physician, as for the title with which they believed it to be associated; and when we know that their only claim to the title rests upon our courtesy—can you wonder that we look upon such a custom as "more honoured in the breach than in the observance," and that we decline to connect a title of so much honour with a qualification of so little worth?

The case of the members of the Royal College of Physicians of London, who received their diploma before the recent changes is altogether different. They, I confess, deserve our sympathy; and, I doubt not, will continue to receive our courtesy. I am, etc., M. B.

February 22, 1863.

Sir,—Notwithstanding the emphatic denial of L.R.C.P.Ed., and F.R.C.S.E., I still believe that I was substantially correct in the statement I made that "the Manchester Medico-Ethical Association some time ago resolved that a licentiate, not having a degree, was not entitled to be called Doctor." Although no formal resolution was proposed on the occasion alluded to, when Dr. Stone the Honorary Secretary, brought the subject of the assumption of a medical title without legal claim for discussion before the society, the opinion was all but unanimous against any one without a degree assuming the title; and I appeal to the honorary secretaries to state whether they in their official capacity recognise the rights of licentiates to the title of Doctor. In reply to your editorial note appended to my former letter, I am still unable to comprehend how any honourable licentiate can assume the title of Doctor in the face of the positive statement made by his college that it "never directly or indirectly claimed the possession of any power to confer the title of Doctor; and applicants for its license have been, in every instance in which inquiries were made on the subject, informed, in the most express terms, that no such title was granted by this college" (quoted from the Annual Report for 1861, of the Manchester Medico-Ethical Association.) I cannot think that any one is endowed with much self-respect, who insists upon having what is not his of right; and to my mind there would be a littleness approaching to the ridiculous in the title of "Courtesy Doctor," were it not that I know it to be assumed, not from a little pardonable vanity but for a purpose not so innocent.

I do not see that the London and Edinburgh Colleges of Physicians are to blame in this matter; the above extract from the "Explanatory Minute of the Council of the Edinburgh College" showing distinctly that it does not sanction the use of the title of Doctor by its licentiates. And we have the Registrar of the London College stating in the Journal that "No physician as such can properly have rank or title, no claim to these being recognised by authorities treating of precedence, except as founded on the possession of an University degree," therefore, if any one unjustly uses the title of Doctor it is for the profession—as the colleges have no power to check its abuse—to act, and refuse it to those who have not a legitimate right to it.

As a contrast to your leading article of Saturday last, you will perhaps allow me to give some extracts from two of your former ones. In the Journal of March 1, 1862, you say "We cannot suppose that gentlemen who supply medicines to their patients can claim the rank conventionally ceded to what are called physicians, although they actually by having become licentiates of a college are *de facto* physicians by title." Also, in the Journal of March 22nd, 1862, you write, "For our own part, we must candidly say, arguing on the principle of a stick being a stick, that we object to give the title of Doctor to those who possess not the doctorate." Will you inform us, Mr. Editor, what has occurred since you wrote the passages quoted to account for your recent change of opinion? I am, etc., F.R.C.S.

February 23rd, 1863.

THE DELIVERY OF TWINS.

Letter from John Jones, Esq.

Sir,—I have read with much interest your observations on the late inquest at Leamington, and think with you that, although the verdict given by the coroner's jury on the case of Dr. Philbrick was not altogether unfair, yet the medical evidence was too hardly pressed and strained against the doctor, and that he is fairly entitled to the sympathy of his professional brethren.

From the evidence, it does not appear whether the placenta belonging to the first child was expelled before the birth of the second. If this were not the case, there would be great liability to hæmorrhage; and the accou-

cheur would not be justified in leaving his patient till the labour was completed by the birth of both children. But if the placenta should follow the child to which it belongs, it might become a question, how long it would be proper to wait before manual interference for hastening the delivery of the second child would be justifiable.

The following case, which came under my notice soon after I commenced practice, was published in the *London Medical and Physical Journal*. It excited much interest at the time, and is noticed in Dr. Ramsbottom's obstetrical work.

A young medical friend called to request me to accompany him to a patient whom he had delivered on the Friday preceding—it being Sunday when he called. He stated that nothing particular occurred to his patient at the time of her delivery; but, on visiting her that morning, he had discovered there was a second child. We found his patient, a strong robust woman, without any unfavourable symptom: the child was a remarkably fine boy. On examination, there was a second child *in utero*.

No doubt, if the existence of twins had been ascertained at the time of delivery, the accoucheur should have delivered before he left his patient. But what was the right practice under such anomalous circumstances? Although the best obstetrical authorities are opposed to a protracted delay in delivering the second child in cases of twins, as no untoward symptoms had occurred in this case, I thought we were not justified in interfering, and decidedly recommended that we should patiently wait and carefully watch for the further operations of nature; and unless hæmorrhage, convulsions, or other dangerous symptoms should occur, not to interfere, however long before the termination of the labour. The passive treatment was accordingly adopted. The patient continued uninterruptedly to improve without the occurrence of any unfavourable symptom. This state continued a fortnight, when labour recommenced, and was speedily followed by the birth of a second boy, healthy and vigorous, but smaller than the first, and about the size of an eight month's fœtus. The mother had a very favourable recovery; and it was remarkable that the secretion of milk did not occur till after the second birth.

I am, etc.,

JOHN JONES.

Derby, February 25th, 1863.

TREATMENT OF TWIN-CASES.

LETTER FROM J. SPROULE, ESQ.

SIR,—Having observed some remarks in your JOURNAL as to the period of time a second child should be allowed to remain after the birth of the first, I am induced, from thirty years experience and constant practice, to forward you a few remarks, which are as true as they are plain.

In the first place, when a second child is in the uterus, and no hæmorrhage occurs, there is no occasion to interfere for twenty minutes, or, if you wish, forty minutes; but at the end of that time, if the uterus did not show some symptom of tonic contraction, I would give a dose of ergot, which will almost in every case bring on a healthy action.

On the other hand, if there be hæmorrhage, sudden or continuous, I would turn, and with success both to mother and child in almost every case. At all events, there would be no danger to the woman, and less to the child, than in allowing it to remain any length of time. Moreover, the parts become more irritable, and the woman weaker and more nervous.

There is no trouble at all in turning the child at an early period; and no danger, for the parts are all in a fit state for the operation. The child is strong; and a good operator will run through with his case in less than an hour, at the outside, from the time when the first child is born.

Most decidedly, if there be no alarming symptoms, a woman may have more time; but if the symptoms were bad, and hæmorrhage continuous, delivery should be instantaneous.

I am, etc., J. SPROULE.

Arvagh, Co. Cavan, February 18th, 1863.

THE MEDICAL ACT.

LETTER FROM JAMES HEYGATE, M.D., F.R.S.

SIR,—There is so much of truth in a letter from "An Old Associate" on this Act, in last week's JOURNAL, that I crave a space to urge upon the Medical Council the absolute necessity of moving in this matter.

During the presidency of my friend Dr. Robertson (now many years ago), a special and very influential meeting of the Association was held in this central town to promote a Medical Reform Bill; and all the old members must recollect how constantly this subject was mooted at our annual meetings—none advocating it more warmly and more successfully than our excellent friend Sir Charles Hastings. No doubt we were (as an Association) mainly instrumental in securing the Act; but, alas! what a failure as a protective measure to legitimate practitioners!

It seems to me that, according to the decisions come to, any one may assume, without let or hindrance, the title of doctor or surgeon, and practise in any way he likes, provided he do not pretend or profess to be upon the registry. Even the slight barrier of the Apothecaries' Company will probably now be in abeyance.

My object, however, in writing this, is thus publicly to urge upon the Medical Council the propriety of seeking new powers to do away with this anomaly. Sir Charles Hastings is one of this body; and if he will kindly use the same eloquence and cogent arguments, in the Council, he has frequently done on former occasions, I do not despair of good coming of it.

I appeal to the Medical Council as the only body likely effectually to gain the ear of Parliament; and my firm conviction is that, if they will move in full conclave, they will not find much difficulty in securing an amendment of the Act.

I think petitions to Parliament from the Branches of the Association, or from the profession generally, would now have no effect. The Government would naturally say, "There is a governing body appointed by the Medical Act, what do they say?"

Let the public avail themselves of empiricism as much as they like; but surely the line of demarcation should be so clear that people may know whether they are employing legitimate practitioners or not. All I ask is, that a man should not be allowed to assume a title he does not legally possess.

I am, etc., JAMES HEYGATE, M.D.,
Vice-President of the British Medical Association.

Derby, March 2nd, 1863.

MEDICAL HEALTH ASSURANCE OFFICES.

LETTER FROM JOHN M. BRYAN, M.D.

SIR,—Since my recent communication (with the insertion of which you favoured me in our JOURNAL), I have received letters from several gentlemen in different parts of the kingdom; showing that there is a widely spread interest in the subject of a Health Assurance Society. I have also received a pamphlet from an assurance company established in 1855, containing a sick benefit table, with scale of ages and payments, allowing £1 weekly, in case of sickness or incapacity, for the first six months; half benefit to 60 years of age; and one quarter after that time. For example: "For a person of 50 years of age, the annual premium would be £4: 2"; so that I am disposed to think that with an

nual premium of £5, or rather more, a society might safely be established.

To this end, I should be happy to act *pro tempore*, and to receive the names of those gentlemen who might feel disposed to join, with the understanding that rules should be formed and satisfactory treasurer or treasurers and secretaries appointed; and it might then be seen how far it would be supported. I still think that it might be commenced and worked through the medium of the honorary secretaries of the British Medical Association, if those gentlemen would feel disposed so to act; and if you would kindly cooperate, and allow the names of correspondents to be inserted in the JOURNAL (and the valuable leading article you gave in last week's leads me to suppose you would do so) you would thereby be conferring a great benefit on those of the medical profession who are desirous at once to have an association formed.

I am, etc.,

JOHN M. BRYAN.

Northampton, March 2nd, 1863.

P.S. Perhaps those gentlemen who write to me personally, and desire an answer, will favour me with a stamped envelope addressed.

MEDICAL HEALTH ASSURANCE.

LETTER FROM H. GRAMSHAW, ESQ.

SIR,—As a member of the British Medical Association, I feel indebted to you for calling attention to the question of medical health assurance in your leading article of the 28th ultimo. I do not wish to monopolise your space on the subject; and you have placed it so forcibly before a portion of the profession that surely it will come home to them; for to me it appears the want of the present day. Instead of being mulcted £2 each for a very doubtful advantage—to wit, registration—what a splendid investment that would have been towards a mutual medical health assurance society. The various professions have their various clubs; but the poor hard-worked doctor, spending much of his time in the pestiferous atmosphere of dirty courts and fever-stricken alleys, can boast of no friendly society of which he is a member. We form a great company of Poor-law medical officers; but we do not strike hand in hand for mutual aid and support; though of a surety there is no superfluity of salary that we can carry to the bank. And though I have seen a surgeon's children in the workhouse, I cannot say I should like my own to be similarly provided for.

In my last note I mentioned Mr. Cubitt of Norwich. That gentleman was to have been the manager of a company called the East-Anglian Equitable Provident Insurance Society. The company was formed; the rules of the society and the tables of rates printed; but the scheme was not carried out because, owing to our legal code, any society of the sort must be a mutual one, or incur personal liabilities, to which no directors would consent. I now forward for your inspection the rules and tables to which I allude; also three letters from Mr. Cubitt to me on the subject; and I hope you will allow him to speak for himself as far as space will permit. He is thoroughly conversant with the subject, and it touches him personally, as he has a son who is not only in the profession, but an ornament to it.

In a scheme of health assurance, it becomes a question, are we to make it one that will provide against: 1. Sickness only? or 2. Sickness with a deferred annuity, commencing say at 60 or 65? or 3. Sickness with deferred annuity and life assurance also? The second scheme appears to me the best.

Any one interested in the matter will find much valuable information in Mr. Alexander Glen Finlaison's report, entitled *Friendly Societies Sickness and Mortality* (printed by House of Commons, Aug. 16th, 1853, price 1s.); also in a *Treatise on Life Assurance Societies and Friendly Societies*, by Arthur Scratchly, M.A., F.R.A.S. (Shaw and Sons, Fetter Lane); and *Observations on the Rate of Mortality and Sickness among Friendly Societies*, by Henry Ratcliffe (printed by George Falkner, King Street, Manchester).

I have only to remark, in conclusion, that the tables on which the East-Anglian Equitable Provident Insurance Society would have acted were approved by an eminent actuary; viz., Robert Tucker, Esq., London.

I am, etc.,

HENRY GRAMSHAW.

Laxfield Villa, near Framlingham, March 2nd, 1863.

To H. Gramshaw, Esq.

SIR,—My attention has been directed to your letter in the BRITISH MEDICAL JOURNAL of February 28th, on the subject of health insurance. I think it one of vital importance to nearly every class of the community; but to none so much as those whose incomes depend upon the power of healthy exertion. If I should be asked to select that profession which stands most in need of protection, or rather, whose moral duty it is to make provision against the hour of sickness, I should point to that of the medical world generally; but, in addition to this portion of the community, there is much fallow ground that requires to be worked. A wide and fertile expanse is before us, only requiring that culture which a common knowledge of statistics and prudential motives urging on to action offers not only a fair remuneration to investment, but would be the harbinger of comfort and consolation to thousands, when stretched on a bed of sickness.

It must not be supposed that your profession stands alone with regard to the need of this provision. The clergy, the commercial travellers, the clerks of various denominations, and a host of others, may and should be brought to guard against the contingency of sickness. Every one knows with what anxiety the day labourer, the artisan, and the mechanic selects a club for this purpose. Others, in a better grade, make provision for their survivors by a life insurance; and, though many among the medical profession may have insured, yet even that provision is left in peril, should it unhappily occur that they are unable from sickness to continue their early avocations.

I am fully aware of the difficulty that presents itself to provide sufficiently against both contingencies (sickness and mortality); but the one is so intimately connected with the other, that they should generally be united.

Let us for a moment say that the first is deemed imperative; that the assured has only his professional income on which he can depend, and that not very ample. Years glide on with an even current, and his professional income barely meets the demand of a man who is by education and position a gentleman. Allowing that his income has been steadily improving, in all probability his family demands have increased in the same if not in a larger ratio, thus preventing any solid provision. The day of sickness comes at last, for come it will to all. No longer able to perform his wonted duties, he falls back, from necessity, on extraneous aid. Increased expense and diminished income are nearly the certain result. The foundation on which he might have relied has not been provided. The provision against sickness would have met the extra expenditure, kept in force the insurance upon his life, been a balm to his anxious feelings, and probably a valuable auxiliary to his recovery.

I need not attempt to describe in its entire result the consequence of not providing against sickness where much depends upon physical energy, a sound judgment, and the power of carrying conviction to the minds of others. In health alone can these powers be retained in full vigour. We cannot ward off the calamity, happily unseen by our feeble vision; but one thing most can do, and, if it be left undone, a duty is neglected,—we can by

care and frugality, by a reasonable restraint exercised over our inclinations, provide in the days of health that which would prove a rich harvest in the period of sickness. I am, etc., G. CUBITT.

17, Market Place, Norwich, March 1863.

LETTER FROM GEORGE CUBITT, ESQ.

SIR,—Will you kindly permit me space for a few remarks relative to health insurances? It is with satisfaction that I see this question about to be agitated by a class of gentlemen whose intelligence and influence cannot be disputed. If I can be instrumental in promoting their views, as far as certified tables and regulations are concerned, I shall be happy to forward a copy of each to any address where they may be useful.

In addressing you at this time, my wish is to make a few observations relative to your remarks in the JOURNAL of February 28th. In suggesting the annual division of the surplus, to the reduction of future premiums, you would be taxing the society very heavily. During the early period of existence, you would not have attained a fair average in numbers; and hence deduction, apportioning profits on so short an experience, would be likely to mislead. The appropriation of the entire savings would be certain destruction, as the excess for cost of sickness as the age advances is far greater than the premium paid. There can be no doubt that a considerable reserve, during the first twenty-five years, is essential to the stability of the society in after years.

I feel that it would be unwise to confine insurances to medical men—decidedly not the best lives. The statistics on sickness are from combined employment; and, to be safe, I think it desirable that insurances should be accepted on the same basis. My own impression is, that the door should be opened wide, if you desire fully to meet the wants of the community. If your object is to satisfy only a clan or class, the scope is insufficient; if you desire to erect a superstructure worthy of commendation, you must have space sufficient. You have to treat with an enlightened public, and must act on liberal ideas.

The means as well as the requirements of the different grades are numerous, and utterly opposed to uniformity. This is, I think, a sufficient argument against confining the allowance to an uniform sum; and I confess I cannot discover an extra risk in accepting £5 per year for an allowance of £3 per week, as compared with £2:10 for one of thirty shillings.

If you confine your allowance to sickness only, it will, I fear, never take root. Our information on that head is insufficient beyond the age of sixty-five. The *future provision should, I think, be a deferred annuity*, commencing at that time or before; all payments to the society ceasing when the annuity commences.

I am, etc., G. CUBITT.

EFFECT OF SYRUPS ON LINEN. Dr. Dore has sent in a paper to the French Academy of Science on the effects of syrup dropped on linen. All syrups, and those of sugar especially, when dropped upon cotton or linen stuffs, and exposed to a moderate temperature, deprive these stuffs of their flexibility and tenacity, and the threads break very easily under their influence. At first sight, the rent has the appearance of having been produced by some corrosive substance, weak sulphuric acid, for instance. A similar effect is produced when wet linen is exposed to a certain degree of cold; the linen becomes brittle. Dr. Dore observes that it is highly important to notice such facts, because they might sometimes, in ignorant minds, generate suspicions injurious to the reputation of a chemist, or of a physician, or else furnish ill-disposed persons with a weapon against those who attend the sick.

Medical News.

ROYAL COLLEGE OF SURGEONS The following members of the College, having been *elected* Fellows at previous meetings of the Council, were admitted as such on March 11th.

Barrow, Benjamin, Ryde, Isle of Wight: diploma of membership dated June 27, 1836
Cathrow, William, Weymouth Street, Portland Place: November 5, 1830
Gilson, John Thomas, Chelmsford: September 2, 1825

APPOINTMENTS.

ANDERSON, William, M.D., appointed Resident Physician and Medical Tutor to the Birmingham General Hospital.
BALDOCK, Stotfold, Esq., appointed Resident Apothecary to Bethlem Hospital.
COWELL, George, Esq., appointed Surgeon to the St. George's and St. James's Dispensary, in the room of W. F. Teevan, Esq.
DUKE, Stephen, M.D., appointed House-Surgeon to the Great Northern Hospital.
JONES, John, Esq., appointed House-Surgeon and Secretary to the Royal Isle of Wight Infirmary.
KNAGGS, S., Esq., elected Surgeon to the Huddersfield Infirmary.
NEWTON, Henry W. P., Esq., appointed House-Surgeon to the Chesterfield and North Derbyshire Hospital.
OLLARD, John F., Esq., appointed Medical Officer to the Royal Isle of Wight Infirmary.
FENTON, John, Esq., appointed Surgeon to the Liverpool Constabulary.
PINNIGER, Broome, Esq., appointed Medical Officer to the Royal Isle of Wight Infirmary.
POPE, John R., Esq., elected Surgeon to the East Sussex Infirmary.
RHODES, George W., Esq., elected Surgeon to the Huddersfield Infirmary.
SHEPHEARD, Philip C., Esq., appointed Assistant Medical Officer to the Three Counties Asylum.
*SWIFT, Henry, Esq., appointed Surgeon to the Liverpool Constabulary.
TEEVAN, W. F., Esq., appointed Surgeon to the West of London Hospital.
WHITHAM, John, Esq., appointed House-Surgeon to the Male Lock Hospital.

POOR-LAW MEDICAL SERVICE.

ALLDAY, Francis, Esq., appointed Medical Officer of the Merthyr Tydfil Union Workhouse.
ELLISTON, Wm. A., M.D., appointed Medical Officer to the Claydon District of the Bosmere and Claydon Union, Suffolk.
GRIFFITHS, Griffith H., M.D., to be medical officer to No. 4 district of the Church Stretton Union.
HAMMOND, Samuel, L.R.C.P.Ed., to be medical officer to the first district of the Midhurst Union, Sussex.
KELLY, Frederick, Esq., appointed Medical Officer to the South District of the West London Union.
LAYCOCK, Robert, Esq., to be Medical Officer to No. 1 District and the Workhouse of the Bramley Union, Yorkshire.
MORRIS, John P., M.D., to be Medical Officer to the Heyford District of the Bicester Union.
NEWETT, Robert H., Esq., to be Resident Surgeon to the Belfast Union Workhouse.
PARK, James H., M.D., re-elected Medical Officer to the parish of Monifieth, Forfarshire.
WESTMACOTT, Joseph V. L., Esq., to be medical officer to the Ardwick district of the Chorlton Union.
WIMBERLEY, Conrad C., M.D., appointed Medical Officer to the Bedworth District of the Foleshill Union, Warwickshire.
YATES, James, Esq., to be Medical Officer to the Newcastle District and Workhouse of the Newcastle-under-Lyme Union.

ARMY.

FORTEATH, Surgeon A.. M.D., 1st Dragoon Guards, having completed twenty years full-pay service, to be Surgeon-Major.

ROYAL NAVY.

NIVEN, James, Esq., Surgeon, to the *Pembroke*.

MILITIA.

MACLAREN, P. H., M.D., to be Assistant-Surgeon Edinburgh County Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

MOTT, Charles G., Esq., to be Surgeon 20th Middlesex R.V.

DEATHS.

CAUTLEY. At Hedon, Holderness, on March 4th, aged 61, Mary Ann, wife of *Henry Cautley, Esq.

HOPKINS, WM., M.D., at Boulogne-sur-Mer, aged 86, on March 6.
LEWINS. On February 26th, at Clifton, the widow of the late Robert Lewins, M.D.
*PROWSE, John, Esq., at Nuneaton, aged 43, on February 26.
*SIMPSON, Thomas, M.D., at York, aged 74, on February 28.
VENABLES. On November 29th, 1862, at Melbourne, Australia, aged 31, the wife of George A. Venables, M.D.

THE DR. SEMPLE FUND. This fund is now closed. Upwards of £500 have been subscribed.

NEW ODONTOLOGICAL SOCIETY. The College of Dentists and the Odontological Society have united, and the society which they now form, has taken the title of "The Odontological Society of Great Britain."

BRITISH ORPHAN ASYLUM. The building of the British Orphan Asylum at Clapham Rise has been taken by the trustees of the Hospital for Incurables. One of the trustees, Mr. C. Wood, has promised an annual subscription to the charity of £300.

ROYAL EDINBURGH ASYLUM FOR THE INSANE. The president of the Royal College of Physicians, Edinburgh; the president of the Royal College of Surgeons, Edinburgh; Professor Simpson, Professor Syme, and Dr. David Maclagan have been appointed the medical board of the Royal Edinburgh Asylum for the Insane during the ensuing year; Dr. Skae has been appointed resident physician, and Drs. Clouston and Yellowlees assistant physicians.

FOREIGN ACONITINE. A correspondent of the *Chemical News* writes: "This alkaloid is generally regarded as a most powerful poison. The foreign article, however, I fancy is a comparatively harmless one. I gave a small dog three grains of a substance, labelled 'Pure Aconitina Exot.,' and obtained from a very respectable source, but it had not the slightest effect on the animal. A few days afterwards I gave three grains of another sample, not said to be 'exot.,' at least that was not on the label, and it was a very different looking article. This made the dog dreadful sick; he vomited and retched almost incessantly for more than an hour, and then he got better, and the next day was quite well."

MEDICAL SOCIETY OF LONDON. The ninetieth anniversary meeting of this society was held at the Albion Tavern, on the 7th instant. The annual oration was delivered by Dr. Habershon. A silver medal was presented to Mr. W. C. Calthrop, of Withern, Lincolnshire, for a paper on Spontaneous Closure of the Axillary Artery. There was no award of the Fothergillian medal. The following officers and council were elected:—President: E. Canton, Esq. Vice-Presidents: J. Bird, M.D.; T. Bryant, Esq.; C. J. Hare, M.D.; and G. Lawson, Esq. Treasurer: C. H. Rogers Harrison, Esq. Librarian: J. Palfrey, M.D. Secretaries in Ordinary: G. D. Gibb, M.D.; and E. S. Thompson, M.D. Secretary for Foreign Correspondence: V. de Méric, Esq. Councillors: J. Althaus, M.D.; R. Barwell, Esq.; J. Birkett, Esq.; W. Camps, M.D.; W. Cholmeley, M.D.; A. Clark, M.D.; J. Cockle, M.D.; T. C. W. Cooke, Esq.; W. Coulson, Esq.; T. Davidson, M.D.; S. O. Habershon, M.D.; A. Henry, M.D.; J. W. Hulke, Esq.; J. Jephson, M.D.; A. Leared, M.D.; H. P. Robarts, Esq.; F. Sibson, M.D.; W. Smiles, M.D.; J. S. Stocker, M.D.; J. Townley, Esq. Orator: H. Thompson, Esq. The proceedings terminated with a dinner.

DEATHS FROM NITRIC ACID. A very painful sensation has been caused in Edinburgh by the death of Mr. Stewart, one of the masters, and also of the janitor of the Edinburgh Institution, a large educational establishment in Queen Street. Mr. Stewart was in the laboratory of the school preparing for some chemical experiments, and while carrying a jar of nitric acid across the room, it fell on the floor and was broken. He called the janitor to his assistance to wipe the floor, and to endeavour to save a portion of the fluid. In this effort both unwittingly inhaled its deadly fumes. Mr. Stewart went home to dinner unconscious of the injury he had received. After an hour or two he began to experience difficulty of breathing, and sent for medical advice, but he very rapidly became worse, and expired at two o'clock on Wednesday morning, about ten hours after the accident. The janitor was also taken ill, and, though he rallied for a time on Wednesday, he afterwards sank, and expired at five o'clock on Thursday morning. Several of the most eminent medical men in the city were called in to the unfortunate patients, but their skill proved unavailing.

DEATH OF A CHILD FROM CAMPHOR. A teaspoonful of camphorated oil was given by accident to a child at Peckham, two years old. The child soon after vomited twice; and then Dr. Griffith was sent for. The deceased was ordered to be put into a bath. She rallied at first, but died in thirteen hours. Dr. Griffith said at the inquest, that he went to the parents' house, and found the deceased in its mother's lap. He was informed what had taken place. The child was greatly convulsed. Owing to the jaws being fixed, he gave stimulating injections to the bowels, and applied mustard poultices to the spine and cold to the head. About twelve o'clock, on his nex visit, he saw that the convulsions had ceased, and t pulse had resumed its regularity. Seven hours aft wards he found the child again terribly convulsed, he detected a strong smell of camphor from the mou The child died at eleven o'clock. The bottle, labe "camphorated oil," was brought to him the next da the constable. The contents consisted of oil and phor. Camphor taken in large quantities was inju It acted upon the nervous system. He considered a teaspoonful of camphorated oil was too much t to a child of a year and eight months old. Convuls sometimes came on from natural causes. He could ot say that the mixture had caused the death, although the symptoms were precisely the same as would be produced by camphor; but if it was the cause of death, it was the smallest dose on record known to destroy life. After some further evidence, the jury returned a verdict, "That the child had died from the administration of camphorated oil, given by misadventure and not from any design.

EXPENSE OF LIGHT. The comparative cost of light is shown in a table exhibiting the comparative cost of the light of twenty sperm candles, each burning ten hours, at the rate of 120 grains per hour:—

	s.	d.
Wax	7	2¼
Spermaceti	6	8
Tallow	2	8
Sperm oil	1	10
Coal gas	0	4¼
Cannel gas	0	3
Paraffin candles	3	10
„ oil	0	6
Rock oil	0	7½

Paraffin and rock oils are the best sources of light for domestic purposes, inasmuch as they give the largest amount of light with the least development of heat. The amount of carbonic acid generated, and heat evolved, per hour, in obtaining a light equal to twenty sperm candles, each burning 120 grains an hour, is as follows:—

	Carbonic acid in cubic feet.	Units of heat.
Tallow	10·1	100
Wax, Spermaceti	8·3	82
Paraffin	6·7	66
Coal gas	5·0	47
Cannel gas	4·0	32
Paraffin oil, Rock „	3·0	29

(*Dr. Frankland. Chem. News.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion. The President, "A Case of Successful Excision of the Elbow-joint"; Dr. Greenhalgh; Dr. Abbott Smith; Dr. Gibb; and Mr. Henry Lee; and other communications.—Asiatic.

TUESDAY. Statistical.—Pathological.—Ethnological.

WEDNESDAY. Royal College of Physicians, 5 P.M. Dr. Chambers. Lumleian Lectures. "Formation of Mucus and Pus."—Meteorological.—Society of Arts.—Geological.

URSDAY. Zoological.—Royal.—Antiquarian.—Linnæan.—Chemical.—Harveian.

RIDAY. Royal College of Physicians, 5 P.M. Dr. Chambers. Lumleian Lectures. "Formation of Mucus and Pus."—Royal Institution.—Western Medical and Surgical, 8 P.M. Mr. Rouse will read a paper "On Rheumatic Iritis."

TDAY. Association Medical Officers of Health.

ULATION STATISTICS AND METEOROLOGY OF LONDON—MARCH 7, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys .. 957 / Girls .. 875	1832	1370
Average of corresponding weeks 1853-62		2075	1456

Barometer:

Highest (Sun.) 29.787; lowest (Fri.) 29.314; mean, 29.561.

Thermometer:

Highest in sun—extremes (Thur.) 108 degs.; (Sun.) 64 degs.

In shade—highest (Tu.) 64 degs.; lowest (Th.) 35.2 degs.

Mean—47.3 degrees; difference from mean of 43 yrs.+7.3 degs.

Range—during week, 28.8 degrees; mean daily, 19.3 degrees.

Mean humidity of air (*saturation*=100), 80.

Mean direction of wind, S.W. & S.E.—Rain in inches, 0.24.

TO CORRESPONDENTS.

** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PHYSICIANS AND DOCTORS.—SIR: Sincerely desirous as I believe you are to be impartial in the expression of your opinion relative to Physicians and Doctors of Medicine, your sentiments, as enunciated in your various "leaders", are draped, so to speak, with the university "toga", from beneath which the cloven foot of impartiality for your first medical love, the University, incontinently peeps forth. Your "slaughter of the innocents", the poor suffering physicians, appears to be insatiable and somewhat indiscriminate; and, in your evident desire to chastise the Edinburgh fledglings of the year of "grace", you lay about you with such over-zealous goodwill as to prostrate the whole species beneath the force of your editorial ferule.

In simple justice, therefore, to the physicians who have obtained their diploma after a fair and legitimate examination, I would beg to ask why, if the title of "Dr." (accorded from ancient times) be disallowed, except as an act of courtesy, to physicians—the highest professional title recognised by the law—why should simple Doctors of Medicine in so many instances assume, and affix to their signatures after the cabalistic letters M.D., the superior title of *Physician* to .... Hospital? to which they have no legal claim! Why, I would also ask, if, as your readers must inferentially conclude from the leader in the JOURNAL of the 21st ult., the title of Physician is to be regarded as inferior to that of M.D., did so many eminent pure and simple M.D.s—such as Sir H. Cooper, M.D. Univ. Lond.; W. H. Ranking, M.D.Cantab.; W. Ogle, M.B. Oxon.; and many others, seek admission into the London College during the year of grace? Would such men seek for an inferior title?

Again: How, if pure and legitimate "Physicians" are inferior to "Doctors of Medicine", is it that a student can or could graduate at the age of 21, but cannot present himself for examination at the Royal College of Physicians until he is of the mature age of 25 or 26, and after an extended period of *practical* study? As a Fellow of the College, you can probably throw a little light on the subject, and oblige Yours, etc., M.R.C.S.

February 28th, 1863.

[Our correspondent does not keep pace with the times. He regards the Doctorate and the Physician's License from a twenty-years ago point of view. But these things have been revolutionised since the year of grace. He ignores, moreover, the fact that physicians have been of late years made by the score, and are still being made, at the mature age of 21. We were quite unaware of having said anything to exalt the Doctorate over the License, or the License over the Doctorate. The fact is, there are physicians and physicians, and there are doctors and doctors. No doubt that a physician made at 21 and a physician made at 25, are made under different conditions; but they are nevertheless both physicians in the eye of the law. We may say of them, as Lord Dundreary does of woman: One physician is as good as another—perhaps better. But members made at 25, and licentiates made at 21, are still equally physicians. EDITOR.]

CONSULTATIONS WITH NON-REGISTERED PRACTISERS OF MEDICINE.—SIR: In my letter to you concerning the non-registered medical practitioner, I said a "physician of high repute had met him in consultation." As you seem to doubt it, I hardly know whether to give names or not. It will look personal if I do; as I have been for twenty years a personal friend of one. I can only repeat that the practising doctor I was first asked to meet in a case; on my declining, a physician (magistrate and mayor) did. Not but what he did the thing adroitly; after meeting him twice or so, he gave him the cold shoulder, and took the case himself. The other would, I fear, be a more serious charge, and, of course, would be a painful case to inquire into, and in which I should be one of the last to proceed; because it would turn upon the question, Is a physician, sent for urgently, to refuse going, because a non-registered man is attending? It must come to that; although I have no more doubt myself that the physician knew as well as I know the circumstances, and whom he was to meet.

I regret to say that the physician has held a distinguished post in our Association, and that the consultations have been more than once.

If it would serve any purpose, I am happy to give the whole of the names; but I do not see that it would. I am, etc.,

March 10th, 1863. AN OLD ASSOCIATE.

COMMUNICATION OF SYPHILIS BY THE BLOOD. M. Viennois insists on the contagious character of the blood of syphilitic patients, which is denied by Ricord, who says:—"It is very remarkable that the blood, which evidently serves as the vehicle of the poison, and which is itself subjected to the influence of syphilis, does not possess any contagious quality, and cannot communicate the disease to a healthy person."

COMMUNICATIONS have been received from:—Dr. THOS. KING CHAMBERS; Mr. CAUTLEY; Dr. HARDWICKE; Mr. J. BIRKBECK NEVINS; AN OLD ASSOCIATE; Mr. HUGH NORRIS; Mr. BENJAMIN THOMAS; Mr. J. VOSE SOLOMON; Dr. T. J. WALKER; Mr. THOMAS BRYANT; Dr. LIONEL BEALE; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. ROBERT H. POWELL; THE HONORARY SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Mr. G. F. BODINGTON; Mr. T. M. STONE; Mr. RIVINGTON; Mr. HAYNES WALTON; and Mr. BENJAMIN THOMAS.

BOOK RECEIVED.

The International Aspect of Quarantine Legislation. By Gavin Milroy, M.D.

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Royal Medical Benevolent College, EPSOM.—Notice is hereby given, that no applications on behalf of persons desirous to become candidates for admission to the College as PENSIONERS or FOUNDATION SCHOLARS at the next ensuing Election can be received by the Council after the Morning of the 18th of March inst., when the list of candidates will be finally closed, in order that the Balloting Papers may be printed. The Election will take place, as usual, in May.

By order of the Council,

ROBERT FREEMAN, Secretary.

Office, 37, Soho Square, London, March 4, 1863.

Royal College of Physicians OF LONDON.—FIRST PART OF THE PROFESSIONAL EXAMINATION FOR THE LICENCE. The next Examination of Students who have completed their Second Winter Session of Study at a recognised Medical School will commence on Tuesday, April 7th.

SECOND PART OF THE PROFESSIONAL EXAMINATION.—An Examination of Gentlemen who are eligible for admission to the Second Examination for the Licence will commence on Tuesday, April 14th.

Registered Medical Practitioners qualified before January 1861, are admitted to Examination under special Bye-Laws.

Candidates are required to give fourteen days notice in writing to the Registrar of the College, with whom all Certificates and Testimonials required by the Bye-Laws are to be left at the same time.

H. A. PITMAN, M.D., Registrar.

Pall Mall East.

Royal College of Surgeons of ENGLAND.—Notice is hereby given that PRIMARY or ANATOMICAL EXAMINATIONS for the Diploma of Member of this College will commence on the 4th, 11th, and 25th of April next respectively.

Certificates from Students completing their Anatomical Studies at the termination of the present Winter Session must IN ALL CASES BE TRANSMITTED THROUGH THE POST not earlier than the 31st of March next.

And that PASS or SURGICAL EXAMINATIONS will commence on the 18th of April and 2nd of May next, respectively.

Certificates from Students completing the Curriculum of this College at the termination of the present Winter Session must IN ALL CASES BE TRANSMITTED THROUGH THE POST not earlier than the 4th of April next.

Particulars relating to these Examinations may be obtained at the College.

25th February, 1863. EDMUND BELFOUR, Secretary.

Apothecaries' Hall.—The next EXAMINATION in ARTS will be held at the Hall, on FRIDAY and SATURDAY, the 24th and 25th of April, 1863. A Syllabus of the Subjects for Examination may be had on application.

An Examination in Arts will again be held in the month of September 1863. R. B. UPTON, Clerk to the Society.

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Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture I.

Mr. President and Gentlemen,—The diseases of children have from an early period of the practice of the healing art monopolised a considerable portion of the attention of the practitioner; although it has been reserved for men of the present century to enter more scientifically into the subject, to search out the peculiarities of the child's diseases, and to elucidate the differences which are to be observed between the affections of early and adult life. Hence it is only within the last few years that the diseases of children have been shaped into a speciality, and have exclusively occupied the attention of some of the leading members of our profession.

It can be scarcely doubted that we are indebted to this sudden increase in our knowledge of such an important branch of medical and surgical study, to the rapid advance of physiology as a science; for how could men comprehend the differences between the diseases of childhood and of the adult, when they were comparatively ignorant of the processes by which health was maintained, and more particularly of the means by which the development and growth of the infant structure passed on to the perfection of mature life?

To this advance in physiological study may be fairly attributed our more correct knowledge of pathology; and it is upon this solid and sound basis that our present improved acquaintance with the diseases of early life has been unquestionably reared.

The Council of this old and honoured Society, recognising the importance of this subject, have been led to believe that the interest of its members might be promoted and the profession benefited by having their attention drawn from the broad field of general medicine and surgery to the comparatively small one occupied by that of the diseases of children: and, on the strength of this belief, have been induced to abandon the custom by which they have been hitherto bound, and have defined the subjects for their Lettsomian Lectures before nominating the lecturers who were to be selected for their delivery. In carrying out these intentions, the Council have nominated me to deliver their surgical course; and they will not, therefore, be surprised that I should confine my attention exclusively to the surgical aspect of the subject; they well knew also that my attention had not been more particularly devoted to the diseases of early life than to those of the adult; and I therefore take it that they believed the subject would be the most advantageously illustrated by one whose experience embraces the broad field of surgery, and had not been narrowed by the contracted view which is too often engendered by the special practice of any one class of medical or surgical diseases.

I propose, therefore, in carrying out these assumed intentions of your executive body, to occupy your attention during these three lectures by more particularly pointing out the differences which are to be found between the surgical affections of early and adult life. Having, in the first place, glanced at the differences in the physiology between the two classes, and shown how the pathological processes are modified by such conditions, I shall, lastly, endeavour to point out in what way this knowledge should influence our practice both in the treatment of disease and injury. I shall review the subject systematically, taking up the various systems in rotation, after having dwelt, as far as time will allow, upon some of the special surgical affections of early life.

The differences between the Physiology of the Adult and of the Child.

I doubt whether I shall be deemed to be departing far from the truth when I assume it to be a physiological fact, which all men readily admit: That in *adult life* the vital forces, started, supported, and maintained by the nervous, respiratory, circulatory, and glandular systems, are mainly employed for the simple preservation of man's physical structure; or, in other words, for the maintenance of what has already attained its perfect growth and complete development. I do not deny that these forces may exist for other subsidiary, or perhaps higher purposes; but it is for the maintenance of the body that they are doubtless principally concerned; and, for the present, this fact alone is one which I would have you bear continually in mind during the consideration of the subject upon which we are now engaged.

The second point, which I would also wish to be impressed with equal force upon your minds, may be thus aphoristically expressed; and I believe that it will be accepted as readily as the last: That in *infant and child life*, the vital forces, originated, supported, and maintained by the nervous, respiratory, circulatory, and glandular systems, are mainly directed for the purposes of growth and development of the being's physical structure; a portion only of their power being employed for its preservation or maintenance.

The grand distinction between the two classes rests upon the fact, that in the child the vital forces are directed for its *growth* and *development*, whilst in the adult they are mainly employed for the *maintenance* of man's physical structure.

Under these apparently diverse physiological conditions, it can be no subject of surprise that there should exist a material difference between the diseases of early and of adult life; and that the pathological processes should be somewhat modified by the physiological principles. For in man's high nature, in which the physical forces are so wonderfully correlated, the influence of growth and development upon *diseased* processes are too great to be passed over without attention; for it is to the abnormal direction given to these *natural* processes that most of the special affections of infancy are to be attri-

buted; and in no single morbid action in young life can their influence even for one moment be disregarded. For, although the forces which are employed in the building up of the body, and in maintaining it when completed, may be mere different expressions of the same power directed in different directions, growth, development, and maintenance are so distinct in their several natures, and so uniform in their ends, that it might be excusable if, for a moment only, we were to regard them as originating from independent sources, and to be expressions of distinct powers. Daily practice proves to us that the growth of a part may go on in all its completeness, whilst its development may be arrested, or progress in an abnormal direction; or we may witness the development progressing in its normal channel, with growth showing itself either in excess or in diminished force; and yet during this time the maintenance of the whole body may be preserved. All malformations are, therefore, but results of some defective power either in the process of growth or of development, or of both; and they are always to be explained by the preponderance, diminution, or abnormal manifestation of one or of the other. Hare-lip, fissured palate, monsters, cerebral tumours, and spina bifida, etc., are to be explained by some defect in the natural development of the child; its growth and maintenance being, in the majority of instances, perfect of its kind; whilst instances may presently have to be recorded in which growth alone has proved defective, development remaining perfect.

The Greater Activity of Infantile Diseases.

We will now pass on to the consideration of another distinctive feature of infantile diseases, which characterises one and all; and that is, their greater activity when compared with those of adult life.

This pathological fact is doubtless to be explained by another physiological truth, which is applicable to adult as well as to child life, although it may be more particularly exemplified in the last:

That the activity of disease appears to be in direct proportion to the activity of the vital processes going on in a part; that in highly vascular organs, morbid processes progress more rapidly than they do in others less favoured; and that in proportion to the extent of action going on in a part will the development of morbid phenomena be manifested, when once originated.

In early life, therefore, the well known activity of the vital processes in all the organs renders them particularly prone to morbid phenomena; and those parts in which development is progressing the most actively are the most liable to become the seat of morbid action.

Again: During development and growth, cell-life is necessarily active; for it is needless to dwell upon the fact that it is through such cell-growth that all development and increase must be carried out. In morbid actions, therefore, when once originated, a like cell-growth and multiplication is to be observed; and this point is well exemplified in the case of tumours. For such tumours, when once developed in children, are generally of rapid growth; and, whether simple or malignant, their peculiar characteristic is cell-structure: the simple tumours being a rapid repetition of their original elements; and the malignant consisting almost entirely of a cell-nature, being invariably of the so-called medullary character; the vital processes manifesting their power by the rapid growth and repetition of the original cell, which had gone astray and become a prodigal, in lieu of developing into a structure of a more perfectly organised nature. Their growth also is generally rapid, being in accordance with the activity of the other functions; healthy and diseased processes having, in this respect, a strong analogy.

As I proceed with my subject, I shall have the pleasure of illustrating more fully the truth of these remarks; and I propose, therefore, to pass on to discuss more particularly the specialities of the surgical diseases of children, commencing with such as are to be explained by some defective power either in the growth or development of the infant structure; the defects which are to be found in the digestive system having our primary attention.

[*To be continued.*]

Remarks

ON

DR. CHAMBERS'S ASSERTION THAT DISEASE IS IN ALL CASES A DEFICIENCY OF ACTION.

BY

LIONEL S. BEALE, M.B., F.R.S.

No wonder Dr. Chambers is alarmed. I spoke of weakening the life of the *cancer*, not the life of the *patient!* He says: "Of course, he (Dr. Beale) goes on to infer that the aim and intention of a physician should often be to weaken *life*"; and, towards the close of his spirited remarks, observes with seriousness: "This is not a mere question of verbal criticism; it is a matter of life and death to our patients". Let me at once dispel his fears. The patients are safe. My colleagues, surgical as well as medical, are, with myself and a very large majority of British practitioners, fully conversant with the necessity of giving support to patients suffering from exhausting diseases; and the pupils have daily opportunities of observing the advantageous effects of the practice.

I cannot but think my friend's fears with regard to the use of lowering treatment by practitioners in the present day are almost groundless. I would ask him if, in his experience, he knows of a single case of "pneumonic consolidation" treated by a British practitioner, during the last ten years, by "weakening life by bleeding *coup sur coup*, or by starvation"? The practice undoubtedly existed in days gone by; but, as a practice, it is now most assuredly extinct.

Dr. Chambers fears I am tending towards the condition of mind of "a certain strong-minded and strong-limbed young lady", who had no pity for people who were "out of health" or "ill", but only for those who suffered from definite disease like apoplexy or measles; and asks me if I have "never heard of people being ill of the doctor". The tendencies of my friend's mind are not in this direction. It is evident he sees every where defenceless patients suffering from nameless ailments, or "ill of the

doctor". He grapples with grave medical errors which to ordinary observers seem to have been corrected long ago. Unhappy mortals who are being killed "by bleeding *coup sur coup*, by antimony, by starvation", beg for his protection; and, like a certain ancient knight who lived but to redress the wrongs of the helpless and unprotected, the champion of "restorative medicine", bearing "life-giving oil" for the "renewal of life", rushes valiantly forth, and instantly restores them by "life-supplying food, warmth, moisture, etc."

As to the scientific questions, I would remark—

1. That I must still hold the opinion, that "when our bowels act a little more than usual; when we pass four pints of urine instead of two in the twenty-four hours; when we perspire freely; if we apply a turpentine stupe or a mustard poultice to our sound and healthy skin,"—we *do not* "necessarily become ill". Such actions are merely increased healthy actions, and take place in perfect health.

2. The author of the *Renewal of Life* should define what he means by life. To say that we "*supply life* by food, warmth, moisture, etc.," and to speak of the "*life-giving*" properties of cod-liver oil, seem to me incorrect expressions. Instead of "supply" and "life-giving", I conclude Dr. Chambers means simply "*support*" and "*life-supporting*". The terms "vital", "more vital", "less vital", "general life", "local life", all need explanation.

3. It is a misapprehension to suppose that I regarded "augmented general or local life" as necessarily associated with "augmented bulk"; nor would I maintain that there was "*more vitality* in a jelly-fish than in a sprat, in a mushroom than in a flea"; but, to take the same striking examples the author of the *Renewal of Life* has selected for discussion, I would maintain that in a living growing mushroom there is a far greater amount of matter in a *living state* than exists in the last named insect.

4. Dr. Chambers says: "Disease is a deficiency of action." I answered: "Disease may consist of an *excess of action*, or there *may be deficient action*." Dr. Chambers rejoins by saying that I uphold the "*converse* proposition" to his!

It is certain that a cancerous growth lives much faster than the normal tissue from which it has proceeded; so does pus. In a given weight of these morbid products, there would be a far greater amount of matter in a *living active state* than in an equal weight of growing cuticle, for example. In the case of cancer and pus, a much greater quantity of inanimate pabulum would be converted into living matter within a given time, than in the normal tissue. Hence, it seems to me, the *vital processes* are *more actively* carried on in these morbid structures than in healthy cuticle. In disease there may be excess, and there may be deficiency, of action; and I submit that Dr. Chambers has not shown that disease is in all cases a NEGATION, a DEFICIENCY of action, or PARTIAL DEATH.

GREAT EASTERN RAILWAY (NEW METROPOLITAN STATION AND BRANCHES) BILL. The Ophthalmic Hospital lies close to the proposed site of the station, and the governors, medical officers, and subscribers in their petition presented by the Earl of Shaftesbury, pressed very earnestly that the bill should be thrown out.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

CHESTER GENERAL INFIRMARY.

OBSERVATIONS ON THE EFFECTS OF LEAD UPON OPERATIVES.

By ROBERT H. POWELL, M.D.Lond., Physician to the Infirmary, etc.

THE neighbourhood of lead works and mines to this hospital affords occasional opportunities for observing the pernicious effects of saturnine emanations on the human system. Those who have inspected the preparation of white and red lead, may well feel surprised that the health of the workmen and women is not more generally impaired, and severe disease speedily induced. That it is so in several instances, however, those who are called upon to treat the ailments of the sick poor of this locality are well aware.

The deleterious influence of the salts and oxides of lead presents itself at the hospital mostly in the form of muscular paralysis. The familiar affection, painters' colic, has not been so frequently noticed as one might expect. Perhaps this may be accounted for by the fact that the respiratory organs constitute the main channel of contamination. The house-surgeon, Dr. Fyfe, informs me that he has met with six or eight cases of lead-colic attacking persons engaged at the lead-works. In most of these cases, previous or present palsy was experienced; and in all the blue line on the gums was well marked. He found that purgatives, opiates, sulphuric acid, and iodide of potassium, in succession, were appropriate remedies.

The workrooms in which the manufacture of white lead is completed are every where pervaded with fine particles of lead-compounds, which must necessarily be inhaled in more or less quantity. A visitor is struck with the resemblance there presented to the quarters of the "dusty miller"; whose jocund look and hale complexion, however, sadly contrast with the wan appearance of the lead-operative. It is to be hoped that the inventive bent of our day may eventually devise some more effectual safeguard to the health of those engaged in such employment, than the imperfect contrivances at present adopted. Meantime, we have to apply ourselves to overcome as far as possible the disease thereby induced, and to trace its precise seat and pathological results.

There is now a man under treatment in this hospital for partial palsy of the upper and lower extremities, who had been engaged for two years at the lead manufactory. He states that his general health has been good until a year and a half ago, when he first suffered from lead-colic, or, in familiar terms, had been "leaded". He complains of no special disorder, save this local weakness of arms and legs, commencing five weeks ago. The man is aged 28 years, of slight build and well formed; presents a pallid aspect. The gums are universally marked with the characteristic blue line. No disturbance of the digestive organs is complained of; the appetite being good, and the bowels acting well. Urine normal. Progression was much retarded; but the man can stand and bear upon the lower extremities. The sensibility is increased in the lower limbs. He complained of nocturnal restlessness, sleeping only three or four hours, and then waking up with painful "startings" in the lower limbs, which are much wasted. His pulse, save being rather feeble, is otherwise unaf-

fected. The skin is cool. He is using the iodide of potassium, with a dose of Dover's powder at bedtime. The renal secretion is increased; and he says he feels much improvement in his power of moving his legs, though only in the hospital ten days; and it may be hoped he will be speedily restored to health and strength.*

There is another somewhat similar, but more severe, case in the hospital now under my care, that of a man who had been engaged for many years at the lead-mines in North Wales. He has paralysis of motion of the lower extremities, but the sensibility is increased. He speaks slowly, but is intelligent. His pupils, especially the left, are rather sluggish on the approach of a lighted taper. He has no blue line on the gums. He complains of constriction of the abdominal muscles, and is obliged to attend speedily to the desire to evacuate the contents of the bladder and bowels. The presence of lead in the system was made manifest by the reaction of the urine with the sulphuret of potassium test. The man is progressing favourably under the use of purgatives, iodide of potassium, and strychnia, with occasional friction to the lower extremities, and the application of galvanism and acupuncture.

A much graver form of lead contamination came under my notice in the out-department a short time past. A stout woman, aged 35 years, applied for relief from general debility and oppressive breathing and pain in her side. She had been engaged in the lead-works for many—I believe over twenty—years. Her health failed her of late, and she became much troubled with dyspnœa—in part, probably, from spasm of the respiratory muscles. Her aspect was anxious; the conjunctiva pearly white; and the skin slightly tinged yellow. Her pulse was frequent, small, and feeble; bowels constipated, with occasional abdominal griping; urine turbid; appetite indifferent; tongue pale and flabby. In fact, her general state was that of modified anæmia. The woman suffered from palpitation; and there was a well marked systolic *bruit* audible over the base of the heart, and to the right of the sternum. Severe paroxysms of angina were occasionally experienced. This poor woman has been treated for the present more with reference to her immediate sufferings, than with the view of removing, as in the preceding cases, the saturnine contamination from the body, which has evidently been deeply impressed with the baneful effects of lead compounds.

Anatomical research has revealed no characteristic or special change in those who have died from saturnine influence; but the above, and other cases which I might cite, pretty clearly indicate the nervous system to be the primary seat of disorder, whether evinced through lesion of the sympathetic or cerebro-spinal division of that system. We may suppose that the metal or some of its compounds permeates the nervous tissues, interfering with the due performance of their functions, and selecting certain functions in preference to others, for reasons which we can only surmise. M. Piorry suggests that perhaps lead, being an indifferent conductor of electricity, opposes the free transmission and play of its analogue, the nervous fluid or influence. However this may be, the disturbance of nervous function is chiefly manifested through the muscular system, and in the form of paralysis of motion, whether attacking the voluntary or involuntary muscles. Neuralgic affections are, however, not uncommonly observed, though not usually so prominently witnessed in these cases as a lesion of motor function. The flexor muscles of the extremities, being the more powerful, longer resist the saturnine action than do the extensors, which first give way under its influence. No doubt, ultimately, the blood becomes impoverished, and the muscular nutrition is defective. This condition is very apparent when the muscles of the forearm lose power in the so-called wrist-drop.

The precise *nature* of the disease consequent upon the saturnine contamination it may be difficult to determine; but, as far as one may infer this from the symptoms and course of the affection, it may, I think, be deemed non-inflammatory, and essentially one of defective innervation. I have not met with any epileptiform seizures in connexion with lead-taint, although their having been elsewhere observed further goes to show nervous lesion to be at the root of the disorder. But we require more precise and closer attention to be given to the subject, and the aid of modern appliances, before we can with any certainty determine the intricate questions arising in connexion with this and allied morbid phenomena. Meantime, I trust that these fragmentary remarks may not prove without interest or utility.

* This case was discharged "cured" since the above report was written.

Original Communications.

ON A CASE OF DISEASED RIGHT HEART; AND ON "CARDIAC APNŒA."

By John K. Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

In the number of the British Medical Journal for November 15th, 1862, there appeared a practically useful paper, by Dr. Stephen Monckton, on Incompetence of the Right Heart. Some years ago, I laid upon the table of the (then) Bath Pathological Society a specimen of diseased heart, which illustrated a common cause of apnœa in children, and the symptoms arising from which during life derive new interest when collated with other varieties of cardiac difficulty.

Case. A female child, about 11 years old, in rather poor circumstances, and of lymphatic temperament, came first under my care on account of difficulty of breathing and palpitation of the heart. The essential point in her history was that, four years previously, she had had whooping-cough in a severe and protracted form. The cough left her tardily, and when at last it did go away, she found herself unable to move about in the agile manner natural to a child, and unable to play at school or to run upstairs. Disordered function probably soon passed into organic lesion; and when I saw the patient, there was abundant physical evidence of dilatation of the heart, with hypertrophy of at least some of its chambers.

But the heart-disease was merely the sequel of pathological changes in the air-tubes and lungs. What those changes are, and how they are brought about, have been aptly described in a clinical lecture delivered by the late Dr. Todd, when I was a student at King's College Hospital. Referring to a case not unlike the one I am now relating, he remarked that "After the cough has lasted for some time, changes occur affecting the lungs and general appearance of the patient. The countenance becomes full and bloated, and the capillaries distended, especially of the conjunctivæ, which look watery and swollen; and some of these minute vessels often burst, giving rise to some chemosis. All these changes result from the circulation in the capillaries being retarded, in consequence of the violence of the cough. The pulmonary circulation becomes similarly affected; the secretion of the bronchial tubes is altered; the lungs become congested and œdematous, and more or less crepitation is heard in different parts of those organs. Percussion elicits a duller note than usual, as the obstructed

bronchial tubes impede, more or less, the ingress of air."

Now, all this morbid anatomy of pulmonary and bronchial apparatus produces a greater or less departure from sound function. And when the duties of the lungs are badly performed, the heart always responds, sometimes by way of sympathy, generally as a measure of compensation. An extra force is required to get the blood to permeate the partially blocked air-cells, and to circulate it through a less aerating area of lung tissue.

In the case of the little girl whose history has been given, an autopsy disclosed a heart, the wall of whose right ventricle was at least twice as thick as the wall of the left. The right cavities were full of blood; the left were nearly empty. The cubic capacity of the right chambers was augmented, and so was the calibre of the veins entering those chambers. And all this was just what might have been expected. The right side of the heart was over-worked, the left side was under-worked; owing entirely to a portion of the capillary system existing between the two, being in a state of blockade.

Concerning this case, there were two points of special interest:—(*a.*) the etiology; and (*b.*) the therapeutics.

(*a.*) The cause of the hypertrophy and dilatation of the right heart was the functional uselessness of a portion of the lungs, and the cause of this was the severe and protracted whooping-cough. Not that there is anything peculiar in whooping-cough as a causative agent, for a similar result may be produced by any other cough in which the spasmodic element predominates, and which is characterised by long "fits" of coughing at irregular intervals. The cough attending influenza in children is very much like whooping-cough; and any ordinary "cold" in a scrofulous child may be accompanied by spasmodic cough, owing probably to the irritation of enlarged bronchial glands.

(*b.*) What is the correct treatment of a case of this kind? A portion of the lungs is virtually in a state of atelectasis; the right heart is over-burdened with blood, which it struggles to get rid of; the abdominal viscera, and venous system generally, are similarly overloaded; and normal respiration is changed into habitual dyspnœa, aggravated always by anything which makes a demand upon cardiac and pulmonary functions. On one occasion, I was called to my patient on account of very sudden and alarming orthopnœa; and, drawing a rapid conclusion that the right ventricle was most likely temporarily paralysed from engorgement with blood, I took away ten ounces of blood from the arm. The relief was very striking; the heart's beats became regular, and the breathing tranquil. Another time an attack of terrible dyspnœa came on while I was in the room; and before I had time to put a lancet into a vein, the girl was dead.

Now, venesection did good here in a very simple mechanical fashion. The child had no fever, and no inflammation; and therefore, in any other sense than a purely static one, she did not require to lose blood at all. Indeed, in a dynamic point of view, loss of blood could have done only harm, since the remaining blood in the body must have been, to that extent, quantitatively and qualitatively degraded. The success of the practice must be the best apology for its correctness. There was no time for theorising—there seldom is in vital emergencies; but, if we have a knowledge of right principles, we shall almost always find them a key to right action. In other respects, the therapeutical management of this case was for several years a very simple affair. Wholesome nutritious food, warm clothing, and daily out of door exercise, were the hygienic facts rigidly carried out. And, if a perpetual supply of mild dry air could be secured in this climate, this child would probably not have perished in the way that she did. She died on a bleak rainy day in winter—on a day when respiration would be tasked beyond its normal rate, and when a compensative cutaneous function would be checked, if not altogether impeded. She had a small measured quantity of alcohol daily, in the form of good beer; but, beyond an occasional aperient, little in the shape of drugs was either taken or required.

In the clinical study of heart-disease, it is of great moment accurately to discriminate those forms which are likely to cause sudden death. We should welcome every scrap of information which we can get during life, about the state of the *cardiac walls*—and the degree, if any, in which they are invaded by atrophy, hypertrophy, or degeneration. Mischief is latent in all these. The first two conditions are the recognised "sequelæ" of diseases of the valves of the heart, and of certain diseases of the lung and of the kidney. A degenerated state of the fibrillæ of the heart-muscle is generally a local expression of a general dyscrasia, like the "arcus senilis;" but, whatever its origin, it is an element of physiological weakness, perhaps of sudden and mortal failure.

The symptom which appears to point most distinctly to the existence of degeneration of the cardiac walls, either wholly or in part, is what Dr. Richardson has so elaborately described as *cardiac apnœa*, and Dr. H. Hyde Salter as *cardiac dyspnœa*. So far as I can judge, the groups of symptoms expressed by these titles respectively are identical, or nearly so; and if differing at all, solely in the fact that the first denominates a more transient condition, like the so-called "angina pectoris," and the latter an abiding difficulty of the respiratory act.

I offer short sketches of two cases which I watched with care for some time, and these will be probably better than an abstract description of a state of heart which it is very important to diagnose and to treat rightly.

1. A retired tradesman, aged 67, a man of active and temperate habits, has suffered for two years from slight dyspnœa. This winter, the dyspnœa has been more severe, and has been characterised chiefly by inability to move, and inability to sleep. The air-tubes and lungs are healthy; the heart's action is feeble, and the rhythm irregular. Physical examination tells us nothing else, and so the case appears to be a typical one of cardiac weakness, the apnœa, or the feeling of *want of breath*, being caused by the languid pulmonary circulation. The patient has received great benefit by the long administration of sulphate of iron.

2. The wife of an innkeeper, was under my care for erysipelas of the face, and constant dyspnœa. She was 55 years old, and I suspect had been not always very temperate. Examining the region of her heart one day, I discovered a pretty loud aortic regurgitant murmur. She had numerous purpuric spots on the skin, and appeared a most unhealthy person. I supported her by good food and good physic, but she got scarcely any better. One evening, when I was visiting her, she fell off her chair and died; and when her huge body was picked up from the floor, we found that her face, which during life was suffused with a deep erysipelatoid blush, was now as white as marble.

There was an insuperable hindrance to my making an autopsy of this woman. But my reading of the case was as follows:—Aortic incompetency, causing a compensative hypertrophy of the left ventricle; but this over-nourished muscle being *bad* muscle, degenerated and partly worthless, was of no permanent service to the heart, and so the organ stopped one day, and caused sudden death.

Note the sudden blanching of the surface in these cases. Dr. Richardson lays stress on this as a posthumous element of diagnosis. It may be assumed to arise from a stoppage of the supply of blood to the capillary vessels, which, in the moment before death, have emptied their contents into the veins. And this phenomenon

affords a clue to the proximate cause of death during the inhalation of chloroform. The first symptom denoting danger is, generally, a sudden paleness of the face; and this may be accepted as a certain index of approaching paralysis of the heart, involving an absolute arrest of function, if immediate means be not taken to avert it. (See a case, taken at random, recorded in the *Lancet*, November 15th, 1862, p. 533.)

There is a condition of the heart, anatomic and congenital, which furnishes another intrinsic cause of cardiac apnœa. A girl, aged about 18, suffers from constant palpitation; the pulse is normally 120, and very weak; her skin, and especially that of the face, is always dusky; she cannot ascend a hill without much difficulty. Physical examination detects no murmur, and no dilatation of the heart. My friend Dr. Coates, (formerly Physician to the Eastern Dispensary) kindly investigated this case. The only explanation I can give of it is, that the fœtal communication between the auricles did not become quite obliterated, and that a little venous blood perpetually filters through the septum, irritating the endocardiac surface of the left heart, and exciting, by reflex sympathy, hyper-action of its walls. This overaction takes a rhythmic form, and is never irregular.

Pure pathology awakens little—far too little—interest, unless it bears upon practice. And patients care for correct diagnosis usually only so far as it is a guide to correct prognosis and treatment. From these two standpoints—prognosis and treatment—it seems that the more common diseases of the heart may roughly be divided into three groups.

(*a.*) *Disease, Degenerative or otherwise, of the Muscular Wall of the Heart.* Death often sudden; scarcely ever can it be hoped that the heart will regain its healthy tone and power. Unless contraindicated by any complication or intercurrent malady, iron must be given perseveringly, and in good doses. Trust not to those transient props, ether and ammonia; they may weather a patient through half-an-hour's distress, but they have no further value whatever. Iron is the one and only element endowed with the property of regenerating blood, flesh-making food and pure air being, of course, allowed at the same time. Some form of alcohol is almost always advisable. By the use of these means much benefit may often be obtained, and apnœa lessened in severity.

(*b.*) *Disease of the Aortic Valves.* Death not often sudden. Dr. Stokes remarks that a general morbid state accompanies incompetency of the aortic valves; "a state of deficient hæmatosis, apparently that which favours the deposition of fatty, atheromatous, and tubercular matter." This points to the same principles of treatment as in the last case; the details being varied to meet individual exigencies. Iron is the unfailing medicinal remedy; its good effect being exercised in sustaining the compensative hypertrophy of the left ventricle, and in nourishing the overworked heart itself with good blood.

(*c.*) *Disease of the Mitral Valves.* Death sometimes sudden, and seldom long delayed. Tonics, especially of the ferruginous kind, are rarely well borne. The chief indication appears to be to unload the over-full venous system, especially that of the abdominal viscera, by saline purgatives (especially the potassio-tartrate of soda, usefully combined with senna or aloes), aided now and then by small doses of mercury. Elimination from the intestinal and renal mucous membranes should be favoured in order to discourage dropsy. A selection of digestible food, taken in small quantities at frequent intervals, is essential; and in this as in all other diseases of the heart, repose of the organ should be promoted by abstinence from unnecessary bodily exertion.

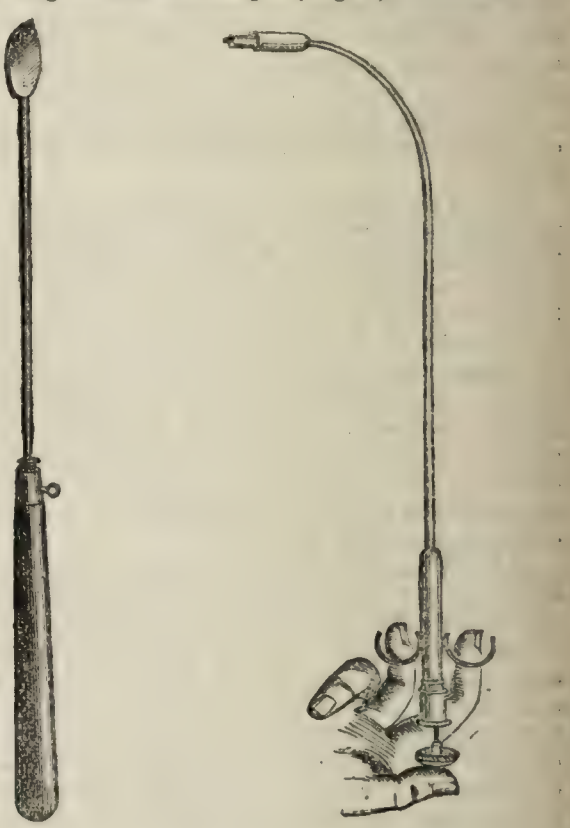
THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

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II.—Instruments Employed in Laryngoscopy.

[*Concluded from page* 269.]

All the instruments I have described are available alike for the examination of the larynx, and of the upper part of the pharynx and the nares; the face of the laryngoscope in the examination of the latter being, of course, turned upwards instead of downwards. As, however, the uvula and soft palate would prevent our seeing the mirror, unless they were artificially held out of their natural position, the little instrument figured in the margin (Fig. 4) becomes necessary. This consists of a broad leaf-like portion turned up at the end, and a stalk, both of metal; the stalk being fixed in a wooden handle. Its use is to raise the uvula and soft palate; and no better example can be given of the difficulties which must be encountered, in their attempts to apply the instruments practically, by those who derive all their knowledge of the laryngoscope from the instrument-makers, than the fact that the traveller from one of the principal London instrument-makers carried this palate-spatula about with him, exhibiting it as an instrument for depressing the tongue. When we are examining the nares, this little instrument is held in the left hand, while the right is occupied with the mirror. Consequently we are not able, when using these instruments, to apply caustics, or adopt any operative procedure, in the regions disclosed to us. I have seen several models of instruments combining the palate-spatula and the mirror in such a manner that both may be worked with one hand, leaving the other at liberty for whatever manipulations may be requisite in the treatment of the diseased conditions revealed by the rhinoscope, as an instrument combining the mirror and palate-spatula is called. The best rhinoscope which I have yet seen is that of Stoerk; and I am at present



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Fig. 4.—Spatula for raising the uvula and palate.
Fig. 5.—Caustic-holder.

getting a model made by Mr. Matthews of an improved form of this instrument, which will, I hope, prove of real practical value.

In the local treatment of the various affections of the larynx and pharynx, many instruments are required which it is unnecessary to describe; but, one of the chief advantages derived from the laryngoscope being the power it gives us of applying caustics with accuracy to the interior of the larynx, no description of the laryngoscopic apparatus would, I think, be complete which left unnoticed the proper form of caustic-holder. Several forms of this instrument have been proposed; and I have employed those of Stoerk and of Leiter. (The latter of these were to be seen, with a large collection of laryngoscopic instruments, in Leiter's case, in the Austrian Court of the International Exhibition; the instruments which I use and recommend are exhibited by Mr. Matthews of Portugal Street.) Both of these, however, have faults in their construction, which have induced me to endeavour to improve upon them; and the instrument here figured (Fig. 5) is the one which Mr. Matthews has invented and constructed, embodying all the suggestions which I made to him as to what was requisite to make the instrument as nearly perfect as practicable. The stalk of the instrument being slender, and at the same time rigid, we are able to direct the caustic accurately to the point desired, without so completely obscuring the image in the mirror as when we employ Stoerk's instrument; and, the extremity of the instrument being expanded, it admits a much larger piece of caustic than any of the foreign instruments I have seen, which will scarcely contain a piece larger than the fenestrum through which it is applied, so that there is risk of the caustic falling into the trachea. I have made the absolute security of the caustic a *sine quâ non* of this instrument. The caustic, being concealed when we introduce the instrument into the larynx, is pushed forward by the pressure of the thumb on a button at the end of the instrument; and, the pressure being taken off, it returns to its case by the elasticity of a spring, when opposite the point we wish to cauterise. The whole is perfectly manageable with one hand.

The ordinary sponge-probangs, mounted on whalebone suitably curved, are of course not superseded by the instruments for holding solid caustics; and no set of laryngoscopic instruments is complete without one or two of these. On precisely the same principle as his solid caustic-holder, Mr. Matthews has constructed an instrument with a sponge for the application of liquids; and regarding, as I do, the solid caustic-holder of incomparably greater practical value, for its convenience and security, than any that has been previously constructed, I should recommend the instrument for applying liquids to those who wish to have every instrument they use neat and elegant, as well as useful.

Together with the instruments I have described above, Mr. Matthews has submitted for my inspection a pair of forceps, or perhaps one should rather describe them as tweezers, which, projecting from the end of a long tube constructed with rings, etc., as is the caustic-holder figured above, are closed by the pressure of the thumb, and open again by their own elasticity when the pressure is removed. These Mr. Matthews, no doubt, intends for the purpose of removing such small foreign bodies as a fish-bone, etc.; and for this purpose they might, I think, be very useful.

Certain instruments, which I have had constructed for the treatment of special cases, I shall describe in connexion with the cases themselves.

Those who are anxious to make a special study of laryngoscopy, and who are able and willing to devote much time to the study of the laryngoscope, cannot do better than study its application on their own persons. Autolaryngoscopy is quite possible by the aid of simply a small mirror held in the left hand, while the right is used for guiding the laryngoscope; but this practice is very difficult, without the use of some apparatus especially adapted for it.

Although, from a fear of being tedious, I shall not here describe the instruments necessary for observing or demonstrating one's own larynx, I may mention the apparatus of Czermak, which is the one I have used. In this, by means of one mirror, the light from a lamp or the sunlight is reflected on to the laryngoscope held in the pharynx; while in another mirror, placed high enough to admit of the light reflected from the first passing beneath it, the operator observes the image of his own mouth with the laryngoscope, and its reflection of the larynx. Another apparatus, which I have not yet seen, appears from the description given by its inventor, Dr. Moura-Bourouillou, at least as good as that of Czermak, simply for purposes of autolaryngoscopy. The pharyngoscope, as it is called, consists of a mirror which may vary from six to eight inches in diameter; this is pierced in its centre by a hole an inch and a half in diameter; and in this opening is placed a lens of glass; the whole is mounted on a frame, which may be fixed to a lamp in such a position that the lens is immediately in front of the flame, the back of the mirror being directed towards the lamp. The light concentrated by the lens falls into the open mouth of the observer; and he, holding the laryngoscope in the proper position, sees what it discloses, reflected in the mirror of the pharyngoscope. The illumination in this instrument, being obtained by concentrating the light instead of reflecting it, is probably better than that obtained by Czermak's apparatus; but for demonstration to others the pharyngoscope of M. Moura-Bourouillou seems to me very inferior to Dr. Czermak's laryngoscope for self-observation; and I should, therefore, advise those who wish to take the judicious step of applying the laryngoscope and studying the laryngeal image on their own persons, before practising upon others, to purchase the apparatus of Professor Czermak, directions for the use of which I will give when speaking of the mode of applying the laryngoscope. Previously to discussing this, I shall, in my next paper, describe the appearance of the parts brought into view by the mirror, as seen during life.

[*To be continued.*]

The Idiots at Earlswood. Some idiots are much affected by changes of weather, the state of the barometer somehow remarkably influencing their nervous system. In short, the phases of idiotcy are illimitable, both bodily and mental, and the pointed remarks idiots make are perfectly inexplicable. For instance, one of them had heard that I had said in a speech they could not play at cricket; so he criticised me by observing, "It is very easy for a man to speak, but he often says what he does not know." However, he certainly could not play at cricket, though that game has now been achieved by many. A clerical friend of mine was showing some of the little ones his hunting-watch, which he blew upon, and then touched the spring, as if it opened by his breath; some larger boys were looking on, and said, "He looks like a clergyman, but he practises deceit." In fact, it is necessary to be most careful as to what is done or said before them, for they often remember everything and make strange observations, especially as to any promise the fulfilment of which may have been forgotten. Yet I have seen a nice little fellow who spoke well enough, but could not recollect what he said for a moment; the impression was gone directly. It should be known by all visitors that they are frequently much pained by thoughtless remarks upon themselves. ("*Earlswood and its Inmates*," *by the Rev. E. Sidney.*)

Reviews and Notices.

Clinical Memoirs on Diseases of Women. By Alfred H. M'Clintock, M.D., F.R.C.S.; late Master of the Dublin Lying-in Hospital; Hon. President of the Dublin Obstetrical Society, etc. With Engravings. Pp. 435. Dublin: 1863.

Practitioners who apply themselves to the treatment of the diseases special to females will, there can be no doubt, receive with pleasure, and with expectations of instruction, the announcement of a clinical work by an ex-master of that famed institution, the Dublin Lying-in Hospital; and, when they have read the book, we think they will agree with us in pronouncing that Dr. M'Clintock has done credit both to himself and to the Dublin school of obstetricians, in laying before the profession "some of the fruits of eleven years experience in the gynecological wards of the Lying-in Hospital."

The book consists of sixteen memoirs; and, to use the author's words, "is based on clinical observation; aims at clinical utility; and is illustrated by original clinical histories."

We will now give, according to the capabilities of the space at our disposal, an outline of the contents of the book.

The first memoir is on Pelvic Cellulitis. Dr. M'Clintock's experience of this disease is derived from seventy cases, of which two only were fatal—death taking place from dysentery, produced apparently from the bursting of an abscess into the colon. He finds the disease to be more common in first than in subsequent labours—twenty-eight cases out of sixty-one having occurred in primiparæ; and while he agrees with Dr. West that cellulitis is rarely the result of true puerperal fever, he supports the opinion of Dr. Bennet that it often follows an attack of metritis or metro-peritonitis. In thirty-four cases out of sixty-two, the development of cellulitis was preceded by "well-marked symptoms of uterine or abdominal inflammation, more or less severe, within the first week of childbed."

An important point is here noticed by Dr. M'Clintock; viz., the occasionally insidious development of pelvic cellulitis after metritis. The existence of the disease may be unsuspected until the patient begins to get up and go about.

"It is a very important rule, therefore, in all cases of convalescence from uterine or peritoneal inflammation, to examine the iliac regions day by day as regularly as to feel the pulse. By so doing, I have on several occasions detected the presence of latent cellulitis, when all the other symptoms indicated the complete subsidence of morbid action." (P. 3.)

After further commenting on the causes and describing the symptoms of the disease, Dr. M'Clintock notices the situations in which, if the inflammation goes on to suppuration, the abscess may burst. The cases that have come under his observation give the following results:—

"Of seventy cases, thirty-seven ended in suppuration with discharge of pus; twenty-four of these burst or were opened externally; viz., twenty in the iliac region, two above the pubes, one in the inguinal region, and one beside the anus; six were discharged *per vaginam*; five by the anus; and two burst into the bladder." (P. 9.)

He has never known a puerperal pelvic abscess to burst into the peritoneum; though he has seen this occur sometimes in non-puerperal abscess.

As to the relative advantages of the different modes of bursting, he finds that the escape of the matter externally, in the iliac or suprapubic regions, is most favourable. This opinion is contrary to one which is held by some other writers, especially M. Becquerel, who says that, when the abscess opens externally, "the suppuration goes on longer, weakens the patient more, and is more frequently complicated with alteration of the pus and with putrid infection." Whatever may be the results in a very large number of cases, Dr. M'Clintock's experience certainly justifies him in expressing an opinion at variance with that of the eminent French surgeon; and it is moreover to be noted, that the only two fatal cases in Dr. M'Clintock's practice occurred in patients in whom the abscess burst *internally*—into the bowel.

Here there follow the records of thirteen cases illustrating various points in the history of the disease; and the author concludes the memoir with some remarks on its treatment. In opening this subject, he insists strongly on the necessity of the recumbent position.

"The first thing is to impress on the patient and her friends that recovery can only take place very slowly; that she, therefore, must have patience, and be willing to observe the strict confinement to the horizontal position, which is the most important part of her management, and without which all treatment will prove nugatory. These cases almost always issue in the recovery of the patient; but they extend over a long period—from three to four months being their average duration. Until resolution has taken place, or, at all events, until the tumour has become chronic in the fullest sense of the word, the patient should observe a recumbent posture. I am anxious to urge this point, again and again, on the attention of the practitioner, for I do not think its importance is sufficiently dwelt upon by writers; and it has been my lot to witness sad, nay, even fatal, consequences from inattention to it." (P. 29.)

The plan of treatment recommended by Dr. M'Clintock may be explained as follows. In the acute stage, local bloodletting by leeches applied over the tender part stands first in efficacy; leeching the vagina or os uteri he thinks of less value, unless the inflammation be limited to these regions. Linseed-meal poultices applied over the lower belly; small doses of Plummer's pill or blue pill, with James's powder (Newbery's); rest and mental quietude; low diet; small opiates if the patient's rest be disturbed; a warm hip-bath in the evening (very great care being of course taken in moving the patient); and, if delivery have occurred recently, syringing the vagina with warm water twice a day (unless pain be produced)—are the remaining remedial means in the acute stage.

In the subacute stage, the author has sometimes seen benefit derived from the administration of doses of from one-tenth to one-sixteenth of a grain of bichloride of mercury three times a day in a drachm of a mixture containing equal parts of tincture of bark, tincture of henbane, and distilled water; a little muriate of morphia being added if there were tendency to diarrhœa. Of other remedies for the disease in this stage, or as it approaches the chronic stage—such as the application of strong mercurial ointment or of tincture of iodine, or the internal ad-

ministration of iodide or bromide of potassium in decoction of sarsaparilla—he does not seem to have a very high opinion, although he says that they "may be tried."

Here again, and even when the disease is assuming the chronic stage, he insists on the necessity for the exercise of great prudence with regard to allowing the patient to rise from bed, and remarks that

"It is certainly desirable to keep the patient under treatment as long as any obvious swelling remains; for, whilst the inflammatory products which form the bulk of the tumour are present in any quantity, they will form a starting point of inflammatory action under any exciting cause, however trivial." (P. 32.)

In the chronic stage, Dr. M'Clintock relies most on sulphate of quinine, iodide of iron, and cod-liver oil; each being used according to particular circumstances. Pure air, however, "is the best of tonics," if the patient can be safely put in a condition to enjoy its benefits. Sexual intercourse must be strictly prohibited as long as any vestige of the disease remains.

If the disease assume the suppurative stage, the treatment must be directed "with a view of hastening forward the abscess, supporting the woman's strength, and alleviating any prominent symptom (such as pain, diarrhœa, sweating, etc.) that may be present." With regard to opening the abscess, Dr. M'Clintock observes:—

"When the abscess points externally, an artificial opening is desirable, but this should not be made till the matter is near to the surface. It is not always necessary, however, to wait till the skin becomes adherent to the tumour; though it is generally advisable to do so. A free opening should be made with the lancet; and it is best to let the matter exude spontaneously from the abscess, or at least very gentle pressure only should be exerted on the latter. The contents of the abscess is usually thick greenish-yellow pus. Where the case proceeds satisfactorily, the discharge rapidly diminishes in quantity, becomes thinner and thinner, and finally presents the appearance of limpid yellowish serum. If the abscess tend toward the vagina, be prominent and distinctly fluctuating and causing much distress, the bistoury may be used; but in the ordinary run of cases I believe it better to let it burst of itself when pointing in this situation; and this was the course almost invariably pursued in my cases, and which I would recommend as a general rule." (Pp. 34-5.)

The memoir which we have just noticed refers to inflammation of the pelvic cellular tissue, occurring in puerperal women; and in the second memoir, Dr. M'Clintock comments on Pelvic Inflammation and Abscess in the Non-Puerperal State. Under this head he includes a group of cases which are assimilated more by their clinical than by their pathological characters; including cellulitis analogous to that which occurs after labour, together with pelvic inflammation consecutive on uterine or ovarian disease. The remarks of Dr. M'Clintock on the affections here noticed may be advantageously considered in connection with those of the French writers who have of late so ably investigated the subject—such as MM. Bernutz and Goupil, Valleix, etc. Several cases are related, which illustrate how insidious and dangerous pelvic or abdomino-pelvic abscesses may be, and how important is their diagnosis when any operative procedure is contemplated, as for the removal of an uterine polypus.

"They further supply us with some hints which may assist in diagnosing obscurely developed cases. The symptoms which should excite suspicion are:—1. A persistent hardness and swelling in one or other iliac region, not distinctly referable to uterine or ovarian enlargement....2. A persistent uneasiness here, with more or less tenderness on pressure. These symptoms alone should be sufficient to create an apprehension of some deep-seated collection of matter, and to prompt to closer and more connected inquiry in the same direction. We shall then most likely discover that the patient has had occasional attacks of abdominal pain, more to one side than the other, accompanied by febrile symptoms and by vomiting or diarrhœa. These illnesses she will, perhaps, describe as having been merely 'bilious attacks.' Her appearance will be more or less cachectic, and the pulse be somewhat above the normal rate; her appetite bad, she may perspire rather freely at night, and occasionally experience slight chills. She may be up and about; still she is only equal for slight exertion, and has a constant *malaise* and feeling of indisposition, which deprive her of all enjoyments, and unfit her for active duties." (Pp. 49-50.)

These symptoms, Dr. M'Clintock admits are not absolutely diagnostic of pelvic abscess; for they may arise from other causes. When present, however, they should "suggest the possibility of a purulent collection existing in the neighbourhood of the uterus, and should incite to careful investigation."

In the third memoir, the subject of Procidentia Uteri and the Use of Pessaries is very fully discussed. In cases of procidentia of long standing, attended with great difficulty—or apparent impossibility of reduction, Dr. M'Clintock has derived satisfactory results from strapping the tumour circularly with adhesive plaster; the strips being left on for two days, and then applied anew. In a case which he relates, reduction of the tumour, which had at first been impossible, was affected, though with some difficulty, after the removal of the fourth relay of the plaster. Great sensibility, or ulceration, of the procident uterus, of course, contraindicate the employment of strapping.

To remove impacted pessaries, Dr. M'Clintock uses a simple instrument consisting of a piece of stout iron wire twisted like a corkscrew at one end. He rarely finds it necessary to break a pessary in order to remove it.

As to the merits of the different kinds of pessaries, he does not pretend to give a positive judgment; but inclines rather to allow to each kind its own advantages in particular cases. The India-rubber pessary is generally very satisfactory, but it is not durable. The air-pessary, with a tube attached for inflation, "has not proved satisfactory to my patients"—on account of the irritation of the vulva by the tube. The pessary with a stem, secured by bandages and tapes, presents both advantages connected with the pessary itself, and inconveniences connected with its accessory apparatus. But if the patient can remain quiet or tolerate the inconvenience, this form of pessary is very serviceable; and in many cases where the perineum is extensively injured, it is the only one that can be worn. Dr. M'Clintock agrees fully with Dr. West regarding the use of sponge as a pessary, that its employment demands scrupulous cleanliness, and that it should be confined to minor degrees of prolapse, being used there as a precautionary measure, which may, if matters go well, be soon dispensed with.

The subject of the fourth memoir is Inversion of the Uterus.

In the fifth memoir, the subject of Fibrous Tumours of the Uterus is very completely treated of. In speaking of the modes in which life may be endangered by these tumours, Dr. M'Clintock expresses his opinion that the three most common sources of danger are the production of peritonitis, of exhaustion, or of hæmorrhage. Peritoneal or pelvic inflammation he regards, from his own experience, as the most fruitful source of danger. The inflammation may arise without any obvious cause ; or it may arise from the bursting of an abscess formed in the subserous cellular tissue ; or from the giving way of serous membrane over a softened fibrous tumour. Hæmorrhage, though often profuse, is rarely the immediate cause of death ; but by its frequent recurrence, with abundant sero-mucous or muco-purulent discharge in the intervals, the patient is liable to be brought into a fatal state of cachexy and debility.

In describing the treatment of the uterine fibroid, Dr. M'Clintock attaches much importance to the use of hæmostatic remedies—hæmorrhage being a symptom which often occurs. Among hæmostatics, he places in the first rank gallic acid, alum, tincture of Indian hemp, and iron. Of the Indian hemp, he says :—

"The hæmostatic properties of the tincture of cannabis Indica (Indian hemp) were discovered by Dr. Maguire of Castleknock, and made known to the profession by Dr. Churchill. I have repeatedly used it in the hæmorrhages depending on uterine fibroids, and can with confidence speak of its occasional marked utility. It does not always succeed—there is no one hæmostatic that will; but it disappoints less frequently, perhaps, than any other. It holds, I think, an intermediate place between the stimulating and depressing hæmostatic agents." (P. 145.)

Polypus of the Uterus forms the subject of the sixth memoir. In the treatment of this affection, Dr. M'Clintock gives a decided preference to removal by the knife, scissors, or *écraseur*. He does not absolutely condemn the ligature ; but, while in removal by excision the principal source of hæmorrhage, which occurs at the time and may be met, in the operation by ligature it is the secondary or remote effects that are to be dreaded. These are thus enumerated by the author :—

"1. Death may occur before the ligature has cut through the neck of the polypus, even in cases where this has not been unusually delayed, and where no part of the uterus has been included in the ligature.

"2. In some cases, a fatal termination has been brought about by the supervention of peritoneal inflammation.

"3. In other cases, uterine phlebitis, ending in death, has succeeded the application of the ligature.

"4. In not a few instances, the fatal issue has apparently been attributable to a low kind of toxæmic fever, or constitutional irritation.

"5. Pelvic abscess, with its attendant dangers, is a result to be apprehended from the operation of ligaturing uterine polypi.

"6. Phlegmasia dolens of one or both legs may follow the employment of the ligature.

"7. It would seem possible for a patient to be carried off by tetanus after this operation." (P. 185.)

In support of his preference of excision over deligation, Dr. M'Clintock mentions that the only fatal cases in thirty-four of uterine polypus which came under his notice, occurred in three out of ten after (he guards himself from saying positively as a result of) the application of the ligature ; further, that in fifty-nine cases of ligature reported by Dr. Robert Lee, death took place in nine ; while, according to the same eminent obstetrician, not one case was fatal among thirty-five in which polypi were removed by torsion or excision. Hence Dr. M'Clintock has evidently ground for opening his remarks on the ligature by saying that he believes "the use of the ligature alone, as a means of extirpating uterine polypi, is destined ere long to become nearly obsolete."

The remaining memoirs contain some valuable practical observations ; the notice of which, however, we must defer to our next number.

[*To be continued.*]

Anatomy of the Parts concerned in Femoral Rupture. By George W. Callender, Assistant-Surgeon to, and Demonstrator of Anatomy at, St. Bartholomew's Hospital. Pp. 51. London : 1863.

Not much, indeed, remains to be said of the anatomy of femoral hernia ; nor does Mr. Callender pretend to bring forward anything remarkably novel. His object has been to test the accuracy of the descriptions now generally accepted ; and at the same time "to trace the extent to which they have been derived from the writings of yet older authorities, whose writings deserve more general notice than has been accorded to them of late years."

Mr. Callender has laboriously examined the literature of femoral hernia, and has brought together the views of all who have written on its anatomy from the Hippocratic period to the present day ; and has thus produced a very interesting monograph, which we commend heartily to the perusal of surgeons and anatomists.

Progress of Medical Science.

Tubercular Disease of the Urinary Organs. Tuberculosis of the urinary apparatus, Professor Kussmaul observes, may occur as a part of general tuberculosis, manifested either in the acute or in the ordinary chronic form. In general, the deposit is limited to the cortical substance of the kidneys; the secreting tissue being capable of performing its function, and becoming only hyperæmic and ecchymosed when a copious tubercular deposit suddenly takes place ; the affection being attended by catarrh of the urinary passages. In very rare cases, the tubercular deposits become confluent, and form, by softening, small caverns in the substance of the kidney ; and still more rarely, the morbid process extends to the urinary passages, causing ulceration and thickening.

Of greater clinical importance than the manifestation of urinary tuberculosis as a part of a general affection, is a class of cases, much more rare, in which tuberculosis of the mucous membrane of the urinary passages appears either as a primary affection, or extends to the bladder and urethra, generally from the seminal passages, but in exceptional cases from the prostate.

Tubercle of the male genital organs is generally primary, and its extension to the urinary organs is either

limited to the bladder or to the bladder and urethra, or extends on one or both sides to the ureter and pelvis and calices of the kidney, sometimes even attacking the renal structure itself. In primary tubercle of the urinary passages, on the other hand, the degeneration generally proceeds from the calices of the kidney to the bladder; but both the renal calices and the bladder may be independently affected; or the bladder may be the starting point of the degeneration.

In women, the combination of tubercular disease of the urinary passages with tubercle of the genital organs is as rare as it is frequent in men. Dittrich, in forty-five cases of tubercle of the genital organs in women, observed it once to be combined with tubercle of the urinary apparatus. In this exceptional case, there was extensive tubercular ulceration of the urethra—perhaps, Professor Kussmaul thinks, the only recorded instance of tuberculosis of the female urethra. As a rule, then, tubercle of the urinary passages in women is primary, while in men it has generally first appeared in the genital organs.

Phthisis of the urinary passages seldom attacks the entire urinary apparatus, but is generally limited to particular points. As has been shown by Rayer and J. F. Meckel, one kidney may be extensively diseased, while the other, with its ureter, is quite or nearly free from tubercle and performs its function. This explains the infrequency of uræmia in phthisis of the urinary organs.

The kidney may be so far destroyed by the confluence and softening of tuberculous deposits, and the tuberculisation of the products of diffuse nephritis may advance so far, that scarcely any part of the gland remains beyond the thickened capsule.

The tubercular kidney is generally enlarged; sometimes it is of its normal size, or even smaller. Professor Kussmaul has seen a case in which it was as large as a child's head; the patient was a female servant. Such a great enlargement always arises from the distension of the kidney and its pelvis and capsule by retained urine and pus, if the ureter be narrow or frequently and for a long time obstructed. Moderate enlargement may be ascribed to inflammation of the parenchyma of the organ, preceding the deposits of tubercle.

As more rare conditions under which tubercle of the urinary passages is met with, Dr. Kussmaul refers to the following. Dr. Basham saw, in one case, a fistulous communication between the bladder and rectum. Lundberg has described a case in which the renal purulent collection broke into the abdominal cavity. Passavant describes an instance where the *trigone* of the bladder was destroyed by tubercular ulceration.

Phthisis of the urinary passages is a very rare disease. Willigk has arranged in order, according to the frequency in which the disease was found in them, the organs in which tubercle was observed in 1317 cases. The order is as follows: lungs, intestines, mesenteric glands, larynx, lymphatic glands, peritoneum, spleen, *kidneys*, pleura, liver, air-passages, bones, genital organs, brain, cerebral membranes, *urinary passages*, pericardium, stomach, tonsils, skin, muscles, tongue, pharynx, œsophagus, pancreas, and heart. The kidneys thus occupy the eighth, and the urinary passages the sixteenth place. Among the 1317 cases of tubercle, the kidneys were affected in 74, or 5.6 per cent.; viz., in 44 (or 5.8 per cent.) of the men, and in 30 (or 5.3 per cent.) of the women; while the urinary passages were tuberculous in 12 cases only, or 0.9 per cent.; viz., in 7 men and 5 women.

Tubercular disease of the urinary passages is observed at all ages; but rarely before the tenth or after the sixtieth year. Ammon saw it in a female child aged 3½ years, the left kidney being enormously enlarged; and Dittrich saw a man aged 71 with tubercle of the bladder, ureters, and kidneys, the disease having extended from the genital apparatus.

The diagnosis of the disease, according to Dr. Kussmaul, depends on the following phenomena and circumstances:—

1. The patients become rapidly emaciated. This emaciation depends on hectic fever; on the discharge of pus and frequently also of blood with the urine; on night-sweats; on disturbances of the digestive function; and occasionally on diarrhœa, which does not necessarily depend on tubercle of the intestines.

2. There are symptoms of chronic inflammation and ulceration of the urinary passages. Among these, as direct results of inflammation and ulceration, are burning, heavy, and dragging pains, generally severe, but varying in intensity in the bladder, in the course of one of the ureters, and in one or the other loin, corresponding with the extent of the tuberculous inflammation. Pressure on the vesical region, or below the false ribs according to Christensen, may increase the pain. The pain in the inflamed bladder is increased in micturition; there is urgent desire to pass urine, and sometimes even incontinence. Ammon noticed pain in the leg of the affected side in a lad aged 19; König has noticed numbness of the thigh.

Another symptom is the discharge of blood and especially pus with the urine. Sometimes the discharge of blood appears first, and that of pus at a later period. Frequently a purulent deposit only is observed; and in a case described by Rayer blood alone was discharged by a patient suffering from tubercle of the genito-urinary apparatus. In a case described by Christensen, the urine at the commencement of the disease was clear, but contained albumen. The urine has been observed to be sometimes acid, sometimes alkaline. The fluid may remain clear in spite of ulceration of one kidney, if its ureter be obstructed by any cause, and the mucous membrane below the obstruction remain healthy.

The epithelium of the bladder may be thrown off extensively, and discharged either in single scales or in large flakes. Epithelial casts of the renal tubules may also be occasionally discharged with the pus.

Elastic fibres, granular *detritus*, and shreds of cellular tissue may be discharged with the urine. This discharge denotes deep-seated loss of substance of the mucous membrane, but does not absolutely denote tuberculous ulceration, unless it be of long duration.

The presence, to the naked eye, of larger or smaller cheesy-looking deposits, together with the discovery by the microscope of tubercle-corpuscles insoluble in acetic acid, with granular *detritus* and elastic fibres, render the existence of tubercle very probable, inasmuch as these cheesy-looking products are rarely observed except in tubercular ulceration.

As more indirect results of the chronic inflammation and ulceration there have been observed diminution of the urinary secretion, and the presence of a swelling in the region of the kidney. The urine may be diminished by destruction of the secreting apparatus or by obstruction of the urinary passages. Dr. Kussmaul believes, that the retention of urine on the pelvis of the kidney by the blocking up of the ureter through the impaction of tuberculous masses or shreds of tissue increases the lumbar pain, which again decreases when the impacted mass is carried away. The absence of urea and urinary salts, observed in one case by Rigler, is to be ascribed to the destruction of the secretory apparatus. Signs of a renal tumour have been observed by Ammon, Rayer, König, and others, sometimes on the left, sometimes on the right side; but they are generally absent. In one case, recorded by Lundberg, the renal abscess opened into the abdominal cavity. The pus became enclosed in a cyst, which was punctured, after which the patient (a female) lived half a year.

3. The diagnosis is further aided by the exclusion of other causes which may give rise to chronic inflammation and ulceration of the urinary passages. In none

of the cases collected and compared by Dr. Kussmaul was there gravel, calculous deposit, or echinococci in the urine, or any of the colicky pain which is observed in cases of calculous pyelitis and sometimes in hydatid disease of the urinary passages. The diagnosis is further grounded on the absence of ramified fibres or of cells from the urine, denoting the non-existence of cancer; as well as on the absence of any tumour projecting from the wall of the bladder into its interior. If a tumour be observed in this situation, the larger it is, the more likely is it to be carcerous. Another point in diagnosis is, the absence of urethral stricture or of enlargement of the so-called third lobe of the prostate, which may be attended by chronic inflammation of the urinary passages.

4. There is hereditary predisposition to tubercle, or evident tubercular deposit in other organs, in the lung or testicles. Tubercular degeneration of the testicles, from which in the male sex tubercle of the genito-urinary apparatus usually extends, is readily recognised. When no positive signs are elicited by examination of the testes, an exploration *per anum* is indispensable, as the disease may have been developed from the prostate and vesiculæ seminales. In many cases, pulmonary tubercle appears at an early or a late stage of tuberculosis of the urinary organs; sometimes, however, no signs of it can be discovered, even on *post mortem* examination.

Tubercular disease of the urinary passages rarely continues more than one or two years. Death is usually brought about by marasmus, terminating in diarrhœa, pneumonia, etc.; more rarely there is uræmia. Sometimes death occurs from pyæmia; or the concomitant tubercular disease of other organs.

The treatment of tuberculosis of the urinary organs is altogether confined to symptomatic and palliative measures. (*Würzburger Med. Zeitschrift*, Band iv, Heft i.)

Hydronephrosis from Obstruction of the Right Ureter by a Supernumerary Renal Artery. In a woman who died of pneumonia, Dr. Kussmaul found the pelvis of the right kidney dilated into a large sac containing urine. The cause of this appearance was the following. From the abdominal aorta there passed at a right angle two renal arteries towards the hilus of the right kidney. The upper artery, which was the larger, and of the size of a goose-quill, divided into two branches, and sank into the upper part of the hilus; the lower, which did not divide before reaching the kidney, entered the hilus at its lower and posterior part; so that the ureter was embraced between the two arteries and compressed by them. Dr. Kussmaul is aware of one similar case only; it is recorded by Rokitansky in his work on *Pathological Anatomy*. (*Ibid.*)

Urinary Paraplegia. Dr. Kussmaul gives a *resumé* of the opinions held by Leroy d'Etiolles, Friedberg, Gull, Stanley, Graves, and Brown-Séquard, regarding the paraplegia which sometimes attends diseases of the bladder and kidneys; and, after reciting and commenting on a case, enumerates certain conditions to which, in the present state of our knowledge, attention should be directed in such instances of urinary paraplegia. These are:—1. Inflammation of the spinal cord and of its membranes at the lower part. 2. Inflammation (myositis) propagated from the kidney to its capsules and to the psoas and iliacus muscles. 3. Inflammation (neuritis) propagated from the kidney or bladder to the lumbar or pelvic cellular tissue, and so to the lumbar and sacral plexus of nerves. 4. Inflammation of the pelvic arteries, and consequent interference with the nutrition of the sacral plexus. (*Ibid.*)

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LAW *versus* MEDICAL SCIENCE.

On each occasion of the circuit of the Judges, we have to note a deplorable struggle between science, legal phraseology, and humanity. The subject is ever the same, and is involved in the unanswerable question: What is insanity? Assuredly a definition of the term which will fit all cases is an impossibility. The learned judges of the land, at the request of the House of Lords, once tried their hands at a legal explanation of it, and completely failed in the impossible attempt—differing, of course, like doctors, among themselves.

Such being, then, the actual position of the question, it becomes to common sense manifest, that each case of insanity must be judged of by its own particular signs and symptoms. We have no defined measure by which we can gauge and estimate the sane or insane condition of a man's mind. The whole history of the man's life must be taken into the calculation, and form the basis upon which our conclusions should be founded. For example, the hereditariness of insanity is an undoubted fact; and is one which cannot be ignored. Insane acts committed long ago by an individual, who has subsequently led a sane and consequent life, must of necessity be taken into consideration, should he again show signs of insanity, and commit a criminal act.

But all such positive facts are ignored by the law when it comes to deal with the criminal. The law says: Did the man know he was doing wrong when he murdered his fellow-man? If he did, he dies the death by the hangman. Such is the law, as laid down the other day and put in practice by Sergeant Shee, acting as Judge. If ever there was a madman, according to evidence given at his trial, the man, who has been left for execution by the Sergeant, is mad. But, says the Judge, I care nothing about all the facts of his previous irregular life, and of his mad ways. I want to know only whether he knew he should kill his man when he shot at him. The Judge asked Dr. H. Tuke—

"Do you think that a man who for the last three years has had the constant use of firearms and never attempted homicide before, is under the influence of homicidal mania?—I do not think this was a case of homicidal mania. It is ordinary mania, with only an occasional tendency.

"You have heard all the evidence, do you, as a man of science, from what you have heard, undertake to say that it is your opinion when he raised his gun at Mr. Stone he did not know if it went off it would kill him?—My opinion is that he did know that it would kill him, but that he had not the power to restrain his will—that he pulled the trigger against his mind. I have

seen my own patients regret with tears their tendency to commit suicide, and yet directly afterwards attempt it.

"Will you undertake, as a man of science, and with a due regard to your oath, to say that it is your opinion that at the time he fired that gun he did not know that what he was doing was wrong?—I have the greatest difficulty in answering that question. He knows now that it was wrong; but I believe that he was under an uncontrollable impulse."

Now we would ask the learned Judge whether, on due consideration, he thinks it possible that any living soul can give a positive answer to the question which he asked? Supposing for a moment that the man really was of lunatic mind (as asserted of the prisoner in this case), what human being could pretend to have the power of entering into that man's thoughts, and of describing the ideas—morbid, or sane, or conflicting—which were raging in his (as pre-supposed) lunatic mind, at the moment when he committed the murderous act? It is manifest that one Only Being can proportion out the degree of real criminality which attaches to the act. To ask such a question of a medical man, is to ask him what he cannot possibly answer with certitude, as Dr. H. Tuke very properly stated. But yet on this answer is to rest the life or death of the man! On what cannot possibly be more than mere opinion and hypothesis—viz., that the man knew he was doing wrong—judgment of death is passed upon him! But surely this is an exhibition of deplorable, not to say unjustifiable, ignorance on the part of the law! Is it not admitted as an undoubted fact by lunacy doctors, that there are few if any lunatics who have not some sense of right and wrong still left in their unhappy minds? Is it not a fact, that one of the greatest improvements in the modern treatment of insanity is the system of rewards and punishments which is introduced amongst lunatics? Are not many lunatics restrained from certain improper acts by moral discipline? Do not many lunatics often know and feel conscious that they are doing wrong acts? Are they not induced to refrain from the commission of wrong acts by promises of rewards, and so on? And does not this prove that undoubted and accepted lunatics may commit criminal acts, knowing them to be criminal acts? If this condemned man, indeed, of whom we are now especially speaking, had been the inmate of a lunatic asylum, or under medical inspection, when he committed the murder, who would have thought of asking the vain question, Did he know right from wrong when he did the deed? In all this the dry unfeeling law utterly ignores the rage and conflict tearing in the lunatic's mind. Who can say that, when the lunatic commits some horrid atrocity either on himself or on others, he is wholly ignorant that he is doing wrong? No living man can enter into the secret of that contest which is going on in his brain, or define the power of the impulses which are stirring him to savage acts or dissuading him from their performance. To pretend to decide upon the responsibility of such a mind as this, is to entrench upon the domain of the Allseeing and the Allwise.

The course of a just, a benevolent, and a scientific dispenser of justice in such a case is, to our mind, very clear. It should inquire whether the man's general acts and life had been the acts and was the life of a sane or of an insane person; and, if insanity were plainly stamped upon the general tenor of his life, ascribe this last—this murderous—act to the same infirm and irresponsible condition of mind. In this particular case, if the evidence given on the trial, as reported, may be accepted as correct, it seems to us that there was long ago abundant evidence to have justified the putting of this man under restraint. He was the subject of wild and mad fancies; such, indeed, as would not only have justified, but required, his being put under restraint. And we would ask Sergeant Shee, supposing our statement that his previous acts were the acts of a lunatic to be correct, and that the man's friends had kindly put him under restraint, and that he had managed to commit this murder while under such restraint—we ask, would any judge in the land, or any jury, have ever dreamt of condemning him to death for murder? Most assuredly not. But where, in the eye of abstract justice and of reason, is the difference in the criminality attaching to the murderer, whether he did the deed as a lunatic under restraint, or as a lunatic loose upon society? And the conclusion is this: That this man, of lunatic mind, has been condemned to death because his friends had not the courage or the forethought to place him under restraint!

One word more. It is impossible not to note that justice is in this matter often tinctured with stern and extra severity, because it feels itself opposed by what we will venture to call the light of medical science. With a kind of Rhadamanthine sternness she hardens her heart against mercy, because she thinks herself assailed by medical theories. The law as laid down by the great judges of the land must be maintained. Their definitions and wise saws, though born of the cruel justice of fifty years ago, must not be upset by the subtle fancies of a lot of half-crazy mad-doctors! It is impossible not to dread that sentiments of this kind, fanned and fostered by the ignorance in this matter and brutality—we can use no other fitting term—of certain of a powerful public press, have their influence over judicial minds, and so lead even them to judge prejudicially all evidence which is offered in favour of the lunatic and irresponsible nature of the deed committed. What can justice want more, than that the murdering lunatic should henceforth be placed, during his life, where he can never again indulge his murderous inclinations?

These last words have received since they were

written, strong confirmation in a trial which occurred on the 18th instant at Maidstone. It is impossible to read the report of it and not feel that the learned judge who presided over it was, from the beginning to the end, biassed and prejudiced against the plea of insanity. We have no hesitation in saying that here again is another lunatic condemned and left for execution. A boy, eighteen years of age, selects a little lad for his victim, cuts his throat, and does this because he himself wishes to die.

"The young man himself stated that he had felt an impulse to kill some one; that he had sharpened his knife for the purpose, and went out to find somebody on whom he should use it; that the poor boy was the first person he saw; that he followed him to a convenient place upon the Lines, knocked him down, cut his throat, knelt upon him, and pressed the blood out of him until he was dead."

The crime is admitted; and witnesses are brought who, one after the other, show acts of mental aberration on the part of the prisoner. A surgeon at Chatham stated that he had twice sent the boy's mother to a lunatic asylum; she had attempted suicide; and that his brother was of weak intellect. The summing up of Judge Wightman is an extraordinary specimen of special pleading. Divested of phraseology, it propounds the extraordinary doctrine that a man of lunatic mind is not a lunatic. "Homicidal mania," the judge is reported to have said, "shows no delusion; it merely shows a morbid desire for blood. Delusion means the belief in what does not exist." What, are we to be gravely told that the ideas which guide the homicidal maniac when he attempts his acts of homicide are not delusions—are not, as the judge would put it, founded on a belief in things which do not exist? The judge will not listen to such a thing as "moral insanity" and "homicidal mania."

"The medical man," he says, "called for the defence defined homicidal mania to be a propensity to kill, and described a moral insanity under which a man, perfectly aware that it was wrong to do so, killed another, under an uncontrollable impulse. This would appear to be a most dangerous doctrine, and fatal to the interests of society and the security of life. Surely such a theory was as contrary to common sense as it undoubtedly was to law. The rule, as laid down by the judges, was quite inconsistent with such a view; for it was that a man was responsible for his actions if he knew the difference between right and wrong. It was urged that the prisoner did the act to be hanged, and so was under an insane delusion; but what delusion was he under? So far from it, it showed that he was quite conscious of the nature of the act and of its consequences. He was supposed to desire to be hanged, and in order to attain the object committed murder. That might show a morbid state of mind, but no delusion."

Will the judge, or any living being, explain how a man can have a morbid state of mind and not suffer under delusion? Are not the very words of the judge self-contradictory? Is not the very expression by which we judge of his morbid state of mind demonstrative of the delusion under which the lunatic labours? And then, what a farce to tell us that, unless this miserable lunatic lad is hanged, "the interests of society and the security of life will be fatally damaged!"

High time, indeed, is it that the legal definitions of lawyers, their attempts to define in set terms that which is utterly incapable of definition—viz., insanity—should be swept away; when such manifest lunatics as the two of whom we are now speaking are left (apparently without hope of mercy) for execution, in order that the theoretical explanations of the term insanity laid down by learned judicial minds should not be ignored.

We have not space to follow out one other most serious conclusion to which these trials point; viz., the deplorable ignorance of the public, which interferes with science when it would seize upon these victims of insane delusions before they commit the fatal acts to which they are driven under their influence. "Mad-Doctors" are derided when they point out those early symptoms which to their practised eye are manifest signs of the future danger. "We will not allow you," says the public, "to interfere with the liberty of these homicidal maniacs. We prefer to consider them of unsound mind, and to hang them when they destroy life, which you tell us they one day assuredly will!" Spite of all legal subtilty and public ignorance, we venture to assert that Science and her sister Humanity will yet win the day in this unseemly struggle.

DISEASES PREVENTION ACT.

Dr. Brady, as he promised, has brought in a Bill to regulate the removal in hired or public carriages of persons labouring under infectious diseases in the metropolis. The Bill gives power to local authorities to provide and maintain carriages for the conveyance of persons labouring under infectious diseases, and to fix the rates to be charged for such carriages, and the penalty for using any hackney carriage for the removal of any person suffering from contagious disease. The fourth clause provides that it shall not be necessary, upon the hearing of any charge of such offence having been committed, in any such conviction to state or prove the disease under which such person was suffering; but it shall be sufficient to allege and show that such person was suffering from disease, and that the person using or employing the hackney carriage knew, or had reason to believe, that such disease was infectious or contagious.

We suspect that such a Bill as this will never pass the House of Commons; and, indeed, as we have already stated, the subject will be found, on examination, to be one of much difficulty to deal with. To enforce the penalty as proposed, it is evident that the cabman or any other medically ignorant in-

dividual may, for the purpose, give a diagnosis of disease. We must say, therefore, that it does not appear possible to deal with this matter by enforcing penalty. Fancy a cabman medically examining a sick fare to determine whether or not his sickness is contagious or infectious! With such a power as this Bill would give, a cabman might actually refuse to convey a respectable alderman to his destination—asserting, as his excuse, that his rubicund visage was manifestly a small-pox eruption. Besides, if people afflicted with infectious or contagious diseases are liable to penalty for riding in cabs, it is evident that persons suffering from syphilis, itch, etc., will be comprised under the penal clause of the Bill! Again, there are diseases—typhus and typhoid fevers, for example—concerning whose contagious nature even doctors still differ. Who, then, is to decide in such cases? Besides this, as we all know, contagious diseases may be contagious in stages during which no external signs exist to manifest the presence or nature of the disease. A cabman, moreover, might object to convey a fare whose face was swollen and distorted by erysipelas; and yet, who would venture to swear that the disease was communicable? To prevent sick people, not suffering from contagious diseases (on the other hand), from demanding the use of public carriages, would be an insufferable act of tyranny. Besides, where are the delicate-minded cabmen to be found, who would, *for a due consideration*, object to take the most virulent of diseases into their cabs?

These considerations assure us that it is impossible to carry out in practice the purposes of such a Bill as this. What Government can and should do is to enforce on parochial managers the propriety and necessity of their keeping conveyances for the purpose of removing those who are, or who are suspected to be, the subjects of infectious diseases. These conveyances should be placed, gratis, at the service of those who require them—of course, under certain due regulations; and would be of very great service in diminishing the evils which they are meant to meet. All public institutions, workhouses and hospitals, etc., would employ them. But it is vain to think that any persons above the class of hospital patients, or who could hire a conveyance of their own, would ever use them. The very fact of their being contagious-disease conveyances would be enough to stamp them with a bad character in the eyes of the class referred to. This is clearly one of those evils which the legislature may mitigate, but which it cannot cure. The cabman's diagnosis of the contagiousness or otherwise of the disease of any sick fare requiring his services will, as a matter of course, be regulated by the amount of the fee paid to him!

Since the above lines were written, Dr. Brady's Bill has met in Parliament the fate which we anticipated for it. The result will, we fear, not improve the already unfortunate character which doctors bear of being bad men of business.

"Mr. HENLEY said, that common sense ought not to be shut out from the discussion of the question. When he came to look into the enacting parts of this Bill, he had not the least conception where he was. The honourable member had not attempted to give them any definition of what the words "contagion" and "infection" meant. Most people believed that the itch was catching; and then, again, there was that class of diseases which some twenty years ago Dr. Edy was so famous for curing. [*Laughter.*] Well, but would either of those diseases come within the category of the cases provided against by this Bill?

"Sir G. GREY had already told the honourable member who introduced the Bill that, in his judgment, not only was it inoperative in its present shape, but that even in committee it could not be so altered as to give it practical effect. It certainly did not appear to him that they were arrived at such a condition of affairs that under no circumstances ought a public vehicle to be used for the conveyance to a hospital of a patient labouring under any of the diseases specified by the honourable member. He believed that in the cases where vehicles had been provided by the parochial authorities to meet the cases contemplated by the Bill, not a single application had been made for the use of such conveyance.

"Dr. BRADY agreed to withdraw his motion for the second reading, and to place it upon the paper for Wednesday, the 27th of May."

THE WEEK.

IN a valuable paper published in the last number of *Guy's Hospital Reports*, Dr. Wilks illustrates extensively the pathology of morbus Addisonii. He there shows conclusively that the criticisms, or rather scepticisms, which have from time to time been thrown upon Dr. Addison's discovery, are without any real foundation in facts. Dr. Addison's main statements are, as Dr. Wilks shows, founded on undeniable data; further experience has only more firmly established their truth. Dr. Addison thus stated his views.

"If he saw a patient who presented this peculiar discoloration of the skin, he offered no explanation as to where, or why, or how it came. He observed associated with that discoloration a certain train and combination of general symptoms—a pearly eye, a feeble pulse, a disposition of strongly marked anæmia, and a few other symptoms less constant and less urgent; and when he met with that combination, he said, 'There is a case in which you will find disorganisation of the suprarenal capsules.' The body is examined, and no other organs are found diseased."

In this paper Dr. Wilks gives us details of twenty-five additional cases, and draws from them the following conclusion:

"It will be observed that in this series of twenty-five cases, in only one of them was there a total absence of pigmentation of the skin. In four the discoloration was not sufficiently marked to attract notice, or the patient was not under treatment for a sufficient time so as to afford an opportunity for a correct diagnosis. In all the others the skin was observed to have been of a very dark colour. In some of the earlier cases, of course, the dis-

coloration had not been yet connected with disease of the capsules; but in the seventeen remaining ones the skin was very dark, and in all (save one) the correct diagnosis was made. In some of these an opinion was formed by those who had had some experience of the disease; in others a conclusion was arrived at by those who had only a written knowledge of it.

"If the fact be contemplated, that in so large a number of cases a disease was suspected to exist in a particular part of the body, and that this was found in every case as anticipated, a conclusion is arrived at, proving the connexion of the symptoms with that disease, which can admit of no doubt; indeed, it strikes the writer that more remarkable than any of the phenomena of the disease is the fact that any other conclusion than Addison's can be arrived at concerning it."

The surgical qualification obtained by the license of the London College of Physicians is, we are happy to find, of practical utility to the possessor of it. We understand that a Licentiate of this College has recently obtained an order in the Durham County Court for the payment of two accounts for services rendered in surgical cases; he having no other surgical qualification than the one above referred to.

It would appear, from the following conversation which took place in the House of Commons, that there is a chance of the grievances of the Indian medical officers being, at all events, carefully inquired into:—

Captain Jervis, who had a notice on the paper to move for a select committee to inquire into the alleged grievances contained in the various memorials and petitions of officers of the late East India Army, said that owing to his not having clearly understood last night what fell from the Secretary of State for India, he did not give notice of his intention to withdraw the motion which stood in his name. But, on perusing the exact words of the right hon. gentleman, he found that the Secretary of State was prepared to recommend Her Majesty to issue a Royal Commission to inquire whether the guarantee given to the officers of the late East India Army by parliament had or had not been departed from, and having that assurance he should not persist in his motion. (Hear, hear.)

Sir C. Wood thought that his answer was clear that such was his intention.

The Fourteenth Report of the New England Female Medical College at Boston is not favourable to the idea of female physicians. In 1854, it tells us that its first diplomas, four in number, were granted. In 1857, it had seven applicants; in 1858, five; and since then the number has gone on *diminuendo*. At the present time the College is in debt.

Dr. Savignac speaks in high terms of praise of chlorine preparations as applications in cases of chilblains—chlorine-water; or of the dry powder of chloruret of sodium to ulcerated chilblains.

M. Rayer presented to the Academy, in the name of M. Giraldès, a biographical notice of Sir Benjamin Brodie. Whereupon the President observed that the death of Sir Benjamin Brodie has caused a vacancy amongst the foreign associates.

In a communication to the Academy, M. Pasteur states that a certain number of infusorial animalcules can live and grow without free oxygen and without contact with air.

Dr. Hullin, in his work on *Medicine and Surgery* lately published, tells how he got rid of a pencil five *centimètres* long and six *millimètres* thick from the bladder. He made his patient retain his urine for as long a time as he possibly could; and when he could hold it no longer, to lean over a table, to grasp its edges firmly, make a deep inspiration, and then force out the urine with all his might. On the very first attempt, the pencil flew out to some distance, and without causing any great pain. M. Hullin recommended this plan from a knowledge of a hydrostatic law. When a vessel with a narrowish opening at the bottom is filled with water, and the opening is suddenly set free, the liquid in escaping makes a whirling motion at the opening; in this whirl floating bodies are seized, and turned so that one of their extremities is presented to the opening. The bladder represented the vase in this case. M. Bousquet says that the former M. Sedillot relieved himself in a similar way of several small calculi.

M. A. Dumont, a young French physician, has sought and obtained permission to go to Mexico to study the yellow fever, which is decimating the French soldiers there. The Government minister has requested the Academy of Medicine to give their young *confrère* some useful instructions as to how he may best employ his talents in the study.

M. Boudet has just sacrificed a dozen secret remedies, whose authors sought for them the approbation of the Academy. His predecessor, M. Robinet, we read, generally scattered a few flowers over his victims before slaying them; he was the Saint-Just of secret remedies. M. Boudet is the Couthon—death without a word.

M. Cuzent has read a note to the Academy of Sciences, entitled, Poisoning by Oysters taken on a Bank near a Copper Mine; and Demonstration of the Presence of the Copper in these Molluscs. The oysters in question, he says, came from England; and were taken near Falmouth in the neighbourhood of a copper mine. These animals have occasioned, he adds, some symptoms of poisoning.

The French Medical Association, in the matter of medical fees, does not consider that it can fix any scale of charges. "The fees of medical men," the report says, "must be regulated by conditions which vary considerably; they depend upon a kind of tacit agreement made between the doctor and his patient; and to attempt to fix the fee would be to interfere with the independence of both the parties. The Association, therefore, should abstain from any general discussion on the subject, as being injurious to professional dignity."

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

The Committee of Council will meet at the Queen's Hotel, Birmingham, on Tuesday, the 24th of March, at 1.30.

Financial Report for 1862, and other business.

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, March 16th, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [General.]	37, Soho Square.	Wednesday, March 25, 4 P.M.
Midland. [Quarterly.]	Board Room of the County Hospital, Lincoln.	Friday, March 27th, 7 P.M.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

The next of the present series of the above meetings will be held at the Old Falcon Inn, Gravesend, on Friday, March 27th, at 3.30 P.M. A dinner will be prepared at 5.15 o'clock precisely. Price of dinner ticket, 5*s*., exclusive of wine.

Mr. Durham, of Guy's Hospital, has promised to explain and exhibit the Laryngoscope.

Trains will leave for London and all stations on the North Kent Line at 8.19, and for Rochester and Maidstone at 8.17.

James Dulvey, *Hon. Sec.*

Brompton, Chatham, March 1863.

EAST KENT DISTRICT MEETINGS.

The seventh meeting was held at the Pavilion Hotel, Faversham, on March 5th; Silvester Eastes, Esq., in the Chair. Several members and other visitors were present.

New Members. Mr. Wm. Bateman and Mr. C. Egerton Fitzgerald, both of Folkestone, were proposed as members of the South-Eastern Branch of the Association.

Next Meeting. It was agreed that the next meeting should be held at Canterbury, on May 7th.

Continued Fever in East Kent. The Secretary called attention to the plan he had adopted for collecting information from members regarding continued fever, which had been so prevalent in East Kent during the last three or four months. He thought it one of the advantages of societies of this kind, that every member should be willing to contribute knowledge and facts from their daily experience. He was aware that some of the members thought that, as they had not taken notes of their cases, they could not fill up the *Return* he had sent to them; but he thought, if they would take the trouble to look through their prescription and day books, many of the columns in the *Return* would be easily filled. Some members had suggested it would have been better to have sent out the *Return* three months ago; but at that time the Secretary could not anticipate such an amount of disease as to deem a special inquiry necessary.

The members present agreed to the advantage of such an inquiry, and promised to do all they could to fill up the *Returns*, so that the Secretary may present an aggregate report at the next meeting.

Communications. 1. Mr. Silvester Eastes read some remarks on the use of the Infusion of Digitalis in Dropsy depending on Disease of the Heart, with notes of two cases to illustrate its effects, which he had found very beneficial in several instances. He particularly pointed to the great advantage of using the infusion in larger doses than is commonly done. He had given six or seven drachms every four hours; and, in some of his cases, the infusion had produced a marked diuretic effect after the tincture had failed. He therefore recommended that, whenever digitalis was used, it should be the infusion of well dried leaves.

2. Mr. Bowles read some remarks on Acute Hydrocephalus, with cases. To illustrate this disease, Mr. Bowles detailed two cases as typical examples—one death, and one recovery. It was shown that usually in this disease, after some disturbance of the economy, generally one or other of the diseases peculiar to childhood, the child never thoroughly rallies; an interval of feeble health supervenes, with impaired nutrition, of some weeks or months duration; and at last, to the surprise of the friends, brain-symptoms set in, and the child is lost.

In the first case, the symptoms were most insidious. The child, four years of age, had suffered from an attack of remittent fever in January 1861, and was sent away for change of air. After its return from a six weeks absence (April 15th, 1861), it was found to be a little ailing; it did not sleep well; its bowels were irritable; and it suffered from attacks of sickness. There was no thirst, and she took what was given her. The tongue was furred and red at tip and edges. All these symptoms did but indicate a little stomach derangement, arising possibly from the excitement of coming home and seeing her parents after a six weeks absence. But, in addition, it had a listless look, the pupils were sluggish, and the *pulse* was somewhat uncertain in force; yet even these symptoms, though they fixed attention to the brain, were so slight that they might easily have been caused by nervous exhaustion. On the 16th, the pulse was a little irregular; and there was slight knitting of the brow, but this was said to be natural. Until the 19th there was scarcely any change, and the friends would not believe that there was any mischief in the head. On that day, there was pain in the stomach, which they thought must have been induced by the cause of the other troubles (stomach derangement). On the 20th, however, the vomiting ceased, the pulse intermitted, and the eyes became more fixed; and on the 22nd, convulsions came on. On the 23rd, a marked improvement took place; the child was more conscious, spoke and expressed its likes and dislikes; the pupils were less dilated, and the eyes more mobile and natural. On the evening of the 24th, an attack of tetanus supervened; and from that time the child began to sink, though not without intervals of delusive improvement between this date and the 1st of May, when it died. During the attacks of tetanus, the child was invariably relieved by opposing the muscular spasms. The head was seized firmly, and forcibly carried forward. When this was done, the distressing cries so peculiar to tetanus and strychnine-poisoning immediately ceased, and the child was evidently relieved. This occurred so frequently, that Mr. Bowles was induced to believe that the cry which has been attributed to spasm of the glottis is due to pain, and to pain alone.

The *post mortem* examination showed, as is usual in such cases, a deposit of lymph at the base of the brain, and a few ounces of serum in the ventricles, with softening of the walls of the ventricles. There was a blood-clot, of the size of a filbert, on the floor of the ventricle, which might have given rise to the tetanic symptoms. The right lung contained one mass of tubercle, of the size of half a walnut; and several transparent miliary tubercles.

The second case reported was that of a child three

years old, whose symptoms for the first three days were so like to those of ordinary typhoid fever, that it was impossible to come to a positive conclusion as to the true nature of the case. The child was very prostrate; had a dry glazed tongue, coated in the centre; sordes on teeth; tympanitic abdomen; dry skin; flushed face; rapid pulse; and relaxation of the bowels, with unhealthy motions. There was slight wandering delirium at night, but no other head-symptom. On the fourth day, there were symptoms of inflammation at the apex of the left lung, and a perceptible irregularity in the pulse. On the fifth day, the hands were bent upon the wrists, and the thumbs into the palms; and the day after this, the left pupil was fixed and dilated, and both eyes were congested and almost obscured with mucus; the left leg was in constant motion, and the mouth champing. In this state the child remained for several days, until the gums were touched by calomel; and from that time a gradual recovery took place. The power of speech did not return for a month from the date of the attack, and the power of locomotion not until some weeks later.

In addition to these two cases, six others were alluded to. Of these, two recovered, and four died. Of the latter, two were not seen until symptoms of effusion had set in, and one not until violent and fatal convulsions existed.

The result of these cases differs from the opinions of the most eminent authors on tubercular meningitis. Dr. West, M. Rilliet, and M. Guersant, all assert that recoveries from acute hydrocephalus have never taken place to their knowledge since it has been proved that this disease is in all cases dependent upon tubercle or the tubercular diathesis. In opposition to such powerful authorities, Mr. Bowles brought forward these eight cases to show that in this disease the prognosis is not quite so unfavourable; for, out of eight, three recovered. In the first case now related, which terminated fatally, no mercury was allowed by the friends to be administered; and the treatment consisted of salines, careful diet, repose, freedom from excitement, and all similar precautions likely to conduce to the child's welfare. Agreeing with the eminent authorities who attribute this disease to tubercle, he was little inclined to use antiphlogistic measures, and especially calomel, in the treatment of these cases; but, having on several occasions observed the extremely beneficial effects of calomel in some obstinate cases of strumous ophthalmia, not only in controlling the inflammatory action, but also in removing the consequent deposits, he was induced, in his later cases of acute hydrocephalus, to give calomel as early in the case as possible; and, as presumptive evidence in its favour, the last three cases treated in this way recovered.

In none of the cases were leeches applied; for in all the pulse seemed to be wanting in power, and the nervous system prostrated; indeed, in two cases of recovery, it was deemed necessary to give wine freely from the onset.

In conclusion, it was strongly insisted upon that the most scrupulous care should be taken, in the early stage, to appreciate the true value of every symptom, and thus to form an early and accurate diagnosis, without which no treatment can be effectual.

LANCASHIRE AND CHESHIRE BRANCH: ORDINARY MEETING.

An ordinary meeting of this Branch was held on Thursday, the 12th inst., at the Royal Institution, Manchester; G. Southam, Esq., President, in the Chair.

Papers and Communications. The following papers and communications were brought forward.

1. On the Effects of Magenta and Tannin on certain Animal Cells. By W. Roberts, M.D., Manchester.

2. Case of Popliteal Aneurism successfully treated by Digital Compression. By G. Southam, Esq., Manchester.

3. A Case of Iridectomy and Extraction of Cataract. By Thomas Windsor, Esq., Manchester.

4. A Case of Sarcinæ Ventriculi. By J. Hepworth, Esq., Barton-upon-Irwell.

5. An Useful and Cheap Form of Gutta Percha Uterine Pessary. Shown by E. Lund, Esq., Manchester.

6. Case of Calculus associated with Hairs growing from the Fundus of the Bladder. By J. Hepworth, Esq., Barton-upon-Irwell.

7. On the Prevalence of Diphtheritic Complication in Acute Exhausting Diseases. By J. Thorburn, M.D., Manchester.

After the meeting, the members dined together at the Clarence Hotel.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Annual Meeting, Tuesday, March 2nd, 1863.

B. G. Babington, M.D., F.R.S., President, in the Chair.

After the ballot for the election of the officers and council for the ensuing year had been declared open, the Treasurer's Report for the year 1862, and the Report of the President and Council were read. The total number of Fellows, resident and non-resident, in the last Report was 630, and they now amounted to 642. The total ordinary income was £1,343 : 13 : 11, against an expenditure, ordinary and extraordinary, of £1,090 : 9 : 4d; leaving a balance of £253 : 4 : 7, which, added to a previous balance of £47 : 0 : 2, and the amount of composition fees in lieu of further subscriptions, £57 : 15, gave an entire balance of £357 : 19 : 9, in the hands of the Society's bankers. There had been a loss of six Fellows by death and of four by resignation; and the Society had received an accession of twenty new Fellows, thirteen of whom were resident, and seven non-resident. The Report referred to the excellent results which had followed the appointment of scientific committees by the Society, as shown in the valuable Report of the first Committee on Suspended Animation, and mentioned that the Council had recently appointed a second Committee on the Uses, Effects, and modes of Administration of Chloroform. The Council considered that the state of the income of the Society appeared to offer a further encouragement to extend as widely as possible the usefulness of the Society, and more particularly the labours of the scientific committees already so auspiciously commenced; by such means increasing the dignity of the Society, and realising the highest aspirations of the distinguished members of the profession who founded it, and of those who had since watched over and fostered its growth. It was stated in the Librarian's Report that 266 new works (independent of journals and continuations) had been added to the library, and, an increase of room for journals and serials being required, that shelving had been added, capable of containing 1800 additional volumes; also that a new feature had been added to the library, at the suggestion of one of the Fellows, Dr. H. G. Wright, in the shape of portfolios containing photographs of subjects of professional interest. A hope was expressed that Fellows possessing copies of such photographs would present them to the Society.

The adoption of the Report was moved by Dr. Burrows and seconded by Mr. Curling; and on being put from the chair a discussion ensued.

Dr. GREENHOW drew attention to what he considered the still imperfect state of the ventilation of the meeting-room, notwithstanding the alterations introduced the year before last, and hoped that further steps would be taken to bring it to that state of perfection which a Society embracing so many Officers of Health amongst its members was entitled to expect.

Mr. CHARLES HAWKINS thought the only remedy would be the enlargement of the room, which had been proposed at several previous anniversaries of the Society, and for which plans and estimates had already been made.

After some discussion, in which differences of opinion were expressed as to the real financial status of the Society, as shown by the balance-sheet, an amendment was moved by Mr. CHARLES HAWKINS, and seconded by Dr. STEWART:

"That a meeting of the Society should be called on the subject, and that the plans and estimates obtained should be laid before the Society."

The PRESIDENT took the sense of the meeting on the amendment, and declared it to be lost.

After some further remarks, in which the speakers congratulated the Society on its flourishing condition, financial and otherwise, and more particularly on the successful introduction of the appointment of scientific committees, which were considered a most valuable addition to the Society's means of usefulness, the original motion for the adoption of the Report was put and carried.

President's Address. The PRESIDENT addressed the meeting, and after a few introductory remarks expressive of his regret at taking leave of his colleagues and of the Society, from whom he had received such courtesy during his term of office, proceeded to a biographical notice of those Fellows who had been removed by death since the last annual meeting. These were six in number: Mr. Eusebius Arthur Lloyd; Dr. George Darling; Mr. Edward Stanley, F.R.S.; Sir Benjamin C. Brodie, Bart.; Mr. Peter Bossey; and Mr. John Gunning. He alluded to the abortive attempt which had been made at the commencement of his presidentship to effect an amalgamation of the Pathological, the Obstetrical, the Epidemiological, and the Royal Medical and Chirurgical Societies; and stated that, as a substitute for this proposed change, a new function had been bestowed on the Society in the formation by its Council of scientific committees for the investigation of subjects of special interest and importance. He eulogised the report drawn up by the first of these scientific committees, to which was allotted the subject of "Suspended Animation;" and augured favourably of the working of a second committee on "Chloroform," whose labours had just commenced. He characterised the creation of these new functions as a move in the right direction; and indicated two other modes in which, in his opinion, the flourishing state of the funds would permit the Society to promote the object for which it was founded—namely, the advancement of medical and chirurgical knowledge. These were—first, to present medals, under due regulations as to time and value, to professional men who should prove themselves most deserving of such distinctions; and, secondly, to aid by grants persons who needed funds for the publication of valuable works, or the prosecution of useful researches. He also made favourable mention of the suggestion of one of the Fellows of the Society, that a new order—namely, that of Corresponding Foreign Fellows, should be created, and gave reasons why such an order had become necessary. The President stated that the question of either changing altogether the locality of the Society or enlarging the present premises had been under consideration, but that neither the one proposal nor the other had been approved; that arrangements, however, had been made for the accommodation of more books by putting up new shelves; and that an improved system of ventilating the meeting-room had been adopted. He finally craved permission, ere he took his leave as the oldest President who had ever occupied the chair, to avail himself of his character as a veteran, and advert to the impassioned tone of address which on some rare occasions he had observed speakers to adopt at the meetings, and to recommend that in future discussions those personalities, those ebullitions of emotion, those impugnments of motives, should be avoided, which were so unnecessary and so out of place in the consideration and discussion of scientific questions. After enlarging somewhat on this topic, he concluded by expressing his great satisfaction at being succeeded in office by a gentleman whose high talents and prominent station rendered him so eminently qualified for those important duties which he would be called on to perform.

At the conclusion of the President's address, the proposed new bye-laws relative to the scientific committees were (with a few technical alterations moved in an amendment by Dr. Balfour) adopted. Thanks were then voted to the members of the Scientific Committee on Suspended Animation—namely, Dr. C. J. B. Williams, Dr. Kirkes, Dr. Harley, Dr. B. Sanderson, Dr. Brown-Séquard, Dr. Hyde Salter, Mr. Savory, and Dr. Sieveking—for the able and zealous manner in which they had carried out their investigations; and also to the authorities of University College, the Royal Humane Society, and the Royal National Life-Boat Institution, for their courtesy and assistance in advancing the inquiry. The thanks of the Society were also voted unanimously to the retiring President, for his able conduct in the chair, and for his admirable address; and to Mr. C. H. Moore, Secretary, and the other retiring officers of the Society, for their valuable services during the time they had been in office.

At the conclusion of the meeting, the result of the ballot for officers and council for 1863 was announced by the President.

JUNIOR MEDICAL SOCIETY OF LONDON.

ST. THOMAS'S HOSPITAL, TUESDAY, FEB. 24.

E. CLAPTON, M.D., Vice-President, in the Chair.

THE minutes of the previous meeting having been read and confirmed, several pathological specimens were exhibited.

ON THE RELATION BETWEEN THE VARIOUS FORMS OF CONTINUED FEVER. BY J. W. HICKS, ESQ., OF ST. THOMAS'S HOSPITAL.

After glancing at the artificial nature of the classification of fever formerly adhered to, the author enumerated the division recently adopted; viz., typhus, typhoid, relapsing fever, and febricula; and proceeded to inquire whether the distinctions between them were such as to warrant their being viewed as distinct diseases, like variola and scarlatina, or merely as varieties of one disease. He considered that, with regard to typhus and typhoid, the evidence of their distinctness was more dubious when derived from the symptoms than from the etiology; the latter showing that both may originate spontaneously, typhus rarely, and typhoid continually so, and that both may be propagated by contagion, the former being more contagious than the latter. The view was then maintained that, as the fever-poisons are repeatedly generated *de novo* at different times, so they have varied considerably in their character in different epidemics.

The Irish epidemic of 1847 was especially referred to, as presenting the characters of typhus, typhoid, and relapsing fevers, more or less in combination, probably from the union of the causes which tend to produce these fevers separately. Relapsing fever was next men-

tioned as closely related to typhus, coexisting in the same epidemics with it, and produced by the same contagion.

Febricula was briefly referred to, not as a specific form of fever, but as including mild or abortive attacks of the other forms; and also applied by some physicians to cases not of a specific origin, such as catarrh and feverish dyspepsia.

An interesting discussion then ensued, in which several members took part. The author of the paper having replied, the meeting adjourned.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, MARCH 2ND, 1863.

A. BRYSON, M.D., R.N., F.R.S., in the Chair.

EPIDEMICS OF YELLOW FEVER IN BERMUDA. BY W. R. E. SMART, M.D., DEPUTY-INSPECTOR R.N.

THE paper was read in abstract by the secretary. It was illustrated with numerous statistical tables, and accompanied with an accurate map of the group of islands. Without going further back than the close of last century, it appeared that the dates of the successive outbreaks of fever at Bermuda have been 1796; 1812; 1818 and 1819; 1837; 1843; 1853; and 1856.

The following were the principal conclusions drawn by Dr. SMART from his extended researches:—

1. In the best recorded yellow fever epidemics of Bermuda, there has been generally a coincidence of the same disease on the American coasts.

2. On such occasions there has been an epidemic constitution, manifested by the prevalence of catarrhal affections in the spring and of gastric affections in the early summer; these yielding to fever, which, at its climax in the autumn, assumed the type of yellow fever with black vomit in a greater or less proportion of the attacks.

3. During these epidemic seasons, comparative immunity has usually favoured the native populations and those of the European residents dwelling under good sanitary conditions.

4. The most intense manifestations of the disease have arisen in crowded barracks and convict hulks, etc., especially when the healthy and the sick have been kept together.

5. Inasmuch as, in the worst instances recorded, it has been found that removal from infected localities has been always followed by an almost complete exemption of those not already infected, by amelioration of the state of the attacked, and lastly by an early extinction of the epidemic character of the fever; it is, therefore, just to consider the essential causes of the disease to operate, under ordinary circumstances, by material local agencies rather than by those of person.

6. Sanitary measures are the means to be relied on upon the approach of the epidemic constitution* in any locality.

7. In the event of an epidemic outbreak, the same measures are highly valuable; but the only measure of certain value then is removal from the locality; and in the case of crowded communities, as in barracks, ships, etc., immediate dispersion into wider space of all persons within the range of the noxious local agencies.

8. Although the direct proof of personal contagion be still wanting, there are ample reasons for concluding that the highest degree of local infection has been generated in the hospitals—naval, military, and convict—so that the malady has been propagated among the attendants as well as among the sick.

9. With regard to hospital arrangements for the treatment of yellow fever, owing to the peculiar predisposition arising from the debility of ill-health, yellow fever hospitals should be distinct and special, and under sanitary cordon; and, considering the disadvantages of the climate of Bermuda, the minimum space, even when perfect ventilation can be maintained, should not be less than 1500 cubic feet per man in fever wards.

After alluding to the terrible mortality from this fever in several ships of the West India squadron in 1861, during their voyage to Halifax and after their arrival there, Dr. Smart remarked:—"I must confess that such results, placed side by side with those of immediate removal of men from infected localities, as exhibited in Bermuda experience, have raised a doubt in my mind whether equal losses of life would have been incurred by the immediate removal of the crews from their ships into some suitable quarantine establishment in the West Indies."

Drs. Bryson, Camps, Stratton, R.N., and Milroy, and Mr. Marson, took part in the discussion of this very elaborate and valuable paper, which had been communicated to the society by the courtesy of Sir John Liddell, Director-General of the Medical Department of the Navy.

* This vague and obscure, although classical, phrase is used by Dr. Smart simply to denote a sickly condition of the general health of a community, as indicated by the unusual prevalence and severity of catarrhs, alvine fluxes, etc., for some time prior to the development of malignant fever in the latter part of the summer or beginning of the autumn—the season when all the epidemics of yellow fever have appeared in Bermuda. (SEC. EPIDEM. SOCIETY.)

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

MARCH 4, 1863.

E. LUND, Esq., in the Chair.

African Drugs. Dr. J. O. FLETCHER reported that he had endeavoured to test a few of the specimens brought before the society at the last meeting. There was one named "itari," said by the natives to be useful as an internal remedy for itch, which he had exhibited with apparently good effect. Another, named "eru," appeared to correspond in character and use with cubebs.

Artificial Pupil. Mr. THOMAS WINDSOR showed a patient on whom he had performed iriddesis and iridectomy on separate eyes. He illustrated well the comparatively round and immovable pupil of the one operation, and the slit-like, contractile pupil of the other.

Plastic Bronchitis. Mr. LUND exhibited some casts of the bronchial tubes expectorated by a patient after a slight attack of hæmoptysis, and which corresponded with those observed in cases of plastic bronchitis.

Diphtheria of Œsophagus. Mr. MORLEY HARRISON exhibited a diphtheritic cast of the œsophagus expectorated by the patient before recovery took place. The main symptom had been a feeling of pain referred to the œsophagus, with inability to swallow beyond a certain point. Some similar exudation occurred about the gums and frenum linguæ; but there was none on the palate, and no evidence of any laryngeal complication.

Hysteria. Dr. J. O. FLETCHER exhibited some brown fluid vomited by a young woman after severe but anomalous symptoms. On analysis, it proved to be strongly impregnated with iron, and its origin was accounted for by the subsequent rejection of several crotchet-needles and other steel articles, which the patient denied having ever swallowed.

Umbilical Hernia. Dr. MEDD narrated the details of a case of umbilical hernia in a young woman. During some violent exertion, the coverings of the hernia, which was congenital, burst and exposed the contents. Some fluid escaped, a portion of the hernia was reduced, but a large piece of omentum sloughed and came away. The patient, nevertheless, did well, and recovered with her hernia radically cured.

Intestinal Obstruction. Dr. MURPHY exhibited the intestine of a child about nine years old, who, six years ago, had an attack of obstruction of the bowels which nearly proved fatal. Since that time she had enjoyed perfect health till the time of her death, which arose from similar symptoms. Nevertheless, on examination, it was found that the intestine at one point was narrowed to an extreme degree, and evidently had been for a long time. In connexion with the seat of obstruction was a process of intestine that appeared to be an old invagination. The case was referred to Dr. W. Roberts for examination and report.

Medico-legal Aspects of Burning. Mr. GREAVES read a paper on this subject. He first detailed the history of some fatal accidents by fire that have lately occurred in Manchester, and then referred to some topics arising therefrom. The question of survivorship was one of these, the author considering that when, as in an instance recorded, two charred corpses are found, the one apparently in an easy flexed position on its side, the other with its extremities much distorted, there is almost a certainty in favour of the survivorship of latter; the one having probably died early from asphyxia during sleep, the other having died from the scorching of the fire. He mentioned also the subject of what are known in the factories as "friction burns," produced by the rapid contact of smooth bodies, and which it would be almost impossible to distinguish in a dead subject from burns by fire. The other subject referred to was that of burns produced while the subject was in a state of deep inebriety or other states of insensibility, the object of Mr. Greaves being to show that very frequently in these cases there appeared to be such a suspension of vital action that the acute appearances do not manifest themselves for several hours.

An interesting discussion followed the reading of the paper, in which many of the members took part.

Six new members were balloted for, and admitted; and the addition of about eighty volumes to the library (for the most part new) was announced.

HARVEIAN SOCIETY OF LONDON.

MARCH 5TH, 1863.

H. W. FULLER, M.D., President, in the Chair.

DIAGNOSIS AND TREATMENT OF ASTIGMATISM. BY J. ZACHARIAH LAURENCE, ESQ.

ASTIGMATISM is an inequality of refraction in the meridians of the globe of the eye; the maximum refraction generally existing in the vertical, the minimum in the horizontal meridian. The heterogeneous image thus produced on the retina causes a diminution in the "acuity of vision"; so that types of given dimensions can no longer be distinguished at their normal distances. In many instances, asthenopia is a prominent symptom, induced by rapidly alternating changes in the accommodation (with a view of obtaining correspondingly successive distinct portions of the retinal image) inducing muscular and psychical fatigue. The various changes the image of a luminous point thrown on a screen by an astigmatic combination of lenses underwent, were then shown. At the focus of the vertical rays, the "focal line" was shown to be horizontal; at the focus of the horizontal rays, vertical; the images comprised within this range (the *intervalle focale* of Sturm) were shown to be ellipses with horizontal major axes, a circle and ellipses with vertical major axes. An astigmatic eye perceives the images of a luminous point precisely in this way, the "focal lines" being producible by auxiliary convex or concave spherical lenses, which have the effect either of bringing forward or throwing backwards their entire focal interval. The inability of simultaneously seeing horizontal and vertical lines with equal distinctness was then shown to exist in nearly all eyes; proving that astigmatism in a low degree is an almost normal condition of the eye.

A series of cylindrical lenses were then exhibited, and their application to the cure of astigmatism.

A very striking instance of this was then shown in the person of a young lady, whom Mr. LAURENCE, after having ineffectually treated for acute asthenopia three years ago, by all kinds of lenses, general treatment, etc., had now completely cured by a sixteen-inch concave cylindrical lens, with its axis transverse; the eye in this case presenting a normal refraction in the horizontal meridian, but a myopia of one-sixteenth in the vertical one. Mr. Laurence drew attention to the scientific advantages the test types of Drs. Snellen and Giraud-Teulon possessed over those of Professor Jäger; the former being always viewed under one constant angle, and thus affording a gauge of the relative acuity of vision of different individuals.

The cause of astigmatism was shown to be most commonly an inequality of curvature of the cornea; sometimes a congenital obliquity of the crystalline lens (as probably in the case of the discoverer of astigmatism, Dr. Thomas Young). The ophthalmoscopic signs of astigmatism were then enumerated: an elliptical form of the optic nerve entrance, and an inability of observing in the direct image the horizontal and vertical branches of the retinal artery with equal distinctness at the same time. Finally, Mr. Laurence alluded to the important development this branch of ophthalmic surgery had received within the last two years by the researches of the late Professor Donders of Utrecht and Dr. Knapp of Heidelberg, who had demonstrated the comparative frequency of astigmatism, which, when recognised, led to the remedy of many otherwise perfectly enigmatical cases.

Correspondence.

TREATMENT OF TAPEWORM.

LETTER FROM ARTHUR LEARED, M.D.

SIR,—As the treatment of tapeworm is a subject to which I have long given particular attention, I beg to make a few remarks in reference to Dr. Ogle's paper.

It is only stated definitely in one case out of the twenty-four recorded, that no reappearance of the worm had occurred after a considerable period from the time of treatment. Now I well know, from experience, that there are only two tests of cure—either finding the head or heads which correspond to the bodies that have been expelled; or the non-appearance of segments with the fæces after an interval of three months from the time of taking the tænicide drug. The reappearance of the worm after apparent cure is very frequent; and it does the treatment employed no discredit to say that relapses occur in a great many instances.

Dr. Ogle has fallen, no doubt through inadvertence, into error when he speaks of the propagation of tapeworm in children by swallowing fragments of the worm accidentally picked up. It is well ascertained that the common tapeworm must pass through a larval condition, imbedded in the tissues of an animal, before it can be developed into a sexual worm. The ordinary mode in which these cysts reach the position necessary for their development—the intestinal tube of a suitable animal—is by having been swallowed with a portion of the tissues in which they existed.

I am also reminded of a scheme proposed in a former number of the JOURNAL for ascertaining the relative value of the oil of male-fern and kousso as remedies against the worm. According to my experience, this

excludes another remedy equal if not superior to the one and greatly superior to the other. The choice lies between kamala and oil of male-fern; while kousso is inferior to either. For hospital practice, kamala has the recommendation of cheapness, while oil of male-fern is expensive. I have used kamala in powder, in tincture, and as an extract prepared for me by Messrs. Allen and Hanbury; but give the preference to the powder. The small success obtained by Dr. Ogle with the tincture may have been due to its want of strength, as there is no recognised formula for making it. As a proof that kamala is a true vermicide, and that the powder does not act merely in a mechanical way, I adduce a case in which the extract was given in pills; no purgative was employed; and, although the passage of the worm was unnoticed, the cure was complete.

I am, etc., ARTHUR LEARED.

12, Old Burlington Street, March 1863.

MEDICAL HEALTH ASSURANCE.

LETTER FROM EDWARD H. COLEMAN, ESQ.

SIR,—I am glad to perceive that a move is taking place respecting a provision for the general medical practitioner during illness and old age. If you think the following suggestions, as the basis for a society or club, to answer the above purpose, I shall be glad to communicate with any of our Association for the purpose of carrying it out.

As a preliminary remark, I will relate that twenty-five years since, myself and three other gentlemen of this neighbourhood, seeing the wearing out of the old sick-clubs of the district, conceived the means of adopting a better system; the rules proposed being as follows.

Each man to be in good health on entering the club.

Each man to pay 2*s.* 6*d.* per month.

Each member's life to be insured for £50.

The representatives to receive £30 at death, and the society £20 to its funds.

Each member, when sick, to have 10*s.* per week during the illness.

This plan, we considered, could be easily conducted, and with little expense; and, instead of wearing out, will be beneficial and strong in old age; and, if the bonuses are taken care of, will provide an annuity after sixty or sixty-five years of age.

The society has been in existence twenty-five years, and has averaged seventy members. The monthly payments are sufficient to insure every member for £50, with a surplus for the first sick members.

This has answered its purpose for mechanics and labourers. Why should it not? For, as ten guineas per annum will insure every member's life for £350, affording 10*s.* per day during illness, and £210 to the representatives at death, five guineas a year will give 5*s.* per day and £105 at death.

This system can be managed without much expense. The capital is in the Insurance Office. A Secretary and President can carry out all its details with little trouble. The payments in should not exceed three months.

I am, etc., EDWARD H. COLEMAN.

Wolverhampton, March 16th, 1863.

FUSION OF THE INDIAN MEDICAL SERVICE. Mr. R. Mills asked when the details of the amalgamation of the medical service of the late East India Company with that of the Royal Army would be promulgated. Sir C. Wood assured the House there had been no unnecessary delay in the matter. A plan recommended by the government in India, and approved of by the highest medical authorities there, had been adopted, and it had been referred for approval to the War Department. He hoped before long that it would be promulgated.

Medical News.

APOTHECARIES' HALL. On March 12th, the following Licentiates were admitted:—

Bracey, William Arthur, Birmingham
Davies, John, Coleshill, Warwickshire

APPOINTMENTS.

ATWELL, Gregory H., Esq., appointed Senior House-Surgeon to the York Dispensary.
BEVERIDGE, Robert, M.B., appointed Lecturer on Pathology and Morbid Anatomy in the University of Aberdeen.
BONTHRON, Andrew, M.D., appointed Surgeon-Superintendent of the Queensland Government Immigrant Ships.
CARR, George, M.D., appointed Physician to the Royal Infirmary, Aberdeen.
CRAIG, John W., M.D., elected Assistant Medical Officer of the St. Giles and St. George Infirmary, Bloomsbury.
DAVIS, John Hall, M.D., appointed Lecturer on Midwifery at the Middlesex Hospital.
FISHER, Luke, M.D., appointed Senior House-Surgeon to the Preston Dispensary.
JONES, John L., Esq., appointed Junior House-Surgeon to the Preston Dispensary.
PEACOCK, Albert L., Esq., elected Resident Assistant-Surgeon to the Sheffield Public Hospital.
PENHALL, John T., Esq., appointed Assistant-Surgeon to the East Sussex Infirmary.
SAVERY, John C., Esq., appointed Assistant-Surgeon to the East Sussex Infirmary.
TURNER, George B., M.D., appointed Surgeon to the East Sussex Infirmary.
WOLFE, John R., M.D., appointed Ophthalmic Surgeon to the Royal Infirmary, Aberdeen.

POOR-LAW MEDICAL SERVICE.

DIXIE, Wolstan F., M.D., to be Medical Officer to District No. 1 and the Workhouse of the Lutterworth Union.
EDWARDES, Charles L., Esq., to be Medical Officer to the Rugeley District of the Lichfield Union.
EVANS, William, M.D., to be Medical Officer to Districts 4 and 5 of the Devizes Union.
FOXWELL, James J., L.R.C.P.Ed., to be Medical Officer to District No. 1 of the Bristol Corporation for the Poor.
KNIGHT, Thomas, Esq., to be Medical Officer to the Waterperry District of the Thame Union.
M'EVOY, Patrick J., L.K. & Q.C.P.I., to be Medical Officer to the Rathcose District of the Celbridge Union, co. Kildare.
MACKENZIE, John W. H., Esq., to be Medical Officer to the Checkley District of the Cheadle Union.
SYMES, James, L.K. & Q.C.P.I., to be Medical Officer to the Gorey Union Workhouse and Fever Hospital.

ARMY.

DICK, Staff-Surgeon-Major W., M.D., to be Deputy Inspector-General of Hospitals, *vice* A. Stewart.
POUT, Staff-Assistant-Surgeon F., to be Assistant-Surgeon 46th Foot, *vice* J. G. Faught.
SAUNDERS, Staff-Assistant-Surgeon R. W., M.D., to be Assistant-Surgeon 16th Foot, *vice* H. Ferguson.

To be Staff-Assistant-Surgeons:—

FAUGHT, Assistant-Surgeon J. G., 46th Foot.
FERGUSON, Assistant-Surgeon J., 3rd West India Regiment.
SANDISON, J.

ROYAL NAVY.

BROSTER, Edward B., Esq., Assistant-Surgeon (additional), to the *Fisgard*.
CAMPBELL, George R., M.D., Assistant-Surgeon, to the *Sparrow*.
ELLIS, John J., Esq., Assistant-Surgeon, to the *Fox*.
FARR, George E., Esq., Assistant-Surgeon, to the *Pandora*.
FULTON, Thomas, Esq., Assistant-Surgeon, to the *Indus*.
JAMESON, Thomas, Esq., Assistant-Surgeon to Greenwich Hospital.
PATTERSON, John H., Esq., Staff-Surgeon, to the *Royal Adelaide*.
PICKEN, Richard, Esq., Surgeon, to the *Orpheus*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BELL, J., Esq., to be Surgeon 1st Administrative Brigade Lincolnshire A.V.
SKINNER, R. V., Esq., to be Assistant-Surgeon Sussex A.V.
TURNER, R., M.D., to be Surgeon 1st Administrative Battalion Banffshire R.V.
WITHERINGTON, J., M.D., to be Surgeon 21st Lancashire R.V.

To be Honorary Assistant-Surgeons:—

DUGUID, W. R., Esq., 5th Banffshire R.V.
RICHARD, B. M., Esq., 3rd Dumbartonshire A.V.

BIRTH.

WHITWELL. On March 10th, at Castle Street, Shrewsbury, the wife of *Francis Whitwell, Esq., Surgeon, of a son and a daughter.

DEATHS.

BARROW. On March 17th, at Ryde, Catherine, wife of B. Barrow, Esq., Surgeon.

CAMPBELL, Archibald, M.D., of Lerago, at Oban, on March 10.

LAZZARETTO. On March 11th, at Portsea, aged 75, Anne, widow of Emanuel Lazzaretto, M.D., R.N.

LUDLOW. Lately, at Barkley, New Forest, aged 90, Elizabeth, widow of Daniel Ludlow, M.D.

MARSHALL, Richard, Esq., Surgeon, at Marlborough Place, Walworth Road, aged 48, on March 11.

LEGACIES. By will, Richard Green, Esq., late of Blackwall, has left £2000 to the Dreadnought Hospital, and £2000 to the Poplar Hospital.

ROYAL MEDICAL COLLEGE. The collegians and aged pensioners of this institution celebrated the marriage of H.R.H. the Heir-Apparent and the Princess Alexandra, on Wednesday, the 11th inst., by a dinner given by the Council of the College.

BIRTHS AND DEATHS REGISTRATION (IRELAND) BILL. In the House of Lords, on Thursday week, the Earl of St. Germans moved the second reading of the bill for the registration of births and deaths in Ireland, which he said resembled the Act passed in 1836 for England, and in 1854 for Scotland. The Marquis of Clanricarde would not oppose the bill, but he doubted whether the medical officers were the fittest persons to be the registrars. He thought the guardians ought to have the power of appointing the persons whom they deemed best suited for the office.

AMERICAN MEDICAL ASSOCIATION. The New York State Medical Society, at its late session, recommended that the American Medical Association should hold its annual meetings notwithstanding the present war. We have on other occasions urged the importance of maintaining the integrity of the National Association by holding its regular sessions, and in this we have lent expression to the opinion of the profession of this State. But in other quarters there is strong opposition to the call of another meeting until the war is concluded, and this opposition controls the action of the local committee. We do not, therefore, anticipate a meeting this year. (*American Medical Times.*)

A CURIOUS TRIAL has lately been going on—Princess Wolkousky *versus* Dr. Ladinsky, who has managed to fleece her out of sums to the amount of more than a million of francs. This skilful swindler, whilst taking care of the health of the Princess, contrived to gain her confidence, and get himself named administrator-general of her property, and, with the assistance of another "worthy" like himself, commenced a series of fraudulent manœuvres, which have ended in the police courts. A difficulty had arisen on account of the nationality of the complainant, who is a Russian, but that having been got over, Ladinsky will be punished according to the French laws for the misdeeds committed in France. The greater part of the sums were supposed to be employed in the establishment of an imaginary bank, which, of course, was only a pretext for despoiling his victim.

THE BAKERS. The Government bill has been printed; it proposes three several enactments. The first is that no one under 18 shall be employed in a bakehouse between 9 p.m. and 5 a.m. The second provides that every bakehouse must be kept in a cleanly state, and provided with proper means for effectual ventilation, and be free from effluvia arising from any drain, privy, or other nuisance; and that the inside walls and ceiling and passages and staircase shall either be limewashed once in every six months, or painted with oil once in every seven years, and the painting washed with hot water and soap every six months. The third enactment is that no place on the same level with the bakehouse, and forming part of the same building, shall be used as a sleeping place, unless it is effectually separated from the bakehouse by a partition extending from floor to ceiling, and has an external glazed window of at least nine superficial feet, with four feet and a half made to open. It is to be the duty of the local authorities to enforce the Act, and their officer is to have the power to enter bakehouses during baking hours to inspect them. The several provisions of the Bill are enforced by penalties ranging from 20*s* to £20.

TESTIMONIAL TO A MEDICAL OFFICER OF RIFLE VOLUNTEERS. The 10th (Warminster) Company of Wilts Rifle Volunteers have just presented a handsome testimonial to their Honorary Assistant-Surgeon. On the company meeting for parade on the Prince of Wales's wedding day, Captain Davis, on the part of the corps, after many complimentary remarks on the zeal, energy, and liberality with which their assistant-surgeon Mr. Bleeck had promoted the interest of the corps, begged his acceptance of a handsome and valuable silver claret-jug, bearing the following inscription:—"Presented by the officers, non-commissioned officers and privates of the 10th Wilts Rifles, to Charles Bleeck, Esq., Assistant-Surgeon of the corps, as a mark of their esteem and gratitude for his valuable services. March 10th, 1863."

DISEASES IN ROTHERHAM. In the House of Commons, Mr. Childers said much alarm had been excited in the neighbouring towns in consequence of the malignant species of fever which had broken out at Rotherham. He wished, therefore, to ask the Secretary for the Home Department whether his attention had been directed to the alarming extent of mortality and disease in the town of Rotherham, arising from the state of the drainage and the imperfect supply of water; and whether government would take measures to enforce a remedy thereof. Sir G. Grey said the attention of the Privy Council was called last year to the sanitary state of Rotherham and the great mortality which prevailed there, and that department of the council which was invested by law with the power of making sanitary inquiries sent down two inspectors to investigate the matter. The inspectors had made a report, and his hon. friend might have it by moving for it. The cause of the disease had been traced to the bad quality of the water in the place, but he was informed that the local Board had a Bill before parliament with a view to procure a supply of better water.

ARMY ESTIMATES. In the recent discussion in the House of Commons on the army estimates, Sir M. Peto referred to the immorality existing at the camp at Aldershot. There were no efficient police regulations to check the spread of immorality, which was accompanied with a large amount of disease. Sir G. C. Lewis said, with regard to the camp at Aldershot, he admitted the evil, which it was difficult to exaggerate; but the difficulty arose how to devise a remedy. He did not despair of finding a practical means of mitigating the evil, and in the course of the session he hoped to be able to make a statement to the House upon the subject. On the vote of £255,093 for medical establishments, services, and supplies, General Peel expressed regret at the diminution of the staff. The warrant founded on the report of the Sanitary Commission of 1858 was calculated greatly to improve the medical establishment, by inducing talented men to join. Its provisions had not, however, been carried out, and he thought the medical officers had just ground for complaint. The result was that the number of candidates was falling off, so that on a recent occasion when there were forty-five vacancies, only fifteen candidates appeared, and some of those broke down under the qualifying examination. Sir G. C. Lewis said there had been some difficulty in the navy in regard to

the warrant. Negotiations had been opened with the Admiralty, and he hoped that before long the warrant would be issued in a form likely to be satisfactory to all the medical officers. (Hear, hear.) The numbers of the staff medical officers were given in accordance with the return of the Medical Director-General. The reductions had been chiefly effected in foreign stations. On the vote of £751,084 for the disembodied militia, Colonel Dickson thought that the War-office ought either to increase the pay of militia surgeons, or withdraw the circular requiring them always to remain at head-quarters. Lord Enfield inquired whether the Secretary for War had taken into his consideration the report of the committee of last session on the pay and duties of army medical officers. Sir G. C. Lewis said it was his intention to act upon the report of that committee, and the present estimate included the additional sum necessary for that purpose.

Varieties.

Injustice to Ireland. The crown prosecutor, in the mismanaged investigation of the Ballymena poisoning case has, being compelled to provide sufficient analytical evidence as to the absence or presence of poison in the body, forwarded portions of the viscera of the late Miss Cary to Dr. Taylor, of Guy's Hospital, for analysis. We can regard this course in no other light than as a gross insult to the profession in Ireland. Have we no medical jurists? Is the fame which Ireland has hitherto enjoyed for accuracy in medico-legal investigations undeserved? If, as we believe is the case, those who have hitherto been entrusted with such inquiries in Ireland have retired from such practice in disgust, there are others as well qualified as Dr. Taylor, if not so fashionable, to whom an investigation like the present should have been confided. We cannot offer the plea of forgetfulness or negligence for the conduct of the crown in this matter, but must regard the slight thus put upon the profession as premeditated and prompted by chagrin at the exposure of the crown prosecutor's culpable neglect in producing illegal evidence. (*Dublin Med. Press.*)

The late Mr. Norman. He early marked out the best course by which to arrive at the goal for which he panted, and won it in a manner alike honourable to himself and to the profession, having been made deputy-lieutenant of the county and twice chief magistrate of the city of Bath. He did not, like Mr. Quekett, entirely eschew politics and confine himself merely to the soft abstractions of science in the gloomy shades of collegiate bowers. Mr. Norman's success was really achieved by that excellence of judgment and skill in operative resource which entitle him to rank as one of the most eminent of those provincial surgeons who have reflected honour on this college. In 1825, Mr. Norman successfully tied the external iliac artery, as well as the arteria innominata. He had tied the common carotid two years earlier. To each young member of our profession who may have set his heart on the honours and emoluments of practice, we may point to the conduct and career of Mr. Norman and say, "Go thou and do likewise." (*Mr. Gulliver's Hunterian Oration.*)

Filtration of Air. Air may be mechanically deprived of many of the foreign matters which it holds in suspension, by a process of filtering through finely carded cotton. Flesh exposed to the action of air so treated, undergoes decomposition much more slowly than in ordinary atmospheric air, and when decay does supervene, it is unaccompanied by the development of vegetable or animal life. A somewhat similar effect is known to be produced by passing air through red-hot tubes, which, by the combustion they generate, destroy any organic substances present. Air thus purified, when introduced into grape juice, fails to promote fermentation like free air. Results resembling these have been obtained from Dr. J. Stenhouse's charcoal air-filters, which combine a mechanical act of filtration with a certain amount of chemical effect, depending on the presence of condensed oxygen in the pores of the carbonaceous matter. (*Mr. Condy.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Mr. W. J. Coulson, "A Case of Obturator Hernia: Operation."—Royal Geographical.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Greenhow, "On Diphtherial Nerve Affections"; Mr. Henry Thompson, "On Treatment of Severe Stricture of the Urethra by Gradual Distension at a Single Sitting."—Zoological.

Wednesday. Society of Arts.

Thursday. Royal.—Antiquarian.

Friday. Royal Institution.

Saturday. Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

T. S.—The debt due by society to the discoverer of vaccination is much greater than is generally imagined by the public at large. Society does not always accept with gratitude the goods bestowed on it. Many wrongs have been laid to the charge of vaccination.

H. N.—We thoroughly agree with a correspondent who says: "I think that if all the interesting cases, which we sometimes despised country practioners meet with, were truthfully recorded, whether our treatment be successful or otherwise, much practical good would result."

The King and Queen's College of Physicians.—Sir: As an old University man, I have read with some interest the letters of your correspondents, Delta and Dr. Foster, with L.K. & Q.C.P. & M.D.I. For a College to have the power to grant a degree, appears to me so great an anomaly, that perhaps the latter two gentlemen will oblige their brother medicals by some extracts from the Charter, or Acts of Parliament, showing how this asserted right is granted to King and Queen's College, Ireland. The only published authority upon which this College of Physicians rests its claim, that I have seen, is the very mild opinion of the Attorney-General for Ireland, "I think the Licentiates and Fellows, as such, of the King and Queen's College of Physicians are entitled to the degree and title of Doctor of Medicine, and to use the letters M.D. after their names." Now, would the Attorney-General have used the words "I think", had no doubt existed upon this point? The fact of the King and Queen's College of Physicians in Ireland not shewing that they had power to confer a degree (though they may have failed to get it registered), is fatal to the claims of this cor-

poration. At any rate, the medical profession have a right to require from this College published proofs that their Charter confers this power, or that the College abandon (what must otherwise be construed into misleading) the publication in their regulations that their license confers the Doctorate.

I am, etc., OXON.

Lyme Regis, March 12th, 1863.

PLEA FOR SPECIAL HOSPITALS.—SIR: As the subject of special hospitals is now engaging public attention, perhaps you will allow me to point out two branches of it which are often confounded in discussion. I will touch very briefly on both. The first branch is confined to the question: Are special hospitals *in themselves* advantageous to patients, to the profession, and to the public? Those who support the affirmative, say:—1. The foundation of such institutions arose from inadequate provision at general hospitals for the cases which they proposed to treat. 2. The principle on which they are upheld is that of the "division of labour", which may reasonably be expected to produce an equal efficiency, when extended to medicine, to that which it has wrought in other departments of toil. 3. Practically, the result of special hospitals has been—(*a*) To cure a number of "incurable" cases. (*b*) To advance professional knowledge, and to introduce improved methods of treatment. (*c*) To stimulate by reaction the general hospitals, which, from their size, are slow of movement, into making special provision for special cases, and thus giving the student an opportunity of learning almost every branch of his art. To prove these points, reference is made to the institutions for diseases of the eye, ear, skin, chest, ovary, uterus, rectum, spine, and foot; also, to the fever hospitals, maternity charities, and the asylums for the idiot and the insane. The latest special institution is for the larynx. It has been organised to afford the aid of the modern discoveries in science to real destitution among out-patients only. Now, the laryngoscope, which has already done so much for the diagnosis and treatment of diseases of the throat, requires much patient skill in its application. Hence, physicians and surgeons to out-patients, numbering from one to three hundred, who can only give each person an average of two or three minutes, and to whom the readiness of a method is the test of its utility, cannot use the laryngoscope as they use the more simple and familiar stethoscope. Those who impugn these arguments, must reply categorically to each.

The second branch of the subject is purely personal. It deals with the question, "Is it lawful for medical men to take an active part in organising professional charities?" It certainly seems to me that medical men, knowing so thoroughly the exact requirements to be met, are able, when the direction is mainly in their hands, to meet them with a certainty of aim, a swiftness of action, and an economy of means in vain to be sought from non-professional agency. Of course, an earnest man pursuing such an object, must expect to have his motives impugned, and may become the subject of attempted reprobation in quarters which have a vested interest in the same line of practice. But our profession is not likely to condemn him, either before the institution which he founded can speak for itself, or if it finds that relief has been honourably administered to cases which could not have been adequately provided for in any better way. Doubtless, even among specialists, will be found men who pervert their means of good to serve selfish ends; but, although some political economists maintain that the pursuit of self-interest, without regard to any other end, is productive of good to the community, and although a slight alloy of that material cannot be dispensed with in a practical world, the retirement of the merely selfish specialist from connection with a special institution, is always to be desired for the good name of his brethren. Should that retirement be voluntarily effected and from conviction of injury, it is entitled to be called, as it sometimes is, a "sign of grace" absolute; but if it be the result of repletion, it must be qualified into a "sign of grace after meat."

The foregoing views are those which I at present entertain on this subject; but I am always open to the influence of fair argument on the opposite side. I am, etc.,

WALTER RIVINGTON, B.A., Res. Med. Off.

Tower Hamlets Dispensary, E., March 9th, 1863.

[The fatal fault attaching to the origin of most of our modern medical charities in London, is this: that they are got up for the purposes of promoting the private interests of individuals, and under the plea of administering to the sufferings of humanity. This blot in their origin adheres to their administration, and subsequent life. In this sense, these charities become in reality advertisements for the benefit of private individuals. The robbery inflicted on the profession at large by the abuses of charity (as it is called) carried on in London hospitals, is enormous. EDITOR.]

THE RIVALTA CASE.—The history of the Rivalta epidemic is shortly as follows:—M. Coggiola, physician at Rivalta, vaccinated a child, Giovanni Chiabrera, eleven months old, with vaccine from a vaccine tube, the child being to all appearance in health, and born of healthy parents. On June 2nd, 1861, the vaccine-matter was introduced from arm to arm into forty-seven children, of whom thirty-eight were afterwards taken ill; and from one of the thirty-eight, on June 12th, seventeen other children were vaccinated, and seven of them suffered from similar symptoms of disease. Inquiry into the matter showed that the origin of the epidemic was due to the fact, that the child Chiabrera had been suckled by a syphilitic nurse before it was suckled by its mother, and that vaccination was not in any way the cause of the disease.

A MATTER OF ETIQUETTE.—SIR: What is your honest and candid opinion, and what future course of conduct would you adopt in reference to the following case? I was lately called upon to visit a sick child in our locality. I prescribed remedies; and, having occasion to go from home on the following day, I did not see the call again until my return on the second day. In the meantime the child suddenly became worse; and the parents very properly called in the aid of another medical man until my return. He was told that I (who am their regular medical attendant, and have been for some time) had seen the case. He prescribed for the child; and has from that time been in regular attendance, in spite of me, and to the astonishment of the parents, who felt a diffidence in requesting him to discontinue his visits, under the circumstances of the case. Now, sir, I wish to know if this is a straightforward and honourable mode of procedure towards a brother practitioner. I am, etc.,

L.R.C.P.E. etc.

[Such conduct as that described by L.R.C.P.E. is utterly unjustifiable; but we do not clearly see what our correspondent can do, unless the parents of the child decide positively as to which of the two medical men they prefer. The case is one which would legitimately come under the notice of a Medico-Ethical Society.—EDITOR.]

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PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, March 1863.

COMMUNICATIONS have been received from:—Dr. J. HUGHES BENNETT; Dr. F. J. BROWN; Dr. ROBERT H. POWELL; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. G. MITCHINSON; Mr. HATHERLY; Dr. LIONEL BEALE; Dr. A. T. H. WATERS; Dr. STYRAP; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. R. T. MORRIS; Dr. JAMES RUSSELL; Mr. E. H. COLEMAN; Dr. A. LEARED; Dr. CAMPS; AN OLD ASSOCIATE; Mr. C. EVANS; Mr. S. A. PARKER; Mr. JAMES DULVEY; Dr. ASPINALL; Mr. BLEECK; Mr. CURGENVEN; Mr JOHN K. SPENDER; Mr. C. VASEY; Dr. T. J. WALKER; Mr. THOMAS BRYANT; and Mrs. RUSSELL.

BOOKS RECEIVED.

1. On the Convulsive Diseases of Infants. By T. Ballard, M.D. London: 1863.
2. On Effusions of Blood in the Neighbourhood of the Uterus. By Henry M. Tuckwell, M.A., M.B. Oxford and London: 1863.

In the Press, in One Volume 8vo,

On the Diagnosis and Treatment

of DISEASES of WOMEN. By GRAILY HEWITT, M.D., M.R.C.P., Physician to the British Lying-in Hospital; Lecturer on Midwifery and Diseases of Women and Children at St. Mary's Hospital Medical School.

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Remarks

ON

THE MOLECULAR THEORY OF ORGANISATION:

IN REPLY TO DR. BEALE.

BY

JOHN HUGHES BENNETT, M.D.

PROFESSOR OF THE INSTITUTES OF MEDICINE, AND SENIOR PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF EDINBURGH.

Dr. Beale concluded his first paper with the following passage:—"But to limit the discussion to one point, the formation of vibriones. Dr. Bennett maintains that several of the molecules forming the scum unite to form minute filaments. I do not think that any one has ever seen two such living molecules together." I hope to have satisfied Dr. Beale in my last communication that not only are two such molecules frequently seen together, but that this is so common an occurrence as to warrant the conclusion that their union produces the filaments. In reply, he now says:—"I propose to devote a separate communication to the important question of the development of vibriones, and I thank Dr. Bennett for expressing his views upon this point so definitely."

Instead of limiting the discussion, however, to this point, Dr. Beale has seized the opportunity to introduce all kinds of queries, mingled with many remarkable assertions as to vitality, in none of which can I agree with him. It forms no part of my intention to controvert the peculiar views of Dr. Beale. I think they may be safely left to the judgment of physiologists. I shall only comment on the following statement:—"A molecule of oil, or phosphate of lime, may result from disintegration; but as such molecule, it can never live. A *living molecule* of oil, phosphate of lime, or any other substance having a definite known composition, is a simple impossibility."

Now, what is it that transforms cartilage into bone, if it be not the regular deposition of mineral molecules into its intercellular substance—a substance maintained by Dr. Beale to be incapable of living? If this is not a living process, what can be such? To say that it is mere infiltration of mineral matter is no argument against its vital character; for in the same manner all growth and nutrition consist of infiltrated matter. Neither is it any argument to say such matters are first in solution. It is only when molecular formations are produced from such solutions, that we have any evidence of their vital nature, as in the molecular substance of bone and muscle. Again, to maintain that, because the composition of the molecules in a texture is now known, *therefore* such molecules can never live, is certainly a curious proposition, and must lead Dr. Beale to support the paradox that nothing lives in a living structure. Lastly, to say of the theory of an opponent that "it is a simple impossibility" is in science the weakest controversial expedient.

Dr. Beale says, "It is a simple assertion, and I maintain, unsupported by evidence, to say 'the molecules of the ovary first coalesce to form the ovum.'" Thereupon he proceeds to ask no less than nine questions, the reply to which, in order to be satisfactory, would require me to write a volume. To save myself this trouble, when Dr. Beale on a previous occasion stated less positively that he was not aware of any observations that bore on this subject, I referred him to the writings of Martin Barry, Meissner, Nelson, Keber, and others, conceiving that this would recall to his memory a crowd of facts in confirmation of my statements. In doing so I especially guarded Dr. Beale from being led astray by the theories of those writers, and requested him only to regard the facts which they placed upon record, which, of course, I interpret differently from them. But, instead of doing this, Dr. Beale turns to the *explanation* of the figures given by Nelson, which he correctly says do not agree with mine. He does not seem to comprehend that the point at issue is not the correctness of the facts, but which is the true explanation of them; and argues that, because Nelson's is different from mine, *therefore* I must be wrong. Although, it will be confessed, it is difficult and laborious to argue with such an opponent, I shall endeavour to make this point understood, as I did that concerning the vibriones.



Fig. 1.

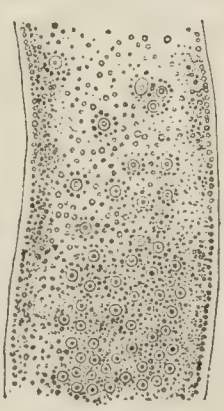


Fig. 2.

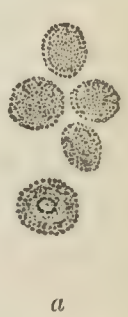


Fig. 3.

Fig. 1 represents the cæcal extremity of the testicle of the *ascaris mystax*, magnified 330 diameters. It contains nothing but molecules, which Nelson calls granules, or seminal particles, and which, he says, are secreted or thrown off from the mucous membrane. In the upper portion of the testicle the tube presents the appearance represented in Fig. 2. By this time the original granules, according to Nelson, swell out and form nucleated cells, which, he says, were obscured by an immense number of minute opaque granules, as in Figs. 2 and 3 (*Phil. Trans.*, vol. cxlii, p. 565). Now this swelling out and so forming nucleated cells, was the theory prevalent when Nelson wrote. Looking at the figures them-

selves, I think it will be clear that the primary stage is *molecular*; that there is no previous cell from which they are derived; and that subsequently they aggregate together in masses, and that from their coalescence the subsequent sperm-cell, Fig. 3 *a*, is formed.

Fig. 4.



a

Fig. 4 represents the cæcal extremity of the ovary of the *ascaris mystax*, also magnified 330 diameters. "It is formed", says Nelson, "of a membranous and perfectly transparent tube, much thicker at the very end (*a*). It is from this thick portion (*a*), which presents a finely granular structure, that the germinal vesicles are thrown off; it constitutes, therefore, the true ovary" (*Op. cit.*, p. 571). If this figure, which is an exact copy from nature, be examined, it will be seen that at the extremity of the tube the structure is molecular, and that the so-called throwing off of germinal vesicles, resolves itself into the coalescence of these molecules. There is no previous cell out of which they are derived.

Figs. 5, 6, and 7 represent the earliest stages in the formation of the ovum discovered by Barry in

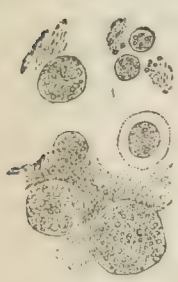


Fig. 5.

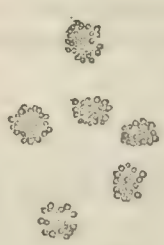


Fig. 6.



Fig. 7.

the salmon, pigeon, and cat—magnified, the first 240, and the last two 440 diameters. They represent objects seen in the ovary *before* the formation of an ovisac. (*Phil. Trans.*, Part II for 1848, p. 308.) Of these Barry observes: "After an attentive examination of these objects, I do not think it hazardous to express my belief that they present one of the earliest stages in the formation of the ovum; the enveloped sac being, as I suppose, the *germinal vesicle* itself." (*Op. cit.*, p. 309.) Of this germinal sac it was believed by Barry, following Purkinje, that it was the *first* part of the ovum formed (p. 308). Here also, then, an inspection of these figures must certainly lead to the conclusion that the ovum is formed by an aggregation and coalescence of molecules, and not from a preexisting cell.

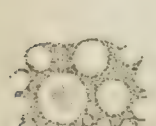


Fig. 8.

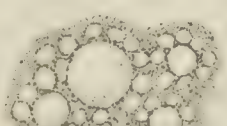


Fig. 9.



Fig. 10.



Fig. 11.

Figs. 8, 9, 10, and 11 are described by Barry as the earliest stages in the formation of the ovum from the ovary of the rabbit. He speaks of them as vesicles. They do not prove the origin of such vesicles from molecules, but exhibit their tendency to aggregate together when produced. Only the one most advanced (Fig. 11) exhibits the characters of a cell. Although these are figured as the earliest parts discoverable in the ovary of the rabbit, it must be clear that a stage in formation existed previously, which was probably the same as that seen in the pigeon, or that given by Nelson, in which nothing but molecules existed.

Without proceeding to make further extracts from other writers, and refraining from giving numerous additional arguments and facts which tend to support the molecular theory of organisation, I ask the candid reader whether the figures now given from two authors only are not sufficient to refute Dr. Beale's confident statement: "It is simply an assertion, and, I maintain, unsupported by evidence, to say 'the molecules of the ovary first coalesce to form the ovum'." On the contrary, I submit that the facts of Nelson and Barry give my theory the most unequivocal support. It avails nothing to call the molecules ova. Let Dr. Beale give them what names he pleases, they are still molecules—as such, are formed in the ovary; do not originate in preexisting cells; and, by their aggregation, produce higher forms. Such is the essence of my theory.

Having now, in deference to the position occupied by Dr. Beale as Professor of Physiology in King's College, London, responded to his invitation to explain more fully some of the points contained in my published lectures on the molecular theory of organisation, I retire from further discussion, with the hope that he will give that theory more consideration than he has hitherto done. The title given to his papers appears to me altogether erroneous, as I defy any one to extract from them one single fact or argument opposed to my theory. In one point we at least agree; viz., that however the primary molecules originate, whether they be living or dead, they are in no degree necessarily dependent on preexisting cells for their formation. This alone is a great step in science. I trust before long that, in the same way he has thrown aside the fallacious doctrine of *omnis cellula e cellulâ*, so he may ultimately disabuse himself of the idea *omnis molecula e moleculâ*.

Statistical Society. On Saturday March 14th, at the twenty-ninth annual meeting, Sir J. S. Pakington, Bart., M.P., in the chair, the following gentleman were elected council and officers for 1863-64:—*President*: Colonel W. H. Sykes, M.P., F.R.S. *Council:* C. Babbage, M.A., F.R.S; J. Bird, M.D.; Sir J. Boileau, Bart., F.R.S.; S. Boult; S. Brown; W. Camps, M.D; W. Farr, M.D., D.C.L., F.R.S; Right Hon. Earl Fortescue; H. W. Freeland, M.P.; Sir F. H. Goldsmid, Bart., M.P.; W. A. Guy, M.B.; J. T. Hamick; F. Hendriks; J. Heywood, F.R.S.; Sir R. Hill, K.C.B.; W. B. Hodge; C. Jellicoe; L. Levi, F.S.A.; W. G. Lumley, LL.M.; Right Hon. H. Mackenzie, F.R.G.S.; M. H. Marsh, M.P.; Right Hon. Lord Monteagle, F.R.S.; W. Newmarch, F.R.S.; Right Hon. Sir J. S. Pakington, Bart., M.P.; F. Purdy; Right Hon. Lord Stanley, M.P.; Col. W. H. Sykes, M.P., F.R.S.; Major-General Sir A. M. Tulloch, K.C.B.; R. Valpy; C. Walford; Rev. W. Whewell, D.D., F.R.S. *Treasurer:* W. Farr, M.D., D.C.L., F.R.S. *Honorary Secretaries:* W. A. Guy, M.B; W. G. Lumley, LL.M.; F. Purdy.

Short Clinical Lectures

ON

THE FIRST PRINCIPLES OF MEDICINE.

Delivered at King's College Hospital.

BY

LIONEL S. BEALE, M.B., F.R.S.

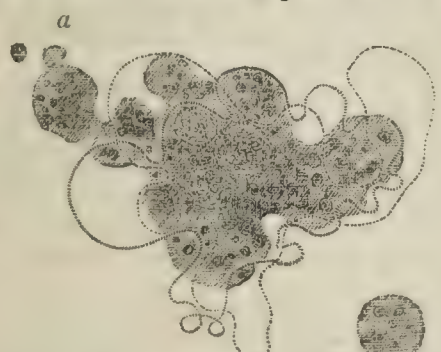
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL; HONORARY FELLOW OF KING'S COLLEGE; ETC.

II *(concluded).*

On the Vital Changes Occurring in the Mucus-Corpuscle.

I have seen an entire corpuscle move onwards in one definite direction for a distance equal to its own length or more. Protrusions would occur principally at one end, and the general mass would gradually follow. Again, protrusions would take place in the same direction, and slowly the remainder of the corpuscle would be drawn onwards, until the whole had been removed from the place it originally occupied, and advance onwards for a short distance in the mucus, in which it was embedded. From the first protrusions smaller protrusions very often occur, and these gradually become spherical, but remain attached by a narrow stem, and in a few seconds perhaps again become absorbed into the general mass. From time to time, however, some of the small spherical portions become detached from the parent mass, and become independent masses of germinal matter, as represented in the figure.

An imperfect notion of these wonderful phenomena may perhaps be formed by reference to the drawing. The three outlines mark the changes in form which occurred in one of these so-called mucus-corpuscles within the period of a single minute. The protrusion, when it first takes place, appears very transparent, as at *a;* but several of the small particles, like those in the salivary corpuscles, make their way into the projecting portion with a peculiar



A mucus-corpuscle from perfectly transparent healthy mucus expectorated from the air-tubes, under a power magnifying 3000 diameters. (The 1-26th of Messrs. Powell and Lealand, with the tube of the microscope lengthened by four inches.) *a.* An outgrowth actually forming, with a small portion completely detached. *b.* Another detached portion growing independently.

oscillating movement. These particles are in active motion in every part of the mass. Although the movements of the included particles are not generally so active as those in the salivary corpuscles, they occur not only in the mucus-corpuscles, but in the young epithelial cells detached from the mucous membrane of the nose and trachea. The very transparent matter which first protrudes is, however, not *devoid of corpuscles;* for, with care in arranging the illumination, very delicate spherical particles, varying greatly in size, can be now and then distinguished. In rapidly growing cancer-cells a very transparent matter which assumes the spherical form is often seen. This is living germinal matter, also composed of minute and very delicate particles. Like germinal matter in other situations, it is coloured by carmine.

The movements above described closely accord with those taking place in the *amœba*, and are of the same nature as those which occur in the protoplasm of many plants, easily observed in the vallisneria, and the appearance of the living matter under very high powers of the microscope is precisely the same in all cases. Similar movements probably occur in cancer and pus; for I have seen appearances in both these rapidly growing morbid structures exactly corresponding to those observed in the mucus corpuscles *after* the changes have ceased in consequence of death. Indeed, it is almost certain that such movements are constant in every kind of living matter. In some instances they continue for some time after the living matter has been removed from the surface upon which it grew. In other cases—and we are not surprised that this should be so in the higher animals—death occurs the instant the conditions under which the living matter exists are but slightly modified. These movements must not be confounded with the Brunonian molecular movements which occur in pigment and other cells. The movements I have been describing cease when the germinal matter dies. The latter, as is well known, take place whenever mineral insoluble particles are suspended in limpid fluid.

What is the nature of these particular movements? Are they physical, or are they vital? There are no examples of any movements like these occurring in any form of matter destitute of life. The matter which moves exhibits the same general characters which I have mentioned belong to living matter in all living organisms; namely, a granular appearance, with a tendency to assume the spherical form when free; a certain amount of viscidity; a tendency to divide; the property of being rapidly coloured (in a few seconds) with an ammoniacal solution of carmine.

The movements I have described clearly show that there exists a tendency in the mass to separate into smaller portions; and probably this is due to a tendency of the particles of which the mass is composed to separate from each other. By division, these masses multiply in the soft viscid mucus in which they are imbedded. Sometimes the entire mass divides into two equal portions; and sometimes it gives off several small portions, each of which may grow. If but a very small portion be detached, and supplied with nutrient pabulum, it *grows* into a mass like that from which it is, in fact, but an offset. But how does it grow? Certainly not by the addition of particles on its exterior; for the whole mass exhibits the same general character, and differs in most important characters from the matter which surrounds it. There is no matter around it

like that of which it is composed; yet the *pabulum* must be around it; and that *it is possible* for fluids to pass very rapidly into the central portion of the mass, is proved by the fact that carmine solution actually does so penetrate in a few seconds. Now, since there is a tendency for portions to move away from the general mass, is it not clear that such movements must cause fluids to flow in the opposite direction—that is, towards the mass and into its substance, or into the substance of the particles of which it is made up, and, if each component particle be regarded as a spherule, towards its centre? So that we are brought to the conclusion that living particles move *from the centre*, while the inanimate pabulum is caused to pass *towards the centre*. We may suppose that this pabulum, having come into contact with, and perhaps passed into, the substance of living particles, itself becomes living, and moves from the centre by virtue of new powers it has acquired, just as other particles have moved which were animated before.

The further prosecution of this inquiry would involve me in a discussion upon the nature of vital force, but this must be postponed for the present; and I shall also defer the consideration of the precise part the germinal matter takes in the formation of the viscid mucus, as it is part of the same question.

In conclusion, I would venture to offer the following opinions upon this difficult question. It seems to me there is much evidence in favour of the inference—

1. That the movements described in the mucus-corpuscle are due to peculiar endowments; and, as such movements take place in living matter alone, it is right to speak of them as *vital*.

2. That physical and chemical changes take place in the fully formed mucus; but neither this nor any form of formed material (cell-wall, intercellular substance, etc.) is endowed with *vital* power.

3. That the only part of any cell-tissue, viscid mucus, etc., actually concerned in vital changes, is what I have termed *germinal matter*. If a structure be destitute of germinal matter, or if this substance have ceased to change, the structure is not living, but *dead*.

4. Pabulum is *inanimate*. Germinal matter *lives*. Formed material was once alive (as germinal matter), but no longer possesses *vital powers*.

Animal Reproduction. In experiments upon the lower animals, such as the polype, it is most extraordinary that, although cut up into various pieces, each particular piece will grow up into the form of the primitive stock; the head, if separated, will reproduce the body and the tail; and if you cut off the tail, you will find that that will reproduce the body and all the rest of the members, without in any way deviating from the plan of the organism from which these portions have been detached. And so far does this go, that some experimentalists have carefully examined the lower orders of animals—among them the Abbé Spallanzani, who made a number of experiments upon snails and salamanders,—and have found that they might mutilate them to an incredible extent; that you might cut off the jaw or the greater part of the head, or the leg or the tail, and repeat the experiment several times, perhaps cutting off the same member again and again; and yet each of those types would be reproduced according to the primitive type; nature making no mistake, never putting on a fresh kind of leg, or head, or tail, but always tending to repeat and to return to the primitive type. (*Huxley.*)

Addresses and Papers

READ AT

THE THIRTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LONDON, AUGUST 5th, 6th, 7th, and 8th, 1862.*]

OBSERVATIONS ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND: ILLUSTRATED BY NUMEROUS FATAL CASES.

By WILLIAM BUDD, M.D., Clifton; Honorary and Consulting Physician to the Bristol Royal Infirmary.

"Le médecin doit, dans ses premières études, jeter un coup d'œil sur les animaux qui se rapprochent le plus de l'homme."—*Chaussier.* (Adopted from Régnier.)

[*Concluded from page* 241.]

This paper would be incomplete were it to conclude without a word on treatment. As, with one exception, all the cases of which I have any knowledge ended fatally, it will be readily understood that I have nothing of my own to offer in the way of cure. Unfortunately, there is too much reason to suppose that, in some of the number, the measures intended for relief were worse than futile, and only hastened death. This was certainly the case with the incisions made in two of the instances which fell under my own eye, and with the leeches that were applied in some others. This uniformly fatal issue is the more mortifying because, in its first period, the disease seems to be in a great degree under the control of remedies.

Rayer, who has had great experience of it, says, in reference to the disease during this period, "its progress may very certainly be arrested by the use of caustics." Nothing can be more positive or unqualified than this statement. The testimony of all the best continental observers is to the same effect.

In Bourgeois's valuable paper, and in Enaux and Chaussier's monograph, numerous cases are given in illustration, which seem to leave no doubt of the fact. Of the various caustics in use the evidence appears to preponderate in favour of the potassa fusa. It is right, however, to state that Chaussier, and one or two other writers of equal eminence, prefer nitric acid or the chloride of antimony. For information as to this and other practical points, I think it best, however, to refer to the original authorities.

From all this it is evident, as I remarked at the outset, that everything hangs on the recognition of the disease in its first stage. In that stage I have myself never seen it. As the subject is comparatively new to the profession in England, and as the point is one of such vital importance, I shall not, perhaps, do amiss in inserting here one or two descriptions of the malady as it presents itself at its onset.

Anthracion with Diffuse Gangrene. "This variety begins with a considerable degree of pruritus, which is succeeded by the appearance of a red spot like a flea-bite. The vesicle, of the size of a millet-seed at first, soon acquires larger dimensions, and if not ruptured by the patient bursts spontaneously. Twenty-four or thirty-six hours after the attack, a small, hard, and circumscribed nucleus, having the form and size of a lentil, is perceptible under and around the seat of the vesicle. In the circumference of this, a soft, but still resisting, swelling, of a reddish or livid colour, covered by and bye with secondary sero-sanguinolent vesicles, at first isolated, but speedily becoming confluent, is de-

veloped. The central point, now of a brownish hue, extremely hard and very insensible, becomes gangrenous. The inflammation extends to a considerable distance; the neighbouring skin is red and shining; the subcutaneous cellular tissue is puffy, tense, and, to appearance, emphysematous. The diseased part is benumbed, without proper sensation, and the gangrene advances with rapidity." (Rayer, *Treatise on Diseases of the Skin*, Second English Edition, p. 559.)

Virchow's account runs thus:—"In the first stage, on looking narrowly at the affected part, you generally discover a small red spot, sometimes with a blackish point in the middle. This spot becomes gradually more irritable, and itches greatly. The patient scratches it; it becomes more and more red, swells up, and forms a small papula; the parent nucleus (*den Mutter-knoten*) —the 'maltka' of the Russians. Most commonly, a vesicle then makes its appearance, which soon attains the size of a millet seed, and contains, at first, a transparent bright yellow fluid, which, however, very early becomes reddish or bluish.

"This is the characteristic malignant pustule, which is usually single, rarely multiple, and which, in most cases, is too soon destroyed by scratching to admit of our carefully studying its development. Underneath the vesicle may be seen the bluish red surface of the nucleus, seated in the substance of the skin, and which continues to extend both in depth and circumference.

"The excoriated surface *readily dries up, and becomes, as it were, mummified*, showing that generally here already the circulation is much enfeebled; while in the neighbourhood, new vesicles spring up, which run the same course. Soon the part loses its vitality, so that it may be pierced with needles without the patient's becoming aware of it."*

The seeming insignificance of the affection in its first origin; the urgent pruritus; the development of a peculiar vesicle; and the early death, hardening, darkening, and insensibility of the immediate substratum; are the leading features of this history. Even in this early phase it has marked peculiarities, which, if things happened always as they are described in books, ought to lead to the recognition of the disease.

From the nature of the case, the practitioner who has to act upon it will, however, always find himself in a trying dilemma. The affection only admits of cure when, to the uninformed, its aspect is trivial, and it can only be cured by a process which leaves a mark. But to make an abiding scar on the face, say of a fair young lady, for the treatment of what, at the worst, appeared to be no more than a common boil, is a proceeding that would be likely to inflict (at any rate, in the eye of the parties most interested) a scar quite as abiding on the reputation of the practitioner who inflicted it. But the responsibility, great as it is, cannot be got over by attempting to evade it. The alternatives on both sides are painful enough, and can only be fitly dealt with by the decision which is the prerogative of sure knowledge. What is most needed among ourselves is the diffusion of information on the whole subject: and I would venture to suggest that the New Sydenham Society might do a good service by giving abstracts from the best essays upon it, and by adding to the series of plates it is now publishing some figures of malignant pustule in its various, and especially in its early stages.

There is one other topic on which I must needs touch for a moment before I bring these remarks to a close. Even those who may hesitate to adopt to the full the theory put forward in this paper of the cases related in it, will admit that in the view here taken of their origin there is enough of probability, at any rate, to show the pressing need of some fresh organisation to prevent the revolting traffic in diseased meat which now prevails. From the details given under this head, it is clear that the measures at present employed for this object signally fail of their purpose.

If we would look at the matter from a more general point of view, the occasion would justify a still larger design. We have had scientific commissions not a few, to inquire into the sanitary condition of men. Might it not be worth while to inquire into the sanitary condition of the animals from whose substance men repair the waste of their own? The result would be, I doubt not, to disclose, as in the case of men, an amount of preventable disease, of which few have, at present, the remotest idea. In this way, and as a money speculation merely, few things, I suspect, would pay the country so well. But we are all, more or less, interested in such an inquiry in a way that touches us more nearly than money ever can.*

By the same mysterious law by which we convert the flesh of animals into our own, we often become the heirs of their maladies, and may even be involved with them in a common death.

The number of deaths annually occurring that are actually recognised as thus arising is by no means inconsiderable. A more perfect knowledge would, doubtless, add many to their number which are never thus regarded in present classifications. Here, for instance, under the head of malignant pustule—if the views put forward in this paper be true—some considerable proportion of three or four hundred annual deaths must, at once, be so set down, which have hitherto been registered under names conveying no suspicion whatever of an animal origin. It is impossible, in fact, to look much into this subject without seeing that this is one of the avenues through which disease and death may enter which is not sufficiently kept before the physician's mind.+

The interest which a comprehensive inquiry into the diseases of animals would have for medical science generally can scarcely be overrated. What has already been done in tracing the dissemination of a few species of entozoa and other parasites is an earnest of what might be expected from investigation in this and other fields.

In the great field of the epidemic and contagious disorders by which the animals that minister to man are afflicted, a rich harvest yet remains to be gathered. It is enough to look over the outline of these disorders,

* Virchow, *Op. cit.* The characteristics of the early stage come out in still stronger relief in the terse phraseology of the Latin tongue. The following description is taken from an account of malignant pustule by Hunnius:—

"Loco, ubi carbunculus se formaturus est, tumor parvus, aucto calore præditus, ictui culicis similis oritur, paulo post in eo vesicula magnitudi grani milii evolvitur, vel vesicula hoc statim ab initio eczemati similis, tumore non prægresso, formatur. Eruptionem comitantur pruritus et formicatio cutis, quibus ægrotus ad scabendum impellitur, ita ut vesicula sæpe mature destruatur. Pruritus in dolorem pungentem ardentemque commutatur, dum epidermis, si vesicula integra manet, secretione ichorosâ paulatim magis à cute elevatur, ita ut vesicula in initio pellucida, postea subflava, subrubra, ex cæruleo nigricans plerumque altero die jam ad magnitudinem pisi accrescat. Ambitus intumescit et prope vesiculam colorem ex cæruleo rubrum manifestat, qui color tumoris peripheriam versus in pallidum transit."

* There is a French work whose title shows that our neighbours are more alive to considerations of this kind than we are. I refer to Professor Delafond's *Police Sanitaire des Animaux Domestiques*. I have been unable to obtain a sight of the work itself.

+ The following statement, which appeared in the *Times* while I was in the act of sending these notes to press, offers a startling commentary upon them:—

"The Royal Dublin Society met on Saturday evening to hear a lecture from Professor Gamgee, on Disease and Mortality among Cattle. When he had concluded, Mr. Gauley, salesmaster, made an extraordinary statement. He said that unless some means were devised to give the farmer some compensation for diseased cattle, it was impossible to prevent him from selling them, or the butcher from killing and selling them. Unless some society were formed to have diseased meat paid for, it would be killed and eaten. There was no use in mincing the matter he said, every one of the salesmen sold diseased cattle. The farmer could not otherwise pay his rent. The disease is so prevalent that he could not live were he to submit his cattle to destruction." (*Times*, Wednesday, Dec. 17, 1862.)

vaguely, even as (for the most part) it is mapped out in veterinary works, to see what instruction their history must contain could it once be thoroughly made out.

A searching investigation into them would open up analogies that could not fail to be of the deepest interest in their bearing on the great group of kindred maladies which are so fatal to man. It is not too much to say that many a vexed problem relating to these last would here find a ready solution. It is, in fact, only by thus extending the survey that it is possible to obtain a just and comprehensive view of the nature and mode of propagation of that great and remarkable brood of morbific agents, which are the material cause of contagious diseases, and which, low as they are in the order of created things—as yet undefined in nature, but specific in essence—are so destructive to men and animals alike.

As related to animals, such an inquiry is the more inviting, because its prosecution offers facilities from which we are debarred in our own case. In studying the epidemics which infest sheep and oxen, *experiment*—that great instrument of modern research—might often be brought into play; in forms, too, in which experiment is most sure of its aim, most easy to interpret, and least likely to mislead. The light which it has already thrown on the history of the particular disease which is the subject of this paper is a good example, both of the extent and nature of the elucidation it is capable of affording.

By this and other means so employed, we might, in no long time, succeed in investing our knowledge of whole provinces of disease with much of that precision which is the charm of the physical sciences, and medicine's greatest want. By the same means, we should gradually be accumulating data whereby to make the work of prevention sure, and thus help towards that great consummation to which we may even now confidently look—the ultimate deliverance of man from that vast brood of contagious diseases, which seem to mock his power—whose very existence is a humiliation to him, and which, under the form of slighter visitations or of wide-spread pestilence, bring every year so many millions to the grave by a cruel and untimely death.

P.S. About a fortnight after the foregoing paper was read, I received from Dr. Markham an extract from the *American Medical Times* of July 19th, 1862, containing a review of a paper on Malignant Pustule in the United States, by Dr. A. N. Bell, physician to Brooklyn City Hospital—the paper being a reprint from the *Transactions* of the New York State Medical Society. I have not seen the paper itself; but judging from the review, there would appear to be an almost complete coincidence between the conclusions at which Dr. Bell has arrived, both as regards the origin of the disease and its mode of propagation, and those put forward by myself. As these conclusions were come to in entire independence of one another, the fact may be taken as a strong presumption in favour of their soundness. The following is Dr. Bell's description of the affection:—

"It first appears in the form of a painful swelling, which after a lapse of time, varying from one to three days, rarely more, developes upon its central part, a small reddish or purple spot, accompanied with itching. In the course of twelve or fifteen hours more this spot changes into a bleb or vesicle, not usually larger than the head of a pin, containing a reddish brown or a yellowish fluid. Owing to the continued itching, the vesicle is ordinarily ruptured soon after its appearance; if otherwise, it dries up in about thirty-six hours, leaving the exposed derma dry, and generally of a livid colour. Itching now ceases; and after a time, varying from a few hours to a day, the centre of this discoloured and denuded surface begins to grow hard, and become surrounded by an inflamed areola covered with numerous small vesicles similar to the vesicle which first appeared. The middle of this areola is depressed, and the colour varies from yellow to black. It is now hard in the centre, and more painful than at any other stage. It is, however, a remarkable feature of malignant pustule that severe pain is generally absent; and this character, so different from all other acute inflammations of the skin, is a valuable negative diagnostic of the disease. During the next twenty-four or forty-eight hours the subcutaneous tissue becomes involved; the tumour strikes deeper, and rapidly extends; yet it is so indurated as to be easily circumscribed, and its confines determined without difficulty. Meanwhile the central point, now of brown or livid hue, exceedingly hard and insensible, becomes gangrenous. If the disease ceases to make further progress, an inflamed circle of vivid redness now surrounds the gangrenous portion; the tumefaction which had before rapidly extended diminishes, and the patient experiences something like an agreeable warmth, accompanied by a pulsatory motion of the affected part. The pulse, which had before grown irritable and feeble, revives; strength increases; and if there has been some degree of fever, accompanied with nausea, as occasionally happens, it is resolved into a gentle perspiration, and the nausea ceases. Suppuration now sets in between the living and the dead parts of the pustule, and the detachment of the gangrenous portion leaves a suppurating surface of variable extent in different cases. Should the disease, on the contrary, tend to an unfavourable issue, generally no suppuration takes place; the gangrene spreads rapidly from the centre to the circumference of the tumour; the pulse becomes smaller and more contracted; the patient complains of extreme lassitude with an inability to sleep, is attacked with fainting fits, and becomes passive as to the result; there is disinclination to take food or medicine, or to have anything done, and there is a total loss of appetite; the tongue is dry and brown; the features shrink; the skin is parched; the eyes are glassy; cardialgia and low delirium premonish the fatal termination."

It is impossible not to recognise, at once, in this description the same disease as that which is the subject of this paper, and the identity of both with the malignant pustule of the continental writers.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

PETERBOROUGH INFIRMARY AND DISPENSARY.

INDURATION OF THE STERNO-MASTOID MUSCLE IN AN INFANT.

(Under the care of, and reported by, Thomas James Walker, M.D.)

In the number of the British Medical Journal for December 6th, is a notice of a paper by Dr. Melchiori in the *Omodei Annali*, in which he calls attention to the occurrence of an induration in the sterno-mastoid muscle, sometimes found in young children, and of which four cases had come under his notice; and in the *Lancet* for January 3rd, are published three cases of this affection, which had been treated at the Royal Infirmary for Children, by Dr. Wilks, who does not appear to have seen the remarks in the British Medical Journal of a month before, as he says that he can find no reference to this malady in books. Dr. Wilks's cases were treated on the theory that the induration of the muscle might depend upon syphilis, and the patients got well. In

the following case, as in Dr. Melchiori's, the treatment was expectant.

John Knighton, aged one month, was brought to the Infirmary on June 30th, 1862, in consequence partly of an attack of diarrhœa, attended with loss of appetite, etc., and partly because the mother wished to know if anything could be done for the neck, on the right side of which she had perceived a lump since the birth of the child. On examination, the sterno-mastoid muscle of the right side was found indurated, feeling as noted at the time like an osseous arch, stretching from the mastoid process to the clavicle. The head of the child was turned a little towards the healthy side.

The mother of the child was a strumous subject, but there was no suspicion of syphilis.

Simple remedies were prescribed for the diarrhœa, and friction with the hand dipped in a little flour was recommended for the neck, more, however, as a placebo, than with the expectation of any benefit, as at that time I had seen no notice of a similar case, and regarded it as a congenital deformity, likely to be persistent.

At the end of three weeks, the diarrhœa being well, and the swelling apparently but little better, the mother was told to show the child when a month had elapsed; she did so on August 19th, when the rigidity had much diminished; and on September 23rd, no trace of it remained.

CALCULUS OF THE BLADDER, DISCHARGED IN FRAGMENTS BY THE URETHRA WITHOUT ANY CRUSHING OPERATION.

(Under the care of, and reported by, T. J. WALKER, M.D.)

The following example of that rare occurrence, spontaneous disruption of a stone, is rather curious than instructive, and is somewhat inexplicable; its publication may lead to some attempts at explanation, or may call forth descriptions of similar cases.

Job Heyward, aged 14 years, admitted into the Infirmary June 10, 1862, has for six or seven years suffered from urinary disorder, and had been an out-patient of the Peterborough and Stamford Infirmaries. He was formerly sounded for stone without any being detected; but within the last two or three years had passed several small calculi *per urethram*. Bloody urine had also been voided on several occasions. About a fortnight before admission, the patient was attacked with severe pain, extending from the loins round the abdomen, and down the thighs. He passed bloody urine at first; but afterwards was unable to get rid of any, and the bladder becoming rapidly distended, he applied to Mr. F. Southam, of Wansford, his usual medical attendant, who has kindly furnished the following particulars of the case while under his care. On first seeing him, on June 31st, the bladder was distended, and at about two inches from the meatus of the urethra was impacted a calculus, which was removed, and found to be of about the size of a small horse-bean; it appeared to be an irregular fragment of a large calculus. A mixture containing liquor potassæ was ordered to be taken twice a day. About three days afterwards, the patient was again very ill, and unable to pass urine; the bladder was distended, and on three occasions Mr. Southam introduced the catheter and emptied the bladder, portions of calculus passing away through the instrument. Subsequently, to this the calculous *débris* accumulated in the urethra, as it did while the patient was in the Infirmary, and Mr. Southam removed a considerable quantity with a director. The alkali was discontinued and citric acid given in its place, and the warm bath was daily used. It was not until June 7th, that the swelling of the penis and prepuce took place; no instrument was introduced into the bladder, except the catheter, and the scoop of a director alone was used to remove the fragments from the urethra.

Upon admission, the bladder was found greatly distended, and the urine constantly passing *guttatim*. The penis was very œdematous and the prepuce contorted; a sound was introduced into the urethra, but met with an obstruction about five inches from the meatus; no grating was felt, nor was the click of the instrument against a calculus felt; no stone could be felt by pressing the finger on the perinæum.

In the evening the boy passed a considerable quantity of urine while in a warm bath, and later passed some at stool.

June 11th. The patient had slept well; the distension of the bladder was greatly relieved; the urethra was felt to contain calculous matter for about two or three inches from the meatus, and with an urethra-scoop several fragments, irregular in form and evidently portions of a large stone, were removed. Some of the pieces had lodged within the prepuce, the œdema causing phimosis, and the remainder evidently being unable to pass the narrow meatus.

June 12th. The urethra, which seemed completely cleared yesterday, was now again filled with calculi, each act of micturition pushing fresh fragments forward. Several fragments were removed, some larger than a pea, and two entire calculi of rounded form, quite different from the other fragments, were also removed, these were about the size of peas. There was now no distension of the bladder, and the patient appeared to be doing well in every respect.

June 13th. A fresh accumulation was found in the urethra, and removed. The weight of the whole, collected since the admission of the patient into the Infirmary, was forty-four grains, and the masses were rather bulky for their weight. The penis was no longer œdematous, though the prepuce was still swollen.

June 25th. The patient now passed urine with perfect freedom, and for some days no trace of gravel had appeared. He therefore left the hospital, and on July 5th was discharged, perfectly free from any symptoms indicating calculus or other disease of the urinary organs, and he remains quite well at the present time.

The whole of the calculus passed from his admission into the Infirmary to the time of his discharge, weighed fifty-five grains, and the *débris* removed before the patient's admission into the hospital, and, unfortunately, thrown away, is estimated by Mr. Southam to have been at least equal in quantity to that.

The composition of the calculus was almost pure uric acid, there being scarcely a trace of phosphates. In most cases of spontaneous disruption, the calculus has, I believe, been phosphatic. The fragments were irregular and angular in shape, and varied in size from pieces as large as a small horse bean, to others about the size of a cardamom seed.

Certainly in this case neither of the so-called explanations of other cases of disruption, such as the clashing of two stones together, nor the contraction of a hypertrophied bladder, will clear up the mystery as to the cause of the breaking down of the stone; and there is no evidence of any change in the character of the urine, or other reason for the unusual termination of this case of calculus. Had Mr. Southam not been clear that the stone which he removed from the urethra on the first day that he saw the patient, was a fragment of the calculus which was broken up, a feasible supposition might have been that a small separate calculus, having become impacted in the urethra, caused retention, and that the retained urine becoming ammoniacal acted upon the uric acid calculus.

The urethra of the boy was capacious up to the meatus, but this was so contracted that the fragments were not removed without some difficulty; and when the œdema and phimosis passed off, it was seen that there had been some enlargement of the orifice, by a slight laceration. There being but slight constitutional disturbance throughout, the bladder never being much distended after the use of the warm bath on the day of admission,

and the concretions admitting of removal by the urethra-scoop, there seemed no indication for any severer measures than those adopted.

COMPOUND COMMINUTED FRACTURE OF BOTH FEET, AND EIGHT SCALP-WOUNDS OF GREATER OR LESS SEVERITY, EXPOSING THE BONES OF THE CRANIUM. AMPUTATION OF BOTH LEGS ABOVE ANKLE.

(Under the care of, and reported by, T. J. WALKER, M.D.)

The following case is an example of recovery from injuries which, at first sight, would seem almost necessarily fatal; and also appears to indicate the great propriety of —occasionally, at all events, if not always, when the circumstances of the case permit it—amputating above the ankle, in preference to selecting a higher portion of the limb.

David G., aged 29, fireman on the Great Eastern Railway, was admitted Nov. 11th, 1862. He was standing on the plate in front of his engine, which was in slow motion, and fell off, with his feet on one rail and his head on the other. Both feet were crushed under the wheel of the engine; while the guard in front of the other wheel probably struck the head, pushed it on a little way, and struck it again, making a fresh wound each time. On admission, the patient was semiconscious, and evidently labouring under the effects of the shock and of the hæmorrhage, which had been considerable, from the scalp-wounds. Although there was a flap of skin about four inches square, struck off the back of the skull, laying bare the occipital and parietal bones, besides other scalp-wounds, no fracture could be detected.

The soft parts, as well as the bones, being too much injured to give any chance of performing Syme's operation at the ankle-joint, amputation of both limbs was performed about two inches above the ankle, the posterior flap being slightly the longer of the two. The hair was removed from the head, and wet cloths applied. The patient was very restless after the effect of the chloroform passed off, occasionally violently delirious, constantly kicking his stumps about, and thus causing continual oozing of blood.

November 14th. The restlessness and delirium had continued unabated up to last night; but this day he was more calm. He had had much thirst, drinking eagerly of beef-tea and milk. The pulse had been usually about 100. The whole scalp was evidently very tender.

November 15th. He slept soundly for three hours last night, and to-day had regained consciousness. The tenderness of the scalp was diminished.

November 17th. The wounds looked well. He ate and slept well. Pulse 116.

November 22nd. The stumps were granulating; there was but very little union. Small portions of the muscles, which appeared bruised at the time of the operation, were sloughing. Last night there was constant delirium for about two hours, and to-day the pulse was 120. He was ordered wine.

November 26th. He continued to be delirious in the night; he was especially so last night. Pulse 120.

November 28th. He had had no delirium for the last two nights. Pulse 90.

January 11th. He had progressed favourably to the present time, and was now, less than nine weeks from his accident, walking about on two wooden legs made with a socket which admits the stump, the weight of the body resting on a rim of leather, surrounding the leg below the knee.

The recovery of the cerebral faculties seems complete; no change in memory, disposition, or intellect being observable.

That this patient did not succumb under the severe injuries he received and the treatment requisite, must, of course, have depended on his own vital power; but great as this must have been, it is hardly probable that he would have survived the double amputation at a higher part of the leg, the operation more usually preferred, but which leaves a much larger wound, and in proportion also as it is nearer the trunk than that adopted, is attended with greater shock.

The operation above the ankle is in itself much less formidable than that below the knee; and the stump left after the former operation is at least equally, if not more convenient, than that left after the latter, if a leg constructed as those worn by this patient is adopted. I would, therefore, in all cases where Syme's amputation is impracticable, consider the possibility of the operation above the ankle.

METROPOLITAN FREE HOSPITAL.

OVARIOTOMY IN A WOMAN AGED SIXTY-FIVE: RECOVERY.

(Under the care of J. HUTCHINSON, Esq.)

[*From Notes by* DR. WARNER, *House-Surgeon.*]

THE patient in the following case is probably the oldest on whom the operation of ovariotomy has yet been performed: we may also add that she makes the fourth recovery after ovariotomy, in succession, at this Hospital. Mr. Hutchinson pointed out to those present at the time of the operation that although the woman's age, counting her years, was 65, yet in constitution she was at least ten years younger. There seemed every probability that, if relieved of her disease, she might enjoy active life for many years to come. Her own strong wish for the operation must also, he remarked, be allowed its weight. She was a monthly nurse, and until the tumour had formed, had been in constant employment. For the last six months the size and weight of the tumour had wholly incapacitated her for any engagements. She was losing flesh and strength, and if not relieved of her disease, there was nothing before her but an illness, more or less slowly tending towards death, and involving throughout its course deprivation of almost all her accustomed sources of enjoyment. He had therefore felt that the mere fact of the patient's age was not one which ought to induce him to decline the operation. He directed attention to an œdematous state of the integuments of the abdomen, and in some degree of the lower extremities, stating that the urine had been examined and found to be free from albumen. The œdema had much diminished during the fortnight that the woman had been in the Hospital. He expressed his opinion that the tumour was polycystic, and had unusually thick walls. He did not expect to encounter any firm adhesions, as there was no history of peritonitic tenderness until quite recently. The following are the facts of the case.

S. B., aged 65, looking much younger than she really was, had been sent, in order to the performance of ovariotomy, to Mr. Hutchinson, by Dr. Sutton, under whose observation she had been at times for three years. Dr. Sutton first discovered the tumour three years before. It was then very small, and at first it increased slowly, and caused no inconvenience; latterly, it had grown much more rapidly; the woman's health had also much failed. She was a widow, and had borne five children. The abdomen measured forty-five inches in circumference, and was everywhere dull excepting in the right loin. The integuments, especially of the hypogastrium, were œdematous, and the prominence of the tumour was much greatest in the hypogastric region. Fluctuation could be elicited, but it was indistinct, and as if transmitted through very thick structures. The uterus was ascertained by vaginal examination to be high up, and quite normal.

On December 9, ovariotomy was performed. An incision, just large enough to admit the hand, was made through the integuments down to the cyst. The hand being introduced, some slender adhesions over the whole front of the tumour were broken down very easily. The chief cyst was then punctured by a large trocar. When the cyst was nearly empty, it was drawn out at the wound, its withdrawal being very greatly facilitated by turning the woman over on her right side. It was necessary during the withdrawal to puncture two or three of the smaller cysts. The pedicle was long and thick. It was secured in a clamp, and the tumour was then cut away about three inches above it. The intestines had not been seen, Mr. Chance, who was assisting, having carefully kept the edges of the wound closed during the concluding steps of the operation. The wound was closed by hare-lip pins, a flannel bandage applied, two grains of opium introduced as a suppository, and the patient returned to bed. The operation had occupied but a very short time, and the woman had borne it remarkably well.

With the exception of a few teaspoonfuls of brandy with ice during the afternoon and evening, nothing was done or required in the way of treatment. During the following night she slept well, and on the next morning her countenance was cheerful, tongue clean, pulse 80, soft and full. A little tea and dry toast was now allowed.

On the 12th the clamp was removed, and on the 13th the pins were taken out. The wound had now entirely healed, but the stump of the pedicle was of considerable size, and occupied its lower end. Excepting a little trouble from vesical irritation, at the end of ten days, and for which quinine and opium were prescribed, the woman had not the slightest ailment during her convalescence. She left the Hospital in excellent health on January 8, thirty days after the operation.

Note on the Importance of a Side Position in Performing Ovariotary. In commenting on the above case, Mr. Hutchinson adverted to the great assistance derived in ovariotomy from turning the patient over to one side. It was convenient to perform the first steps of the operation with the woman on her back; but, as soon as the tumour was partially emptied, the side posture had great advantages. The patient should be turned to the side opposite to that from which the tumour grew, as the intestines would thus be less likely to protrude. The advantages obtained are two—first, in the greatly increased facility of dragging out the cyst, and, secondly, the much diminished risk of any cyst-fluid finding its way into the peritoneal sac. With the patient on her back, and the cyst nearly empty, there is often still considerable difficulty in getting the tumour out, owing to the circumstance that the remaining fluid by its gravitation drags the cyst back again at one part as fast as the operator extracts it at another. All this is remedied by the side position, and the operation may be completed much more quickly and with a smaller incision. The importance of preventing cyst-fluid or blood from gaining access to the peritoneal sac is obvious, and can scarcely be overrated. It is clear that there would be much less likelihood of any doing so with the patient on her side. Mr. Hutchinson added that he had several times tried the side position, and found it more than realise the advantages expected. It had also been tried, at his suggestion, in a case in which he was not the operator, and with a result which was all that could he wished for. In case of polycystic tumours, in which it was needful to cut into many cysts in succession, the side position was especially desirable, and in some such it might even save time to turn the patient well over, and then cut freely into the tumour, without any attempt at emptying it by means of the trocar. It was of course important to arrange for a good light from below in adopting this position.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF CÆSAREAN SECTION.

By R. W. Coe, F.R.C.S.E.(Ex.), Senior Surgeon to the Bristol General Hospital.

[*Read February 26th*, 1863.]

The surgeon is happily but seldom called upon to perform a similar operation to the one the details of which I propose to lay before you. And before doing so, I would state that I do not intend to enter upon the consideration of the conditions which are held to demand this operation, nor how far in my particular case the Cæsarean section was justified.

I have left the discussion of these points to our friend Dr. Swayne, whom we all regard as our local authority in matters obstetrical, and whose judgment especially determined me in the present instance; a judgment the correctness of which the small measurement of the pelvis (which is before you) affords a sufficient confirmation of. I simply desire to call attention to one or two points which struck me whilst performing the operation, and to place on record another (I am sorry to say) unsuccessful case.

My friend Mr. Henry Grace brought the patient, Mary Ann Brain, to the General Hospital, on the afternoon of December 24th, 1862, she being then in labour; Mr. Grace having determined in his own mind, that it was impossible she could be delivered by natural means, and believing that no measure short of the Cæsarean section would suffice. He stated to me that he had been called to see her on the morning of the day previous (December 23rd), she having then been in labour about thirty hours; that the labour had been ushered in by a partial evacuation of the liquor amnii; that he found the os uteri dilated to the size of a shilling, with the head presenting. He further told me that the pains never became very violent, owing, as he supposed, to his having given the woman an anodyne; that subsequently to his seeing her the os did not dilate much more, and that the liquor amnii ceased to escape. I saw the woman soon after her admission; she was a coarse hard featured countrywoman, of about 40 years of age, below the middle height. She did not look so exhausted as I expected, on learning she had been suffering so long a period. Her pulse was 96; her skin cool, with labour pains coming on from time to time.

Before examining her by the vagina, Mr. Grace drew my attention to her external form. She presented, on withdrawing the bedclothes, the most revolting aspect that I have ever seen the human form present. Her body was of medium length, having on its upper and front part massive and pendulous breasts, and being encircled with large moveable rolls of fat; her limbs were disproportionately short, the upper ones appearing almost like fins appended to the shoulder-blades, the likeness being increased by the dumpy aspect of the hand; the lower limbs equally short with the upper, and encircled from the hips to below the knee with loose and large rolls of fat. The pudenda presented a few straggling hairs, and masses of fat with deep indents between them and the thighs.

On examining by the vagina, the os uteri was reached with difficulty, and found to be dilated rather larger than half-a-crown piece, the head presenting, the membranes ruptured, and most, if not all, the liquor amnii escaped. Great deformity of the pelvis was at once detected; the upper part of the sacrum approached so near to the symphysis pubis, that hardly two fingers could be passed between; there appeared to be a little more space in the left side of the pelvis between the lateral mass of the

sacrum and acetabulum; the coccyx projected very far forwards. It was impossible that a living fœtus could pass through such a narrow passage. (The child in this case was found to be alive; and the placenta supposed to be attached to the upper and right side of the uterus.) The pelvis is before you. The measurements are: from promontory of sacrum to symphysis pubis, one inch and eight-tenths; widest part between lateral mass of sacrum and brim of pelvis, one inch and four-tenths; transverse diameter in front of promontory of sacrum, four inches and seven-tenths.

A consultation was quickly held; I ventured to intimate that I thought it possible to extract the child by the natural passage, but we all appealed to Dr. Swayne for his opinion. As nearly as I remember, it was given pretty much as follows:—"You may possibly extract the child piecemeal; but the woman will run as much danger as from the Cæsarean section, if not more, with, of course, sacrifice of the child. Statistics are unfavourable to the removal of a child by evisceration through a passage not more than two inches in diameter; therefore, I advise the Cæsarean section in the present case."

That advice was followed, and I think properly so. Mr. Grace, who was present at the consultation, my colleagues and myself, were unanimous in agreeing on the necessity of operating.

A room being prepared and heated up to 80° by means of a large fire and two steam kettles, and chloroform having been given to the patient, I proceeded to operate; but before making the incision, I passed a catheter into the bladder and found that, though not containing any urine, it extended fully three inches above the pubes. My incision through the abdominal parietes began two or three inches above the umbilicus, and ended at a safe distance from the pubes, thus avoiding the bladder, which with the ordinary incision would certainly have been opened. Mr. M. Clarke and Mr. Grace then held the abdominal flaps against the uterine walls, so as to prevent any blood or liquor amnii from flowing into the abdominal cavity, on my cutting into the uterus. The section of the uterine wall in the middle was followed by a smart rush of blood, the uterine sinuses remaining wide and patulous; I seized the legs of the child and rapidly extracted it, the only delay occurring during the passage of the head, which was tightly grasped by the edges of the incision. The child, which was a little blackish in the face from the tight squeeze of the neck, was handed to Dr. Swayne, who recovered it. The placenta, found where it was expected, was immediately brought away; the only and real difficulty then began; the uterus would not steadily contract and obliterate the incision, as it is generally described as doing; partial contractions occurred, followed by relaxations and gushes of blood. The entrance of this blood and any remaining liquor amnii into the abdominal cavity was carefully prevented by Messrs. Clarke and Grace.

After the lapse of some time, the uterus was sufficiently contracted to allow of the closing of the abdominal incision, which was accomplished principally by means of pins. The uterus did not look very satisfactory, however; the incision in its walls gaped somewhat widely, making one fearful that either blood or secretion would soon escape into the abdominal cavity.

The after history of the case can be summed up in a few words.

After she recovered consciousness, vomiting set in and continued, despite of every remedy; her pulse gradually quickened to 160; pain soon made its appearance in the belly, followed by tympanitis. She died at 2 P.M. on December 26th, forty-two hours after the operation, having suffered from all the symptoms of acute peritonitis.

The *post mortem* examination revealed that which I feared. The uterus had not firmly contracted; and, though there was little or no blood within the abdomen, still doubtless, some secretion had escaped from the cavity of the uterus through the incision in its walls, and thus given rise to the peritonitis.

Mr. Grace advised the giving some ergot before the operation. I regretted afterwards I had not done so.

The uterus is before you; it presents the same appearance, or nearly so, that it did after the operation, and after the *post mortem* examination; its condition will, I think, satisfactorily account for the fatal termination in this particular case.

If it should ever unfortunately fall to my lot again to do this operation, two points would be impressed upon my mind by this case: viz., 1. To ascertain the exact relation of the bladder to the front of the uterus; and 2. To take special care to produce contraction of the uterus immediately upon the removal of the child, either by the administration of ergot prior to the operation, or the use of galvanism immediately subsequent to it.

Reviews and Notices.

CLINICAL MEMOIRS ON DISEASES OF WOMEN. By ALFRED H. M'CLINTOCK, M.D., F.R.C.S.; late Master of the Dublin Lying-in Hospital; Hon. President of the Dublin Obstetrical Society, etc. With Engravings. Pp. 435. Dublin: 1863.

[*Concluded from page 296.*]

IN the seventh memoir, Dr. M'CLINTOCK describes Tumours of the Vagina. In this situation, the occurrence of growths is comparatively rare; and those which appear are generally of the fibroid or the cystic kind. Dr. M'Clintock has never met with a case of cancer arising primarily in the vagina, although the disease sometimes extends to this part from the uterus or vulva.

Cystic vaginal tumours, arising from either the anterior or the posterior wall, appear to be more rare than fibroid tumours. Cases, however, have occasionally come under the notice of Dr. M'Clintock, and also of Scanzoni, West, Murat, F. Churchill, and others. An interesting instance of the kind is related by Dr. Junius Hardwicke of Rotherham in the *Lancet* of last Saturday. Dr. Hardwicke, being called to a woman in labour, found "a non-pedunculated tumour, larger than an orange, in the recto-vaginal septum, and pressing forwards into the vagina". It was pushed down and rendered tense by the child's head at each labour-pain. Dr. Hardwicke punctured the cyst with a penknife (the only sharp instrument at hand), when "about a pint of serous fluid escaped". The cyst collapsed; and, as the patient was exhausted, labour was completed by the forceps. As to the treatment of these cystic tumours, Dr. M'Clintock observes:

"The radical cure of a cystic tumour may be accomplished in different ways. If it grow by a neck or pedicle, this may be at once cut across with a scissors or knife, at a little distance from the vaginal wall. Simply puncturing the cyst and letting out its contents may be followed by a cure; though so happy a result is rare. In addition to tapping and excising the cyst, it is generally necessary to remove a portion of it, or to excite inflammation of its internal surface by the application of nitrate of silver, strong tincture of iodine, or nitric acid, or by dressing it with dry lint. Any one of these will generally be found successful." (P. 211.)

In the eighth memoir, Dr. M'Clintock describes Tumours of the Vulva under the heads of—1. Warty

and hypertrophic tumours; 2. Fibrous and fatty tumours; 3. Cystic tumours; 4. Vascular tumours; 5. Cancroid and carcinomatous tumours.

Among the diseases noticed in this memoir, is the very rare affection described by M. Huguier of Paris under the name of *esthiomène* or *esthiomenus*—a term applied to it by Alibert. It is also known as herpes exedens, lupus, and rodent ulcer. Dr. M'Clintock agrees with Dr. C. West that, while the appearances met with in this disease are sometimes manifestations of tertiary syphilis, cases do occur "which are quite independent of venereal taint". A case of undoubted syphilitic origin is described by Dr. M'Clintock as having come under his notice; in which, between two and three years after the removal of tuberculated and enlarged nymphæ in a syphilitic patient, the "anterior part of the ostium vaginæ was the seat of considerable ulceration, which had destroyed part of the urethra". At the same time, he saw in the Lying-in Hospital a patient in whom there was no history of syphilis, and in whom the urethra was entirely destroyed, so as to allow the bladder to be everted; and there was evidence, in the form of cicatrices, that the disease had made great ravages at the posterior part of the vulva, having destroyed the perinæum, sphincter ani, and about an inch of the recto-vaginal septum.

"This disease of the pudenda", Dr. M'Clintock observes, "is certainly very uncommon, and I am acquainted with only one English writer who has mentioned it—Dr. C. West. It presents characters common to syphilis, cancer, scrofula, and elephantiasis. It is essentially chronic in its course, and unattended by pain or danger to life. The ulceration makes slow but steady progress, sometimes healing in one direction at the same time that it extends in another. The subjacent and contiguous structures are indurated and tumefied; and fleshy growths, resembling condylomata, appear at the vaginal and anal orifices. Adult women from twenty to fifty years of age, and upwards, are the usual subjects of this disease; but M. Huguier once met with it in a girl of twelve years old, who had hereditary syphilis, and scrofulous esthiomenus on several parts of her body, the pudenda being only secondarily attacked.

"Making allowance for difference of texture, situation, and function, I do not see that it presents any characters which should make us regard it as an essentially distinct disease from lupus of the face. In fact, the lupus of dermatologists has a very close affinity, if not an absolute identity, with the *esthiomène* of M. Huguier. Any one will be convinced of this, who reads Dr. Neligan's admirable description of lupus as met with on the face and scalp, and M. Huguier's account of *L'Esthiomène de la Région Vulvo-anale*. . . . It is almost needless to observe, that *lupus pudendi* is a totally distinct and different disease from *noma pudendi*." (Pp. 223-4.)

The next memoir is on Pelvic Hæmatocele. Dr. M'Clintock prefers this term to those of *retrouterine* or *periuterine* hæmatocele, which have been used by foreign writers. He gives a very complete epitome of our present state of knowledge of the disease, as derived from the researches of Recamier, Velpeau, Bernutz, Goupil, Nélaton, Tilt, H. Bennet, C. West, Simpson, etc.; and furnishes the results of his own experience. As to puncturing the cyst, he

"Would not be induced to resort to the trocar unless urgent symptoms were manifested in consequence of the bulk or mechanical pressure of the tumour; and not even then, unless it were in the chronic stage."

In the tenth memoir, Pudendal and Uterine Hæmatocelesare described. By *pudendal hæmatoceles*, the author means the tumours which arise from extravasation into the cellular tissue of the vagina or adjacent parts, generally during labour, but in rare cases previously to the setting in of labour. A varicose state of the veins of the vagina or vulva is commonly supposed to be a necessary or very constant precursor of the effusion of blood, and the formation of the thrombus. Dr. M'Clintock, however, has found varicose veins present in two cases only out of thirty-eight; and, although he has seen many patients with varices of the vulva, he does not remember that one of them had hæmatocele—an exemption which he is disposed to attribute to the distensibility of the varicose veins protecting them from rupture under the circumstances which cause thrombus.

The occurrence of pudendal hæmatocele is mentioned as taking place before labour, during labour, and at the termination of labour. In the non-gravid state, a thrombus may be formed on the vulva by the application of direct violence. It has not been known to occur here spontaneously in non-gravid females; and the instances in which it is formed during pregnancy without any assignable exciting cause are very rare. When it occurs during labour, from pressure of the child on highly vascular parts, it may prove so great an obstacle to the birth as to require to be opened. Dr. M'Clintock, however, would act cautiously in this matter, and says:

"Unless the tumour actually prove an insurmountable obstruction to parturition, I do not think it should be opened in the acute or formative stage. But at a later period, when it has ceased to enlarge, and the further effusion of blood is completely at an end, an incision into the tumour might anticipate by a few days the natural process of effecting the removal of the coagulum. If we could open the tumour and clear out its contents, without exciting hæmorrhage, this proceeding would be attended with some advantage; but hardly sufficient, I think, to make it worth while incurring the risk, especially as the treatment required for the subjugation of this hæmorrhage might be contraindicated by the puerperal condition of the patient." (P. 285.)

Dr. M'Clintock restricts the term *uterine hæmatocele* to "the very rare variety of thrombus in which the lip, or the lower part of the cervix of the womb, is the seat of extravasation". This affection is important, as it may be the cause of hæmorrhage during the second stage of labour, or immediately or some days after delivery.

In the remaining memoirs, the author treats of Stone in the Bladder; Mammary Inflammation and Abscess; Secondary Hæmorrhage after Parturition; the Semeiological Value of the Pulse in Childbed; Dropsy of the Ovum; and Cystic Disease of the Ovum.

We must pass over several interesting points occurring in the course of these memoirs, in order to direct attention to Dr. M'Clintock's valuable observations on the Pulse. His object is to point out certain exceptions to the general rules that the patient may be considered as going on favourably when the pulse does not exceed 80, while a pulse of 100 or upwards indicates danger or at least some puerperal disease. In his researches, Dr. M'Clintock has been led to attach most importance to the frequency of the pulse; not, however, losing sight of the other three important characters—rhythm, force, and fulness.

Exceptions to the rule that a pulse not exceeding 80 or 84 is a favourable sign, are found under the following conditions. 1. The pulse may be rendered less frequent by the use of two or three drachms of ergot; as well as by the administration of other medicines, especially opium or digitalis. 2. Dr. M'Clintock has observed that, in the commencement of metritis, there is often a period during which the pulse does not range above the ordinary standard; this state, however, lasts only a few hours. From attending too exclusively to the pulse, and neglecting local symptoms in such a case, the practitioner may be led into the error of allowing the disease to gain ground before the use of sufficiently energetic measures—an error which the author candidly confesses himself to have sometimes committed in the outset of his practice. 3. The pulse may subside and indicate a favourable state of the patient after acute metro-peritonitis, while an attack of pelvic cellulitis is insidiously setting in. Hence the necessity, insisted on in a previous memoir, of examining the iliac regions in such cases. 4. A rigor may occur during, as well as before, an attack of puerperal fever; and, previously to this, the pulse may fall in frequency, "leading the attendant, if he should happen to see the patient at this period, to believe that the disease is yielding, when in truth it is gaining strength, and, it may be, getting beyond the reach of art." 5. The pulse may be reduced in frequency by the presence of nausea. 6. In pyæmia, the pulse is almost always rapid; but Dr. M'Clintock has seen it sometimes fall to 70 or 80, after the sweating stage succeeding to rigor, and apparently the effect of extreme exhaustion.

To the second general rule—that rapidity of the circulation indicates the presence of puerperal disease—the exceptions are more in number than to the rule regarding normal slowness of pulse. The exceptional cases are classified by Dr. M'Clintock into those in which the pulse is *momentarily*, *temporarily*, or *permanently* quickened.

Momentary quickening of the pulse is capable of being produced by innumerable causes—by any mental emotion or bodily disturbance, or even by the act of nursing.

The quickness of pulse may be temporary—continuing for several hours. The special causes of this are, want of rest, and abuse of alcoholic liquors; and Dr. M'Clintock agrees with Professor Levy of Copenhagen, that

"A temporary frequency of the pulse, commonly accompanied by increased cutaneous perspiration, is often the result of the patient's room being at too high a temperature, whether by fires or by the action of the sun's rays. He" (Professor Levy) "states that in the Lying-in Institution over which he presides at Copenhagen, the pulse is found elevated in the majority of patients on unusually hot summer days; and that this effect of heat not unfrequently manifests itself in connection with a perceptible tendency to uterine hæmorrhage." (P. 366.)

Permanent frequency of the pulse may depend on mere functional disturbance without appreciable disease; or on some morbid non-puerperal cause. In the first category is included acceleration of the pulse under the following circumstances. 1. Instances, rarely met with, in which the normal rate of the pulse ranges from 90 to 110. 2. Cases where the patient has made immoderate use of spirits or even of tea before labour. 3. Cases, sometimes occurring, where much hæmorrhage during or after labour leaves the circulation excited and irritable for many days. 4. The production of much suffering in the act of suckling. 5. The presence of some latent mental affection. 6. An attack of puerperal mania is often preceded by an excited pulse. 7. The circulation is sometimes quickened in highly nervous or hysterical women after confinement to bed for some days. Professor Levy appears to regard this as an instance of acceleration of the pulse in the horizontal position—the ordinary physiological result of change of posture being apparently reversed. 8. Professor Levy describes an *epidemic* quickness of pulse, preceding or accompanying an outbreak of puerperal fever. So much importance has he been led to attach to this, that, in the Copenhagen Lying-in Hospital, he has

"Allowed a generally diffused quickness of pulse among the lying-in women in the institution to act as a warning of an unfavourable puerperal constitution, and as a hint at the time to limit the admissions as much as possible, for which the arrangement for scattered attendance through the town, of late years, affords facility. After some days, or a week or two, I have often found the state of things improved, and have then, by way of experiment, again permitted the unlimited admission of fresh patients, intending, according to circumstances, to allow it to continue, or again to put the limitation in force. And I am, at least, convinced that in the course of years I have, in this mode, not infrequently succeeded in preventing or arresting the further development of commencing epidemics in the institution." (Pp. 372-3.)*

The non-puerperal diseases mentioned by Dr. M'Clintock as producing quick pulse during childbed are: scarlatina; organic disease of the heart; pulmonary consumption; Bright's disease; and, according to Professor Levy, chloræmia.

We have thus given an outline of this work, noticing some of the numerous subjects on which the author has offered the results of his experience. The conclusion at which we have arrived in the course of its perusal, is one which no doubt will be shared in by all whose good fortune it may be to read the book; that, in thus publishing some of the results of eleven years experience in connection with a large obstetric institution, Dr. M'Clintock has done good service to the science and practice of the diseases of women.

Observations on the Diseases of the Rectum. By T. B. Curling, F.R.S., Surgeon to the London Hospital; Examiner in Surgery to the University of London; etc. With Wood Engravings. Third Edition, revised and enlarged. Pp. 232. London: 1863.

Although English medical literature furnishes us with few complete works on surgery; yet we have a comparatively large number of monographs upon particular subjects, excellent as far as they go, and the work of some of the best minds. Such a work is that of Mr. Curling now before us. Mr. Curling has shown that a surgeon of the highest qualifications may give his especial attention to a subject without becoming a specialist.

It is only by surgeons of eminence directing their particular attention to certain subjects that these can ever be thoroughly elucidated; but then the sur-

* Dr M'Clintock here quotes from a translation of a memoir by Professor Levy.

geons should see that their theories and practice are in accordance with that which is known in other branches of science. In this way, the especial consideration of any one subject cannot but extend the boundaries of general knowledge. But, on the other hand, if exclusive attention be given by a surgeon to any one branch of medicine, without reference to that which is being done in other departments, then the speciality must act injuriously upon the progress of knowledge, and lead to contracted views in practice.

Mr. Curling's work belongs to the first of these two classes. It is well and clearly written. The descriptions are concise, and the illustrations to the point, without becoming tedious by their multiplication. But upon which we would especially remark is that the practice recommended throughout is in perfect keeping with the most approved principles of general surgery.

After an introductory chapter, the important subject of Irritable Ulcer of the Rectum is well described, and the different modes of treatment shortly, simply, but clearly described.

The following chapters are devoted to those affections of the rectum which resemble, or have been confounded with the irritable ulcer.

Chapter v treats of the important subject of Hæmorrhoids. Mr. Curling does not here omit to describe the improved mode of operating introduced by Mr. Salmon.

"I seize and throw down the pile, and, giving the instrument to an assistant, make, with the scissors, a deep notch or incision along the base of the pile at the point of junction of the mucous membrane and skin, cutting parallel with the coats of the rectum, and not into the pile, and carrying the ligature well into the groove, knot it tightly and securely at the root of the growth. When the hæmorrhoid is very broad or large in size, I pass the curved needle around with a ligature to the bottom of the groove made by the incision, and through the central part of the base of the pile. The needle being withdrawn, the ligature is left double, and tied on each side." (P. 54.)

Mr. Curling regards the ligature as the safest and most effectual remedy "for the cure of internal hæmorrhoids of any considerable size." Judging from other works which have from time to time appeared, there would, however, seem to be considerable difference of opinion in the profession upon this subject. The advocates of each plan probably extol that system which has succeeded in their own hands, and we must suspend our judgment before we give in our adherence to any one of these methods exclusively, or as the best under all circumstances.

Fistula in Ano and Stricture of the Rectum form two very important chapters in Mr. Curling's work, and are well worth the attentive perusal of every practical surgeon. Stricture of the Rectum is also treated of at length, and with great care.

The most valuable and original part of Mr. Curling's book is that which treats of Congenital Imperfections of the Anus and Rectum. Upon these subjects the author has evidently bestowed much careful investigation ; and two chapters are devoted to their consideration.

The congenital malformations of the rectum are divided as follows :—

1. Imperforate anus without deficiency of the rectum.
2. Imperforate anus, the rectum being partially or wholly deficient.
3. Anus opening into a *cul-de-sac*, the rectum being partially or wholly deficient.
4. Imperforate anus in the male, the rectum being partially or wholly deficient, and communicating with the urethra or neck of the bladder.
5. Imperforate anus in the female, the rectum being partially deficient and communicating with the vagina.
6. Imperforate anus, the rectum being partially deficient, and opening externally in an abnormal situation by a narrow outlet.
7. Narrowness of the anus.

The different modes of treatment for these various affections are carefully considered in Mr. Curling's work, and especial attention is given to the subject of Colotomy ; and this is considered under three heads :—

1. The difficulties of the operation.
2. Its dangers.
3. The condition of the artificial anus, and the inconveniences attending it.

In these last chapters Mr. Curling gives us the results of upwards of one hundred cases which he has collected, tabulated, and analysed. The principal facts deduced from these cases have already been published in the *Transactions* of the Royal Medical and Chirurgical Society for the year 1860.

Green Oysters. We described a few days ago two methods employed by M. Cuzent for discovering copper in the oysters which come from Marennes, and which are remarkable for their green hue. The *Moniteur* now publishes a letter from the mayor of that town, which is intended to counteract the unfavourable impression caused by M. Cuzent's revelations regarding the unwholesomeness of these oysters. He states in his letter that the trade in green Marennes oysters has increased to such a degree during the last fifteen years, that the white oyster beds of the neighbourhood had become insufficient to stock those peculiar beds where the creature acquires a green colour together with that delicious taste which causes the Marennes oyster to be so eagerly sought after. In order, therefore, to meet the demand white oysters have had to be imported from Spain, Bretagne, Ireland, and England. The Marennes oyster is, in fact, in its ordinary state, as white as any other, and only receives its green colour and peculiar taste when transported to certain beds covered with a small submarine kind of moss, and formed of the slime deposited by the sea from the small gulf called the Rivière de Seudre. Now, a considerable number of oysters are imported from Falmouth by the inhabitants of Marennes, and these oysters really contain a certain quantity of copper, which gives them an acrid taste. On their arrival they are deposited in certain beds apart from the others, and kept there for six months, after which period experience has shown that they lose their copper salt, and consequently their bad taste. Now as to M. Cuzent's experiments, and the results obtained by him, the mayor explains that a Marennes fisherman, whose trade is not very extensive, got over from Falmouth a few thousand oysters, which out of thirst for gain he sent off to Rochefort before they had sojourned more than three weeks in the beds set aside for their purification. These oysters having caused alarming symptoms, copper was found in them by M. Cuzent, but they were not real Marennes but Falmouth oysters, the former still retaining the excellent qualities for which they are known. (*Galignani's Messenger.*)

British Medical Journal.

SATURDAY, MARCH 28TH, 1863.

THE HANGING OF SO-CALLED CRIMINAL LUNATICS.

THE *Times*, the *Saturday Review*, the *Examiner*, and no doubt the other journals which follow suit to these luminaries, are lost in delight that judges have been at last brought to a proper sense of their duties, and have done with all maudlin sentimentality in the matter of hanging weak-minded individuals. A few more hangings of this kind, shouts the *Saturday Review*, and the gallows is saved: "Vive la guillotine!" They have each of them been engaged in the singing of hymns of joy and exultation at the prospect of choking the life out of a couple of lunatics; mingling, however, with these songs murmurs of threats at any home authority who might dare to interfere between them and their prized prey. One is really reminded of the dance of a set of North American savages, before proceeding to business, around their scalpable victims, tied to a tree and garotted; or of a body of citizen Lynchers executing summary injustice to gratify their *natural* inclinations; or of a set of red-capped *citoyens* dancing round *la lanterne*. We never remember such a fervid thirst expressed by the press for the shedding of expiatory blood;* no, not even in cases of the greatest atrocity, and where no pretence of a plea of insanity could be set up on behalf of the criminal. The old Adam is still prominently alive in us. The lower kind of animal faculties—of "destruction", etc. —which are said to lie somewhere in the back part of the cerebral quarters, still assert their posterior pre-eminence. In fact, it is impossible not to regard this sudden outbreak as something akin to a furious epidemic; for it appears to have affected judges as well as journalists, and to have extended widely over the land. Judges, who have of late years seemed to shrink from hanging, now show themselves as determined to hang as journals to have hanged.

We may well imagine that something more than the mere plea of insanity set up on the part of the murderer has produced this strange phenomenon; and, in fact, we have not far to go for the exciting cause. The mad-doctors, and, in fact, doctors in general, have been going it too fast and coming it too strong as interpreters of mental conditions, morbid or healthy. They must be put down by the strong nerve of judicial severity, and by the admirable logic of journalistic ridicule; for society is in danger! The jargon of mental psychology and the pretensions of whipper-snapper country doctors and important pretentious London experts are to be once for all denounced, annihilated, and, in fine, kicked out of every healthily conducted court of justice. To men of *common sense* and of sterling British-jury faculties is to be committed, in future, the decision of the question, Is he a lunatic? In all doubtful cases, Calcraft's ingenuity and his simple noose are to decide the Gordian difficulty.

Are we wrong in saying that too little of calm judgment and too much of passion have been manifested at the seat of judgment during the trials to which we last week referred? As regards the press, its vehement language sufficiently stamps the character of its method of dealing with the subject.

We trust, however, that before these lunatics are handed over to the executioner, calm reason will again assert and maintain her claims to a hearing. There are, indeed, some few subjects for thought arising out of these unreasoning denunciations of the press, and out of the dicta of the bench, to which we would invite a calmer consideration.

We would, on the principles of that common sense which is invoked to annihilate medical interference, ask whether the judges and the press have in this matter squared their proceedings strictly in accordance with common sense. Let us glance shortly at *their* method of handling the question.

One great argument of the press in favour of the execution of these two murderers is derived from the fact that medical men often give absurd answers to abstruse questions touching insanity put to them by crafty counsel and learned judges. Because, argue these journals and the judges, medical men have been made to answer illogically—in fact, to talk nonsense —in the witness-box respecting insanity, *therefore* medical evidence in insanity is worse than useless. Because in this chopping of logic a medical witness, who has made no special study of insanity, has had his heels tripped up, *therefore* the criminal is not a lunatic, and *therefore* he shall be hanged. Plain common sense (which is, after all, nothing but the practical application of scientific knowledge) is appealed to in this matter. Let then plain common sense deal with it; and assuredly common sense and everyday practice tell us that in ordinary civil cases of supposed lunacy, before we frame a decision, we embrace all the facts affecting the mental history of the individual, and upon them found our judgment. When a commission sits to inquire into the mental condition of a man who has property to be looked

* It is strange to note how this feeling pervaded the Court which tried the youth at Maidstone. The reporter of the trial noted the ways and manners of the prisoner; and from these, his looks and words, etc., deduced conclusions as to his sanity! The judge, from the very opening, took a stern Rhadamanthine aspect of the business, plainly hinting that he would put up with no nonsensical plea of lunacy. The daily papers, too, in commenting on the trial, stated *facts* most perversely against the prisoner. The *Times*, for example, in a leader, said there was a plea, that the youth's mother and son were "of weak intellect"—the fact sworn to at the trial being that his mother had attempted suicide, and had been twice in a lunatic asylum! The feeling of the youth's town, too, was, we were told, distinctly favourable to his sane condition!

after, is not every act and word of the supposed lunatic tainted with folly, past and present, strictly scrutinised and put down in the catalogue of considerations out of which a decision as to his state is to be drawn? But if such a kind of investigation is good in civil cases, why, in the name of common sense, is it to be excluded in criminal cases? "No," says the judge or the law, "I will listen to none of all that. All I want to know is: Did the man know what he was doing when he committed the murder?" Why, every man connected with lunatics would tell him that the most dangerous and homicidal of lunatics are the most cunning, plotting, and contriving of lunatics. The most sensible lunatic with whom we ever conversed in an asylum was one who a few days before had most craftily procured and hid away under his bed a poker, with which he on the following day battered in another lunatic's skull. Who could say that this man did not know he was doing wrong at the moment? According to Judge Wightman's law, indeed, he would most assuredly have been hanged for the murder, and, we have no hesitation in saying, would have gone through his trial in court without showing a sign of insanity. Why, it is a well known and commonplace fact, that lunatics actually place themselves under lunacy law, feeling that they cannot otherwise restrain themselves from the commission of some murderous act even upon their own children. Do not such people know right from wrong? Yet are they not, and do not the law and common sense and humanity accept them and treat them as, lunatics?

Again: Is it common sense to conclude, because ordinary medical men, who do not deal with insanity in daily practice, are drawn into the talking illogically and even nonsensically in court, that men who have devoted their whole lives to the investigation of the subject are incapable of assisting the court in the investigation? Is this alone—this insanity—of all scientific subjects of investigation, the only one in which the scientific investigator is incapable of giving instruction to the uninitiated? Would it be common sense to entrust a minute chemical inquiry into the hands of a village druggist? No; the court sends for our Christisons, Taylors, and so forth. But why does it not, in doubtful or difficult cases in which the question of lunacy occurs, also send for its experts in lunacy to advise and assist it? It will, we suppose, be admitted that there are cases in which even the judge and the press do not question the insanity of the criminal; and then, again, there are cases in which they do doubt of his insanity; and then, again, there are cases in which they have no doubt whatever as to his non-lunatic condition. Well, does not this, at all events, show that there are degrees in the force of the signs of insanity; and is it not certain, that the signs which precede the establishment of the most fatal lunacy in a man are ofttimes faint—and, indeed, imperceptible except to the practised eye? Is it not, therefore, reasonable to suppose that those engaged daily and all their lives with lunatics may have a knowledge of the thing beyond that of judges and of juries, and of a sovereign and infallible press? "But no," say the judge and the press; "all your vast experience in this matter does not enable you to form any better opinion about it than we can form. John Hodge, here on the jury, can take a common sense view of the case, which you cannot. You are up in the clouds. Much learning has made you as mad as your patients."

It may be fairly granted that there is a show of suspicion against the evidence of an expert, when it is given expressly for the purpose of keeping a man's neck out of the noose. But in cases where doubts—reasonable doubts—as to the man's lunatic state exist, do not common sense and common humanity call upon the court to obtain independent and sufficient and the best evidence it can procure to enlighten it amidst the darkness and mysterious horrors of lunacy? If human life is of all the value in the eye of the law which we pretend it is, why does not the law itself bring down its own experts to test the mental condition of the supposed lunatic? Instead of this, it laughs at the evidence of the country doctor, who says the man is mad! it throws over the evidence of the criminal's own expert as suspicious! it produces no expert of its own! and then, with its *common sense*, it accepts the evidence of the other country doctor, who believes the man to be sane!

And, to wind up this tissue of unreason, it condemns the man by assuming a position which is utterly incapable of proof; viz., that the man knew right from wrong when he committed the murder. It rejects with derision the united experience of all the great minds and authorities that have dealt with the subject. Yes, the law sitting on the judgment seat declares, through the mouth of Judge Wightman, "Homicidal mania shows no delusion; it merely shows a morbid desire for blood. Delusion means the belief in what does not exist."

We have Judge Wightman's word for it, that the man who exhibits a maniacal thirst for human blood is free from all delusion; that no delusive ideas impel or excite him to the homicidal acts; he is not driven on to their performance by a belief in things which do not exist; he does them, we may suppose, simply from a love of the thing, from want of better employment, and so forth! But how did the learned Judge become possessed of this momentous secret? When did he enter into the brain of a homicidal maniac, and how did he come to learn that no delusion is impelling that wretched soul to homicidal deeds?

At all events, this much is certain, and in the

name of that oft and vainly invoked common sense, we would beg those who deal out the law to understand, that this interpretation of it, which is, admittedly, solely founded on a dictum of the judges, is distinctly opposed to the conclusion derived from the vast experience of all competent authorities in all countries on the subject of lunacy. Turn the matter as we please, this much is certain, that against this united experience of authority the law has nothing to produce in favour of its hanging dogma, more than what is founded on the purest hypothesis; namely, that homicidal mania is not founded on a delusion, and that moral insanity is not a fact. In truth, on this negative assumption, which, as a negative, is plainly incapable of proof, and to which all scientific experience is opposed, the law which hangs the supposed lunatic is solely based! And we would ask, in the name still of common sense, are we, is humanity, to accept as final, and as unchangeable, the dictum of judges relative to insanity given years ago? If the field of mental pathology is daily being widened, and our knowledge of the morbid states of the mental faculties enlarged, it is surely not unreasonable to demand that the legal dictum should be brought into some kind of accordance with scientific knowledge.

Well, then, the practical conclusions to which we here come are these: That it is our firm belief if scientific and unprejudiced knowledge were called in by justice, or we should rather say by law, to assist and enlighten it in the two special cases to which we are now referring; viz., of the man Fooks and of the youth Burton, it would declare that these two individuals were not agents responsible for the murders committed by them; *that if their mental states were inquired into, as under a commission de lunatico, they would both be pronounced non compos;* that it is most cruel and unjust to condemn a man in accordance with a legal dictum which is based on pure hypothesis, and is contrary to scientific experience; that in all doubtful cases of criminal responsibility the law should seek council from its own responsible experts; that it is contrary to the humanity of this latter half of the nineteenth century to throw on the shoulders of the criminal the *onus probandi* his own lunacy—to demand of a lunatic that he shall have wit enough to prove himself to be a madman!

As regards the man Fooks, we affirm, from evidence given at the trial, that he had, long before he did the murder, done and said acts and words which would not only have justified, but required his being placed under supervision. And if this proper care had been taken, who would then have thought of hanging him had he, while under restraint, effected the murder? And if this be true, we ask again, as we did last week, where, in the eye of abstract justice and of reason, is the difference in the actual criminality attaching to the act, whether it was done by a lunatic under restraint, or by a lunatic loose upon society?

Of the youth Burton we would say, enough lies before us to warrant us in believing that his act was that of a lunatic. The utter absence of those reasonable springs of action upon which the law in ordinary cases lays so much stress, as evidence of guilt; the absence of all purpose and malevolence as regards his victim, taking the first which fell under his hand; the only suggested motive of the murder—the compassing of his own death through the instrumentality of the hangman; his open avowal of his guilt—all these facts are surely more than enough to *suggest* the conclusion of his insanity; and when we add to them the fact of his having a brother of feeble intellect, and a lunatic suicidal mother, we have surely abundant evidence to warrant us in demanding, in the name of humanity, that his mental condition shall be investigated, not by an enlightened jury of his countrymen, nor tested by a legal dictum, but by the eye of skilled scientific knowledge.

It really does seem worse than trivial for a judge on the bench solemnly to tell us that society is in danger if such a miserable wretch as this be not hanged. Why we might fairly argue that if you gratify his wishes by hanging him, you encourage other wrongly-minded persons with morbid ideas like his to do likewise. We might argue that if this deed is to be punished for the sake of society, and of example, the wiser course would be to shut him up for life in a lunatic asylum, as by hanging him you encourage others of his kind to do likewise, by ensuring them the end they seek; viz., death by the halter. The prospect of a life in a lunatic asylum might arrest the murdering hand, might have arrested this youth's!

And we must, in conclusion, once again protest against the manifest unreasonableness of Judge Wightman's argument which condemned the youth:

"It was urged that the prisoner did the act to be hanged, and so was under an insane delusion; but what delusion was he under? So far from it, it showed that he was quite conscious of the nature of the act and of its consequences. He was supposed to desire to be hanged, and in order to attain the object committed murder. That might show a morbid state of mind, but no delusion."

Here then, as the climax to a *reductio ad absurdum*, we have the solemn judicial assurance, that the commission of an act of murder for the purpose of being hanged is not and therefore cannot be founded on a delusion. The desire thus to compass a violent death by the hangman is not and cannot be founded on any delusion—any false, mad, lunatic idea! Where did the Judge learn this?

We cannot define insanity. No definition of the term has ever yet, or can be given. We have no exact measure, no dictum, by which we can try and

gauge the state of a man's mind. Each case must be judged of by itself. It is, therefore, a most false law which would lay down a dictum to comprehend all cases. It is a false and an unjust law.

We will not believe, until the acts are accomplished, notwithstanding the violence of the press and the prejudice of the law, that modern humanity will permit the execution of these two persons, until, at least, their mental condition has been properly investigated—we mean by competent authority.

ARMY MEDICAL OFFICERS.

The following true and excellent remarks from the *Daily Telegraph*, on the gross ill treatment exercised by the Horse Guards upon the medical officers of the army, are worthy of a place here. We trust that all our medical brethren, who have influence with members of Parliament, will exert that influence by calling upon those members to assist in forcing the Government to carry out into full operation the terms of the Queen's warrant.

"While Sir James Outram lay upon his death-bed, he uttered these words to a distinguished officer of the Indian army who was with him to the last: 'It pains me to think that the services rendered by medical officers to the public have been so ill requited, and that my efforts to obtain justice have been attended with so little effect. But the time is coming when they *must* be properly recognised; the next great war will settle this long controversy terribly in their favour.' This parting prophecy of the great statesman and soldier ought to be written up in tall letters on the façade of the Horse Guards. It is matter of mournful history how our army system broke down upon the mud of the Crimea. For a while great minds, like Lord Herbert's and Florence Nightingale's, gave their powers to initiate a better state of things; and the Horse Guards themselves were awakened and ashamed. Since that day the reaction of all this agitation has set in. Lord Herbert is dead; Florence Nightingale's noble heart beats feebly with sickness; and the congenial military command, 'As you were', has been passed to the several departments. The medical service of the army has shared in all the hopes and disappointments of that action and reaction. When the Russian war disclosed how grievously the soldiers' health and comfort had been neglected, and how ill that profession had been treated whose function is to guard them, it was resolved that for the future the medical department should have justice. Its entire system was to be remodelled; it was to be placed on such a footing that men of liberal education and professional enthusiasm should find in it a worthy career for their talents and energy. A Royal warrant was issued conceding a just position to its members; staff or regimental surgeons were to rank with majors of the army; the pay and allowances of each grade were placed on a fair footing; the Royal Victoria Hospital at Netley was established; and a medical school, with a proper force of professors, was founded.

"This was the hot stage of the fever of shame and repentance; the cold qualm has succeeded, in the virtual cancelling of these fair promises and prospects. A most arbitrary regulation, emanating from the Horse Guards, has quashed the Royal warrant: the medical officer, grown grey in the field and hospital, may again see the beardless ensign sitting above him; the pay and allowances guaranteed him have been again withdrawn; in a word, with this branch of service, as with all others, it is 'as you were'.

"Perhaps it may be thought we overpaint the picture, in describing the medical department of her Majesty's army, at home and in India, as one which men with reasonable ambition will no longer enter. Let one fact, then, be quoted. At a recent examination of candidates for this service, out of forty-five vacancies, *only fifteen* could by any possibility be filled. A good regimental doctor will save his pay in men's lives a dozen times over in a campaign; and good doctors cannot be got or kept with contumely. On the skill and science of the medical officers depend all the success of some military combinations. Baron Larrey was declared by Napoleon to be worth half a dozen of his generals. We don't want medical officers to enter the military service for a living, but as a most honourable employment, where true science will find a magnificent field, and receive ready thanks and honour. Recalling these most obvious considerations, we were glad indeed to have it from the Secretary of War last Monday that the authorities are once more moving in the direction of reform, after shunting the service thus upon the down line that leads to disgust and discomfiture. The 'Queen's Warrant' is the basis that we must insist upon."

THE CLIMATE OF EGYPT.

M. Schnapp, the French sanitary doctor at Alexandria, has made a serious study of the climate and the hygienic condition of Egypt?

"Is it," he asks, "into this country, so inhospitable towards strangers, towards the white man who comes from the north, and towards the black man who comes from the south, into this country which is so destructive to its own children, that we ought to send our sick and our valetudinarians?"

According to him, the Semitic race, the Japanese, the Ethiopian, are all devoured by the climate of Egypt. He tells us:—

"That it is not in hot countries like Egypt that we find during winter the most favourable metereological conditions of a mild and constant climate."

He also adds, that the annual deaths in Cairo and at Suez exceed the births. With regard to the existence of phthisis in Egypt, M. Schnepp's observations leave no doubt of the fact that tuberculosis and scrofula reign in all parts of Egypt, but in varying degrees, being less frequent in Cairo, for instance, than in Alexandria. In the Egyptian population, which is represented to us as once happy under the Pharaohs, scrofula commits fearful ravages amongst all classes of society. Speaking of phthisis, he says:—

"During four years that I have practised in Alexandria, I have seen a large number of European patients, in hospital, at the dispensary, and in the town, and I frankly declare that I have never seen a phthisical patient recover, or, as it is called, cured. And I feel bound to add, that the disease once declared, takes, in this country, a rapid course, and soon arrives at its fatal termination. When once the tubercle begins to soften, disorganisation goes on with frightful rapidity. Hence, then, basing my remarks, on the one hand, on the climatic conditions of Egypt, and, on the other, on pathological observations, I consider that I may fairly lay down the following proposition, which I address to my *confrères*, who will understand it; viz., when your patient exhibits unequivocal signs of tubercular disease, take care not to send him into Egypt."

MEMORIAL TO THE LATE SIR BENJAMIN BRODIE.

In the Journal of September 6th, 1862, in remarking upon a "proposed Wakley testimonial", we made the following observation: "That it is not during the life of an individual that the public and the profession can impartially estimate the value of his services, so as to present him with a proper testimonial. We quite agree with Dr. Watson, that the proper moment for considering with calmness the propriety of raising a testimony to the public life of an individual is when the grave has closed over him." The observations referred to, as made by Dr. Watson, are as follows.

"I feel, and I have always felt, a strong repugnance to testimonials, and honours of a like kind, *to living men;* and, except on some rare exceptional occasions, I have acted in accordance with that feeling. I may be wrong in this, but so it is. I know that I differ on the subject from many of my acquaintances. Some time ago, I declined, upon the same grounds, to contribute towards a testimonial to Sir Benjamin Brodie, an old and valued friend of mine, and surely as deserving of honour and respect as any Englishman alive."

In calling to mind this letter of Dr. Watson's, we think we may fairly ask the profession whether the time has not arrived when it would be well to consider whether some mark of respect should not be offered by the profession to the memory of the late Sir Benjamin Brodie. Testimonials rightly directed, and made to the memory of departed worth, honour those who bestow them as much as they do him to whom they are dedicated. They show to the public at large that, in the midst of our daily work and our money-making and our scientific labours, we, as medical men, do not forget that, after all, the dignity of our calling as a profession rests on something superior to the mere acquisition of wealth—that it, in fact, derives its illustration from the honour and principle displayed to the world by men of the stamp of Sir B. Brodie. If there ever did exist a man in the profession who was worthy of such a memorial as that here suggested, surely Sir Benjamin Brodie was the man. If it is intended to do honour to his memory, the time is fully ripe for the offering. What the profession thought it right to do in honour of Sir Astley Cooper and of Dr. Babington, must surely be due to the memory of Sir Benjamin Brodie.

We may appropriately add to these remarks the following words taken from a Notice of the Life of Sir B. Brodie by M. Giraldès, read before the Surgical Society of Paris on January 14th:—

"Thus I have traced the scientific and professional character of this eminent man, whose life was

"'L'accord d'un beau talent et d'un beau caractère.'

"During nearly half a century, Sir Benjamin Brodie exercised a marked influence over English surgery, by his teachings, by his writings, and by his high social position. In his small surgical class at the Windmill Street School, in his official lessons at St. George's Hospital, in the high position of president of the Royal College of Surgeons, and in the presidential chair of the Royal Society, Sir Benjamin Brodie gave an example of his love of work, of the highest scientific and professional honesty, of respect for the rights of all, and of profound attachment to the profession to which he belonged. His high position and his important works have justly ranked him amongst the surgical celebrities of the age. He did not resemble the brilliant meteor, whose deceptive light serves only to mislead the traveller in the darkness of the night. He was rather the powerful beacon, the sure and constant guide, serving to direct us amongst the shoals and rocks."

THE WEEK.

The Metropolitan Counties Branch has applied itself in earnest to the mitigation, and we would hope the ultimate extinction, of the evils arising from the present system of gratuitous medical services. At a meeting of the Branch held on Wednesday last, a report was brought up from the Council, to which body the subject had been referred by the Branch for consideration. The fact, as shown in another column, that the report was not adopted in its integrity, proves merely that, while both the Council and the Branch were at one on the general merits of the subject, there was a difference of opinion as to the best mode of commencing proceedings. The mischief is one which has been so long in growing, and has so insidiously pervaded our system of medical attendance on public institutions, that we cannot expect to uproot it at once. The Branch has, we think, acted wisely in determining on a mode of proceeding which offers the best promise of success, in being less obnoxious to reaction than a more decided demonstration at the present time would be; and which will, if perseveringly carried out, destroy the foundations of the abuse. The permanent committee appointed by the Branch will, without doubt, do their duty; but they must make up their minds to a long and probably laborious course of action. They may meet with discouragements from the apathy of some and the opposition, selfish or conscientious, of others; but they must persevere, and in the end will succeed. It must be remembered that the bearing of the subject is not confined to hospital medical officers, but reacts on other branches of the profession. How, for instance, can Mr. Griffin and his coadjutors be expected to obtain an improvement in the condition of Poor-law medical officers, when Poor-law officials can triumphantly point to the hospital medical men doing their work for nothing?

We have received communications both from Mr. Adams and from Mrs. Russell touching the matter between them, which has of late been so prominently brought under the notice of the profession and the public. We do not, however, see what end, beyond that of satisfying the curiosity of the scandal-lover,

can be attained by their publication. Assuredly a correspondence of this kind will entail upon us the necessity of publishing endless statements and counter-statements. It is evident, in our opinion, that there is only one way in which any further proceedings can be usefully taken in this matter. We understood, at the meeting which was held by Mr. Adams's friends on the subject in Cavendish Square, that it was that gentleman's intention to prosecute the parties opposed to him for perjury. It seemed to us then, and we must say that it still seems to us, that if any further action is to be taken in the case, this is the only one which promises any effective results. We may add that, under the circumstances, we regret that Mr. Adams has not followed out what appears to have been his original intention in this respect.

We have been requested to publish the following:—

"The Branch Medical Council for England, at its last meeting, remitted to Mr. C. P. Symonds of Ormskirk the sum of £20 (the amount of a penalty which the treasurers of the Council had received), towards defraying the expenses of a prosecution under the 40th section of the Medical Act.

"Mr. Symonds undertook that prosecution in August last, by the desire, and with the support, of the medical gentlemen of that neighbourhood, against a person named Josiah Archer Bowen, 'for falsely pretending to be and using the name and title of a surgeon, and then and there giving a certificate of death..... and writing under his name the letters, Sub-M.R.C.S.Eng., implying thereby that he was recognised by law as a surgeon.'

"The magistrates of Ormskirk inflicted on the defendant the full penalty of £20 and costs, which costs were taxed against the defendant at £25. Notice was given of appeal to the Court of Queen's Bench, but the intention to appeal was presently abandoned."

A very good suggestion has been thrown out by Mr. Charles Hawkins. He recommends that, in addition to the collection of photographs of diseases which has been commenced by the Medico-Chirurgical Society, a collection of engravings of medical men should be made.

"Every body", he says, "has some that might be presented. In time a very valuable collection would be in the possession of the Society. There have been several such collections formed by private individuals, but unfortunately after a time they get out of the public sight. Should the Fellows ever have courage to build rooms worthy of the Society, in which the profession might occasionally meet, a fine collection of professional portraits (which some industrious secretary might illustrate with autographs, etc.) would form an interesting part of such *réunions*. During the Exhibition of last year, one of the most interesting sights was a collection of portraits of eminent men, so illustrated, exhibited in the rooms of the Law Society in Chancery Lane."

We would add to this, that a collection of the photographs of distinguished members of the profession, and particularly of foreigners, would form a most interesting appendix to the collection of engravings called for by Mr. C. Hawkins.

We must say we feel surprised that our Irish medical brethren should have so cheerfully, and indeed thankfully, accepted Sir R. Peel's Registration Act in its entirety. They are now in one particular placed upon the same footing as Scotch medical men, being *compelled* to give without fee or reward certificates of the cause of death of their patients. In England these certificates are not given compulsorily; and we cannot understand why Irish medical men did not cry out for equal justice to Ireland. Here, at all events, is another specimen of the results of the Gratuitous Medical Services system. The Irish medical man, who receives not a farthing for his certificate of death, if he give it not is indictable for a misdemeanour! The sop of making a medical man the Registrar has, it would seem, prevented any complaints on this head.

We regret to announce the death of John Smith Soden, Esq., at Bath. He was eighty-three years of age. He was one of the original members of the British Medical Association, and one of the most esteemed men in the profession. We intend to give a sketch of his life in an early number of the Journal.

Three cases of transfusion of blood in childbed, have been lately practised in London—two by Dr. Hicks, and one by Dr. Greenhalgh—one of them terminating successfully. In none of the three does the transfusion appear to have been satisfactorily carried out. In the successful case, about two ounces of blood only were injected into the patient's arm, who was then *in extremis*. This quantity, however, it was thought, sufficed to stimulate the heart, and produced reaction enough to save the woman's life.

M. Diday asserts that, in his opinion, the force of the syphilitic virus has much diminished in our days, like the vaccine virus, which is so much less efficacious than the matter of the cow. But his arguments in favour of the assertion are very unsatisfactory and inconclusive.

Michel Nostradamus was born at St. Rémy, in Provence, in a recently converted Jewish family. His quality of great man and prophet have led people to inquire into the year, the month, the day, and the happy hour in which he first saw the light—Thursday, December 14th, 1503. His father, himself the son of a physician of the Duke of Calabria, was called Jacques Nostradamus, and the notary of St. Rémy. Michel studied at Montpellier, and was made a doctor in 1529.

A journal tells us that in the enlightened town of Stuttgart a committee has been formed to establish an anti-vaccinating society!

Association Intelligence.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, on March 24th.

PRESENT:—Sir C. Hastings (in the Chair); Mr. Bartleet; Dr. W. Budd; Mr. Cartwright; Dr. Stewart; Dr. A. T. H. Waters; Mr. T. W. Williams; and Dr. P. H. Williams.

The Financial Report for 1862 was read and adopted.

Letters from Dr. Gibbon and Mr. Lord, on the subject of Gratuitous Medical Advice, were read, and recommended to be published in the JOURNAL.

A scheme proposed by Dr. Budd, for the investigation of Epidemics and Epizootics, was read, and will be published in the JOURNAL. Dr. Richardson also kindly consented to cooperate.

A communication from Dr. Bryan, on the subject of a Medical Health Assurance Society, was read, and directed to be entered in the minutes.

The Secretary was instructed to advertise the Prize Essay in the medical periodicals.

CHARLES HASTINGS,
PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, March 25th, 1863.

FINANCIAL REPORT FOR 1862.

IT is peculiarly gratifying to your Committee, that on the present occasion they are enabled to present a report which in every respect is very encouraging; for not only is there a considerable balance of income over expenditure for the past year, but all the encumbrances which for years have pressed heavily on the resources of the Association are paid off, and we enter upon the present year with every prospect of the income of the society being equal to the expenditure. Instead of the Association being indebted, as was the case some years ago, to your Treasurer to a large amount, he now holds a balance of £221 in favour of the institution. This result has, we are glad to say, been achieved without cramping the energies of the Association by parsimony in the necessary outlay for carrying on its affairs; and it now may fairly be expected that, by paying a due regard to a wise economy, a favourable financial result may be annually expected.

Below is appended the annual statement of the income and expenditure for the past year, which has been examined by the auditors appointed at the last annual meeting, and found to be correct. It will be seen that the income is larger than that of any former year; and this increase is not confined to the subscriptions being augmented, but also extends to the amount derived from advertisements and sales. By those who have felt any anxiety for the financial position of the Association in former years, this result will be greeted with unfeigned satisfaction.

1862.—DISBURSEMENTS.	£	s.	d.
JOURNAL EXPENSES:			
Mr. Richards (Printing)	1736	8	10
Mr. Honeyman (Sundries)	79	5	2
Davidson (Commission)	88	5	6
Mr. Orrin Smith and Mr. Westmeath (Engraving)	7	0	6
Mr. Richards (Publishing—for three years)	150	0	0
Salaries:—Dr. Markham and Dr. Henry	275	0	0
Contributors to Journal	241	8	6
Interest and Commission	3	14	0
EXECUTIVE EXPENSES:			
Secretary and Clerk	117	0	0
Gurney and Son (Report of Meeting)	23	12	4
Secretary's Petty Cash	25	2	6
Sundries:—District Expenses; Post-Office Orders; and Collecting	25	13	0
	2772	10	4

1862.—RECEIPTS.			
Balance	107	5	2½
Subscriptions for 1862	1933	11	6
Ditto for previous years	202	5	0
Advertisements and Sales	750	10	6
	2993	12	2½
Disbursements for 1862	2772	10	4
Balance due from Treasurer	221	1	10½

Such being the statement of accounts for the past year, the Committee will conclude their report, as there now exists no debt to pay off, with a statement of the probable receipt and expenditure for the current year.

PROBABLE RECEIPTS FOR 1863.			
Balance due from Treasurer	221	1	10½
Subscriptions for the present year (taking the sum as last)	1933	11	6
For previous years	202	5	0
For Advertisements	750	10	6
	3107	8	10½

PROBABLE EXPENDITURE FOR 1863.			
JOURNAL EXPENSES:			
Mr. Richards (Printing)	1750	0	0
Mr. Honeyman (Sundries)	92	18	0
Mr. Davidson (Commission)	98	0	0
Engravings	10	0	0
Richards' Publishing Account	66	16	0
Salaries for Journal	275	0	0
Contributors to Journal	250	0	0
Bankers' Commission	5	0	0
EXECUTIVE EXPENSES:			
Secretary and Clerk	117	0	0
Reporting	28	0	0
Secretary's Petty Cash	25	2	6
Sundries	25	13	0
	2738	9	6
Prize Essay	21	0	0
	2759	9	6

With the above figures before them, your Committee feel justified in pronouncing the finances of the Association to be in a sound and vigorous condition.

CHARLES HASTINGS,
President of the Council, and Treasurer.

METROPOLITAN COUNTIES BRANCH: GENERAL MEETING.

A GENERAL meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Wednesday, March 25th, at 4 P.M.; ROBERT DUNN, Esq., President, in the Chair.

Gratuitous Medical Services. The following report from the Council of the Branch was read.

"Your Council desire to report that, in pursuance of a resolution passed at a general meeting of the Branch held on December 9th, 1862, they have taken into earnest consideration the subject of gratuitous medical services.

"A series of proposals have been laid before the Council by Dr. Gibbon, and, after discussion, have been passed in the following form.

"1. To give publicity to all hospitals and dispensaries that recognise the principle of payment for medical services. (This has done good service in the case of the insurance companies.)

"2. To append to every medical vacancy announced in the JOURNAL the amount of salary or honorarium, if any, that is attached to the post, just as the value is given with every clerical vacancy.

"3. To bring from time to time the expediency as well as the justice of paying for medical, no less than for legal and clerical services, under the consideration of the governors and committees of all institutions.

"Your Council believe that the carrying out of these proposals would aid in checking the evil under notice; but they are also of opinion that a more extended and

vigorous action is necessary. They therefore recommend that a public meeting be called, to which shall be invited all medical officers of institutions in London, the representatives of the press, and the chairmen of boards of management of hospitals and dispensaries; and that an active subcommittee be appointed by the Branch to make the arrangements for such meeting.

"The Council also recommend that a permanent Committee of the Branch be established to influence, through the press and by other means, the profession and the public in regard to the importance of obtaining adequate remuneration for the medical and surgical officers of all charitable institutions for the sick."

Dr. J. SEATON proposed, and Mr. LORD seconded, the adoption of the report.

A discussion followed, in which Dr. Gibbon, Dr. Stewart, Dr. Sieveking, Dr. Markham, Dr. Camps, and Mr. W. Martin took part; and the report was ultimately received and ordered to be entered on the minutes, and adopted with the exception of the paragraph recommending the calling of a public meeting; such a proceeding not appearing expedient at the present time.

Dr. SIEVEKING proposed, Mr. W. MARTIN seconded, and it was resolved—

"That the permanent Committee for the abolition of gratuitous medical services consist of Dr. Burrows, Dr. Sibson, Dr. Sieveking, Dr. Stewart, Dr. Gibbon, Dr. Richardson, Mr. Dunn, Mr. Lord, Dr. Markham, and Dr. J. Seaton, with power to add to their number; that they be requested to put themselves at once in communication with the Council of the British Medical Association, and with the medical corporations of the United Kingdom, with a view of obtaining a strong expression of opinion on the subject; and that they take such other steps as may be necessary to promote the objects for which they are appointed."

New Members. The following members of the Association have joined the Branch since the commencement of the present year. Twenty-nine were admitted at a meeting of the Council held previously to the general meeting.

Brett, Alfred T., M.D.
Broadbent, William H., M.D.
Burrows, W. Adcock, Esq.
Cahill, Thomas, M.D.
Clark, Alfred, M.D.
Cormack, John Rose, M.D.
Dobell, Horace, M.D.
Duplex, George, L.R.C.P.
Gaut, Frederick J., Esq.
Grant, Alexander, Esq.
Habershon, Samuel O., M.D.
Headland, Edward, Esq.
Hillier, Thomas, M.D.
Hird, Francis, Esq.
Hodson, Charles F., Esq.
Hulme, Edward C., Esq.
Hunt, Thomas, Esq.
Jackson, J. Hughlings, M.D.
Johnson, George, M.D.
Leared, Arthur, M.D.
Lipscomb, J. T. Nicholson, M.D.
Norton, Richard, M.D.
Phillips, Richard, Esq.
Rees, G. Owen, M.D.
Rose, H. Cooper, M.D.
Schulhof, Maurice, M.D.
Smith, Wm. Abbotts, M.D.
Solly, Samuel, Esq., F.R.S.
Tamplin, Richard W., Esq.
Tanner, Thomas H., M.D.
Weber, Hermann, M.D.
Wordsworth, John C., Esq.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 19TH, 1863.

W. SEDGWICK, Esq., Vice-President, in the Chair.

ASTHMA. BY J. BURDON SANDERSON, M.D.

AFTER stating that the definition of asthma as a species of disease must be founded exclusively on the study of its development during life, with but little assistance from morbid anatomy, the author proceeded to describe the phenomena of an attack, dwelling particularly on the nocturnal onset of the affection, and the complete remission of all the symptoms during the intervals. The characteristic elements of asthmatic dyspnœa were stated to be: (1) excessive expansion of the chest; (2) resisted but forcible efforts to expire; (3) diminution of the exchange of air in the chest, and consequent venous condition of the blood. In the asthmatic state, the chest is arched forwards in extreme inspiration, the diaphragm sinks below its normal level, so that its power is lost, while the almost fruitless efforts to renew the air in the chest are accomplished by elevation of the upper ribs. The expiratory muscles of the abdominal wall are in excessive action; but, in spite of their efforts, air is expelled from the chest with extreme difficulty and in small quantity. The condition of the blood which is thus produced gives rise to the sensation of want of breath, and impels the patient to make conscious and voluntary efforts to get rid of the used air, which is, as it were, locked up in his chest, so as to enable himself to obtain a fresh supply.

In order to arrive at an explanation of this remarkable state, so different from every other form of dyspnœa, the circumstances must be considered under which it is developed. Asthma comes on during those hours of the night in which sleep is ordinarily most profound. At night the respiratory function is modified, the quantity of air exchanged is diminished. This diminution is partly, though not entirely, dependent on a change in the respiratory function of the vocal cords, which in nocturnal breathing approach each other more closely than in the waking state; that muscular action by which they are kept apart is relaxed. The more profound the slumber, the greater the relaxation, and the narrower the chink of the glottis—*e.g.*, in snoring expiration.

Assume for a moment that this natural relaxation becomes excessive. As the laryngeal resistance is normally greater to the egress than to the ingress of air, the chest falls more and more with each respiration, the inspiratory power of the diaphragm lessens, the exchange of air is diminished, the blood becomes less arterial, and thus, without any agency beyond the intensification of that condition of respiration which exists in natural sleep, all the elements of asthma are developed. In short, it is possible to account for asthma as a result of disorder in the respiratory function of the glottis. But if it be remembered that the muscular fibres on which this function depends are governed by the same nerve as the contractile fibres of the lung-tissue (as is shown by the experiments of Donders, Wintrich, and Knaut), it will be readily admitted that if in asthma the respiratory fibres of the glottis are relaxed, those of the lung are in a similar state of relaxation, which would afford an additional explanation of the remarkable dilatation of the chest. This view accords perfectly with what is known as to the intimate relation of asthma and emphysema. Emphysema cannot be regarded as the cause of asthma; it would even be more correct to speak of it as its consequence. Emphysema results from resisted but powerful efforts on the part of the expiratory muscles to expel air from an expanded lung. This is precisely the state of things in asthma. But the relation between the disease and the lesion is rather that of community of cause than of consequence. Temporary overexpansion of the lung is a constituent of asthma; permanent expansion cannot exist without emphysema.

Under the head of diagnosis, the author distinguished between asthma and spasmodic dyspnœa, in all forms of which the relation between the inspiratory and expiratory acts is the reverse of that which holds in asthma, *e.g.*, the spasmodic dyspnœa of phthisis, acute bronchitis; and dwelt on the importance of determining the relative duration of the inspiratory and expiratory acts, which may be best effected, not by listening to the chest or observing its movements, but by the auscultation of the larynx.

As regards treatment, the author had found that no remedies were useful during the attack of asthma excepting stimulants, of which ipecacuanha in large doses, alcohol, and coffee, were instanced as most important.

At the conclusion of the discussion, the Vice-President

announced that the next meeting would take place on April 2nd, when Dr. Pollock would read a paper on Pneumothorax.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 7TH, 1863.

H. OLDHAM, M.D., President, in the Chair.

THREE gentlemen were elected Fellows of the Society.

The PRESIDENT gave a short address upon his assumption of office.

Dr. TYLER SMITH read a communication from W. W. Wiseman, Esq., and exhibited a part of the Funis of a Still-born Child in which a Double Knot was found. The knot was apparently the cause of death. It was the second child in a twin case, the first being born alive.

ON VESICO-VAGINAL FISTULA, THE MODE OF OPERATING, AND THE RESULTS OBTAINED IN FIFTY-FIVE CASES AT THE LONDON SURGICAL HOME.

BY I. BAKER BROWN, F.R.C.S.

In the first part of the paper, the author gave an account of the method at present followed by him in operating. The various steps of the same were illustrated by drawings. No bars or clamps were used. The knives employed were two—one for the right hand, and one for the left. The needles, of various curves, forming a series fourteen in number, were on the same principle as Startin's, but of rigid material. They were armed with wire, and thrust through the pared edges, great care being taken to avoid the mucous coat of the bladder. The two ends of the wire were simply twisted round and round, and so fastened. The patient was afterwards laid on the side, and a male elastic catheter, with bag attached, kept in the bladder. She was kept quiet for ten or fourteen days, and the wires removed. The operation was often completed in ten minutes.

The total number of cases of vesico-vaginal fistula admitted into the London Surgical Home since its foundation four years and a half ago was 58. Of that number, 55 were submitted to operation, with the results as shewn in an accompanying table. The remaining three were not operated upon in consequence of the bad condition of bodily health, the result of syphilis. Of the 55 cases treated, 53 were operated upon by the author, one by Mr. Nunn, and one by Mr. Harper. Of the total number of operations, 43 were followed by perfect cure; 1 was much relieved; 2 died; 5 were not cured; and 4 are still under treatment, with every prospect of cure. Of the 43 cures, in 24 this result followed the first operation, including the cases of Mr. Nunn and Mr. Harper; in 8 the cure occurred after the second operation; in 5 after three operations; and in 6 after more than three operations. Of the other cases, which were not cures, details were given in the tables exhibited. Of the two fatal cases, one died eighteen days after the operation, apparently from exhaustion, the age of the patient being fifty-six; the other died seven days after from pyæmia.

With regard to the causes of vesico-vaginal fistula; of the 58 cases admitted into the London Surgical Home, 47 were over twenty-four hours in labour, and 39 were as much as thirty-six hours or more; 7 were two days, 16 were three days, 3 were four days, 2 were five days, 2 six days, and 1 seven days.

In the whole number of cases, instruments were used in 29, exactly one-half; and in 4 only of these was the labour less than twenty-four hours, and with 7 exceptions the patients had been thirty-six hours or more in labour before instruments were used.

Of the 58 cases, in 24 only the injury happened at the first labour, in 7 at the second, in 5 at the third, in 4 at the fourth, in 6 at the fifth, in 2 at the sixth, in 5 at the eighth, in 1 at the ninth, in 1 at the thirteenth, in 1 at the fifteenth, and 2 not mentioned. In many of these cases, notwithstanding the existence of the fistula, the patient bore several children, apparently without inconvenience, before coming under treatment; and in a few of them, subsequent to cure by operation, other children have been born without recurrence of mischief. In a large proportion of the cases there is a history of the birth of a very large child; in some it weighed 15 lbs.; and in one, that of the woman in whom the lesion happened at the fifteenth labour, the child weighed 17 lbs.

From the foregoing statistics, it is evident that the cause of the lesion is protracted labour, and not the use of instruments or deformity of the pelvis; and, as a necessary conclusion to what has been stated, it follows that vesico-vaginal fistula would scarcely or never occur if a labour were not allowed to become protracted: this is a point for the careful consideration of the Society, and of practitioners at large.

A printed tabulated statement as to the 55 cases operated on was handed round. Mr. BROWN further stated that he had had 11 other cases under his care in St. Mary's Hospital, and 6 in private practice, making a total in his own experience of 58 cured; 34 by one operation, 11 by two operations, 5 by three, and 8 by more.

Mr. BRYANT remarked that the essential steps of the operation might be divided into two. First, to make a clean and even dissection of the margin of the fistula; and secondly, to bring the edges together, and to keep them there. Both points were of equal importance; for, if either was imperfectly executed, failure would necessarily follow. He differed from the author respecting the use of the forceps and scalpel in carrying out the first steps of the operation. He had been led to the formation of his pronged guide, a description of which would be found in the *Transactions of the Medical Society of London*. By this instrument a clean section of the margin of the fistula, however large it may be, is absolutely guaranteed. Every operation which he had undertaken since its introduction had been followed by immediate success. Respecting the second step of the operation, he generally preferred metallic sutures. He believed that it was unnecessary, as also injurious, to leave the sutures in after union had taken place. Respecting the use of opium in the after-treatment, on which Mr. Brown had been silent, he was disposed to recommend that enough be given to keep the bowels at rest, but nothing more. He would inquire of Mr. Brown, also, how long the catheter was retained in the bladder after the operation? His experience had told him that a periodical introduction only was necessary.

Mr. NUNN believed that further observation would show, as it had shown in a case he referred to, that in some cases the retention of the catheter in the bladder was not always safe; that ulceration was liable to ensue. This was a point requiring careful consideration.

Dr. BRAXTON HICKS thought that, from what he had seen, more injury was done by long-continued pressure than by a more forcible one of short duration. It was impossible to lay down any rule as to the time the head could remain with impunity, for in a case of vesico-vaginal fistula he had seen the labour was of average duration, and never severe. Although he considered, in good hands, the forceps could be safely used, yet before we could assent to the inference drawn by Mr. Baker Brown we must be certain that no other injuries would be produced by the forceps worse than vesico-vaginal fistulæ, injuries which might possibly prove early fatal, and thus not give time for the development of fistulæ.

Dr. OLDHAM saw nothing in the communication made to the Society, valuable as it was, to induce him to vary a hair's breadth from the precautionary precepts for the employment of instruments in protracted labour which were recognised and advocated by the best British obstetric authors. He felt pursuaded, from his experience of cases which had come before him, that the more frequent employment of instruments would result in the

laceration of the structures at the floor of the pelvis, particularly the laceration through the sphincter of the rectum, an accident only second to that of vesico-vaginal fistula in its distressing results, and which involved a most painful and formidable operation.

Dr. TYLER SMITH observed that in laying down a rule of practice it was especially necessary to employ precise language. If Mr. Brown had employed the term labour with impaction, instead of protracted labour, he should have agreed with him. We might have protracted labour from many causes, some of them not necessarily injurious to the mother, but we could not have continued impaction of the head without the risk of injury to the soft parts of the mother, and impaction should therefore never be allowed to go on unrelieved. In performing the valuable operations which had been devised for these distressing conditions, he (Dr. Tyler Smith) thought it should be laid down as a principle, that in repairing one organ the integrity of the neighbouring organs should be respected. This applied, in the operations for vesico-vaginal fistula, to the rectum, ureters, and the os uteri. In some of the cases related the os uteri had been closed, and the menstrual fluid left to escape *viâ* the bladder, or the urine to pass *per rectum*. These evils were scarcely less than those they were intended to remedy. Fatal results had followed from closure of the os uteri. Very recently he had seen a remarkable case where the os uteri had been closed in a plastic operation, which seemed perfectly justifiable, for the relief of utero-vesical fistula. A perfect cure was the result as regards the urine for the time. Menstruation occurred through the bladder, but the patient in a few months become pregnant. The urethra was of moderate size, and there seemed no other explanation than that the spermatozoa must have passed from the vagina through the urethra and bladder to the uterus. The result of this and other cases satisfied him that it was not a safe practice to close the os uteri, or to invade other organs, but that the plastic operations should be limited as far as possible to the closure of the original fistulæ.

Dr. ROGERS agreed in the remarks made by the President and Dr. Tyler Smith. With reference to the mode of operation recommended by Mr. Brown, he thought it was undoubtedly the best. He considered Mr. Brown and other gentlemen were entitled to great praise for their untiring labours in rendering these formerly hopeless cases amenable to treatment.

Mr. BAKER BROWN said that he supposed the prong mentioned by Mr. Bryant to be similar to that invented by Mr. Hilliard, of Glasgow. He had tried it, and found his old plan easier and quicker. In America, Drs. Sims and Bozeman did nearly all the denuding of the edges with scissors. This made the operation very long. But if the knife was first used to mark around the fistula how much was to be taken off, and then, by means of a fine pair of forceps, the edges were made tense, Mr. Brown said that the whole fistula might be denuded, taking out a complete ring—a matter of great importance. In regard to the sutures, Mr. Brown stated that he greatly preferred wire, although Dr. Hayward, of Boston, U.S., used silk in preference. Mr. Brown had by this gentleman's advice used silk in one case with a good result. But they were more liable to slough, and the wires, from their stiffness, had the advantage of keeping the edges more in apposition, and so ensuring a greater depth of union. But the sutures to be used should, Mr. Brown thought, be silver, not iron, as recommended by Dr. Simpson, of Edinburgh. Mr. Brown expressed a very strong opinion in favour of keeping the sutures in long enough; never less than nine days. He believed no harm ever resulted from retaining them in longer; but in one case he had had, he removed them on the sixth day, at the patient's request. The fistula appeared quite healed. She got up next day, contrary to advice, and the whole burst open again. She was re-operated on; the sutures were left in a sufficient time, and a cure resulted. Mr. Brown had made experiments, and kept silver sutures in for six and nine months, and no trace of ulceration appeared. Mr. Brown considered that opium should be given only in sufficient quantities to keep the bowels quiet. One grain immediately after the operation, and repeated night and morning, according to the circumstances of the case. Many patients cannot bear the catheter, especially the leaden one, but Mr. Brown had seldom found the male elastic catheter to cause irritation. Perhaps in time we might gain sufficient confidence in the operation to allow the patient to pass her urine as required, but at present it was better to retain a catheter, or when that was not tolerated, to pass one when needful. He had purposely used the term protracted without reference to the cause of protraction, for it was very rarely that a medical statement could be obtained. It was necessary, therefore, to take only the statement of the patient as to the duration of labour. When the head was impacted, Mr. Brown would deliver as soon as possible by forceps. He quite agreed with Dr. Tyler Smith as to the necessity of maintaining the integrity of the other parts in these operations. Of the two cases on which he (Mr. Brown) had operated, and where the patients subsequently menstruated *per urethram*, in one, the patient having been under many operations in other hands for some years, the os had already been interfered with either by sloughing or by the operation, and only one small opening, as described, remained to be closed. There was, therefore, nothing left to do but to close the opening, regardless of the menstrual flow. The patient had done well. No inconvenience had arisen, and she was grateful for the benefit received. In the other, that lately brought before the Society by Mr. Chapman, the os uteri was already closed by cicatrisation, after extensive sloughing, and therefore Mr. Brown had nothing to do with its occlusion. He considered that the two terms, vesico-vaginal and vesico-uterine fistula, were not used with sufficient caution. Although the os uteri might often be involved in vesico-vaginal fistula, the true vesico-uterine fistula was when the whole was high up in the cervix, urine dribbling through the os uteri, although no aperture from the bladder was visible. This was the kind of which Jobert had related seven cases, Dr. Fleetwood Churchill one, and which had lately been so well described by Mr. James Lane, who had had one case. In all these the treatment had been to close the os, so that the patient menstruated *per urethram*. He (Mr. Brown) had never had such a case, but he thought that the treatment adopted was decidedly the lesser evil, and if the patient, on having the case laid before her, was of the same opinion, he considered it perfectly justifiable. The case Mr. Nunn had mentioned showed that by leaving a vesico-vaginal fistula alone, other evil results, besides the inconvenience, would arise.

THE CHLOROFORM COMMITTEE appointed by the Council of the Royal Medical and Chirurgical Society have decided to attack the subject through the means of three subcommittees—a medical and physiological, a surgical, and an obstetrical subcommittee.

THE CRIMINAL LUNATIC FOOKS. Dr. Conolly, Dr. Harrington Tuke, the chaplain of the gaol at Dorchester, and the clergyman of the parish in which the condemned lunatic Fooks resided, applied this week for an interview with Sir George Grey, in order, if possible, to prevent his execution.

HEALTH OF THE KING OF THE BELGIANS. Letters from Brussels state that Dr. Langenbeck of Berlin, who had been again sent for to attend King Leopold, has found his Majesty in a more unfavourable state than during his previous visits. The King suffers particularly from fever and want of sleep.

Medical News.

APOTHECARIES' HALL. On March 19th, the following Licentiates were admitted:—

Ailfrey, Charles Henry, Stamford Hill
Averill, Alfred, Broadway, Worcestershire
Caudle, Charles Edward, Henfield, Sussex
Holden, George Herbert, Presteign, Radnorshire
Rumboll, Walter, Ramsbury, Wilts

APPOINTMENTS.

*HART, Ernest A., Esq., appointed Lecturer on Ophthalmic Surgery in St. Mary's Hospital Medical School.

HEAD, Edward A. H., M.D., appointed Lecturer on Botany in the Charing Cross Medical School.

KEAL, William, Esq., elected Coroner for the County of Rutland.

*RANDALL, John, M.D., appointed Lecturer on Medical Jurisprudence in St. Mary's Hospital Medical School.

*SMITH, H. Spencer, Esq., appointed one of the Senior Surgeons to St. Mary's Hospital.

POOR-LAW MEDICAL SERVICE.

ATHWATER, A. Henley, Esq., to be Medical Officer to District No. 2 and the Workhouse of the Dulverton Union.

COOKE, William, L.R.C.P.Ed., to be Medical Officer to the Llantrissant District of the Pontypridd Union.

COX, Alfred G., Esq., to be Medical Officer to the Crewkerne District No. 1 of the Chard Union.

DAVIES, Edward W. S, Esq., to be Medical Officer to the Mountain Ash District of the Pontypridd Union.

EVANS, William, L.R.C.P.Ed., to be Medical Officer to the Ystradyfodwg District of the Pontypridd Union.

LEIGH, John, Esq., to be Medical Officer to the Llanfabow District of the Pontypridd Union.

LLEWELLYN, John, Esq., to be Medical Officer to the Caerphilly District of the Pontypridd Union.

MORGAN, Walter, Esq., to be Medical Officer to the Pontypridd District of the Pontypridd Union.

SPRAGUE, Charles G., Esq., to be Medical Officer to the Workhouse and the East Church District of the Sheppey Union.

WOODWARD, Martin, Esq., to be Medical Officer to the Fladbury District of the Pershore Union.

ARMY.

CLERIHEW, Deputy Inspector-General G., M.D., retiring on half-pay, to have the honorary rank of Inspector-General of Hospitals.

COCKBURN, Surgeon-Major J., 1st Regiment of Life Guards, retiring upon half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

PRENDERGAST, Staff-Surgeon-Major R. H., to be Deputy Inspector-General of Hospitals, *vice* G. Clerihew, M.D.

TAYLOR, Deputy Inspector-General George, M.D., to be Principal Medical Officer of Chatham Garrison.

MILITIA.

DOUGLAS, J. R. A., Esq., to be Assistant-Surgeon 4th Royal South Middlesex Regiment of Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BATEMAN, W., Esq., to be Assistant-Surgeon 1st Administrative Brigade Cinque Ports A.V.

To be Honorary Assistant-Surgeon:—

BOWEN, S. S., M.D., 8th Gloucestershire R.V.

DEATHS.

BROWN. On March 22, at Hampstead, aged 5, George St. John, seventh child of R. Gosset Brown, M.R.C.P.

GRAHAM. On March 19, at Greenhill, Edinburgh, Laura E. S., eldest daughter of Archibald Graham, M.D., Retired Superintending Surgeon, Bombay Army.

HOLLIER, Edward, Esq., surgeon, at Hammersmith, aged 72, on March 18.

JACKSON. On March 20, at Penrith, aged 71, Katherine, wife of Wm. Jackson, M.D.

LAURENCE. On March 22, at Devonshire Street, Portland Place, aged 34, Miriam, wife of *J. Zachariah Laurence, Esq.

PAIN. On March 21, at Shoeburyness, Eleanor M., infant daughter of George Pain, Esq., Surgeon Royal Artillery.

*PHILLIPS, George, Esq., at Haverfordwest, on March 19.

SEALY. On January 7th, at Nelson, New Zealand, aged 39, Matilda Ann, wife of W. B. Sealy, M.D.

*SOPER, John Smith, Esq., at Sydney Place, Bath, aged 83, on March 19.

MR. FRANCIS MASON has resigned the office of Surgeon to the St. Pancras and Northern Dispensary.

DETAILING OFF A HISTORIAN. The Surgeon-General at Philadelphia would remind the medical profession that, some months since, a medical officer was detailed by the Department, to prepare the surgical history of the rebellion.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Dr. Barclay, Dr. Merriman, Dr. Kirkes, and Mr. C. H. Moore have been appointed referees of papers of the Royal Medical and Chirurgical Society; and Dr. Babington has been appointed trustee, in the place of the late Mr. Stanley.

UNIVERSITY OF CAMBRIDGE. In consequence of the unexpected retirement of a gentleman elected about six months ago, a medical exhibition is vacant in Caius College, Cambridge, of the value of £100 per annum, to be held, with rooms in the College, for seven years. Candidates must be under twenty-one years of age, and will be publicly examined.

DEATH OF A JOURNAL. The *British American Journal* published at Montreal, Canada, and edited by Archibald Hall, was discontinued with the December number. It has been very ably conducted, being a fearless advocate of the rights of medical men, and it is unfortunate that the profession of Canada has not manifested more interest in its pecuniary success. (*American Med. Times.*)

ROYAL COLLEGE OF SURGEONS. Professor Huxley's interesting lectures will be brought to a close on *Monday* next, instead of the following day; on which occasion he will give a *resumé* of the theories of the Vertebral Skeleton.—Owing to the great number of candidates about to offer themselves for the examination for the membership of the College, which will commence on Saturday, the 4th proximo, it is expected that Professor Gulliver will not be able to resume his portion of the lectures before the middle of June.

GARIBALDI'S WOUNDS. The Paris *Presse* says: "The health of Garibaldi gives great anxiety to all his friends. Our Turin correspondent wrote some time ago that he did not share the general optimism; and to-day he writes to us that not only is the instep tumefied, but the swelling is gaining on the leg, which may bring about grave results. Garibaldi has been compelled to decline the visits which he has frequently received at Caprera." Another journal says: "We deeply regret to state that much anxiety is felt for the health of the General, and that within the past few days an urgent request for medical assistance from England has been forwarded from Caprera."

THE TOMB OF CHESELDEN. Mr. Charles Hawkins writes as follows:—"The alterations at Chelsea Hospital have disclosed the tomb of Cheselden, who was surgeon to the hospital. It is rapidly going to decay; and, if not looked to, in a few years it will be impossible to make out the inscription. Surely the authorities of the hospital would, if asked, put the tomb into repair; if not, I think there would be no difficulty in collecting a few pounds among the profession for so laudable a purpose. Next to Cheselden lies Sir Everard Home, also surgeon to the hospital; over his remains there is simply a flat stone with his name on it. *Sic transit gloria mundi.*"

BIRTHS AND DEATHS REGISTRATION (IRELAND) BILL. The Marquis of Clanricarde, before their lordships went into committee on this Bill, wished to present petitions from the Poor Law Guardians of the Unions of Limerick and South Dublin, praying that the expense of carrying the Act into effect might be defrayed out of the Consolidated Fund and not out of local rates, and that the Guardians be allowed to appoint the registrars. He had also a petition to present from the King and Queen's Colleges of Physicians, objecting to the appointment by Boards of Guardians of officers to be called superin-

tendent registrars, to be placed over the medical men who were to discharge the functions of registrars. He believed that the Bill would be utterly inadequate for scientific and sanitary purposes. In cases where medical men refused to act the Guardians were to appoint whom they pleased as registrars, whether they had the necessary scientific acquirements or not. Returns were to be made quarterly, but they would be useless in a sanitary point of view. It was idle to suppose that the operation of this Bill would furnish reliable sanitary information. It would be better to expunge that portion of the measure altogether, and introduce it as a separate Act.

Vaccination (Ireland) Bill. Sir R. Peel, in moving the second reading of this Bill on Monday last, said it was intended to supply the defects of various other bills which had been passed within the last thirteen years. Within the last few years there had been a great falling off in the number of children vaccinated in Ireland, and he proposed to assimilate the law in Ireland to that in England, employing for the purpose the machinery of the Registration of Births and Deaths Bill, which had recently passed through the House. England was not the only country in which vaccination was compulsory, but in most countries in Europe there was a compulsory system. From the census returns he found that no fewer than 50,000 persons had died of small-pox in Ireland since 1841; and in 1860 there was a diminution of 33,000 in the number of vaccination cases as compared with those of the previous year. The cost of the proposed measure would be very trifling. The registrars of births and deaths would also act as registrars of vaccination. The Treasury would bear the expense of the books, but in cases in which the registrar himself was not the vaccinator he was to be allowed a fee of threepence for making the registry. Under an existing Act dispensing doctors were allowed about a shilling a head for each child they vaccinated. There were about 200,000 children born in Ireland each year, and it was calculated that of these, three-fourths, or 140,000, would receive gratuitous vaccination. The total expense imposed on each of the Poor-law unions by the Bill which is now proposed would be about £3 : 16 : 8—a mere trifle compared with the benefits which it would confer on the country. Colonel Dunne moved the adjournment of the debate. Sir R. Peel appealed to the hon. and gallant member to allow them to proceed. The measure would be of great benefit to the poor of Ireland. The burden imposed by the Bill would be only 1·21 of a farthing in the pound on the total valuation roll of Ireland. Lord Naas said the expense of the measure was not the most serious objection to it. To attach a legal penalty to non-vaccination would tend to make that very important and necessary operation exceedingly unpopular. The Act of 1858 had not yet had a fair trial. All that was wanted at present was that the Poor Law Commissioners should take care that the dispensary doctors did their duty. After some conversation the motion was withdrawn, and the debate was adjourned.

OPERATION DAYS AT THE HOSPITALS.

Monday.....	Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.
Tuesday.	Guy's, 1½ P.M.—Westminster, 2 P.M.
Wednesday...	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.
Thursday.....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.
Friday.....	Westminster Ophthalmic, 1·30 P.M.
Saturday.....	St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Clinical Discussion. Dr. Palfrey, "On Obstructive Dysmenorrhœa treated by Incision of the Cervix Uteri"; and other communications.—Chemical (Anniversary).

Wednesday. Obstetrical Society of London, 8 P.M. Dr. Swayne (Bristol), "On a Case of Cæsarean Section." Other papers by Dr. Skinner (Liverpool), Dr. Tyler Smith, Dr. Eastlake, Dr. Gervis, etc.—Geological.

Thursday. Linnæan.—Chemical.—Harveian.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—March 21, 1863.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week.....	Boys..1129 Girls..1102	2231	1624
Average of corresponding weeks 1853-62		1980	1416

Barometer:
Highest (Tu.) 30.041; lowest (Sun.) 29.161; mean, 29.774.

Thermometer:
Highest in sun—extremes (Tu.) 86.7 degs.; (Sun.) 60 degs.
In shade—highest (Fri.) 57.9 degs.; lowest (Wed.) 28.1 degs.
Mean—41.0 degrees; difference from mean of 43 yrs.—0.8 degs.
Range—during week, 29.8 degrees; mean daily, 15.4 degrees.
Mean humidity of air (*saturation*=100), 77.
Mean direction of wind, N.E.—Rain in inches, 0.23.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Erratum.—In the report of Mr. J. Zachariah Laurence's paper at the Harveian Society, contained in last week's Journal, for "the researches of the late Professor Donders", read "the late researches of Professor Donders".

Vaccino-Syphilitic Inoculation.—Sir: In a notice in the last number of the British Medical Journal, it is stated that out of forty-seven children vaccinated at Rivalta, thirty-eight were taken ill; and that out of seventeen other children subsequently vaccinated (from one of the first series), seven suffered from similar symptoms. It is further stated, "that vaccination was not in any way the cause of the disease."

This assertion is calculated to mislead; for although it was ascertained that the first child vaccinated (the vaccinifer) in all probability contracted its disease from a syphilitic nurse; yet a perusal of the cases now published in nearly all the languages of Europe, can leave no doubt that syphilis was conveyed to all the other forty-four children by the act of vaccination. Out of a population of two thousand, eighty persons, all previously healthy, were either directly or indirectly infected by the transmission of syphilis, together with the vaccine disease from the first vaccinifer. I am, etc., Henry Lee.

Savile Row, March 24th, 1863.

Medical Imposition.—Sir: A question has arisen of some importance; namely, should a registered medical man meet in consultation one who is not so? There are many old general practitioners in this country, unregistered, who attend the patients of their sons and friends, when the latter are otherwise engaged. When I remonstrate, they insinuate that they can evade the late Act, by acting in the capacity of assistants! The fees that they earn, of course, go into the pockets of their sons and favourite friends. It appears to me very unfair to tax by registration the young just entering into practice, and allow the rich to be exempt from responsibility and the pecuniary means of carrying out the late Act, for which they petitioned. I am, etc.,

March 1863. A Graduate.

Communications have been received from:—Mr. Haynes Walton; Mr. R. W. Coe; Dr. R. H. Powell; Dr. J. Hughes Bennett; The Honorary Secretaries of the Obstetrical Society; Dr. Gardner; Dr. Blakeley Brown; Mr. Thomas Bryant; Mr. J. Z. Laurence; Mr. J. West Walker; Dr. Lionel Beale; Dr. Davey; Dr. Jonathan Toogood; The Registrar of the Medical Society of London; Dr. F. Hawkins; Mr. J. V. Solomon; Mr. H. Hulme; Dr. James Russell; Dr. Edward Copeman; Dr. Williams; and Dr. Beatson.

CHLORODYNE.

"INVENTED AND DISCOVERED IN 1844 BY RICHARD FREEMAN."

(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S.Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. & L. M. etc., etc., Albert Terrace, London Road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and in all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating, that after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, etc., etc.

"Having been in the habit of using Mr. Freeman's Chlorodyne for some time past, I have much pleasure in stating *that it has never failed to have the desired effect* in whatever case it has been administered."

Manufactured by RICHARD FREEMAN Pharmaceutist, Kennington Road, London, S.;
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz, 10s. each.

Pulvis Jacobi ver, Newbery

Is the ORIGINAL & GENUINE, was ESTABLISHED A.D. 1746,

And is Prescribed, "by the highest authorities," for Fevers, Ague, Rheumatism, Colds, Influenza, &c. &c.

FRAS. NEWBERY & SONS, 45, *ST. PAUL'S CHURCHYARD.*

Prices for Dispensing—1 oz., 9s.; ¼ oz., 3s. 4d.

TOWLE'S CHLORODYNE. Dose, 5 to 20 Drops.

CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS. the Profession is directed to the following component parts in his preparation:—

CHLOROFORMYL	ACID. PERCHLOR.	TINCT. CAPSICI.
ÆTHER.	TINCT. CANNABIS INDICÆ.	MORPHIA.
OL MENTH. PIP.	ACID. HYDROCYAN.	THERIACA.

The proportion of Morphia—⅝ gr. in f. ʒi. Dose—Five to twenty Drops.

The Profession is respectfully referred to the various Letters that have appeared in the Medical Journals against the use of "SECRET" REMEDIES.

The Proprietor would suggest the following designation in the writing of Prescriptions, should a preference be given to the above preparation—"**CHLORODYNE,**" (**TOWLE'S.**)

Sold in bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; 4 oz. to 20 oz., 1s. per fluid oz. Sole Manufacturer and Proprietor, A. P. TOWLE, Chemist, etc., Ardwick, Manchester. May be had from Barclay and Son, Farringdon Street; or through any Wholesale House.

Twinberrow's Patent Double-Action Reservoir Injection Apparatus

Complete with Additional Pipes for all purposes, and suitable for every Climate.

W. TWINBERROW has no hesitation in offering his Patent Reservoir Injection Apparatus as the most simple and perfect yet produced. The Piston or Pump, which so frequently gets out of order, is not introduced into this apparatus; there is, therefore, an absence of OILY GREASY MATTER and BLACK LEAD (which are absolutely necessary to lubricate the piston in the usual syringes), which soon become rancid and green, some portion of which inevitably passes with the fluid injected from an ordinary syringe.

TWINBERROW'S PATENT DOUBLE-ACTION SYPHON SYRINGE,

With Additional Pipes for all purposes, including the most perfect Eye Dauche and Ear Syringe.

The great advantage of this Syringe over others of a like description is its having a double action, thereby producing an uninterrupted stream, consequently discharging double the quantity of fluid in half the usual time and with much less exertion.

From J. E. ERICHSEN, Esq.

6, Cavendish Place, Cavendish Square, October 1st. 1861.

Twinberrow's "Double Action (Syphon) Syringe" is the most generally useful instrument of the kind with which I am acquainted. For the more ordinary purposes it is specially well fitted, being compact, portable, and NOT LIABLE TO GET OUT OF ORDER. By a very simple arrangement, the instrument may be rendered available as an Eye Douche, an Ear Syringe, and for washing out the Bladder For these purposes it is peculiarly well adapted, being continuous in its action.

JOHN ERICHSEN,
Professor of Surgery at University College, and Surgeon to the Hospital.

From W. FERGUSSON, Esq.

Professor of Surgery at King's College and Surgeon to the Hospital.

16, George Street, Hanover Square, Oct. 14th, 1861.

SIR,—I have seen and made use of your Double Action Syringe, and think very highly of it. Yours faithfully,

Mr. Twinberrow, Edwards Street. WM. FERGUSSON.

W. TWINBERROW, SOLE PATENTEE, PHARMACEUTICAL CHEMIST, 2, EDWARDS STREET, PORTMAN SQ., LONDON.

To be had of all Chemists, Druggists, and Surgical Instrument Sellers in the United Kingdom.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture I. (*Continued.*)

Hare-Lip.

Commencing at the superior orifice of the mucous canal which forms part of the digestive system, the deformity denominated hare-lip is the most important surgical affection that demands our notice; and it is one which, without doubt, is to be explained by a distinct want or arrest of development of the fœtal structure.

Anatomists are now generally satisfied that the upper jaw is developed from several centres; and that the incisive portion—the analogue of the permanent intermaxillary bone of the lower animals—exists in the human species. The development of the integument forming the lips is also modified, or is rather determined, by the development of its bony attachment; and it is, therefore, by such an arrest of this process that a hare-lip, associated or not with a fissured alveolar process or a divided hard or soft palate, is to be explained.

A hare-lip is, therefore, a simple want of union between the tissues which are developed from different centres; and a fissured palate, partial or perfect, is but a want of union between the osseous centre—the analogue of the intermaxillary bone of the lower animals—and the body of the superior maxillary bone.

The fissure in the soft parts or in the bone may, consequently, be either single or double, partial or complete; the extent of the deformity being determined by the period at which the arrest of the development of the parts was primarily fixed, or by the fact of the mal-development being confined to the junction of one or of both intermaxillary bones.

I might add, in passing, that if some anatomists are doubtful as to the existence of this intermaxillary bone in the human species, on account of the difficulty, not to say impossibility, of separating it from the other osseous centres in a healthy or adult bone, pathological investigations may be advanced as powerful means of proving the truth of the theory; and the following case, which is quoted from my own experience, is one in point.

A child, aged 3 years, was brought to me at Guy's Hospital in the year 1858, with necrosis of some portion of the upper jaw, which had followed upon a severe attack of measles. With a pair of dressing forceps the dead bone was readily removed, and subsequent convalescence followed. The bones which were removed turned out to be perfect specimens of the incisive centre of bone, or the intermaxillary; and they came away entire, fairly proving that they had been originally developed as independent centres of ossification. The bones were exhibited before the Pathological Society, in the year 1858.

We will now return to the more practical points connected with this subject of hare-lip; and I believe that I shall be able to bring before your notice some facts which cannot but be regarded as of interest; they have been adduced from the material which my opportunities at Guy's Hospital have enabled me to collect. I possess the records of sixty-four cases of this deformity; this number including all the examples which have been admitted into Guy's Hospital for about eight years, with other cases which have fallen under my own care amongst the out-patients, these counting one-third of the whole number. A careful analysis of this material has yielded the following facts.

Nature and Extent of the Deformity. The arrest of development forming the deformity denominated hare-lip may be of different degrees of severity. It may be confined to the lip itself, or extend to the hard and soft palate, causing a mere fissure in the gum, or a complete separation of the hard and soft tissues. It may be of a single or a double nature; the double fissure, however, never extends beyond the lip and the intermaxillary bone; the cause of the deformity forming a sufficient explanation of this fact.

I have seen, in the lip of an adult, a congenital cicatrix on the left side of the upper lip, with a slight elevation of its mucous margin, which was evidently due to a condition which may be said to be the very earliest indication of a hare-lip. The child of this parent had a more complete fissure, and was operated upon by me with complete success.

The different varieties and complications, however, of hare-lip will be best shown by an analysis of the collected cases; and the following facts may be relied on.

In 32 of the 64 cases, the deformity was of a simple character, and affected the lips alone to a greater or less extent; 3 cases were complicated with a fissure of the gum, corresponding to the labial deformity; 2 had a fissured gum and hard palate; 21 a fissured hard and soft palate; and 6 cases were of a double nature.

It is thus evident that half the cases of hare-lip are of a simple and uncomplicated character, and that in the remaining moiety some deformity of the mouth and palate coexists; a fissure of both the hard and soft palate being present in two-thirds of the remainder, or in one-third of the whole number of cases.

Seat of the Deformity. All the cases which have passed under my observation have been in the upper lip; and, although authors refer with some confidence to the fact that the lower lip may be similarly affected, it is a subject of difficulty to believe in the truth of such an opinion, as the very pathology, or rather the explanation of the nature of the deformity, forbids the idea of the possibility of such an occurrence holding any position in our minds; and if the explanation which has been just given be a true one, the opinion that it is ever found in the lower lip must be looked upon as of doubtful accuracy.

The upper lip, therefore, is its natural seat; and the next point for illustration relates to the side in which it is usually observed. That it is

never found in the median line, is a fact that the experience of all surgeons will at once admit; and the results of experience upon this point only bear out the truth of the explanation of its cause. That it is generally found on the left side of the body, the analysis of my own cases positively proves; for 63 per cent. of the cases were on the left side, and 36 only on the right. A satisfactory explanation of this fact has never yet been given, although I believe it to be a generally received truth that deformities, as a whole, are more common on the left than on the right side of the body; and the above figures tend in a great measure to prove the accuracy of the remark.

Sex. The influence of sex is the next point which presses upon our attention; and, if the facts which the analysis of my materials yields were not supported by the generally received impression which most surgeons entertain, they might be considered to be somewhat strange; for out of the 64 cases of hare-lip, 44 occurred in boys, and but 20 in girls, or in the proportion of 70 per cent. of the former, and 30 per cent. of the latter; this deformity occurring 40 per cent. more frequently in males than in the female sex.

If we analyse these cases again, however, an unexpected result makes its appearance; for in the simple and uncomplicated examples of harelip, the difference between the two sexes is not so great; for of the 30 cases, 18 or three-fifths were in males, and 12 or two-fifths in females. But in the more complicated examples—that is, in those in which the hard and soft palate were more or less involved—the greater frequency of its occurrence in the male sex becomes most apparent; for of the cases in which both hard and soft palate were completely fissured, 17 cases, or 80 per cent., were in boys, and but 4 cases, or 20 per cent., in girls; the male element predominating to an extreme degree. And in the worst cases of all—that is, of double hare-lip—all the six examples were observed in male children.

These facts are, to say the least, extremely curious; for it can hardly, I think, be looked upon as an accident that, in the cases which have passed under my own observation, the male element should have predominated so largely; and I am disposed to look upon my own experience as an expression of what would be that of others, if it were given to us. By way of summary, the following conclusions may be drawn.

Conclusions. 1. Hare-lip is always found in the upper lip, and is most frequent on the left side of the body; 63 per cent. of the cases taking place on the left side, and 36 per cent. on the right.

2. It is more common in the male than in the female sex, in the proportion of 70 per cent. of the former to 30 per cent. of the latter.

3. In the simple uncomplicated cases, the proportion is less marked; but as the cases become more complicated, the greater frequency of its occurrence in the male sex becomes more apparent; the proportion between the sexes being 80 per cent. and 20 per cent. It would also appear to be a rare thing to find a double hare-lip in a female child.

Treatment of Hare-Lip. There neither is nor can be any difference of opinion between surgeons as to the expediency of affording surgical relief in the cases of deformity which we are now considering; although there is still great uncertainty and diversity of opinion between them as to the period at which it is the most advisable to submit the child to an operation. Some surgeons assert that operative interference is most successfully carried out at the very earliest period of the child's existence; and that the earlier the operation is performed, the greater are the chances of a complete success. On the other hand, surgeons of equal eminence maintain that the practice just laid down is fraught with danger, and that the correct practice is to wait till the child's powers are fairly established; and that one or even two years should be allowed to pass before any attempt to repair the deficiency should be made. Between these two extremes lie the opinions of many men; and it is, therefore, with a view of obtaining some definite data upon which a positive opinion can be based, that I will now lay before you the conclusion to which I have been led.

But, before doing so, allow me to allude with all deference to the uncertain grounds upon which surgeons have been in the habit of founding positive opinions; for it is too true that these opinions are, as a rule, based only upon impressions; although it may be that these impressions are the result of extensive and perhaps most conscientious experience. Still I feel that I may appeal with confidence to all who hear me, when I assert that there are few things more fallacious than the general impressions which experience affords, however great may have been the field from which they have been gleaned; and that true impressions can only be gained from positive and definite materials.

I am unable to direct you to any work or even journal in which definite data have been recorded, from which just conclusions can be drawn as to the period at which it is the most advisable to operate in cases of hare-lip, unless I were to mention my own previous contributions to this subject, which will be found in the third part of my *Clinical Surgery.*

It is, therefore, with some confidence that I am now able to add something to our stock of knowledge which may prove of use in guiding us to a correct decision. If I lay myself open to the charge of saying that surgeons have hitherto formed their opinions upon indistinct and indefinite data, I can only justify myself by pleading that the grounds upon which the opinions have been based have not been published; and that, therefore, I may be forgiven for doubting their existence.

The facts which I now adduce may form but a nucleus round which others may hereafter collect; and the conclusions I now give may have to be confirmed or corrected by future observers.

Analysis of Cases. Four cases were operated on within the first two weeks; one on the fifth day, and two on the eleventh day, one of which proved fatal.

Eight cases were between four and five weeks of age; in two of these, the parts subsequently gave way, although the cases in the end turned out well.

Ten cases were operated on between the sixth and eleven weeks, with success.

Fifteen cases were treated between the third and sixth month, with only one failure.

Six cases were operated on between the sixth and twelfth month, with a good result; and

Fifteen were also successfully treated after the first year.

From these facts it will appear that, during the first six weeks of life, the operation for hare-lip is

by no means so successful as to warrant its general performance, unless an absolute necessity compels. Out of the twelve cases, one died; and in two the wound subsequently sloughed, although in both a good recovery was finally secured. At a later period of life, a successful issue was recorded in all.

At what period of the infant's life, then, should the operation for hare-lip be generally performed? In order that a satisfactory answer should be given to this question, it is necessary to consider the purposes for which the operation may be required; and they may be divided into two classes.

Firstly, the operation may be called for to preserve life; the imperfection of the mouth forming an insuperable difficulty to the child's sucking.

Secondly, it may be called for simply as an operation of expediency, to improve appearances and remove defects.

When demanded for the satisfaction of the first purpose—namely, to preserve life—there is no question of period which the surgeon has to decide. The operation must be undertaken at all hazards; but the successful termination of the case will be uncertain. For this purpose, I have performed the operation on the fifth day with complete success, and other surgeons have been equally successful even at a much earlier period; but, under these conditions, the necessity of the operation overcomes all other questions, and the surgeon has no option but to do his best.

In the second and more numerous class of cases, however, the time for operation rests entirely on the surgeon's will; and it only remains for us to decide from the records of positive experience, the period of life at which the greatest success can be anticipated.

Judging from the materials which I have but just laid before you, it would appear that the operation when performed at any period of life after the sixth week is likely to be followed by a successful result; I would give the preference, however, to about the third month of life, the vital powers of the child having by that time become fairly established, and well able to resist the tax upon their strength which is necessarily occasioned by any operation. At an earlier date—that is, during the first few weeks of life—the operation should be condemned; unless, as it has been previously explained, the existence of the child appear imperilled.

The Operation. It will be hardly profitable to any of us if I were to take up your time by recapitulating all the varieties of operation which have been suggested by various surgeons for the relief of the deformity now under consideration; and I propose, therefore, to confine my remarks simply to what I have observed and practised, and to recommend what appears to be the best means out of the many which have received attention.

In simple cases, there are but two main objects which the surgeon has in view—to pare the edges of the fissure, and to adapt them so as to render the deformity as slight as possible.

I would give the preference to the scalpel for the performance of the first stage; for with such an instrument a cleaner section of the tissues is made than when scissors are employed; and this cleanness of the incision is a point of primary importance.

The form of section which is to be recommended is variously estimated by different surgeons. Some are content with a clean straight section of the lip's margin, being so satisfied with obtaining simple union of the separated parts, as not to care about making an attempt to supply the deficiency of tissue which is invariably present at the margin of the lips. Other surgeons recommend that the line of incision should be curved inwards, so that the lower margin of the lips, when brought into position, will be made to project downwards, and thus tend to correct the evil which has been just alluded to. But I am disposed to give the preference to the plan of operation which I believe was originally suggested by Malgaigne, as by it the labial notch is almost to a certainty done away with, and the deformity most completely remedied. It consists simply in paring the edges of the wound from above downwards, leaving the inverted flap adherent at its labial border. When this is done, and the upper edges of the divided lips have been brought together, the lower flaps may be connected by a fine suture; and, if proved to be too long, they may be curtailed; sufficient material being left to fill in the gap which is too often the result of the other forms of operation. In my hands, this plan of operation has proved eminently successful, and it only requires in its application a little nicety in the adjustment of the parts.

An important preliminary point, however, demands attention, as the success of the case rests materially upon its due performance; for, however well the marginal incisions may be executed, unless the lip have been rendered readily moveable upon its labial attachments, a failure to the operation must be expected. This freedom of movement is, however, readily secured by making a free section of the mucous membrane of the lip from its osseous connexions. When this is done, the whole lip can be readily raised from its position, and all chances of tension are completely taken away.

The fear of removing too much of the lip's margin is one which is most certainly groundless, the usual fault of operating surgeons lying the other way; for the labial tissues are very extensible, and a free section of the parts is to be preferred.

The *second step* of the operation remains for us to describe; its object being to bring the edges of the wound together, and to keep them there. This end is most readily and efficiently carried out by means of the interrupted suture. Silk or wire may be selected according to the fancy of the operator, one exciting as much or as little irritation as the other. The interrupted suture is to be preferred to the uninterrupted, as it is more readily removed.

The sutures should be inserted from a quarter to half an inch from the wound's margin, and carried obliquely through the lip, to the line which is bounded by the mucous membrane, but not through it, and then introduced at a like spot on the opposite side, and firmly tied. A fine suture at the labial margin should also be applied, in order to maintain as accurately as possible the line of lip.

All bleeding is generally at once arrested when the wound's margins are brought into contact; but, if it be troublesome, one of the sutures may be made to perforate the bleeding vessel.

A little elastic collodion may be subsequently painted over the part, to prevent friction; but, as a rule, the practice of leaving the part open proves equally satisfactory. The employment of pins in

simple cases may certainly be looked upon as unnecessary, as the simple means which have been described are amply sufficient.

In operating, therefore, upon uncomplicated cases of hare-lip, the following points appear the most important.

First, to separate the lip freely from its gummy attachments; *secondly*, to make a free section of its edges, according to the plan previously laid down; and *thirdly*, to bring the edges accurately together by fine interrupted sutures, introduced at a distance from the wound's margin, and deeply placed. If these points are observed, and the child is neither too young nor too sickly, a successful termination to the case may with some confidence be predicted.

Complicated Cases of Hare-lip. The remarks which I have just concluded, concerning simple and uncomplicated hare-lip, are equally applicable to other cases of a more complicated nature; but there is a point of practice in *double* hare-lip which deserves a few moments' attention, as there is still a diversity of practice in such cases which, I confess, appears to me somewhat singular. Some surgeons invariably operate only upon one side at a time, fancying that a greater success follows such a line of practice than when both sides are treated at one operation. From what has passed under my observation, I cannot see any reason why both sides should not be simultaneously treated; but, on the other hand, believe that advantages are obtained by such a proceeding, which are not secured by the more timid and prolonged process. In the six examples of double hare-lip which I have tabulated, primary success followed in each instance; and in the cases which fell into my own charge, I had no reason to believe that the operation would have succeeded better if a different practice had been followed. In one case of a boy aged nine weeks, I employed a pin in order that the centre bit should be well held down to the lateral portions; and good success followed the attempt. In the second case, of a boy aged one month, I operated after the plan which I have previously given; but I preserved only the lateral flaps of the outer portions, joining these in the centre beneath the central piece. Primary union followed the operation, and a recovery in which the deformity was but little marked.

In no instance have I witnessed any evils resulting from the practice which I have just laid down; and I am at a loss to understand the principle upon which surgeons still adhere to the older practice of carrying out a double and separate operation.

In certain complicated cases of hare-lip, the central incisive or intermaxillary portion of bone is found projecting to a detrimental extent; and it becomes a question with the surgeon whether he shall remove it by means of bone-forceps, or fracture it and press it backwards. In many instances, unless some such proceedings as these be carried out, the operation for hare-lip cannot be performed. I have seen both plans executed with good success in the practice of my colleagues, and in one instance have performed excision with success.

If the bone can be pressed backwards by a moderate amount of force, the practice appears to be preferable to the one in which the obstacle is only overcome by its removal; but, if this plan should be impossible or inexpedient, there is no alternative but to excise the part. It is true that, by removing the central portion, the incisor teeth will be taken away; but it is better that such a practice should be carried out, than that the original deformity should be left, particularly when it is remembered that, with such a projecting bone, the incisor teeth would in all probability appear much out of place, even to the extent of piercing the lip—a contingency which I have in one case certainly observed.

In some instances, however, an exfoliation of the incisor tooth may take place before any operative interference has been performed; and this was illustrated in a case which fell under my care on Oct. 27th, 1862, in a male child aged one month, who had a hare-lip on the left side, with a fissured hard and soft palate, the incisive portion of the superior maxillary bone projecting far forwards. When the mother brought the child to me, the soft parts over the projecting bone were dry and apparently dead; and with the slightest touch the "scab" came off, and with it the crown of the incisor tooth. The surface readily healed; and the child is to return to me for operation at a future period.

There is one other point in the treatment of these cases which the surgeon should remember; and that is, if the primary operation fail, and primary union cannot be procured, there is still a good hope of securing ultimate success by union from secondary adhesion. This end is to be obtained by the application of strapping, or in preference sutures, to the granulating wound, so that they may again be placed in apposition. In several instances which have been tabulated, this practice was performed, and a good result took place; and in two cases which came into my hands several years ago, equal success may be recorded. Both were infants, upon whom I had been led to operate at a very early period, two and three weeks only being their respective ages. Sloughing followed the original operation; and when the parts had begun to granulate, sutures were reapplied, and a good recovery was eventually secured.

With these remarks I will now conclude the subject of hare-lip, having, I believe, touched upon the chief points of practical importance, and given facts upon which definite opinions may be based. The personal experience of any single surgeon in hare-lip is rarely very great; and it can only be by the collective experience of many that positive opinions can be based. I advance my own facts, knowing them to be true; and entertain the hope that other surgeons may be induced to add their own stock of cases to these which I now contribute, and thus either confirm or correct the opinions which have been based upon them.

The subject of cleft palate is not one which need occupy our attention; for, although it is a congenital defect, it can be remedied only in advanced life, and has, therefore, no special claim for notice. Artesia oris or closure of the mouth is also a congenital condition which may exist; but, as I have had no personal experience upon the subject, it will receive only this passing notice.

[*To be continued.*]

THE EDINBURGH CHILDREN'S HOSPITAL. The Queen has been graciously pleased to become patroness of this charity, and has intimated, through the Secretary of State, her desire that it be henceforth called "The Royal Edinburgh Hospital for Sick Children".

Remarks

ON

DR. BEALE'S CLINICAL LECTURES, COUNTERIRRITATION VERSUS RENEWAL OF LIFE.*

BY

THOMAS KING CHAMBERS, M.D.,

HONORARY PHYSICIAN TO H.R.H. THE PRINCE OF WALES; ETC.

COUNTERIRRITATION (as I have pointed out in the *Renewal of Life*) has nothing whatever to do with allopathy or any other special system. Indeed, while allopathy professes to cure by substituting an abnormal state opposed to that already existing, counterirritation substitutes one whose nature is similar.

Having already, in the last number, defended Dr. Pereira's explanation of its mode of action, I will now proceed to examine Dr. Beale's own. It is longer, but I do not think more complete. He takes as his first example the action of blisters, which, he says, "act beneficially in two ways—first, by exciting through the afferent nerves in the skin an impression by which the efferent nerves distributed to the mucous membrane are caused to contract, and thus a diminution in the supply of blood results; the direct consequence of this diminished supply of pabulum being a slower multiplication of the pus and imperfectly formed epithelial cells. In consequence of the increased flow of blood to the skin, the young cells of the cuticle grow and multiply at the expense of the pabulum, which would otherwise have gone to feed the structures formed on the surface of the mucous membrane. Secondly, such an increased action being established in the deep layers of the epidermis, crude materials in the blood, which would otherwise have been taken up by the pus on the mucous membrane, are appropriated here."

That is to say, that blisters do good only by causing a diminution in area of distant blood-vessels, and by exhausting the supply of nutriment. Surely, if this were the case, the earlier in the inflammation that a blister could be applied, the better it would act; for, on Dr. Beale's theory, you could not too soon diminish the area of the dilating capillaries, and you could not be too ready to cut off the supply of the pabulum of the future pus. But put on a blister at the beginning of an attack of pleurisy or peritonitis, and I am sure every practical physician will agree that you make it worse.

Again, observe carefully and without prejudgment the period at which epispastics produce their fullest effect. Place a blister on a chest half full of hydrothoracic fluid; let it go through all its stages of complete action, and observe at what period it is that the level of the fluid sinks most rapidly; and you will find that to be not at first, not when it is supposed to be doing its work by contracting the blood-vessels and exhausting the "pabulum" by pouring it out in the shape of serum; not at this time, but when the blistered surface begins to heal, when new skin is beginning to form, that is the time when the level of dulness on percussion sinks most quickly. The benefit accrues, not when the counterirritation is at its height, but when it is all over. A practical application of this is made in my lecture on Pleurisy (*Renewal of Life*, Lect. viii, in second edition).

I have said I considered Dr. Beale's sketch of counterirritation incomplete. I mean that he has omitted, in his description of the action of blisters, a good deal which is highly important. At the end of his description, he has omitted the healing process above alluded to, and which experience shows to coincide in point of time with improved health. Then, again, he has forgotten all mention of the absorption of cantharidin, which has certainly a potent physical agency. Let Dr. Beale administer cantharides by the mouth, and he will find it benefits chronic bronchitis just in the same way as blisters do. I do not mean so certainly or so powerfully, but by the same change towards health in the mucous membrane. These are serious omissions; and the professor himself shows how serious they are in a later part of his lecture. He says there that the authorities at the hospital to which he belongs, when counterirritation fails to relieve chronic bronchitis, apply stupes of hot turpentine, thus saturating the atmosphere with a volatile oil whose effect on the mucous system closely resembles those of cantharidin. This should have reminded him of one of the actions of blisters.

By the way, in commenting on the physiology of Dr. Beale's lecture, is not our knowledge of the afferent and efferent nerves of the blood-vessels rather limited? and is it wise to be led by that limited knowledge?

Professor Rokitansky thinks that irritation of the sensitive nerves causes "antagonistic palsy of the nervi vasorum." Dr. Beale thinks it makes them "contract." Dr. Headland thinks that the effect of blisters is to draw *off* the attention of the nerves from a morbid part. (*Action of Medicines*, p. 56. Third edition.) Dr. Beale thinks it is to attract or draw it *on*. For my own part, I think that when we talk about "stimuli," "irritation," "attention," and so on, we are using the language of analogy, or even of allegory, and had better give it up.

But I must question more seriously his statement that there is an "increased *flow* of blood" to an inflamed skin. Its redness is due to the dilatation of the transparent capillaries, and the retention and retardation of their blood-stream. There is more blood *in* them doubtless; but not more blood flowing *to* them during the congestion or stasis of inflammation. This makes all the difference to Dr. Beale's argument.

I think Dr. Beale has described very well the exhaustion of "pabulum" caused by blisters; the difference between us is, that he considers it a virtue, and I consider it an unavoidable fault. We need not cut our friends because they have faults; but we may guard against them. And this we shall best do in the case of blisters, not by aiding and abetting their evil power by starving, but by compensating it with ample supplies of the most digestible "pabulum." We shall thus best avoid the debility which is liable to arise from epispastics.

* See BRITISH MEDICAL JOURNAL, February 28th.

What I have said will apply *mutatis mutandis* to diuretics, purgatives, and all the other drugs which I have classed together as Destructives, because they destroy the pabulum of the tissues. My lectures show that I employ them, but so as to try and do the least harm along with the most good.

On the whole, I think Dr. Beale has been unnecessarily startled by what seem to have come upon him as new ideas, even before he opened the book. The title on the back was chosen to express an idea, not new, indeed, but which has been long working in the minds of the most observant of our profession, and which has largely affected modern practice; viz., that the *Renewal* of deficient material and deficient function is the true art of healing. To express this idea was the object of the lectures selected to form the volume; and if a title is to describe the intention of a book, I do not know of one that would have so well answered the purpose. I decline to answer flippant ridicule; but let critics pause—no, critics have no time to pause—let practical physicians pause, before they condemn. Let them reflect on their most successful practice, and say if it does not support my rough outline of a therapeutical system. And if they think it does, is it too much to ask them sometimes to modify modes of treatment opposed to it, and judge of the comparative results of the experiments?

Διάπειρά τοι βροτῶν ἔλεγχος.

Life amid Foes. The take of herrings by fishermen within the jurisdiction of the Scotch Fishery Board amounted in 1861 to nearly 900,000,000. It seems a marvellous drain upon the power of multiplication, of one animal to destroy in a year a multitude exceeding in number, perhaps, the whole human population of the globe. But this vast number sinks into insignificance when compared with the destruction effected by other agencies. It is very common to find a codfish with six or seven herrings still undigested in his stomach. If we allow a codfish only two herrings a day, and estimate that he feeds on herrings for only seven months in the year, he takes 420 as his allowance during that time; and since at least 2,400,000 codfish were caught in 1861, and the cod and ling caught were certainly not a tithe of those left behind, the destruction of herring by those voracious fish alone may be estimated at ten times as great as that effected by all the fishermen put together. But the conger and the dogfish probably do as much mischief as the cod and ling, the gulls and the gannets slay their millions, the porpoises and grampuses destroy untold multitudes, sea trout and innumerable other fish prey upon the herring fry, flat fish of all kinds resort in immense numbers to the spawning grounds of the herring to prey upon the freshly deposited ova. Extensive as our fishery operations are, their effect upon the supply of herrings becomes inappreciable when compared with all these consuming agencies. The Royal Commissioners, who have recently inquired into the operation of the laws relating to herring trawling, and from whose report these statements are taken, notice the practical result of all this:—A plentiful multiplication of herrings in any year nourishes and supports an increased army of enemies, and if these latter multiply too fast the herrings become diminished in number, whereupon the fish that destroy them are starved down, and, in a weakened state, more easily fall a prey to their own enemies; the herring, then, relieved from their oppressors, in a year or two appear again in immense numbers, and so the alternations of prosperity, over production, and panic in the trade which they originate will occur with as much regularity as if the herring were manufacturers.

Original Communications.

DISEASES OF THE LACRYMAL DUCT, ATTENDED BY STRICTURE: TREATMENT.

BEING REMARKS ON THE COURSE OF CLINICAL INSTRUCTION AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By Haynes Walton, F.R.C.S., Surgeon to the Hospital, and to St. Mary's, Paddington; late Teacher of Anatomy and Demonstrator of Operative Surgery in St. Mary's Medical School.

The functions of the lacrymal duct, that is, the conveying away of the tears and of the conjunctival secretion from the surface of the eye to the interior of the nose, may be interrupted in consequence of stricture, arising from causes purely mechanical acting nearly always from without, or from constitutional influence.

The first are so rare that I have not seen half a dozen instances, and the variety is small. They comprise injury from wounds; pressure from malignant and other tumours in the neighbouring cavities, the orbit, the antrum, and especially those of the nose. Besides these are exostoses, swelling of the bones immediately around the duct, and periosteal inflammation from syphilis. A polypus, it is said, has been met with in the duct. I do not think it requisite to say more about these peculiar exceptions. They will not be obscure to any one who has sound anatomical knowledge, and bestows pains and time in the investigation of cases, and who has at all studied the conditions of an ordinary obstructed duct.

The second produces disease of the duct itself. It includes the mass of instances that are met with. There is no more palpable fact than that such influence proceeds from those bodily conditions known as feeble and scrofulous. The direct evidences of struma, in the well known manifestation of absorbent gland enlargements are very often coexistent. The thing itself is a strong local and external marking of such a diathesis, just as much as a chronic purulent discharge from the ear or the nostril. But it is not a termination of strumous or other inflammation of the conjunctiva, I would almost say never, as I have not seen such connection. The converse, however, I have often witnessed; indeed, conjunctival implication is often the consequence of this strumous inflammation of the duct.

A watery eye is the first intimation that a person receives of a diseased duct. A tear requires to be wiped, and is troublesome in proportion as the eye is exposed to any influence that excites the lacrymal and conjunctival secretions, the most common of which is atmospheric.

Respecting the diagnosis, there is really no obscurity. The wet corner of the eye, the soppy eye-lashes, the redness and the swelling of the integuments, disclose it. When there is doubt because any of these symptoms are less marked, the effect of pressure with the finger on the sac upwards, will be a sure guide; for with sufficient disease to produce discomfort enough to induce the person to seek a remedy, there is always an accumulation of tears and mucus which will regurgitate through the punctum, mostly the lower. There is only one possible source of error, and this may arise out of an obstructed punctum, because occlusion of the lower one causes effects similar to the early stage of a diseased duct, and the pressure test would fail. With the slightest doubt, therefore, the punctum should be well examined.

When the eye is watery, and there is no accumulation in the sac, and the probe passes readily through the

punctum and canaliculus, there is no fault in the excretory apparatus, in the conduits from the eye. An irritable conjunctiva, causing hypersecretion of the lacrymal gland, is probably the origin of the evil.

I avoid entering into a consideration of the many phases that a diseased lacrymal sac may pass through, and which have been described as mucocele, relaxation of the sac, and so forth, as it tends to no practical end, and only mystifies and puzzles. These are all merely more or less aggravated symptoms of an unhealthy mucous membrane, of which the prejudicial effect is the most exercised, where the lower end of the duct—the part encased by bone—is strictured.

A strictured duct requires to be mechanically treated, and as there is a morbid state of the canal, by which an accumulation of the secretion it causes merely interrupts the free passage of the tears, and which state may be remedied by constitutional and topical measures; and as there may be stricture with but faintly apparent morbid action, and with little or scarcely any escape of new products or accumulation, when the sac is pressed, it often becomes a nice matter to diagnose between them. For many years I have sought for the indication in question; and now I rely on two simple facts as the most sure and unerring guides. These are the state of the canaliculi, and the condition of the parts about the lachrymal sac as conveyed to the touch.

When one of the canaliculi, especially the lower, is choked at the inner end, there is, as far as I have observed, almost invariably, stricture of the duct as well. Again, when there is decided thickening of the parts over and about the lacrymal sac, so that the edges of the bones cannot be felt as in health, there is that condition that needs dilatation. These rules have fewer exceptions than any that I know of. A profuse discharge, even of purulent matter, through the puncta, generally associated with stricture, is not in itself, as I have frequently ascertained by actual exploration, an unerring sign of obstruction. On the other hand, all degrees of narrowing of the duct, and even complete occlusion, may exist, without the escape of pus, and but little of any secretion.

It is the chief object of this lecture to show how to effect the process of dilatation in a strictured duct, because it demands special teaching.

I am quite satisfied that the mere occasional probing is not in itself sufficient. Besides, it is so tedious and so very disagreeable that both public and private patients rebel against it. I may add that when there is really that degree of structural change which unequivocally calls for instrumental treatment, the wearing of a style is the less irksome, the more beneficial, and the quicker plan.

It is a great modern improvement to introduce the style through the canalicular entrance into the lacrymal sac, instead of the old plan through the skin on the face. I think that it may always be done, except when there is a lacrymal fistula, especially with necrosis. The method of doing it is this: The lacrymal director is passed into the punctum and along the canaliculus, till the point enters the sac, and rests against the lacrymal bone. With a fine scalpel this canal should be slit up in its whole length, and, as I think, a little of the sac as well. In certain instances, when, for example, a patient cannot be seen as often as I would wish, I introduce the style, if practicable, at once; but generally I effect it by a slower process, dilating the duct by degrees. Primary union is very apt to follow the operation on the canaliculus, in part or in whole, and the new channel should be reopened with the director or probe each day, till no longer required.

I generally explore the duct in the first instance with a tapering steel sound, and then with a small silver wire; and should there be much stricture, and some difficulty in reaching the floor of the nose, I do not withdraw the wire, but cut off the upper part and turn the end down on the eyelid with pliers in the form of a little hook. After a few days, the calibre of the duct is increased, and the style may be more readily introduced. The styles should be made of standard silver. The head should be curved into a hook, or wrought into a little tail, the extremity of which rests just over the eyelid. Several wires should be kept that the lesser might be employed till the largest can be used. Different lengths, too, are needed; for in each application the foot should reach the palatine process of the superior maxillary bone forming the floor of the nose. There is then no risk of the style slipping down; nor of the upper end producing irritation from pressure; nor ulceration, and so forming a false channel to rest on. Messrs. Weiss of the Strand keep all the instruments that I use.

The stricture may prove to be very tight—so dense, indeed, that it cannot be penetrated by the probe or the style. It must then be divided by the style-knife, which ought to be pressed down till the resistance is overcome.

The success of the entire proceedings rests on the accurate passage of the style. Liability to failure consists in the tendency there is to penetrate the lacrymal bone rather than in line of the duct. I know of no more common mistake in ophthalmic surgery than for a false passage to be made in attempts to open the nasal duct, and to probe it; and the liability is still greater when the canaliculus is made the channel after the manner now described.

I can give no rules for guidance beyond those of acquiring anatomical knowledge of the part, which a single dissection on the dead body will afford; of exercising great care; and never to be satisfied that the right passage is reached, till the probe touches the floor of the nose; when the lacrymal bone is penetrated, the probe passed into the fauces as far as it may be thrust.

From time to time, the style should be removed and cleaned, and if it should ever become uncomfortable or irritating, the cessation of wear for a day or two generally makes it afterwards tolerable. Some patients wear it at night only. As to the duration of its application, I continue it until all inflammatory action has been subdued, which is indicated by an absence of all purulent or other secretion of an unhealthy nature from the duct.

I can declare that I have obtained an amount of success during the last five years which often astonishes me when I reflect on the nature of the cases treated. In the majority, I have had perfect results. In some, there has been immense amelioration, it being only at times when, perhaps, the conjunctiva is swollen from catarrh that a little defective working in the excretory channel is felt. In some few, the reintroduction of the style for a few days, or longer, has been needed. In not a single case treated in my private practice have I failed to afford some substantial relief.

CASE OF SUDDEN PARTURITION.

By C. Blakeley Brown, M.D.

Ann S., aged 26, began to feel ill about 3 o'clock P.M. on March 14th. While resting on the bed, she felt, as she thought, a "call of nature"; and, while sitting up, gave birth to a fine full grown child, which falling on the floor, the funis was broken off about eleven inches from the navel. She took her child and lay down with it for some time; when, feeling easier, she dressed herself, went to the door of the house, hailed a cab which she saw passing, and, getting into it with her bady, was driven to Queen Charlotte's Hospital. On her arrival there, she walked out of the cab up several steps with the child in her arms, before the doors of the hospital could be opened; and, having entered, would have walked

up stairs, if the matron had not insisted upon her being carried. This occurred between 8 and 9 P.M. When she was put to bed, the matron discovered that the placenta had not come away: this she removed without difficulty, and found the torn funis to correspond with that still on the child, which she tied and cut, and from which there had been no hæmorrhage whatever. Both mother and child are now in the convalescent ward, and have had no bad symptom, or seem to be any the worse for their journey.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASES OF PUERPERAL CONVULSIONS, WITH REMARKS ON THE USE OF BLOOD-LETTING.

By J. G. Swayne, M.D., Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Midwifery at the Bristol Medical School.

[*Read February 26th*, 1863.]

There is, in the present day, a strong tendency to decry all methods of treating disease which do not harmonise with the stimulant plan now so much in vogue. Hence, I believe, some well established and highly successful remedies are in danger of being abandoned, whilst others are being substituted for them which are of doubtful efficacy, and have not yet been sufficiently tested by experience. This remark applies especially to the use of bleeding in puerperal convulsions, and, in illustration of it, I now bring forward the following cases, embodying my own experience of that disease.

Case I. In 1842, I attended M. F., a primipara, living in Albion Row, Bedminster. The os uteri was rigid and unyielding. The feet presented. Convulsions came on, preceded by drowsiness, when the os uteri was dilated to the size of a shilling, and before the membranes gave way. I bled her to thirty ounces, and hastened the delivery. The child died in convulsions a few hours after birth. The mother had one or two fits after the bleeding, but recovered well. Purgatives and antispasmodics were used.

Case II. In 1842, I was called to attend S. H., a multipara, living in Eugene Ward. She was suddenly taken with convulsions previous to labour, and before any one could be sent for, was delivered during one of the fits of a healthy living child. I bled her to twenty ounces, shaved her head and applied cold lotion, and administered an enema of assafœtida and turpentine. The convulsions continued in a mitigated form for two or three days, gradually abating in frequency, and disappearing altogether about the end of a fortnight.

Case III. In 1847, Mr. Wheeler requested me to see Mrs. L., a primipara, aged 30, whom he was attending. Labour pains came on in the morning of the same day, accompanied with convulsions, which increased in severity. Mr. Wheeler had bled her before I arrived, to twenty ounces, and had given her one drop of croton oil and ten grains of calomel, and a strong turpentine enema. But as the fits still continued, he requested me to see her. I went to her at 8 P.M. She was then quite insensible with stertorous breathing, and pulse varying from 120 to 160. The bowels had been freely opened, and the stools were black and offensive. The labour all this time was steadily proceeding. When the os was pretty well dilated, I ruptured the membranes and let the labour go on naturally. She had now had no fit for three or four hours, but just when the head was pressing on the perinæum she had another convulsion. We therefore determined to hasten delivery by the forceps. This was soon done, and she was safely delivered of a still-born child which had apparently been dead for two or three days. Soon after delivery her breathing became less stertorous, and her pulse less frequent, and in about twelve hours she had regained partial consciousness. For two or three days after this she remained in a maniacal condition, but this gradually passed off, and she made a good recovery.

Case IV. In 1850, I saw Mrs. J., a primipara, living in Stokes Croft, in consultation with Dr. Herapath, who had been attending her. She had been in labour twenty-four hours, and about four hours before I saw her was attacked with epileptiform convulsions. When I saw her the convulsions returned about every twenty minutes, there being complete unconsciousness in the intervals. She was a thin spare woman; but as there was much congestion of the vessels of the head, we bled her to twelve ounces. The pulse was now frequent and rather weak. The fits were mitigated after the bleeding, but the pains were feeble, and the labour made very little progress. We then waited between two and three hours, when, the insensibility still continuing and the fits returning at intervals, we determined to effect delivery. As the os was not sufficiently dilated to admit the forceps, craniotomy was performed, but with considerable difficulty. The woman remained completely unconscious after delivery and in a state of extreme collapse, accompanied with restlessness and jactitation. We gave her liberally brandy, ether, and ammonia, but she did not rally for some hours. However, in the following night she became partially conscious, and ultimately made a good recovery, except that she was slightly salivated by some calomel which was given during labour.

Case V. In 1853, Mr. Godfrey requested me to see Mrs. G., a lady whom he was attending in her first confinement. The labour had been very tedious, and the head had been some hours at the outlet of the pubis, notwithstanding that ergot had been given. The patient had had two convulsions before I arrived, and had been bled to twenty ounces. When I saw her, the head was in the same position and did not move, notwithstanding two or three very strong pains. These pains were followed by a severe convulsion, and we deemed it prudent to wait no longer. I therefore delivered her with the forceps. There was no convulsion after delivery, but the detachment of the placenta was accompanied with some hæmorrhage and tendency to syncope. We therefore gave her brandy, ammonia, and laudanum. The child was healthy and strong, but for some hours had contraction of the flexors of the left fingers and thumb. The patient did not completely regain consciousness until the third day, but ultimately did well.

Case VI. I was sent for by Mr. Corbould, to see Martha M., in Cox's Buildings, St. Philip's. She had been previously healthy, and was seven months pregnant with her first child. She was attacked with convulsions about 8 A.M., June 28th, 1854. When first seen about 11 A.M., she had had three fits, and was almost entirely unconscious, breathing slightly stertorous. There were no symptoms of labour, and not the slightest dilatation of the os uteri. She was bled to about ten ounces. She seemed somewhat relieved by this, so much so that she was able to get up in bed, and understood what was said to her. After some interval, however, she had another very severe fit and became comatose, and the convulsions returned twice or thrice every hour until 3 P.M. Cold was applied to the head, and an enema of turpentine and castor oil given. The fits now became more frequent and severe; Mr. Corbould therefore applied twelve leeches to the temples, gave her a drop of croton oil, and placed mustard poultices on the calves of the legs. As the convulsions still continued with abatement, Mr. Corbould requested me to see her. Finding the pulse apparently unaffected by the previous depletion, I bled her again from the arm to ten ounces. After this, the pulse became weaker and more

frequent, as much as 120; whilst the fits continued with rather less frequency to midnight. During the three succeeding hours only some slight twitchings of the limbs were noticed, and at intervals she addressed her sister by name, and seemed to listen when spoken to in a loud voice. The pulse too became steadier and less frequent, and she was allowed a little brandy. However, about three the next morning, another fit of unusual severity came on, and she died before it passed off. There was not the slightest dilatation of the os uteri or other symptom of labour. No *post mortem* examination was allowed.

Case VII. On March 13th, 1856, Mr. Biggs, one of my pupils, requested me to see J. P., a primipara, aged 19. She was attacked with convulsions during the latter part of her labour, which continued until 1 P.M., when she was delivered of a still-born child; the fits then returned at irregular intervals, until I saw her at 5 P.M. She appeared to be a short stout plethoric woman, and had been accustomed, as I understood, to take too much food and drink, and too little exercise. She was lying in a state of complete unconsciousness; her breathing was stertorous, and her pupils scarcely affected by light; her pulse was rapid, but not very full. I directed her to be bled to sixteen ounces, and her head to be shaved and covered with cold pads, also mustard cataplasms to the back of the neck and calves of the legs. Five grains of calomel were likewise given, and an enema of turpentine and castor oil administered. I saw her at twelve the next day; she appeared better, was partially conscious, and her breathing had lost its stertorous charac ter. She had only three fits in that day. I directed a blister to be applied to the scalp, and, as the bowels had not been moved freely, I ordered the calomel and the turpentine enema to be repeated. I saw her at four the next day, and she had then had no more fits, and had quite regained consciousness; from that time she did well, and completely recovered.

Case VIII. On December 4th, 1856, Mr. Coe requested me to see a patient whom he was attending in her first labour. She was a short thick-set woman, of muscular development and plethoric habit. He told me that he saw her first about noon, soon after which she was attacked with violent epileptiform convulsions. He therefore bled her to thirty ounces. The pains were then but few, and the os not dilated larger than a shilling. I saw her about 8 P.M. The labour had then made much progress; the head was presenting naturally, and slightly distending the perinæum. She had had only three convulsions since the bleeding, and they were not so violent as the previous ones. Soon after I arrived, she had another; and, as the pains were now flagging a little, we agreed to hasten the delivery. Mr. Coe therefore applied the forceps, and delivered her without difficulty. The placenta soon followed, accompanied with considerable hæmorrhage, which was restrained by pressure, cold, and ergot. There was no return afterwards of convulsions or hæmorrhage; and both mother and child did well.

Case IX. On September 4th, 1861, Mr. Parker requested a consultation with me on Mrs. B., living in Buckingham Vale, Clifton. She was a primipara, aged 30, and was a plethoric, stoutly built person. I saw her at 1.30 P.M. She had been in labour all the previous night, and had had no sleep. About half an hour before I saw her, epileptic convulsions came on, and Mr. Parker had taken sixteen ounces of blood from her arm, and applied cold to her head. I found the presentation natural, and the head fully engaged in the pelvis. I therefore applied the forceps, and at about 2.15 P.M. delivered her of a fine male child. There was no other convulsion until about 3.30 P.M., when she had another. We then gave her five grains of calomel, and applied a blister to the back of the neck. She was partially unconscious after each fit. The urine was of specific gravity 1015, and highly albuminous. No more convulsions followed, and both mother and child did well.

Case X. On February 1st, 1862, Mr. Crichton sent for me to ask my advice respecting Mrs. ——, Cumberland House, whom he had just attended in her first labour. The pains commenced at 3 A.M. He first saw her at 9 A.M., when he found that she had had two violent convulsions. The face presented. She had one convulsion afterwards, but labour progressed favourably, and ended, without assistance, at noon. About three, she was again attacked with strong convulsions, which frequently returned. He had applied sinapisms to the back of the neck, and cold to the head. I saw her at 7 P.M. Her breathing was stertorous; the fits returned two or three times in an hour, and there was complete insensibility between them. The pupils were contracted, and scarcely affected by light. The pulse was upwards of 100, and moderately full. We bled her to fifteen ounces, had her head shaved, and gave her five grains of calomel and a scruple of jalap. A blister was applied to the nape of the neck. The urine was high coloured, and contained about sixty per cent. of albumen. On the next day, we found she had had no fit since 3 A.M. Consciousness was partially restored; and from that time there were no more convulsions, and she gradually recovered.

Case XI. On February 8th, 1863, Mr. Mayor requested me to see Mrs. H., living in Stapleton Road, whom he had attended the day before in her second confinement. He told me that soon after her first confinement she had one convulsion only, and recovered well without any treatment. On the present occasion she had given birth to twins, the second child being born about an hour after the first. The head of the first and the breech of the second presented. They were both females, fine children, and born alive. The labour was favourable. On the evening of the same day, about fourteen hours after delivery, she was attacked with convulsions, and these continued through the night, the interval between the fits being on an average half-an-hour. There was almost complete insensibility between each, and some stertor of the breathing. Mr. Mayor saw her in the morning, and gave her forty minims of tincture of opium. This slightly mitigated the severity of the attacks. I saw her about 8 P.M. She had had no fit for three hours, and was slightly conscious; but whilst we were in the room she had a violent attack of convulsions, and this was followed by another in about a quarter of an hour. We then bled her to fourteen ounces, and ordered her five grains of calomel and five grains of jalap and an enema of turpentine and castor oil; also a blister to the nape of the neck; and the hair to be cut short, and cold applied to the head. She had a fit, but a less severe one, immediately after the bleeding. Some urine drawn off just before, contained about thirty per cent. of albumen. We saw her again about 9 A.M. on the following day. She had had four fits since last night, but they were less severe and she seemed more conscious. The breathing had lost its stertor, and the pulse was 92 and soft. The blood drawn by venesection was much buffed and cupped. The urine now contained scarcely twenty per cent. of albumen. From that time she had no more fits, and the urine two days afterwards presented scarcely a trace of albumen. She talked at random for two or three days, and her vision was disordered, for she thought that the chimney ornaments were dancing about the room, and told her husband that his hair had turned green; but these symptoms gradually passed off, and she made a good recovery.

Remarks. All the cases just related were, without exception, instances of genuine puerperal eclampsia. It will be seen that out of the 11, 9 were primiparæ, and 2 multiparæ. This corresponds with what has been generally observed; viz., that the great majority of cases of puerperal convulsions are primiparæ.

In 10 cases, the fits appeared at the full term; and in one only before term, viz., at the seventh month.

In 4 cases, the convulsions came on before the rupture of the membranes, and in 7 after.

With respect to the presentation, the vertex presented in 8; the vertex and breech in one (twins); the face in one, and the feet in one.

As to the result to mother and child, 10 mothers recovered, and one died; whilst 7 children lived, and 5 died. This is more favourable than usual—the ordinary maternal mortality, according to Dr. Churchill, being 1 in 4½. The only fatal case amongst mine was the one in which convulsions came on in the seventh month: there was no sign of labour, and the mother died undelivered, and the child was lost also.

Labour was terminated by the natural process in 5 cases; by the forceps in 4; by craniotomy in 1; whilst in one there was no attempt at labour.

Lastly, as regards the treatment. In all the eleven cases, the principal remedy was blood-letting; next in importance to that was delivery; whilst the secondary means were purgatives, counterirritation, cold to the head, and antispasmodics. In speaking of the treatment, our attention will be chiefly directed to blood-letting, because, at present, there is a general tendency to disparage this, as I believe, most valuable remedy, and to substitute for it various anæsthetics, especially chloroform. In a lately published manual of midwifery, for instance, bleeding is spoken of as the "old routine plan", "as if the best way of enabling a patient to bear up against the disease, which has seized hold upon her, is to deprive her of the very means of resisting its evil influences." It is thus that the doctrines of the "Todd School" are carried into every branch of practice, and theoretical objections are made to methods of treatment sanctioned by the widest experience. I do not deny that chloroform may be sometimes of great use in mitigating the convulsions; but yet I believe that in the majority of cases it can have no effect in removing the *fons et origo mali*. In most cases of puerperal eclampsia the affection is associated with, and probably springs from, a state of toxæmia denoted by a highly albuminous condition of the urine. What possible effect can chloroform have in removing this condition? But it can easily be proved that bleeding will do this effectually; and we can readily understand how it may do so by relieving renal congestion. My brother, not long ago, had a severe case of puerperal convulsions, which he will bring under your notice this evening. In this instance, the woman had not gone her full time, and therefore delivery was not effected; the principal reliance was placed on a copious abstraction of blood. Before the bleeding, the convulsions had been very frequent and severe, and the urine highly albuminous, containing, in fact, more than eighty per cent. of albumen. After the bleeding, there were no more convulsions; and in a few hours the quantity of albumen was scarcely twenty per cent. I have no such well marked instance as this, because in most of my own cases the patient was delivered soon after being bled; and, unfortunately, except in the three last cases, the condition of the urine was not noted. I have, however, abundant evidence of the great relief which speedily followed the abstraction of blood, especially in Cases 2, 8, 9, 10, 11, 12. In No. 11 particularly, the convulsions set in with renewed severity after delivery, but abated very soon after free venesection.

The records of puerperal eclampsia treated by anæsthetics and not by bleeding, are not, as yet, sufficiently numerous or satisfactory to induce us to abandon old and well established rules of practice, which yield results as favourable as those given by Dr. Behm, and quoted in the *British and Foreign Medico-Chirurgical Review* for last July, where, out of twenty cases treated by bleeding and calomel, there were seventeen recoveries. Nor do I intend myself, unless upon much stronger evidence, to give up a line of treatment that, in my own hands, has been successful in ten out of eleven cases.

Progress of Medical Science.

Tetanus in a Child: Internal Hæmorrhage. A female child, aged 3 years, of a healthy family, and who had herself been previously in good health, was admitted into the Hôpital Ste. Eugénie, under M. Bouchut, on July 22nd, 1862. Four or five days previously, she was said to have received a blow from a projectile in the right infraorbital region; but no trace of injury remained when she was admitted. On July 21st, at noon, she was seized with pain in the mouth, head, and neck. On the following night, she sprang up from sleep, crying out and complaining of increased pain in the same regions. It was then perceived that the jaws were closed, that she could neither open the mouth nor drink, and that the head was slightly drawn backwards. The intellect was unaffected. Some ineffectual attempts at vomiting were made.

On her admission the next day, the skin was moderately warm; the pulse regular, 116. The respiration was slightly sighing; but neither percussion nor auscultation detected anything abnormal in the lungs. The countenance was somewhat anxious, and the right eye was occasionally turned inwards for a moment at a time. The jaws were firmly closed, and the child could not open them beyond a *centimètre*. Upon drink being offered, she took only a small draught, and swallowed with extreme difficulty, apparently from spasmodic contractions of the pharynx. The head was strongly drawn backwards; and this condition was occasionally rendered more intense by spasmodic action of the muscles of the neck. The cutaneous sensibility was unaffected.

The patient gradually got worse; and on the 23rd, there was distinct opisthotonos; the limbs, both upper and lower, were sometimes stiff, with the fingers and toes contracted; sometimes more supple. There was loss of sensation; the thoracic resonance was good, and the vesicular murmur normal; there were neither vomiting nor alvine evacuations. The temperature in the axilla rose to 106° Fahr.; and this, M. Bouchut observed in his clinical observations, together with the loss of consciousness, and the trismus and opisthotonos, might lead the case to be regarded as one of cerebro-spinal meningitis. On the other hand, the latter disease is generally epidemic; in it the aspect of the patient is usually typhoid, the mouth is covered with sordes, there is severe pain in the spinal region—all of which symptoms were absent in the present case; and the muscular contraction is continuous and not aggravated in paroxysms.

Death took place on the 23rd, eighteen hours after admission; and, at the *post mortem* examination made twenty-four hours later, the following appearances were observed. The meninges were healthy. The sinuses of the dura mater and the vessels of the pia mater were filled with black fluid blood. The brain was firm, highly congested, and presented numerous red points in the centrum ovale. The cerebellum, pons Varolii, medulla oblongata, and the spinal cord in the cervical region, were firm, and presented no appearance of change. From the seventh cervical to the fourth or fifth dorsal vertebra inclusive, there was, between the dura mater and the vertebral laminæ an effusion of blood in the form of a clot 6 *centimètres* in length, 1½ in breadth, and 1 in thickness; it was partly blackish, partly decolorised. It was limited to the posterior part, and did not seem sufficiently large to compress the cord. A small quantity of dark blood was found in the same situation, from

the fifth dorsal vertebra to the lumbar region. The spinal cord, at the level of the clot, was of normal size, firm, resistant, and not flattened. There was no effusion of serum or of blood in the spinal arachnoid. The pia mater was strongly congested. The intrarachidian veins were gorged with blood in the whole extent of the spinal canal. In the posterior mediastinum along the course of the azygos veins and their branches, there was a considerable number of sanguineous suffusions, of several *millimètres* in extent. The heart and vena cava contained some clotted blood. The lungs and abdominal organs presented nothing remarkable.

In his remarks on the case, M. Bouchut considered the question whether the hæmorrhage observed was to be regarded as the cause or as the effect of the tetanus. He believed it to be an effect and not a cause. Hæmorrhages in the vertebral canal, in the mediastinum, in the cerebral pia mater, in the cerebral ventricles, in the cellular tissue of all parts of the body, in the interstices of the muscles, etc., have been described in a large number of cases by MM. Matuszynski, Levy, and Thore. But they are not constant; and the fact that they are not confined to the vertebral canal indicates against their being regarded as a cause of the tetanic symptoms. Again, in the strychnine-tetanus which may be produced artificially in animals, it appears, from the observations which have been made, that, if death occur slowly, the tetanus produces hæmorrhage into the vertebral canal and into the cellular tissue of the limbs. Hence M. Bouchut concluded, that the hæmorrhage which takes place into the spinal canal and cellular tissue in tetanus is the effect and not the cause of the disease. (*Gazette des Hôpitaux*, 12 Fév. 1863.)

Resection of the Os Calcis. M. Carlo Busi has endeavoured, in excision of the os calcis, to avoid making an incision in the sole of the foot; the cicatrix in this situation being inconvenient both in walking and in standing. He makes an incision commencing at the external border of the foot, passing round the heel, and ending on the other side at a point opposite to that where it commenced. The incision must be on a level with the edge of the foot, above the plantar surface. The flap has the form of a horse-shoe. If it be necessary to remove the part of the bone where the tendon of Achilles is inserted (a step which should be always avoided as much as possible) the posterior part of the incision is carried to a greater or less height in the heel. The flap is turned down, and resection of a greater or less amount of the bone is effected. M. Busi, who has performed this operation in two cases, finds that it is preferable to the ordinary operation in bringing the whole of the diseased part into sight, and in allowing the saw to be used freely in any direction that may be necessary. The flap allows pus to escape freely during the process of healing. After cicatrisation, the weight of the patient's body does not bear on the scar. No vessels of any importance are wounded in the operation. (*Bull. delle Scienze Med di Bologna;* and *Bull. Génér. de Thér.*, 15 Février, 1863.)

Tannin in Diseases of the Respiratory Organs. M. Woillez has described the results which he has obtained from the use of tannin in affections attended with excessive bronchial secretion. He has given the medicine in pills, each containing from 15 to 20 *centigrammes* (about 2¼ to 3 grains); of which two were taken twice daily at meal-time. The treatment has always been borne well. When continued for a long time, it seemed in two or three cases to produce some nausea before meals; but this ceased on merely suspending the medicine during three or four days. In no case was obstinate constipation produced. M. Woillez first used tannin in bronchitis, and subsequently in certain pulmonary congestions, in the bronchial dilatation, attending the termination of some cases of pneumonia, and in phthisis.

In bronchitis, with subcrepitant râles occupying at least the bases of both lungs posteriorly, M. Woillez has given rhatany (which contains tannin), and also tannin itself, with the effect of diminishing the secretion. He relates the case of a patient, aged 70, who had pulmonary emphysema with bronchitis, and of one aged 67, who had an attack of subacute bronchitis, in both of whom four-*gramme* doses of rhatany were given each day with distinct benefit.

On the other hand, tannin has little or no efficacy in chronic bronchitis, when the excessive secretion has become a kind of organic habit.

The preliminary congestion which attends severe fevers, especially of the typhoid class, has been rapidly removed under the use of tannin given in the doses indicated above. In one case especially, where the engorgement of the bronchi was so great as to produce extreme dyspnœa and cyanosis, these symptoms were rapidly removed by the tannin.

In the intrabronchial hypersecretion which accompanies uncomplicated bronchial dilatation, tannin produced no effect beyond slightly diminishing the abundance of the expectoration. M. Woillez also tried gallic acid in these cases, but with scarcely more marked effect. (*Gazette des Hôpitaux*, Fév. 14.)

Spina Bifida in the Cervical Region. M. Blot related the following case at a meeting of the Société de Biologie. The subject was a newly-born infant, well-formed in general, rather above the average size, capable of sucking perfectly, and presenting no appearance of suffering. At the middle part of the posterior cervical region, there was a tumour, covered by the skin at its adherent circumference only, where the integument, a little thickened, formed a kind of band. The remaining part of the covering of the tumour was formed of a thin violet-coloured membrane, like a serous membrane. The walls were translucent, and allowed a clear yellow fluid to be seen within. The tumour was flaccid, soft, and corrugated, in whatever position the child was placed. When compressed lightly, it appeared to diminish in size, as if the fluid contents had passed into the spinal canal. No symptoms of compression were produced by the reflux; there was no paralysis either of the body or of the limbs. When the child cried, the swelling underwent no change in volume. When the infant was quiet, no movement of expansion connected with either respiration or circulation could be seen in the tumour. Its base had a circumference of four *centimètres*. On each side, but more distinctly on the right than on the left, could be felt projections which appeared to be the ununited laminæ of the lower six cervical vertebræ. The projection which they formed on the left side was slightly undulated. On depressing the centre of the tumour with the finger, there was perceived at the level of its base, a kind of hiatus, which seemed to result from the separation of the vertebral laminæ. The child had from birth been in good health. It slept well, and passed fæces and urine at intervals in the same way as ordinarily formed children. There was no deformity of the chest or of the limbs; the sutures and fontanelles were a little larger than usual. The only treatment employed was to protect the tumour by laying on it a piece of wadding and fixing it by a bandage carried round the neck. (*Gaz. Méd. de Paris*, 14 Février, 1863.)

Picronitrate of Potash as a Vermifuge. Some months ago Dr. Friedrich of Heidelberg described, in Virchow's *Archiv*, the beneficial effects of picronitrate of potash in cases of trichina. The remedy has also been employed in tænia. Dr. Walter of Offenbach relates the case of a woman aged 30, who had had *tænia solium* for several years. During fifteen months he had

employed all known remedies for tapeworm, including the bark of the root of the pomegranate, considered by some as infallible. On November 15, 1862, he gave the patient five pills, each containing five *centigrammes* of picronitrate of potash. On the 20th, an entire worm was expelled with the head. Four days after taking the medicine, the patient presented a jaundiced appearance. (*Archiv für Pathol. Anat. und Phys.*; and *Bulletin Général de Thérap.*, 28 Fév., 1863.)

Cysticercus Cellularis of Muscle. M. Ordonnez, in a note communicated to the Société de Biologie, describes this entozoon as being surrounded by three envelopes. The first is adventitious, and formed of bundles of fibrils; the other two form, properly speaking, but one covering, as they consist of a sort of pouch with a portion of its invaginated wall in contact with the body of the animal. This pouch is formed of a semitransparent very granular substance. The cysticercus possesses a tolerably large head, provided with four suckers and a terminal proboscis, surrounded with a double crown of from twenty-six to thirty-two hooklets of large size. The body of the animal is composed of a large number of joints, and appears to be confounded with the wall of the pouch with which it is in contact. The integument is constituted of a network of fibres, some longitudinal, others transverse. In the interior are scattered little spherical bodies, which M. Ordonnez believes to consist of calcareous salts. The muscular fibres surrounding the cyst can be easily torn, and contains a very large amount of fat. The striated appearance is indistinct; and the fibres have a granular aspect. (*Gaz. Méd. de Paris*, 14 Février, 1863.)

Treatment of Hæmorrhage from the Ear in Hooping-Cough. In this affection, to which Dr. Gibb some time ago called attention in this country, M. Triquet recommends the following treatment:—1. If there be pain, cupping should be applied to the mastoid process, or two or three leeches in front of the tragus (one leech only in very young children). 2. Calomel or scammony should be given in doses proportioned to the age of the patient. 3. The membrana tympani should be rendered immoveable by cotton introduced into the ear by means of a speculum and soft probe. 4. The patient should be kept free from any noise which may agitate the tympanic membrane and prevent the reunion of the lips of the wound. 5. Cicatrisation should be favoured by touching the edges of the rupture in the membrane with a mixture of one part of tannin in 100 of glycerine once or twice daily. Or a small piece of gold-beater's skin soaked in elastic collodion may be applied. M. Triquet states that cicatrisation is complete in seven or eight days under the use of the last-mentioned two remedies. (*Journ. de Méd. et de Chir. Prat.*, Février 1863.)

Obturator Hernia: Reduction. A peasant woman came under the care of M. Werner, with symptoms of strangulated hernia. Pain was produced by examination in the region of the obturator foramen; and here there was found, lying among some small engorged lymphatic glands, a very painful tumour of the size of a hazel-nut. The two fingers of the left hand, introduced into the vagina, could not pass above the horizontal branch of the pubic bone. To reduce the hernia, M. Werner applied pressure externally, and at the same time, by means of the other hand introduced into the vagina, employed traction inwards, backwards, and upwards. The hernia was reduced; and the fingers of the hand in the vagina were immediately enabled to pass beyond the horizontal branch of the pubic bone. (*Würtemburg Med. Corr. Blatt*; and *Gazette Méd. de Paris*, 14 Fevrier, 1863.)

British Medical Journal.

SATURDAY, APRIL 4TH, 1863.

INFECTIOUS DISEASES AND PUBLIC CONVEYANCES.

Mr. Brady has, we understand, asked advice of the College of Physicians in reference to his proposed Bill for the prevention of the spread of infectious diseases through the improper use of public conveyances. The Council has delegated the consideration of the matter to the Council; and we are satisfied that the College will make no recommendation in furtherance of such a Bill, unless it can suggest propositions which are capable of being put into practice. Our profession has already a very indifferent character as a business body; and Mr. Brady has certainly not improved its reputation in that way by the production of the impossible Bill which he lately brought under the notice of Parliament. This Bill was, as a matter of course, a failure; but the Government have promised the doctor another chance.

As the Bill will, therefore, again come before Parliament, and in, we hope, a tangible form, we venture to make a few suggestions respecting it.

It does not appear to us that Mr. Brady has fully considered the real character of the business which he has taken in hand—the exact nature of the evil which he would amend or remove. In our opinion, the following are the points on the due consideration of which preventive measures must be founded.

It is, we apprehend, an undeniable fact that at least 95 per cent. of the persons, subjects of infectious diseases, who use or require the use of public conveyances, street cabs, etc., belong to the class of society which seeks refuge in hospitals and workhouses in times of sickness. It is, therefore, almost wholly for this class that legislation has to provide under such circumstances. Persons in the middle and upper classes do not, except in the rarest instances, require the use of conveyances when sick of infectious disorders. Where they fall sick, there they lie until they recover or die. Moreover, we may assume as a fact that almost every one of the aforesaid 95 per cent. of sick is seen by a medical man previously to his removal to hospital or workhouse. Indeed, we apprehend that in most cases the removal takes place at the instigation and on the recommendation of the medical attendant.

Hence, then, unless these statements can be shown to be erroneous, we have before us the particular difficulty and danger which has to be provided for; and we have, therefore, to inquire next: How can it be so arranged that these 95 per cent. of persons,

subjects of infectious diseases, shall be prevented from making use of cabs and public conveyances for the purpose of effecting their removal from one place to another?

We believe it will be found that something, but comparatively little, can be done in the way of enforcing the non-use of cabs, etc., by penalties; but that much, very much, may be done by advice and persuasion given by the medical attendant. Indeed, if we are not much mistaken, the chief promoter of this good to society must be the medical profession; and in this way. Government will take steps to enforce upon each parish the keeping of a proper conveyance for the removal of the infectious sick; and any qualified medical man who may be called in to the infected person requiring removal shall have the power of at once giving an order on the parish authorities to the effect that their carriage is to be immediately placed at the disposal of his patient. We need hardly add, that no objection is likely to be taken to the use of the conveyance by the class of persons referred to. Indeed, its economical services—for, of course, no payment will be demanded for its use—will make it gladly accepted by them.

As regards enforcing the use of such parish conveyances in the removal of infected persons by penal clauses, something, as we have said, but, we believe, comparatively little, can be done; 95 per cent. of the good that is effected must be worked on the voluntary system, as above shown.

As regards the penal clauses, then, we would argue thus:—It is manifestly out of the question to fine a cabman who unknowingly takes up an infectious fare; and it is also manifestly absurd to enforce upon this individual the necessity of examining his fares diagnostically before taking them up, to satisfy himself by personal inspection that his customers are free from infectious disorders. According to Mr. Brady's Bill, it is certain that the cabman, if he do not make the diagnosis himself, would have to keep a doctor always on hand to examine his fares for him.

Some good, however, might, we believe, be done in the way of enforcing penalties under circumstances of the following nature. When once the medical man has informed the patient or his friends that the disease is infectious, the parties who employ cabs, etc., for the patient's removal should be subjected to penalty—fine or imprisonment. The cabman also who knowingly takes up an infectious fare should be liable to the same.

Hospital and workhouse officials, again, should have orders in all cases to take the number of, and, if possible, to hand over at once into the custody of the police, all cabs, etc., in which cases of infectious diseases have been conveyed to their hospitals, etc.; and to give notice to the cabmen that infectious fares have been carried in their cabs. Such cabs, etc., should be at once removed from circulation, and subjected to a fitting quarantine before permission is given for their reappearance in public; and, under such circumstances, if the cabman was ignorant of the infectious character of the disease of his sick fare, the loss attaching to the quarantining of the cab should be put to the charge of those who hired and employed it. Such persons would also be liable to the penalty attaching to the hiring of the cab.

A penal clause of this character would operate most beneficially. Every cab, for example, that conveyed a patient to the Small-pox Hospital would, *ipso facto*, be condemned to quarantine; and the persons using it to penalty. The result would be, that no cabman would convey a fare to the Small-pox Hospital, or knowingly run the risk of conveying an infectious fare to a public hospital, etc. Every cabman should also be subject to fine, etc., who, after having been duly warned that an infectious fare has been carried in his cab, plies for hire without permission given by the police—*i. e.*, until his cab has passed through quarantine.

As regards those rare instances of infectious sick requiring removal which occur in the upper and middle ranks of society, little can be done to prevent the use of cabs, etc., by them. Happily, such cases are, as we have shown, most rare, and probably do not form more than 1 or 2 per cent. of the whole number of infectious sick who undergo removal. Here we must, we fear, say *de minimis non curat lex*. We may be very sure, at all events, that the parochial conveyance will never be resorted to by them. If such persons have no conscience to restrain them in the matter, it is very certain that no penal enactments will ever stop them from employing cabs, etc., for their purposes; and equally certain that no cabman will be found to refuse such a fare, even if he were made aware of its nature, on receipt of a satisfactory consideration. The risk of detection in conveying a private patient from one house to another is very small, compared with that of taking him to a public institution. Of course, nevertheless, both the cabman and his fare would be liable to the penal enactment.

Finally, to render the Bill operative, it is necessary to name and define clearly the diseases which are comprised under the term of infectious; and here, as a matter of course, doctors will differ. Putting aside, however, for the occasion, all nosological hair-splittings, there will, we apprehend, be in practice little difficulty in the matter; for assuredly, in a case of this kind, disputing doctors will admit that it is better to err on the most comprehensive side. Fevers, therefore, which all doctors admit to be infectious, and fevers, again, of whose infectious nature some doctors doubt, should all be comprised for the purpose under the head of diseases the sub-

jects of which are not to travel in cabs, etc. These diseases are readily reckoned up; they are as follows: continued and eruptive fevers—viz., scarlatina, small-pox, typhus and typhoid fevers, and malignant cholera. On consideration, we do not think that measles, chicken-pox, and hooping-cough, should be included in the category.

Such are the suggestions which we would venture to make. Until better informed, we must hold that they contain within them all that can be practically and effectively done in this matter. It seems to us that the propositions made are very simple, may be readily carried into practice, and will be very effectual in carrying out the desired object.

HANGING CRIMINAL LUNATICS.

It is a remarkable fact, and one which has probably struck some of our readers as a very anomalous fact, that at the very moment when one set of judges are straining every nerve to put down the plea of insanity as a bar to execution in cases of murder, other judges are doing their very best to prevent the conviction of other individuals who are accused of murder, and in whom no pretence of a plea of insanity is set up.

Striking examples of this sort have been given during the present assizes. Chief Justice Cockburn, to whom, as we have always understood, the passing of judgment of execution on a human being is most hateful, and, when possible, ever avoided, most strongly charged the jury the other day, in cases of supposed poisoning, not to convict the prisoners unless they were most sure of their guilt. At the very time when Judge Wightman was refusing to listen to any plea of possible insanity in the boy-murderer at Chatham, Judge Cockburn was urging the jury to let no reasonable doubt rest in their minds if they brought in the prisoner guilty. Is not this most illogical?

If it be right and reasonable (as assuredly it is) to give the prisoner the benefit of any doubt which may arise as to his guilt, is it not equally right and reasonable to give to the criminal the benefit of any reasonable doubt as to his sane condition of mind? Here we have the law, on the one side, straining every nerve to set aside conviction in cases where any fair show of doubt exists as to the guilt of the prisoner; and here again we have the law straining every nerve to procure the conviction of a murderer respecting whose sane condition of mind the very gravest doubts exist. Yet, for the life of us, we cannot see why the doubt should be admitted in the one case more than in the other; that is, if common sense and reason are to be our guides in the matter. A man of insane mind who commits a murder is admittedly not responsible for the murder; therefore, to hang a man about whose sanity there is a reasonable doubt, is, as far as we can see, precisely the same thing as hanging a sane man about whose guilt there is a reasonable doubt.

We will venture to prophesy that the hanging of the lunatic Fooks, and, if it is to be so, of the boy-murderer at Chatham, will some day be followed by a powerful reaction in the minds of the people; and then we shall doubtless have something like justice done in such cases. However, such is the violence of the press and the determination of the bench, that it is useless to hope for any rational consideration of the subject at the present moment. That the cause which we advocate is, however, the cause of truth, of justice, and of humanity, we are thoroughly satisfied; and that it is a cause which will ultimately prevail, we have no earthly kind of doubt.

It is not possible to believe that the hypothetical dicta even of judges, when founded on erroneous conclusions, can eventually withstand the force of truth and science. Error, under the protection of judicial authority, may carry its views for the day; but science must in the end prevail against it. The judicial bench declares that homicidal mania and moral insanity are offsprings and delusions of medical minds. All medical psychologists in all countries, every great mind that has dealt with lunacy, *per contra*, declare, unhesitatingly, that homicidal mania and moral insanity are positive facts. The issue, therefore, is fairly joined between law and medicine. We can afford to calmly await the result; and in the meantime must still struggle to enlighten the ignorance and humanise the brutal feelings which make the world rejoice over this horrible execution of the insane. In the meantime, we may solace ourselves with the reflection that the death of these criminal lunatics cannot be laid to the charge of the medical profession. That profession has here, as ever, been foremost in pleading the mission of mercy and the cause of humanity.

THE PHARMACOPŒIA.

Dr. Burrows and Dr. Farr, the one a member of the Medical Council, and the latter a member of the *Pharmacopœia* Committee, both said a few words, at the last meeting of the College of Physicians, on the subject of the *Pharmacopœia*. Dr. Burrows did not give a hopeful account of its progress. He said that the determination come to in favour of the old-fashioned grain had caused a great deal of new work to be encountered; viz., the conversion of the Committee's new-fashioned grain back into the old style. He, however, believed that the work was in progress, and had been much advanced. It appears that every alteration has to go the circuit of the three kingdoms; to be subjected, in fact, successively, to the Irish, Scotch, and English criticisms of the three subcommittees sitting respectively in London, Edin-

burgh, and Dublin. This process, of course, gives rise to interminable alterations, suggestions, recommendations, joinders, rejoinders, replications, and so on. Dr. Burrows said also that a part of the manuscript was actually in print; but that as to when the work would appear he could give no opinion.

Dr. Farr, however, who, being on the committee, should know most of the matter, gave a more hopeful view of things. He seemed to think that there decidedly was a chance of the work seeing the light during the present generation. The chief, in fact the only, cause now of the delay was the circuit of the manuscript through the three kingdoms. He assured the College that the *Pharmacopœia* was steadily progressing; that a part of it was in print; and that the remainder was rapidly getting into the same state. It does not appear, by the way, that the delay has injured the College's pecuniary interests; for the treasurer remarked that during the past year the College had netted £26 by the sale of *Pharmacopœias* of the old kind.

THE ROYAL COLLEGE OF PHYSICIANS.

Dr. Watson was, on Monday last, for the second time, unanimously elected President of the Royal College of Physicians. In taking, or rather resuming the chair, Dr. Watson remarked that he could not but feel that for a second time he had been placed in a position the proudest which a member of the medical profession could occupy in this country. After thanking the College for the honour thus bestowed on him, the President took a cursory glance at the proceedings of the past year. The College had, he said, happily passed through a quiet year; it had not been driven into the misfortune of litigation; and the labours of the President, too, had been much diminished. The new bye-laws, whose construction had cost so much time and trouble in former years, had been completed and published during the past year, and, as far as could be seen, were acting well; though, as might be anticipated, some few alterations might be still required in them. Hence the cares and anxieties which naturally attach to the President's chair had been this year less than usual. No new Fellow had been made during the year; and but one Fellow had been lost to the College—viz., the late Dr. McWilliam—a man, said the President, of no indistinct mark. He was remarkable for his researches into the causes of diseases; his turn of mind took him in that direction. He distinguished himself in the Niger Expedition. He was also commissioned by Government to inquire into the cause of the fever which occurred at Boa Vista after the arrival there of the famous *Eclair*. Dr. McWilliam had always been, since his election as a Fellow, a punctual attendant at the College meetings. Of the Members of the College, two had died during the year; fifteen new Members had been admitted during that period; and sixty-eight licenses had been granted. The finances of the College were in a sound condition; and the College had, therefore, gone to charges for the building of a new room, which was much required. Eighteen lectures had been given; nine of them being of the endowed sort—the Gulstonian, the Lumleian, and the Croonian lectures; the other nine were extraordinary lectures given on different subjects by permission of the College. The College during the past year had relinquished one of its oldest privileges; viz., that of publishing a *Pharmacopœia*. This privilege it had held since the year 1618—*i. e.*, for nearly two centuries and a half. With its usual modern liberality it had, for the benefit of the profession at large, handed over the privilege to the Medical Council, who are engaged in the production of a national *Pharmacopœia*. The College had also had the pleasure of opening its doors to several important medical bodies during the year. It was most pleased to receive within its walls the British Medical Association, presided over by Dr. Burrows. The New Sydenham Society also held its meetings in the College; and the Medical Officers of Asylums for the Insane. The College also gave two *soirées*, which were well attended and highly successful. The College, moreover, had done its duty to the state, having been on several occasions called upon by the Government to assist and advise it in matters of medical interest. This was a fact of much interest and of much importance, because it shows that the Government now regards the College as the leading authority in matters medical.

THE WEEK.

The pressure from without has again begun to show itself in a most unmistakable fashion at the Horse Guards. Experienced army medical officers are becoming disgusted with the service, and more than that, are leaving it; and candidates for admission are daily becoming scarcer. The consequence of this is: that the following new warrant has been issued by the Government. We congratulate our army medical brethren on this partial restoration of their rights, which we trust will not again be easily withdrawn or rather withheld from them. We apprehend that there is little for which to thank the powers that be in the matter. They give because they feel they must give. It's the old tale of the evil one turning monk. What we have now to fear is the behaviour of that individual on his return to health.

"*New Army Medical Warrant.*—Circular No. 808 (Relative Rank). (Victoria R.)

"Whereas we have judged it expedient to cancel our Royal Warrant of 28th March, 1861, which assigns the relative rank of junior major to certain staff and regimental surgeons of our army, and to revise those parts of the

several other Royal Warrants now in force, prescribing the privileges attaching to relative rank of officers of the Civil Departments and non-combatant officers of the Military Departments of our army; our will and pleasure is, that such privileges shall, from the date of this our Royal Warrant, be regulated as follows:—

"Relative rank shall carry with it all precedence and advantages attaching to the military rank with which it corresponds, and shall regulate the rates of lodging money, number of servants, rations of fuel and light or allowances in their stead, detention and prize money according to the regulations and upon the conditions in force from time to time; but such relative rank shall not entitle the holder to military command of any kind whatsoever, nor to the presidency of courts'-martial, courts of inquiry, committees, or boards of survey, but when the president of such courts, committees, or boards shall be junior to the officer of the Civil Department, then such member of the Civil Department shall attend as a witness, and not as a member. Choice of quarters shall be regulated by relative rank according to date of commission, except in the case of commanding officers' quarters, and in cases in which special quarters shall be permanently appropriated with the approval of the Secretary of State for War.

"Relative rank shall not entitle the holder to salutes from ships or fortresses, nor to the turning out of guards, but it shall entitle him, if commissioned, to salutes by sentries or by individual soldiers.

"Honorary rank of paymasters shall carry with it all the privileges and advantages attaching to relative rank of corresponding degree.

"All commissioned officers serving with the troops shall be entitled to funeral honours according to relative military rank.

"Given at our Court of St. James's, this 7th day of March, 1863, in the twenty-sixth year of our reign.

"By Her Majesty's Command.

"(Signed) G. C. Lewis."

The College of Physicians have appointed a Committee consisting of Drs. Alderson, Budd, Hawkins, and Pitman to draw up two addresses to be presented to the Queen and the Prince of Wales, congratulatory of the Marriage of the Prince.

Germany counts twenty-one universities, which, in 1862, had attached to them 264 professors, 181 titular and 83 assistant-professors, and 3347 students. They are divided as follows:—

	Profs.	Studs.		Profs.	Studs.
Vienna	28	579	Jena	10	51
Prague	22		Griesswold	10	167
Berlin	21	323	Freidbourg	10	44
Leipsic	20	230	Giessen	9	152
Munich	18	244	Erlangen	8	83
Tubingen	14	105	Marburg	8	61
Wurzburg	14	289	Halle	7	45
Goettingen	13	166	Rostock	7	32
Bonn	12	119	Breslau	6	119
Heidelberg	11	96	Kiel	6	38
Kœnisberg	14	104			

In France, science is listened to in this matter of criminal lunacy; indeed, to its decision the fate of criminal lunatics is eventually committed. The law tries the prisoner, and finds him guilty or otherwise of the murder. The plea of insanity, if it be set up, is adduced after the trial. The Government thereupon commits the inquiry as to the state of the man's mind, into the hands of its experts, and by their report the decision of the Court is eventually guided. They manage these things better in France.

We have received a report from Drs. Peacock and Meadows, the referees appointed to investigate the charge of undue appropriation of literary labour brought by Dr. Mayne against Dr. Fowler. They find, after a careful investigation, that the title of Dr. Fowler's work was derived from the original *Medical Vocabulary* of Dr. Mayne; but that "the charge of plagiarism against Dr. Fowler, implied, if not directly expressed by Dr. Mayne, in the preface to the second edition of his *Medical Vocabulary*, has not in any degree been substantiated." The entire report is too long for insertion in this week's Journal, but shall appear in the next number.

Bad accounts are circulated of Garibaldi's health. M. Jules Guérin, in the *Gazette Médicale*, considers that, "as the health of the illustrious patient may be again seriously compromised, it is his duty to point out what it is which, in his opinion, prolongs the sufferings of the General and prevents the closing of the wound. The cause is the presence in the bottom of the wound of some foreign body introduced with the bullet."

M. Flourens continues his researches into the etiology of purulent infection. "I placed," he says, "a few drops of pus taken from the dura mater of a dog on the pleura of another dog perfectly healthy. In thirty-six hours the animal was dead; there was found a double purulent pleurisy. The pleura on both sides was filled with pus; but no other viscera contained pus. Pus was also placed in the abdominal muscles of a healthy dog. The dog was dead in four days; an extensive infiltration of pus had taken place between the different muscles of the abdomen." M. Flourens next tries the effect of the pus taken from one part and applied to another in the same animal. "Pus taken from the dura mater of a dog was applied to his pleura. On the fifth day, the animal was dead; the left pleural cavity being filled with pus. Hence, it appears, that pus conveyed from one animal to another, or from one part to another part of the same animal, produces a most acute purulent affection, which destroys life."

Dr. Mongeot has presented the Academy of Sciences with a series of new preparations, in which gelatinous silicic acid alone plays the part of the basis (excipient). He says that the substance may be usefully substituted for the fats contained in ointments, etc. The unalterable nature of this substance, and its moderate price (not more than that of linseed meal), enables us to use it in ordinary daily practice.

DR. TOOGOOD ON MEDICAL CHARITABLE INSTITUTIONS.

The following paragraphs are taken from a Historical Account of the Bridgwater Infirmary, by Dr. Jonathan Toogood, with a perusal of which we have been favoured.

The utility of public institutions for the sick is so universally admitted, that it appears unnecessary to enlarge on the subject; but it cannot be brought too frequently before the public, or insisted on too strongly. The calls upon the charity with which I have been so long and intimately connected (the Bridgewater Infirmary), have been sufficiently numerous to shew its steady popularity, and extensive influence as an instrument of good. It is not improbable that the great facility afforded to the admission of real objects of charity may have contributed largely to cut short causes of complaint in their onset, preventing the multiplied production of other cases in many varied ways, in which the sickness of one individual acts injuriously on the health and welfare of others, and by which neglected illness, and want of early remedy may weaken or break up the constitution, to the ruin of individuals, the distress of families, and the injury of society. The happy feature of affording immediate assistance which distinguishes this charity, adds for the above reason materially to its value. It is now well understood that, desirable as it is to prevent public charities from being preyed upon, by substantial persons whose mean spirit will allow them to consume that which was given for the poor, a too great scrupulousness in the admission of objects would defeat some of the best purposes of the institutions.

I lately met with the following observations on this subject, which has been much discussed within the last few years :

"Much, no doubt, might be justly urged against the system of gratuitous services, especially where, as is everywhere the case, they are dealt with by the public as a mere matter of course entailing no obligation, and requiring but little in the way of grateful acknowledgment, and where, particularly in some large institutions, the medical men who uphold them are considered and treated as servants to those who afford the less valuable, though very necessary, pecuniary aid. Yet on the other hand, something may be said in favour of the system, this being much or little according to the appreciation of such services by the public. If they be duly acknowledged, a certain amount of credit and confidence is established ; a certain position, socially speaking, is obtained ; a more extended reputation, and consequent employment, may result from it; and a degree of professional advancement may follow. These advantages, however, such as they are, may all vanish in a moment, should the opportunity thus widely offered for detraction, or misrepresentation of professional actions, fall upon a soil propitious to the fertilisation of personal animosity, jealousy, or fondness for listening to the false representations of those who may have met with rebuke on account of subterfuge or pretence of disease. The account may thus far perhaps be balanced ; but there are a few other considerations which nothing can dispel from the mind of the conscientious practitioner, the chief of which is, that in the exercise of his gratuitous services, he is affording great relief to suffering humanity, and that in his attendance on public charities, he is individually doing more than can be effected by the individual subscriptions and donations of the most liberal pecuniary donor. He feels, moreover, that without being able to compete with his rich neighbour in the amount of money contributions, he nevertheless stands in a position of being a much larger distributor of that charity which is reckoned as one amongst the greatest of christian virtues."

I am as decided an advocate for gratuitous advice judiciously given, as I am an opponent of its indiscriminate administration. The gratuitous services of the medical profession are widely and universally given, which is probably the reason why they are so little appreciated and acknowledged. The legal profession holds as high a position as the medical, but who ever heard of a barrister giving his advice gratis, or of an institution for gratuitous legal advice. Is not the retrospect of the life of the former more enviable than of the latter ?

There is a point of well-doing amongst the labouring part of society, where a slight counterpoise would turn the scale. An industrious man may, even with a large family, be in circumstances of considerable comfort, and may be rising in the world, yet a severe fit of illness shall not only cut off the income from his labour, but may consume all his savings and involve him in debt. To such a man timely assistance in sickness is invaluable ; nor does the advantage terminate with himself and family ; it is deeply felt by the community, thus probably preserved from future extensive incumbrance. In such cases, any immediate profit to be derived by the members of the medical profession from a private attendance would ill compensate the mischief (even to themselves) and injury to the public. Every new burden imposed upon the rate-paying portion of society is so much abstracted from their ability to expend money with professions and trades. It may not be going too far to express a belief, that every guinea paid in supporting a well conducted dispensary is repaid manifold to the subscribers by the diminution of parochial charges, and that the faculty are rewarded for their gratuitous attendance, by this relief of the higher and middle classes, by the habit created of more extensive application for medical assistance, and by banishing men who degrade the respectability of the profession.

My early practice brought me much into contact with the poorer classes, so that I had great opportunities of becoming well acquainted with their habits and conduct ; and I can with truth affirm that in many instances I have witnessed as much good feeling and kindness towards each other, and as fine traits of character, as are to be found in any situation in life. The illustrious Boerhaave, who was one of the greatest physicians as well as one of the best men that this or perhaps any age has produced, used to observe, "The poor are my best patients, for God is their paymaster" ; and the celebrated Dr. Rush, who from a humble station in society, rose to the highest eminence in his profession on the other side of the Atlantic, declared that "To the patronage and prayers of the poor he owed all his success in business, and perhaps his life, and that he wanted nothing but a heart more disposed to be thankful for all the favours and mercies he had received."

To this position I willingly subscribe, and most readily acknowledge that I am indebted to that class for bringing me into notice, and raising me to my present station in the profession.

Sir William Temple said of the learned professions, "The divines have the most honour, the lawyers the most money, and the physicians the most learning."

Medical men with talent and observation have advantages over most other professions, partly because they have to deal with every order of society, from the high-born patrician and prosperous millionaire down to the poor man in the hospital, seeing them as they really are under circumstances which, more than anything else, level all artificial distinctions.

As the welfare of all hospitals mainly depends on the medical officers who are attached to them, the choice of those is of the highest importance. Medical practitioners of all descriptions abound so plentifully, that the public have no difficulty in obtaining assistance ; and it is their

own fault if they do not employ those, who from their known acquirements are best calculated to relieve them. But the case is very different in public institutions for the sick, where the choice is made for the patient by other persons; consequently it behoves those persons to use much caution in their selection.

Subscribers to hospitals seldom attach that degree of importance to the election of medical officers which the trust requires. It often happens that applications are made to individuals, and promises of support obtained by a party who knows that a vacancy is likely to occur, long before its public announcement, and the consequence is that the choice sometimes falls on a candidate who owes his success more to his early information than to his merits or qualifications. Subscribers would discharge their duty more faithfully, and there would be a greater chance of ensuring the best assistance the district afforded, if the claims of the respective candidates were fairly submitted to the body of subscribers on the day of election, who would then be free to choose those who appeared most competent to fulfil the trust reposed in them. It is the duty of subscribers to oppose all candidates put forward for private or party purposes, or the nominees of any man, whatever his rank or station may be, who might wish to dispose of his practice with the understanding that his public appointment is to be included in the sale; nor should any one incur the heavy responsibility of proposing a candidate to fill so important an office, with whose private and professional character he is not thoroughly acquainted, or to whom he would not entrust the care of his own family, and regarding whom he is not satisfied that the charity will be benefited by the election.

Medical men who undertake the gratuitous care of small institutions in the country, are probably actuated by very different motives from those who seek appointments to larger hospitals in populous places; the former cannot expect to extend to any considerable degree their limited practice or reputation by filling such situations, and are, it is to be hoped, influenced by motives of humanity chiefly, whilst all the world knows how much hospital surgeons are preferred in large towns. It may, perhaps, be said, that the election of a medical man to a public charity confers a distinction and raises him above his neighbours. If this be not true, it ought to be; for the choice should always fall on those who, regardless of time and expense, devote themselves to the study of their profession, and avail themselves of all sources of improvement.

The establishment of an hospital confers great benefits in a locality on all classes. It holds out an inducement to well educated men to settle in the neighbourhood; for, where hospitals exist, skilful medical men are always found. It is a great advantage also to students, who will find themselves much further advanced at the expiration of their pupilage, than those who have not enjoyed such opportunities.

In choosing a new candidate, it is not perhaps too much to expect that some attention should be paid, *cæteris paribus*, to the wishes of those by whose exertions the reputation of the charity has been raised, by the appointment of a successor with whom they may act cordially on all occasions; and especial care should be taken not to introduce one whose practice is at variance with established principles, who may compromise the best interests of the charity, and by implication injure the reputation of his colleagues.

It is a fact admitted by all who have considered the subject, that hospitals with the smallest number of medical officers, prosper best; and this is strongly exemplified in the Wiveliscombe Infirmary, which under the exclusive direction of the late Mr. Sully and his uncle, Mr. Bishop Cranmer, for more than a quarter of a century, has been better conducted, and dispensed more good, than any other charity with which I am acquainted on a similar scale.

It is of the utmost consequence that the most perfect harmony and good understanding should subsist between all the medical officers of an hospital; for, if unhappy jealousies and animosities exist, the patients may suffer severely. Many advantages arise from consultations with men of candour, who are mutually confident of each other's honour; a remedy may occur to one which did not to another; one may want resolution or sufficient confidence in his own opinion, to prescribe a powerful but dangerous remedy, on which, however, the life of his patient may depend. In such a case the concurrent opinion of his colleagues may determine his conduct. But, if there is no mutual confidence, if opinions are regarded, not according to their intrinsic merit, but according to the persons from whom they proceed; or if there is reason to believe that proposals delivered with openness are to be whispered abroad, and misrepresented to the public without regard to the obligations of honour or secrecy; and if, in consequence of this, one is singly to be made responsible for the effects of his advice, disadvantages to the sick, and dissensions amongst the medical officers, are sure to follow. My plan during an active professional life has invariably been, in my private practice, to recommend consultations in all difficult cases with those who, either from having devoted their time and talents to that particular class of disease, or having had from peculiar circumstances greater opportunities of observation, are most likely to benefit the patient, without reference to his situation or title.

MEDICAL MATTERS IN BERLIN.

Dr. St. John Roosa writes thus, from Berlin, to the *American Medical Times*:—

"The New York medical public is tolerably familiar with the book on Diseases of the Ear, by Dr. Kramer. The doctor has no public clinic, but I have been permitted to see many of his cases, as presented in his rooms, during the last two months and a half, and they have been of great interest. The doctor makes three divisions in his cases—diseases of the external, middle, and internal ear, respectively. He takes issue with Toynbee and Wilde, and classifies the greater number of cases as belonging to the second variety. Indeed his Eustachian catheters, ranging in numbers from one to five, beginning with a tube the diameter of a very slender pin, are his great vehicles of cure. He has discarded his former plan of injecting air into the cavity of the tympanum by means of the pump, and does it altogether by the mouth. With regard to diseases of the internal ear, he claims that scarcely anything is known. He has the peculiar idea that diseases of the ear are entirely *local*, and uses no *constitutional* remedies, blaming Wilde and others very severely for the use of mercury, blisters, etc. Dr. Kramer uses oil upon the membranum tympani, very weak solutions of zinc, in no case of lead, and injects air and mild astringent solutions into the middle ear. The time I have been here does not, of course, allow any fair judgment as to the results of his treatment.

"The Eye Clinic of Professor Graefe is a place naturally of great interest to the student, the facilities for instruction being great. The building is not as fine as our Eye Infirmary, nor is the number of patients as large, yet from the nature of things, of which I may speak later, the student fares better than with us. I may say, however, that the general practice, in ordinary cases, does not commend itself to me, as that at the Eye Clinic in New York.

"The Charity Hospital, having about two thousand beds, is a noble institution. The treatment of fractures

eems to me better attended to in the New York Hospi-al, Bellevue, and St. Luke's. Plaster of Paris is very xtensively used. The measurements after union of ractures of thigh, are very loose in method. The patho-ogical rooms of Virchow are connected with this hospi-al, and are extensive to a degree a New York student an hardly conceive. The thoroughness and compre-ensiveness of *post-mortems* are wonderful. The interest orrespondingly great. Virchow, besides his reputation s a pathologist, has one as a statesman, being a vigor-ous opponent of the government in the Prussian parlia-nent.

"Professor Langenbeck, the great surgeon of Berlin, olds a daily clinic. The building has room for about ne hundred patients, and many come from the country o be operated on by him. His lectures on surgery are lso delivered here. His collection of instruments, with vhich he illustrates his lectures, is very large, embrac-ng the new and old from every land. The number of nedical students here, during the winter session, is es-imated at from 500 to 600."

INFLUENZA EPIDEMICS IN ICELAND.

The following is an extract from an interesting paper y Dr. John Hjaltelin, an Icelandic practitioner, pub-ished in the *Edinburgh Medical Journal* for February.

The first account I have been able to find out in our nnals regarding epidemic influenzas goes back to the ear 1627, when the malady is stated to have been pre-ailing in the northern part of this country, where it is aid to have occasioned a great mortality. About the ame time, the influenza raged in Italy also; but forty ears later, or in 1669, the influenza most likely again nade its appearance in our country; for it is stated that, luring the winter, there was a very common sickness, vith some roseola, which very often is still associated vith the Icelandic *grippe*; and it is well known from the vritings of Fanossius Guido, in his Monography, "*de Morbo Epidemico Hactenus Inaudito*, that influenza in his same year raged over a great deal of Germany and nany other northern countries. Again, in the years 1705 and 1719, influenza is mentioned in our annals; but being only said to have visited the northern part of his island, I am inclined to think that this has perhaps been a malignant catarrh. In 1730, an epidemical dis-ease is said to have begun in the south part of Iceland, going from thence to the country districts and the more northern regions, which is the most common course for our influenzas; and this disease has therefore undoubt-edly been an influenza, which supposition is strength-ened by the well-established fact, that this same disease one year before, or in 1729, was spread over the whole of Europe. It happens very often, as we afterwards shall see, that the most malignant influenzas arrive one year later in our country than they do in the continent, and are therefore prevailing here when they have already finished their ravages in the other countries of Europe. Few years afterwards, or 1735 and 1736, when the re-nowned European influenzas of 1732, 1733, and 1737 had made their ravages on the continent of Europe, and in America, Iceland was also visited by two epidemics, which, no doubt, have been of the same nature.

During the year 1775, an epidemic influenza visited most of the countries of Europe, and in 1776 it reached this island; but being then, as it very often is, associated with roseola, or rubeola spuria, it was looked upon as a sort of morbilli. I doubt very much whether the great and renowned European influenza of 1782 also reached this island or not; some believe it did so in the same year as it ravaged Europe; and it is said to have been complicated with epidemical diarrhœa and dysentery, especially in children. Again, in 1802-1805, when an epidemical influenza was very common in Russia and France, Iceland was also in 1809 visited by the same disease.

In this century the influenza has about seven times visited our country, namely, as aforesaid, in the years 1804, 1816, 1825, 1839, 1843, 1855, and this year 1862. Only two of these epidemics, viz., that of 1816 and that of 1855, seem to have been confined to this country, while those of 1834 and 1843 were spread over the whole of Europe and America; and it is, moreover, very remarkable, that while their visit to the continent is commonly of one or two years earlier date than to our country, their appearance here is always of the same date as in North America. It is, moreover, an undeniable fact, that all our epidemical influenzas, which coincide with those of the continent, are more malignant and dangerous than those which only are confined to our island. Many epidemical influenzas are mentioned in the medical annals of Europe which never reached Iceland. The influenza of 1837, which I myself observed in Copenhagen, did not touch Iceland, although it ravaged a good deal of Europe.

The epidemical influenzas of 1843, which made great ravages in this country, seem also to have been very bad in North America, but did not, as far as I know, invade the continent of Europe. The epidemic of 1855 was very like that of 1816, for although very common, they were both mild, and only occasioned a small mortality. The epidemics of 1825, 1835, 1843, and 1862 have all, on the contrary, been very malignant and dangerous.

[Dr. Hjaltelin now describes the circumstances that anteceded the last outbreak, which began in May 1862.]

After a mild winter, we got a very cold spring; the average temperature of April being only 2° of Celsius (28°·4 F.) Heavy northerly gales swept over the country, and the thermometer fell often during the night down to —8° of Celsius (17°·6 F.) The barometer indicated a constantly heavy atmospheric pressure, and the ozonometer showed a great deal of ozone in the air. About the end of April the season at once grew milder, and about the 6th of May the thermometer rose up to +10° of Celsius (50° F.) At this time, I was travelling on horseback from Reykjavik to Cape Reykjanes, in order to look at some patients affected with the typhus. On the 10th of May, I was returning to Reykjavik on a clear, hot, and beautiful morning; but when I had nearly half-finished my way, a dry offensive fog, thick and ill-smelling, surrounded me; this fog was very cold, and so thick, that the beams of the sun could scarcely penetrate it. My guides, who instantly felt the bad effect of this fog on their respiratory organs, proposed to stop at a farm near us, but, although I had the same bad feeling, I was not inclined to do so, and ordered them to continue our voyage until we reached the town. On the 11th of May, which was Sunday, the inhabitants of Reykjavik made in the church, by their hard, dry, and frequent cough, a very bad noise during the holy service; and on Monday, which was a hot and agreeable warm day, many of the inhabitants were confined to their beds. That same day, prodigious swarms of flies, viz., the "Blausater," filled up the small streets of our little town, and continued like dark clouds to surround the houses during two days, after which time they covered the streets with their dead bodies, like a heavy fall of a black augitic or volcanic sand. This phenomenon is, I think, very remarkable, for it is many times before observed during the outbreak of influenza. Thus Jussien states that the grippe of the spring 1733 was anteceded in France by offensive fogs, "more dense than the darkness of Egypt;" and Petit says, that the influenza of 1775 was ushered in by thick and noisome fogs. In the same year, a continual dark fog, particularly smoky, anteceded the outbreak of this disease in Scotland. More authors, but especially Dr. Darwin, have recorded the dark and dry fog which ob-

secured the sun before the ravages of the influenza of 1782, and he supposes "that the material which thus rendered the air unwholesome and muddy, probably caused the epidemic catarrh which prevailed in that year." Some sensible people in this country have, moreover, told me, that the influenza of 1843 was in like manner ushered in by continuous dark and noisome fogs. Be this as it may, there is, in my opinion, no doubt that this our last epidemical influenza was in some way or other occasioned by the aforesaid dense and offensive fog; and it was, moreover, very remarkable, that the smell of this fog, being quite unlike common fogs, was that of a highly concentrated ozonic gas, which immediately irritated the mucous membrane of the lungs, and most likely also the other mucous membranes of the body.

Association Intelligence.

SOUTH-EASTERN BRANCH.

WEST KENT DISTRICT MEETINGS.

THE third meeting for the session was held at Gravesend on March 27th, 1863; T. HECKSTALL SMITH, Esq., President of the Branch, in the chair. There were also present twenty-seven members and visitors.

New Members. Two new members were proposed and elected agreeably to the rules of the Association; viz., Joseph Stewart Burton, Esq., Woodlands Lodge, Blackheath; and John Christopher Armstrong, Esq., of Gravesend.

Death of Mr. G. W. Martin. The meeting desired to express their sympathy with Dr. Adam Martin of Rochester, in the bereavement which he has lately sustained in the death of his son.

The Secretaryship. Dr. DULVEY tendered his resignation as honorary secretary to the West Kent district meetings, on the plea of ill-health and family affliction.

Mr. J. M. BURTON proposed, and Mr. HUNT seconded, the resolution to accept Dr. Dulvey's resignation; and they, at the same time, testified to the great ability, zeal, and success of Dr. Dulvey's administration of the duties of secretary.

Mr. FRY followed in the same strain, and stated that the institution of the district meetings was solely due to Dr. Dulvey.

Dr. DULVEY returned thanks, and said that he rejoiced to see the district meetings in so flourishing a condition on his ceasing to hold office.

It was then proposed by Dr. ARMSTRONG, and seconded by Mr. FRY,

"That Dr. Frederick James Brown of Rochester should be the secretary."

This resolution was put and carried unanimously.

Communications. The following communications were made:—

1. Ascites and Anasarca in the Fœtus; a successive case to that reported in the autumn of 1861. By J. M. Burton, Esq.

2. A conversation was induced by Mr. Hunt (of London) on the Epidemic Prevalence of Scabies at the present time. One gentleman recommended for the cure of the disease sleeping in powdered sulphur strewed over the sheets. The eruption now prevalent is said to somewhat resemble rupia.

3. Mr. Durham of Guy's Hospital demonstrated the use of the Laryngoscope. He was assisted by Mr. Hilder, who kindly made himself the subject of the experiments.

The usual thanks were voted, when the members and visitors adjourned to dinner.

ERRATA.

AT page 333, column 1, of last week's JOURNAL, in the list of new members admitted into the Metropolitan Counties Branch, for "Clark, Alfred, M.D.", read "Clark, Andrew, M.D."; and for "Norton, Richard, M.D.", read "Norton, Robert, M.D."

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 24TH, 1863.

RICHARD PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON DIPHTHERIAL NERVE AFFECTIONS. BY EDW. HEADLAM GREENHOW, M.D., F.R.C.P.

THE author began by stating that the epidemic sore-throat which, under the name of diphtheria, had latterly engaged so much attention, was well known to be followed by nervous phenomena of a peculiar kind. These consisted chiefly of impaired, excessive, or perverted sensibility, together with more or less complete paralysis of the muscles of the fauces, pharynx, tongue and lips, extremities, trunk, and neck; the frequency of the occurrence of these symptoms in the several sets of muscles being nearly in accordance with the order in which he had placed them, the first named being the most frequently and the last the least frequently affected. The author had had the opportunity of watching the course of several cases of these diphtherial nerve affections in patients under treatment at the Middlesex Hospital, and the present paper was in a great degree based on those observations. He did not mean to infer that every attack of diphtheria was followed by some of these secondary nerve affections, for he had seen patients recover perfectly without experiencing any of them; nor to assert that their intensity was always proportioned to the severity of the primary disease, for he had sometimes seen them follow comparatively mild attacks of diphtheria. Nevertheless, as a general rule, he had certainly observed these nerve affections to be more frequent after the worst cases of diphtheria, and to bear some proportion even to the local severity of the attack; he had noticed, for instance, that the paralysis and anæsthesia were sometimes more complete on that side of the fauces which had been most severely affected by the primary disease.

The author had found that a brief period of convalescence—generally not exceeding a few days, but in rare cases extending to weeks—almost always intervened between the disappearance of the sore-throat and the accession of the nerve symptoms; and cases had fallen under his notice in private practice in which patients who had recovered sufficiently from diphtheria to be sent from home for change of air, had subsequently fallen into a helpless condition from diphtherial paralysis. The fact of this interval seemed to him important, inasmuch as it went far to show that the paralysis could not be entirely attributable either to the albuminuria which so often accompanies the acute stage of diphtheria, or to the anæmia which closely follows it, as patients had often got rid of the former symptom, and had even begun in some cases to regain flesh and strength, before the accession of the paralytic symptoms.

The author had observed that these nerve affections do not at once attain their maximum of intensity, but are progressive even in the same sets of muscles; and also that if several of the sets of muscles which he had enumerated should be attacked in the same individual, they do not become affected all at once, but in succes-

on—the faucial or pharyngeal muscles being the first suffer, and so on in the order in which he had placed em at the beginning of the paper—though it by no eans followed that all of them should be affected in y one case. He had found the muscles of the fauces far the most frequent, as well as the earliest, seat of erve affections after diphtheria, and had seen them atcked in many cases in which the rest of the muscular stem either entirely escaped or was very slightly afcted. When the fauces were paralysed, the soft palate st its natural action, the speech often became imperct, and liquids regurgitated through the nostrils. hese symptoms should be discriminated from the arseness of voice and return of fluid through the ostrils which often occur during the acute stage of phtheria, and arise, as in ordinary quinsy, from the vollen and painful state of the fauces impeding the tural action of the parts. Anæsthesia had coexisted ith the paralytic affection of the fauces in all the cases at had come under the author's notice, so that these aturally very sensitive organs became altogether callous nd insensible to touch.

Next to the affection of the fauces, impairment of sion, probably due to paralysis of the ciliary muscle, ppeared to be the most frequent of the nervous disorders nsequent on diphtheria. The author had observed at the pupil of the eye became dilated and acted slugishly under the influence of light a day or two before e sight became sensibly impaired, and often remained for a time after the sight had been regained; also at patients unable to read with unassisted sight could so with the help of convex spectacles; and hence he atibuted the impairment of sight to a temporary loss of ljusting power.

The nerve symptoms which he had noticed in the ngue and lips were, formication, a sense of scalding, umbness, and impaired taste and power of movement. hey began, for the most part, in the lips and the tip of e tongue, and gradually extended upwards towards e dorsum and root of the latter organ.

The limbs had suffered more or less, in all the five ases which formed the basis of the paper, from paralys and anæsthesia, besides tenderness and abnormal ensations, such as coldness, formication, and a feeling constriction in the fleshy parts, as if they were tightly andaged. These affections began either first in the pper, or at the same time in both the upper and lower xtremities, and were at their commencement peripheal, extending gradually upwards from the tips of the ngers and toes towards the trunk, and in some cases ffecting the lower part of the back and of the abdomen. e had found that pressure over the sciatic and median erves was sometimes attended by acute pain, and that ressure of the instep between the finger and thumb ometimes caused convulsive starting of the leg and foot, s well as pain. He had observed that the paralysis in me cases assumed a more or less hemiplegic character, t had seen no instance in which, one side being aralysed, the other remained entirely unaffected.

The author had seen nerve affections after diphtheria f a graver character than any of those exemplified in e present group of cases, and several even fatal cases ad fallen under his notice in private practice. In three f these latter, death was caused by failure of the action f the heart, and in one by exhaustion from vomiting. e believed, however, that such cases were fortunately xceptional, and that the great majority of sufferers from iphtherial nerve affections, under good management, ooner or later recovered their usual health and rength.

The author had satisfied himself that these cases were est managed on sound general principles. Generous iet, and a liberal allowance of stimulants, together with st in bed, he believed to be always necessary. Tonics, pecially steel and quinine or the mineral acids, he had found useful from the first appearance of the nerve affections; and after the complete development of the paralytic symptoms, nux vomica and strychnia had proved in his hands most valuable remedies.

Subjoined were the five cases on which most of the remarks in the paper were founded.

LIVERPOOL MEDICAL INSTITUTION.

March 5th, 1863.

A. B. Steele, Esq., Vice-President, in the Chair.

Small Polypi removed from the Uterus with the Ecraseur. By T. F. Grimsdale, L.R.C.P.Ed. These were six in number, and were taken from the cavity of the fundus uteri, where three others that were not yet removable were left behind. The instrument used was a modification of that used by Dr. J. Braxton Hicks; and Dr. Grimsdale thought it the best instrument for removing small polypi. The uterus was first dilated by a very long sponge-tent, and then the instrument was easily introduced, and the pedicles divided without hæmorrhage. Before the operation, the patient suffered from profuse menorrhagia; but she has since menstruated twice, and not excessively.

Lesion of the Base of the Brain. Mr. Hakes showed a specimen taken from a patient who had died at the Northern Hospital after a blow in the face from a capstan-bar. The right restiform body and the right posterior column of the cord a little lower down were the parts involved. (This case will be published *in extenso.*)

A discussion took place with regard to the nature and probable causes of the morbid appearances, and as to the bearings of the case on the functions of the restiform bodies; and in this, Dr. Waters (who had seen the patient before death), Mr. Fletcher, Mr. Higginson, and other members, took part.

Syncope after Delivery. By W. T. Callon, M.D. The syncope that occurs after delivery, Dr. Callon thought, might be classed under two heads; viz., vascular and nervous syncope; and he pointed out that while in both these states we may have pallor and loss of consciousness more or less transitory, yet that there are certain special symptoms belonging to each state; and these he classified according to the organs affected. Dr. Callon drew a lively picture of the condition of the patient in a case of flooding causing vascular syncope; and contrasted the real dangers of this state with the phenomena of what he called nervous syncope, which are apt to appear very alarming to the inexperienced.

Mr. Hakes said he thought so clear a line could hardly be drawn between these two sets of cases, as far as particular symptoms were concerned.

Mr. Fletcher thought the difference in prognosis was not so great as was indicated in the paper. He had never had a fatal case of hæmorrhagic syncope; but had seen at the Workhouse a fatal case of nervous syncope following the use of the forceps.

The Chairman said he feared we could not divide these cases of syncope into a safe and a dangerous class; women may certainly die from the shock alone.

Mr. Lowndes thought that, looking at the cases we generally meet with, we may accept Dr. Callon's views as to the relative danger of these two kinds of syncope.

Dr. Vose said that Travers, in his work on *Constitutional Irritation*, has taken many examples from obstetrical cases. These cases of nervous syncope must not be treated too lightly. In surgery, shock is frequently fatal; and here we have what he believes is considered a severe traumatic lesion, liable to produce shock.

Dr. Skinner remarked that embolism was sometimes a cause of very sudden death following confinement.

Dr. Grimsdale understood Dr. Callon to have referred to the two more ordinary forms of syncope, leaving out

of sight the more extraordinary cases that sometimes occur. The great danger of these latter is obvious. In all cases of syncope after delivery, of course, the first thing would be to ascertain whether there has been any flooding.

Dr. CALLON, in reply, said that he had meant to confine himself to these two distinct forms of syncope as they usually present themselves, and to place their different phenomena clearly in view.

ODONTOLOGICAL SOCIETY.

MARCH 2ND, 1863.

DENTAL EXOSTOSIS: ITS PATHOLOGY AND DIAGNOSIS. BY J. WALKER, M.D.

THE author commenced by defining what was to be understood by the term exostosis, and described the various forms of the disease, which were illustrated by diagrams and specimens.

He then considered the causes of exostosis, regarding inflammation of the peridental membrane as the first step in the morbid process leading to an exudation of organisable lymph, which is converted first into fibrous, and then into osseous tissue. The causes of inflammation of the peridental membrane were, caries, concussion, looseness of the tooth and its apparent elongation from rising in the socket, rheumatism, syphilis, gout, and mercuralism. Hence, exostosis may affect the fangs of sound as well as of carious teeth, though in a less degree. Speaking of rheumatism, the author expressed his opinion that this was a much more common cause of periostitis around the fangs and in the socket of the teeth than is generally supposed; and one chief reason for this opinion was the very great relief from pain which he had repeatedly seen follow the use of iodide of potassium when all other remedies had failed.

The last division of the subject was the diagnosis of exostosis from other diseases about the face and mouth, particularly neuralgia and incipient disease of the temporal bone from otitis, he placed its chief distinction in the character. In exostosis the pain comes on gradually, is continuous, and often severe. In neuralgia it is intermittent, often severe from the commencement, but the patient has intervals of ease. In otitis the pain is always increased by pressure about the ear, and at length is relieved by the occurrence of a discharge of puriform matter. Hearing will also be impaired or confused. The author more completely illustrated this division of the subject by cases occurring in his own and in the practice of others; he shewed also an interesting specimen of a monkey's head, with the cancellous structure of the bones of the face highly hypertrophied without extending to the bones of the skull, from irritation and inflammation, arising from a diseased canine tooth, the fang of the tooth being exostosed.

EFFECT OF COLOUR ON DISEASE. The power of colours on disease, once supposed to exist, may be considered as a branch of sympathetic medicine. White substances were considered refrigerant, and red ones heating. Red flowers were given for diseases of the blood, and yellow ones for the bile. In small-pox, red coverings, bed-curtains, etc., were used to bring out the eruption. The patient was only to look at the red substances, and his drink was coloured red. The physician of Edward II treated the king's son successfully by this rule; and as lately as 1765, the Emperor Francis I, when sick of the small pox, was, by the order of his physicians, rolled up in a scarlet cloth; but he died notwithstanding. Flannel, nine times dyed blue, was used for glandular swellings. To this day the tradition remains that certain colours are good for certain disorders. Thousands of people believe that red flannel is better than white for rheumatism. A red string worn round the neck is a common preventive of nose-bleed. (*Once a Week.*)

Correspondence.

LAW *v.* MEDICAL SCIENCE.

LETTER FROM F. T. PONCIA, ESQ.

SIR,—To you are due the thanks of every friend to humanity and truth, for the able and lucid remarks you made on the above subject in last Saturday's JOURNAL. The obscure ideas and confused language evinced by certain contemporaries rendered it necessary that, by some one at least, the truth should be clearly expressed. A subject of such magnitude as that which deals with life should not be settled by mere legal dogmatism, without recourse to the founts whence common sense dictates truth must flow.

The legal mind, whilst careful for the public safety, should be certain that its judgment is not misled by false reasoning, and by a principle as absurd and untrue as it is destructive and unjust. That principle on which is founded so much false reasoning, is the rule laid down by the judges; viz., "that a man was responsible for his actions if he knew the difference between right and wrong." It is this principle which has blinded the legal mind, and caused it to deny the existence of moral insanity. But this principle confounds *knowing* with *willing*. Of what use is my knowing, if I cannot help doing a thing? Will knowledge restrain me?

Now, that such a state exists in which there is uncontrollable impulse, we have the observation of medical men to prove, and of a host of psychologists who have devoted their whole time to the investigation of mental diseases. Surely these men ought to know, and their opinions to have weight, instead of the merely speculative notions of those who never knew anything practically of the subject. I presume that it is not from lawyers that a jury ought to form their verdict in such cases, but rather from the ascertained facts as laid down by the man of science—however strange those facts might seem—however inexplicable—or however alarmed and nervous a judge might grow whilst echoing that hackneyed, croaking, and ill-omened phraseology about "the interests of society and the security of life", which has been uttered with all the formality of learned stupidity over many an innocent victim. Now, since it is an ascertained fact that a man may be irresistibly impelled to do a certain act which he knows to be wrong, it follows that he is not responsible for it; and, therefore, the musty rule of the judges is inapplicable in such cases. That rule deals with knowing—the power of discriminating between right and wrong; it is applicable to cases of sound mind; but is as inapplicable to mental disorder as it would be to the case of a choreic patient who made faces at you. It is wrong to contort the visage and make odd grimaces, and he who is afflicted with St. Vitus's dance knows this as well as any man; but will his knowledge restrain his grotesque movements? And, in like manner, when disease seizes on the mind, propelling it in a certain direction—in that case, the knowledge of right and wrong is likewise impotent to check the headlong will, run mad.

The subject, sir, is one of vital importance. It would be well to see it further discussed, and brought forward more prominently before the legislature. It is humiliating to see, session after session, authorities in mental disease set down and snubbed by men in office who are no authorities whatever on the subject; but this is the least evil, for innocent lives are sacrificed because a great medical fact is ignored.

I am, etc.,

F. T. PONCIA.

161, Hockley Hill, Birmingham, March 26th, 1863.

RUSSELL *v.* ADAMS.

LETTER FROM WILLIAM ADAMS, ESQ.

SIR,—In reference to remarks made in your JOURNAL the 28th March, I am desirous of stating that, from e conclusion of the trial up to the present time, it has en my wish to proceed with the action for perjury ainst Mrs. Russell, but various circumstances have used delay.

It must be borne in mind that nothing can be more certain than the verdict of a "British jury", of which e above case has afforded a remarkable example; and at nothing can be more certain than a lawyer's bill. e expense to which I have already been put by these rthless people may be stated to be between seven and ht hundred pounds, and the expense of the prosecun for perjury cannot be less than three hundred, and ay extend to five hundred pounds; so that the total st of defending an unfounded action and an atrocious empt at extortion is more than any professional inne can well be called upon to bear.

Nevertheless, in the year 1863, it is a fact that such action has been brought, however disgraceful to the ficial system of the country; and it must not be forten that any professional man is at any time liable to placed in a position similar to that which I have unfortunately occupied. I am, etc.,

WILLIAM ADAMS.

5, Henrietta Street, Cavendish Square, March 31st, 1863.

TREATMENT OF TAPEWORM.

LETTER FROM JOHN W. OGLE, M.D.

SIR,—With reference to Dr. Leared's remarks on my ses illustrating the treatment of tænia, which appeared your pages on the 14th inst., I would observe that I ere adduced probable reasons why the "head" of the rms was not brought to me by patients. I would ly adduce, in addition, the observation said to have en made by Bremser, that out of one hundred persons ected by, and treated by himself for, tænia, in only e of them was the expulsion of the head of the worm ected, *and yet ninety-nine out of the hundred were ed.*

As respects the reappearance of segments of the worm er the use of the remedy, I believe that, if such had en noticed, I should, in many cases at least, have ard of it, inasmuch as I always charge patients to ook out" for such a contingency, and to present themves again at the hospital if necessary; and as so many our out-door patients live in the vicinity—Pimlico, ompton, Chelsea, Kensington, etc.—and habitually sort to the hospital for relief, this injunction can be, of rse, readily complied with.

A few words with regard to another point in Dr. ared's letter. He states that I speak "of the propation of tapeworm in children by swallowing fragments the worms". This is an inaccuracy on his part; and cannot help thinking that careful reading of what I l say would have prevented it. I did not use the rd "propagation". I spoke of the "communication" the tænia segments, of their transference (*i. e.*, of the a which they contain) from one person to another; t did not describe the possible results of this assumed mmunication, though I hinted at their being injurious. m not aware of any observations which would render other than likely that the mature embryos of such ova, introduced from the digestive organs of one person o those of another, might find their way through the ats of the bowel or into the circulation, and thus ince harmful results in different viscera of the body, en as is known to be the case with some of the lower imals. Any one versed in the recent literature of helminthology will know to what I allude. Will not the ovum of the tænia, under exceptional circumstances, hatch in the human bowel; and the resultant embryo pass into the hydatid cisticercus, the larval or scolex form, in the human body, as it does in other of the vertebrata? I ask the question simply and confessedly with the hope and expectation of obtaining information from others on this subject. I am, etc.,

JOHN W. OGLE.

13, Upper Brook Street, Grosvenor Square, March 30th, 1863.

THE MANCHESTER MEDICO-ETHICAL ASSOCIATION AND MEDICAL TITLES.

LETTER FROM THE SECRETARIES.

SIR,—The Manchester Medico-Ethical Association having been several times referred to in your JOURNAL, in regard to the vexed question of medical titles, we think it right to state that the above Association has never passed any resolution on the subject. In officially addressing a member or other person who is a Licentiate of a College of Physicians, the Honorary Secretaries follow the example set by Dr. Francis Hawkins, the Registrar. We are, etc.,

JOSEPH STONE,
JONATHAN WILSON, } *Hon. Secs.*

March 21st, 1863.

MEDICAL PROTECTION SOCIETY.

LETTER FROM JAMES GARDNER, L.R.C.P.ED.

SIR,—In the last number of the JOURNAL you express a wish that a society should be formed for protecting the medical profession from unjust and vexatious actions at law brought against them. Does not the Medical Protection Society in Lincoln's Inn Fields answer this purpose? It has been in force many years. Perhaps one of the members will kindly explain, and state whether, if Mr. Adams had been a member, by the laws of that society he could have claimed protection and support from them in his late action. On looking over some old numbers of the *Medical Times* for 1852, I found the inclosed advertisement; and you will there see it called a Benevolent Society.

A word or two with regard to the proposed formation of a medical sick fund or club. I see no reason why our Association should not form one amongst ourselves, taking especial care to restrict it entirely to medical men only, and those qualified and in practice; and likewise to do it as economically as possible, by the secretaries and those taking office being honorary, and charging only for actual personal expenses. It appears to me to be feasible. I for one would willingly join it, and be happy to act as local honorary secretary to carry out the object.

I am, etc., JAMES GARDNER.

Bungay, Suffolk, March 18th, 1863.

COMPLIMENT TO A NAVAL SURGEON. Staff-Surgeon R. T. C. Scott, of the *Royal Adelaide*, flag ship of the commander-in-chief at Devonport, recently superseded on the expiration of his period of service, was on Thursday last entertained at dinner by the officers on board his old ship. Mrs. Scott, the wives of the married officers, and other ladies, were also amongst the guests. After the removal of the cloth, and the disposal of the usual loyal toasts, the Rev. Percy Rogers, chaplain of the *Royal Adelaide*, proposed "The Health of Dr. Scott," who had endeared himself to his brother officers, and the ship's company generally, by his gentlemanly bearing and the kindest attention whenever his professional services were required. The healths of Mrs. Scott and the ladies present were also drank with much enthusiasm.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Monday, March 30th—

Watson, Thomas, M.D.Cantab.,

was elected President of the College for the ensuing year.

At the same meeting, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Cracknell, Henry Heanes, M.B., King's College Hospital
Sturges, Octavius, M.B., 35, Connaught Square
Williams, Henry Llewellyn, M.D., 9, Leonard Place, Kensington

The following gentlemen passed the preliminary examination in the subjects of General Education, on March 28th, 1863:—

Bradford, Robert Mark, Exeter
Branson, Walter, Worthing
Cheesman, Henry, 2, Finsbury Square
Churchill, Frederick, Backham Terrace, Lambeth
Elliott, Arthur Bowes, Richmond, Yorkshire
Hay, Richard, Bridport, Dorset
Smith, Walter, Ringwood, Hants
Winslow, Lyttleton Stewart, Caius College, Cambridge

APOTHECARIES' HALL. On March 26th, the following Licentiates were admitted:—

Allen, James, Hale, near Liverpool
Atkinson, Frederick Page, St. Thomas's Hospital
Baker, Thomas, Birmingham
Craister, Thomas Lawson, Leeds
Hutchinson, Francis Blake, London
Julian, John Page, Durham
Lloyd, Samuel, Smethwick, Staffordshire
Russell, George Ireland, Gravesend
Stone, Robert Sidney, Bath
Ward, Henry Seekamp, Horncastle, Lincolnshire
Wine, Henry Charles, Bristol

APPOINTMENTS.

HEAD, Edward, M.B., appointed Physician to the St. Pancras and Northern Dispensary.
HOLMESTED, Thomas, Esq., appointed Resident Medical Officer to the Dispensary, Newport, Monmouthshire.
KIRKMAN, William P., M.D., appointed Medical Officer and Superintendent of the Kent County Lunatic Asylum.
MIDDLEMIST, R. P., Esq., elected Surgeon to the St. Pancras and Northern Dispensary.
ROSS, David, M.D., elected Resident Medical Officer to the South Shields and Westoe Dispensary.

POOR-LAW MEDICAL SERVICE.

BELCHER, Joseph S., M.D., appointed Medical Officer to the Workhouse and South District of St. George's-in-the-East Union.
LEDWARD, Ralph W., M.D., elected Medical Officer for the St. Michael's District, Manchester.
LORIMER, John, M.D., elected Medical Officer for the Cathedral District, Manchester.
MEDD, John, M.D., elected Medical Officer for the St. Jude's District, Manchester.

ROYAL NAVY.

HUGHES, E. W., Esq., Assistant-Surgeon, to the *Archer*.
LLEWELLYN, Owen J., Esq., Surgeon, to the *Archer*.

YEOMANRY CAVALRY.

BULLOCK, T. W., Esq., to be Surgeon Warwickshire Yeomanry Cavalry.

DEATHS.

ALDIS, Sir Charles, Surgeon, at 13, Old Burlington Street, aged 87, on March 28th.
ASHLEY. On March 30th, at Ladbroke Square, aged 2, Claude Evelyn, youngest son of W. H. Ashley, M.D.
CASWALL, Chas., Esq., Surgeon, at Tunbridge, aged 58, on March 27.
DAVEY, James S. E., Esq., Surgeon, eldest son of *Dr. Davey, Northwoods, Bristol, aged 24, in his passage home from West Africa, on January 8th.
HOGG. On March 26th, at 12, Aldersgate Street, aged 7, Frances Emma, fourth daughter of Charles Hogg, L.R.C.P.Ed.
HORTON. On March 24th, at Brighton, Sarah, wife of Joseph Horton, Esq., Surgeon, late of Bromsgrove.
KAY, David, M.D., at Bradford, aged 46, on March 20.
ROWLEY, Thomas, M.D., at Lichfield, aged 73, on March 21.

ROYAL COLLEGE OF SURGEONS. The Hunterian Museum has been enriched with a magnificent series of preparations illustrating the pathology of the human eye, nearly seven hundred in number, including the microscopic slides prepared from the same specimens. The whole have been made with consummate ability by Dr. C. Bader, of the Royal London Ophthalmic Hospital, and a former assistant in the museum. The preparations are accompanied with a description of the appearances at present exhibited by the specimens, with a history of the case, and a general and microscopic description of the morbid appearances presented by the eye when recent. Such a collection does not exist at home or abroad, and great credit is due to the council of the college for securing it for their museum.

THE ACCIDENTS ON MARCH 10. At the inquest held on one of the persons killed in the crowd during the illuminations on the 10th, the coroner said that in his opinion nearly all those who had perished in the fearful crushes in the city during the late rejoicings had been previously in a state of disease of the heart or other internal organ. It was a matter of some interest as well as importance to ascertain the fact beyond doubt, both to reassure the general public and also to warn persons so afflicted of the great danger into which they inevitably ran in subjecting themselves to the pressure and excitement of such scenes, and the *post mortem* examinations made placed the fact beyond doubt. A verdict of "Death from rupture of the stomach" was returned.

THE LATE SIR BENJAMIN BRODIE. The will of Sir Benjamin Collins Brodie, Bart., D.C.L., F.R.S., F.R.G.S., of Broome Park, Betchworth, near Reigate, Surrey, was proved in the London court on the 11th inst., by his sons and executors, Sir Benjamin Collins Brodie, Bart., and the Rev. William Brodie, M.A. The personal sworn under £18,000. The testator executed his will in October 1861, and two codicils in August and September last. To his son now Sir Benjamin Collins Brodie, Bart., F.R.S., and to his issue he has devised his freehold estates; but, on failure thereof, should the same descend to any of the testator's family, except his daughter, Maria Eliza Hoare, the name of "Brodie" is to be used, by Royal licence, with his family arms. To his eldest son he also leaves his estate at New Sarum. His estate in Surrey—subject to the payment of an annuity of £100, bequeathed by the testator to his niece Blanche, the daughter of his brother, Mr. William Bird Brodie—is to be divided into three equal parts; one-third to his eldest son, one-third to his son, William, and the remaining third to his daughter, Maria Eliza Hoare. The testator further bequeaths to his son, William, a legacy of £2,500, and to his daughter, Mrs. Hoare, £500; appointing his son, Sir Benjamin, residuary legatee. (*Illustrated News.*)

THE ROYAL SOCIETY. General Sabine, president of the Royal Society, held his first conversazione for the present season on Saturday evening last at Burlington House. The reception rooms were furnished for the occasion with interesting objects of science and art, among which the most attractive were Professor J. Clerk Maxwell's apparatus for viewing the mixed colours of the spectrum, and his dynamical top; Dr. B. G. Babington's morphometer, an instrument invented in Austria for the firing of mines by frictional electricity; Mr. Crooke's specimens of the newly-discovered metal thallium in its various forms; a portion of the Mediterranean cable, from a depth of seventy fathoms, between Sardinia and Africa, incrusted with corallines and other specimens of marine zoology, exhibited by Mr. Fleeming Jenkin, together with curious ova and moss-like vegetation from a thousand fathoms' depth; Dr. Cobbold's preparations showing the important advantage which naturalists may find in solutions of magenta, for rendering visible minute anatomical details; Mr. Olley's brilliant chromophotographs; Mr. Frank Buckland's artificial breeding of

fish, in full operation; a number of special relics and memorials of Linnæus, exhibited by the Linnæan Society; an elegant model of the shield ship designed by Captain Coles, and models of the double screw gunboats constructed by Messrs. Rennie for the service of the Spanish government at the Philippines. The assemblage of visitors, which was numerous and animated, did not separate till a late hour.

Female Medical Advertisement. *Novelty in English Medical Practice.* Our friends who reside on the other side of the Atlantic have now for some years availed themselves of the services of female practitioners of medicine, one excellent consequence of which, at least, has been that many of the weaker sex, who would silently have endured years of suffering from a dislike to consult a male practitioner, have unveiled their miseries to one of their own sex, and been spared years of wretchedness by a speedy relief. Female doctors of medicine are a great boon to society, and an inestimable safeguard to the feelings of delicacy. In England, we believe, only one female practitioner holding a diploma is at present practising, Mdle. Cavania, Hospital, Lordsmill Street, Chesterfield, and 2, Station Street, Nottingham, and 4, King Street, Derby, who is certainly effecting a revolution in medical practice, as evinced by the immense number of cures which she has performed in Chesterfield, Nottingham, and the surrounding townships, and the daily increasing number of patients, particularly females, who are wisely availing themselves of her professional knowledge and skill, of which report speaks as being of a very high order. The press bears testimony of her great success in the treatment of dise e;—in what town, village, or hamlet in the Midland ... nties has not her fame widely spread? Hundreds of ... ons have tendered their thanks, and requested their c... s to be published in the local newspapers, for the be ...efit of others. Mdle. Cavania's days of attendance at 2, Station Street, Nottingham, are every Monday, Wednesday, and Saturday.

Medical Fees. It may be said "a medical opinion is a marketable article submitted to public competition, and will, therefore, only bring a certain price regulated by the amount of competition." Such argument is good, if medicine is to be made a trade, if the doctor is to differ from a member of any other learned profession, if his opinion is to be valued as a trader's stock by demand and supply; but we should be very sorry to see such a course adopted. Why should doctors differ from lawyers, or engineers, or solicitors? Why should their fees be cut down according to the temper or means of every person who pays them? If a law opinion is necessary it must be paid for; be the client rich or poor, liberal or parsimonious, the solicitor's fee must be paid without abatement, or no opinion will be given, and the solicitor is in a position to stand by his fee, because he feels certain that the ban of his profession would rest on any one who took less than the regular amount. In plain language, we want the trades union which protects all other trades and professions, we want professional obloquy brought to bear on him who degrades his profession. Consultation with homœopaths has been checked by such a manifestation of opinion in Dublin, and wherever medico-ethical associations have been established they have effected much good. We believe it is only by such means underselling can be prevented, and the degradation of our profession to trade level obviated; it will not do to say that there may be two ranks and two fees in the profession, for no medical man can take a low fee without detracting from the estimated value of medical services. (*Dub. Med. Press.*)

Trial of a Medical Man for Perjury. Evan Thomas, a surgeon in considerable practice, at Manchester, was indicted on Saturday last for perjury. It appeared that on the evening of the 5th of January last a bedroom was secured at a respectable hotel in Manchester for a lady who was to arrive by train late at night. The lady arrived, accompanied by the defendant, who, after seeing her to her room, left the house. Next morning he returned and was shown to her room, and, on entering, he locked the door and remained inside for about a quarter of an hour. The chambermaid, whose curiosity had been excited, remained outside at the door, and after a short interval she heard a slight moan as of some one in great pain, and also a noise as of a pair of scissors being put down on the washstand. Immediately afterwards the defendant came out and told her to call the landlord. When the landlord arrived Mr. Thomas told him that the lady had died of an epileptic fit, and so suddenly that he, the defendant, had scarcely time to turn from the basin where he was washing his hands to get some water to throw over her. An inquest was held, and a *post mortem* examination made by Thomas; who swore that there was a tumour in the womb, which had brought on an epileptic fit, and was the cause of death; that there was intense congestion of the brain and its membranes, caused by epilepsy; and that he had never seen the deceased before. Thereupon the jury returned as their verdict that the lady died of an epileptic fit. The body of the deceased was removed the same evening to the defendant's house, and he sent a telegram to a Dr. Stale at Cockermouth; but it appeared that this gentleman had then left that place, and so it happened that the telegram came into the hands of Dr. Bell, who had been the medical attendant of the deceased. He at once communicated with Mr. Waugh, her solicitor, who despatched his clerk, Mr. Musgrave, to Manchester, who recognised the body as that of Mrs. Mary Ann Bell. She was a widow, and resided at Bassenthwaite. From some circumstances that had come to the knowledge of Dr. Bell and Mr. Waugh, Mr. Musgrave made a statement to the coroner; and the result was that on the 8th of January, the coroner called upon the defendant for some explanation. Mr. Thomas then said that he had seen Mrs. Bell about a month before, and also on another occasion a year or so previously; and that Mrs. Bell was about five or six months gone in pregnancy at the time of her death, as appeared by the *post mortem* examination. Several letters from the defendant were produced which had been found in the house of Mrs. Bell, which showed that he knew she was pregnant. From one of her letters it appeared that she had suggested the procuring of abortion, which he declined to do, at the same time saying that there were some who would do it, but he did not know who they were. From the defendant's books it also appeared that on three separate occasions he had received 5*l.* from Mrs. Bell. The coroner directed a second *post mortem* examination to be made by Mr. Heath, the surgeon to the Manchester Infirmary, who found that the head of the deceased had not been examined at all, and that the tumour spoke of was a cystic tumour in the right ovary, and not in the womb. Mr. Overend urged that the defendant had done nothing improper; that there was no attempt by him to procure abortion, and that he had only preserved an honourable professional secrecy with regard to the state of his patient. It was true that she had a tumour connected with the womb. It was true that she died of epilepsy, the effect of which would produce congestion of the brain. The learned Judge summed up, pointing out that, though there was no evidence of the defendant having attempted to procure abortion, the question for them was whether he had not given evidence that he knew to be false, and by which he intended to mislead and conceal from the coroner's court the true cause of death. The jury retired, and after a long absence, returned with a verdict of *Guilty* against the defendant, who was thereupon sentenced to three months imprisonment.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M.—Ethnological.—Epidemiological.

TUESDAY. Pathological.—Photographic.

WEDNESDAY. Society of Arts.—Microscopical.—North London.

FRIDAY. Astronomical.—Archæological Institute.

SATURDAY. Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

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PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, April 1863.

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Facts and Arguments

OPPOSED TO

DR. BENNETT'S THEORY OF ORGANISATION.

BY

LIONEL S. BEALE, M.B., F.R.S.

ROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL.

DR. BENNETT, after having reiterated his statements and assured the candid reader that vibriones *are* formed by the coalescence of molecules, and that the molecules of the ovary *do* coalesce to form the ovum, retires from further discussion. In doing so, however, he treats his opponent with the most courteous and merciful forbearance; and Dr. Bennett is kind enough to say, "It forms no part of *my* intention to controvert the peculiar views of Dr. Beale. *I* think they may be safely left to the judgment of *physiologists*"!

Two of Dr. Bennett's statements which seem to me unsupported by actual observations have been under discussion:—the statement that ova were formed by the coalescence of the molecules of the ovary, and the statement that vibriones were formed by the coalescence of molecules. These opinions are entertained by Dr. Bennett alone. Now what evidence has he adduced to justify his inferences?

1. It has been elicited in the course of this discussion that the very positive statement, "the molecules of the ovary coalesce to form the ovum," has not been arrived at from original observation, but from an examination of what Dr. Bennett terms the "facts" observed by Nelson, Barry, and others. Now, it has been shown that, in order to arrive at these so-called "facts," Dr. Bennett has termed *ova*, in the ovary of *ascaris mystax*, figured and described by Dr. Nelson as "molecules." In his last paper, Dr. Bennett copies more of Nelson's figures, and maintains that the appearances delineated give him unequivocal support, although neither *Nelson*, *Barry*, *nor any other observer*, as far as I can ascertain, held the view which Dr. Bennett holds and supports by reference to observations not his own. He still maintains that the molecules in the ovary, by their aggregation, produce "higher forms." "Such is the essence of my theory." (P. 314.)

2 Dr. Bennett has not *seen* vibriones actually formed by coalescence, but is convinced that the particles do so coalesce, and gives drawings of the process as he concludes it occurs. He sees no difficulty in their subsequent division, for a body may be formed by the aggregation of molecules and multiply by division.

My paper on the formation of vibriones is not yet ready; but I may mention that I have not succeeded in making the vibriones come so close to each other as Dr. Bennett represents in fig. *c*, p. 209; nor do they exhibit any tendency "to aggregate together and melt into one another!" In spite of the most attentive and repeated watching, continued for more than an hour at a time, with the aid of the highest power I can use (3000 linear), I have never seen two separate particles as close together as represented in Dr. Bennett's fig. 3, or *coalescing to form a filament*. On the other hand, I have *seen* elongated filaments like those represented in 5 and 6 *divide*. All I can make out, is, that the particles, from the very first, *grow* not by the aggregation and coalescence of molecules already formed, as Dr. Bennett asserts, but by the absorption of matters in solution; and that they multiply by *division*. Dr. Bennett thinks a living structure is formed by the physical processes of *aggregation and coalescence*, and may multiply by division.

It seems to me, on the other hand, that the two processes are opposed to each other, because, in the first, particles are supposed to be *attracted towards*, and in the last, to *separate from* each other. These opposite processes are, according to Dr. Bennett, explained by the molecular theory of organisation, and thus the various conflicting views of authors are harmonised!

Dr. Bennett and myself differ in opinion on these matters, and differ also in opinion as to the mode of conducting scientific inquiries of the kind. He grounds his conclusions on the formation of ova, mainly if not entirely upon "facts" observed by others; while it seems to me that the advocate of such a doctrine is bound to adduce actual "facts" which he has himself observed, or to appeal to experiments he has himself conducted.

Dr. Bennett has commented upon two sentences of mine, and I cannot allow his comments to pass without observation. As the whole paragraph is an excellent example of Dr. Bennett's mode of arguing and summing up, it will repay analysis.

The following is my statement on which Dr. Bennett will alone comment:—"A molecule of oil, or phosphate of lime, may result from disintegration; but as such molecule, it can never live. A *living molecule* of oil, phosphate of lime, or any other substance having a definite known composition, is a simple impossibility. We might as well speak of a living mass of iron, lead, or other metal."

Upon this Dr. Bennett comments as follows:—"Now, what is it that transforms cartilage into bone, if it be not the regular deposition of mineral molecules into its intercellular substance—a substance maintained by Dr. Beale to be incapable of living?" (not "*incapable* of living", but "*not possessing vital power*".) "If this is not a living process, what can be such? To say that it is mere infiltration of mineral matter is no argument against its *vital character;* for in the same manner all growth and nutrition consist of infiltrated matter."*

Infiltration a *vital* character! Is infiltration

* In his first lecture in the *Lancet*, Dr. Bennett adduces Mr Rainey's observations on this very process in favour of his views concerning the aggregation of molecules and molecular coalescence. Now, Mr. Rainey has written one hundred and fifty-two closely printed pages, and has adduced many original observations for the very object of showing not only that the formation of shell and bone, but every soft tissue, is due to the operation of physical force. Many arguments are adduced specially to show that the process of ossification is *physical* and not vital, and to prove "the dependence of the rounded forms of organised bodies on physical and not on vital agencies." In Dr. Bennett's first lecture, many statements are advanced in favour of the very same inference, and yet here is one of the most undoubtedly physical processes occurring in the living body claimed by Dr. Bennett as a *vital* process.

going on *out of the body a physical process*, but when it occurs in a tissue a *vital process?*

"All growth and nutrition *consist of infiltrated matter*." Here it is asserted that the processes or acts of growth and nutrition consist of matter.

Next comes the following:—"Neither it is any argument to say such matters are first in solution. It is only when molecular formations are produced from such solutions, that we have any *evidence* of their vital nature, as *in* the molecular substance of bone and muscle."!

Then Dr. Bennett says, "Again, to maintain that, because the composition of the molecules in a texture is now known, therefore such molecules can never live, is certainly a curious proposition, and must lead Dr. Beale to support the paradox that *nothing* lives in a living structure."

Dr. Bennett must have been a little confused when he thus interpreted the sentences quoted by him. I have merely said that molecules of oil, as such, cannot live. If Dr. Bennett believes in living particles of oil or phosphate of lime, perhaps he will inform physiologists how to distinguish them from lifeless particles of the same substances. Nor am I led to support any such paradox as Dr. Bennett supposes. The so-called nucleus of a lacuna of bone may be *alive* without the hard bone-tissue itself being so. Is every part of a hair or a nail *alive* merely because it is attached to, or a part of a *living body?* Because the nucleus of an epithelial cell is living, must we assume that the outer hardened part (cell-wall) is living also? Is the outermost part of a cell *alive* simply because the matter within gives unmistakeable evidence of life? Is not the shell of a seed which will germinate as inanimate as that of a seed whose germ is dead? The shell once consisted of soft living cells, but the matter formed by their agency has gradually condensed, and now the whole serves the part of a passive, inanimate, protective covering. The shell of a seed takes no active part in the process of germination; nor is the hard osseous tissue already formed, actively concerned in the formation of new bone-tissue. The matrix in which the earthy matter is deposited in obedience to physical and chemical changes was once *alive*, but has *now ceased to live*. The great difference between *living bone* and *dead bone* seems to be, that in the former there is *living matter* (nucleus) in each lacuna; while in the latter the lacunæ are occupied only with fluid or air. It seems to me that, in the case of every elementary part or "cell" composing a living tissue or organism, part *lives*, and part consists of matter that *has lived*—part is "*living*", part has "*ceased to live*". This may appear paradoxical to the author of the "Molecular Theory of Organisation", who leaves it, with other peculiar views, "to the judgment of physiologists".

Dr. Bennett concludes this paragraph with becoming magnanimity. He says: "Lastly, to say of *the theory of an opponent*, that 'it is a simple impossibility', is in science the weakest controversial expedient."

It will scarcely excite surprise that a controversialist who for "ova" and "germinal vesicles" substitutes "molecules", should for "oil or phosphate of lime" read "theory of an opponent". I have not *said* of Dr. Bennett's theory, that "it is a simple impossibility"; but that a *living* molecule of *oil* or *phosphate of lime* is an impossibility. The entire sentence has been quoted above.

For Dr. Bennett to say, "If this figure, which is an *exact copy from nature*, be examined," when he has not copied it from nature;* to assert that "the *throwing off* of germinal vesicles resolves itself into "*the coalescence of these molecules*"; to say that an inspection of certain *figures* drawn by others *must lead* to the conclusion that the ovum is formed by "an aggregation and coalescence of molecules"; to call Nelson's "germinal vesicles" "molecules"; and all this without taking the trouble to appeal to one original observation of his own upon the formation of ova,—are examples of the "controversial expedients" of Dr. Bennett, but I will not venture to characterise them as "the weakest".

Dr. Bennett stigmatises the doctrine "*omnis cellula e cellulâ*" as *fallacious* (!), and ventures to translate my notions into Latin. He informs his readers that my idea is "*omnis molecula e moleculâ*", which is giving me credit for holding the opinion that matter comes from matter!

In this controversy I have endeavoured to say as little as possible about any views of my own; but Dr. Bennett has taken care to let every one know that, like him, I possess "peculiar views". I may, therefore, be permitted to state that the conclusion to which I have been led amounts to this:

That every particle of living matter has been derived from preexisting living matter; that formed matter (cell-wall, intercellular substance, secondary deposits, etc.) was once in the state of living matter; and that the inanimate nutrient matter only acquired vital powers when it comes into contact with matter already possessing these endowments—that is, *living matter*.

* The figure was copied from nature upwards of *ten* years ago!

Scientific Jottings. *Archiv der Heilkunde*, a German medical journal, announces that Professor Wunderlich uses foxglove (*Digitalis purpurea*) with great success in typhus and other fevers. In the former especially he administers it at the time when danger is chiefly threatened by the violence of the fever. When, therefore, in the second week particularly, the pulse is at 120, and the temperature high in the evening, and but little lower on the following morning, Dr. Wunderlich administers to an adult an infusion of one *gramme* of foxglove in water, and continues it until the pulse has fallen to its natural state. This method has never been known to aggravate either the cerebral or abdominal symptoms. Dr. Saint-Martin states in the *Bulletin de Thérapeutique* that the edible birds' nests so sought after by the Chinese possess the most nutritive qualities possible, and are a sovereign remedy in all cases of general debility. A nest well cleaned and ready for the market weighs from fifteen to sixteen *grammes*; is of a greyish-white colour, brittle, with scarcely any taste, and no smell. In this state it fetches about 100f. *per kilogramme*. Dr. Vinson, now at Madagascar, states that worms and caterpillars form part of the delicacies most highly prized by the natives. One kind of caterpillar, remarkable for its long silky hair, spins a coccoon like that of the silk-worm. This coccoon is opened and the animal taken out in the shape of a lump of curds. A sufficient quantity being collected they are fried in oil, a few yolks of eggs added, and the whole seasoned with scraped cheese. This is considered a dish for princes and nobles. The people also dig into the ground to get at a certain kind of beetle, which are boiled in oil or fat, and are thus eaten with great relish. (*Galignani.*)

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture I. (*Continued.*)

Malformations of the Anus and Lower Bowel.

Having thus far occupied your attention by dwelling for some length upon the congenital deficiencies which are to be observed at the upper orifice of the mucous or digestive canal, I propose to pass downwards to the other or terminal end, and to discuss the subject of imperforate anus or occluded rectum; and to attempt, from general as well as from personal experience, to bring before you some practical points, which may be of service in the treatment of this interesting and difficult class of cases. These malformations of the rectum may be divided into three great sections.

1. The simplest form, which includes the cases in which the orifice of the anus is completely closed, the rectum being partially or wholly deficient.

2. The more complicated class of cases, in which the anus exists in its natural condition, but opens into a *cul-de-sac*; the rectum being partially or wholly deficient.

3. Cases of imperforate anus, the rectum opening either into the vagina or urethra, or in some other abnormal position.

Under one or other of these headings can nearly all the cases of this congenital defect be readily classed.

To Mr. Curling's exhaustive paper, published in the forty-third volume of the *Medico-Chirurgical Transactions*, we are unquestionably indebted for the bulk of our information upon this subject; and as his description of these deformities with their assigned causes is so good, I may be pardoned for quoting them at some length.

It will be observed (says Mr. Curling) that the classification of these imperfections is founded on states which can generally be recognised during life. Unfortunately, the condition of the terminal portion of the intestinal canal, and its relations to the parts around, cannot be predicated with any certainty. In cases of imperforate anus, or of anus opening into a *cul-de-sac*, the intestinal canal may terminate in a blind pouch at the brim of the pelvis, the rectum being wholly wanting; or an imperfect rectum may form a short sac, descending to the floor of the pelvis, or as low as the neck of the bladder in the male, or the commencement of the vagina in the female.

It is known that the anal portion of the bowel is developed distinctly from the upper portion, and that the two afterwards approximate and unite, the diaphragm or septum disappearing by intestinal absorption. A failure in this process is the cause of the second form of congenital imperfection.

The cases of imperforate anus in which the rectum communicates with the urethra or vagina depend on the original existence of a *cloaca*, the malformation being due to an incomplete separation during fœtal life. These conditions are the result of an arrest of development at different stages. The blind pouch, in which the intestinal canal terminates, is sometimes connected to the anal integument, or to the anal *cul-de-sac*, by a cord prolonged from the bowel above. These cases are not, like the preceding, the result of a non-formation of the rectum; but are produced by an obliteration of the bowel, which was originally well-formed; the obliteration being a pathological change, due, probably, to inflammation which had existed during intrauterine life.

Cases are quoted by Curling from M. Goyrand and Friedberg, where the muscular tissue of the intestine was clearly traced, which point with considerable force to the accuracy of these views.

It is, therefore, with a view of determining the practice which should be employed in these different varieties of malformed anus and rectum, that I now purpose to enter upon the consideration of this subject.

Treatment of the First Class of Cases. In the first class of cases in which the anus is closed or absent altogether, there would not be much difficulty in arriving at a correct conclusion as to the practice which should be followed, if it were possible for the surgeon to learn with accuracy by any examination the true position of the bowel, the terminal end of which is evidently malformed. It may be that the anus is the only part in fault, and that the bowel is natural as regards position, its orifice being alone closed. In these fortunate instances, there is not generally any great difficulty in determining the true condition of the parts; for a distinct bulging of the distended rectum will, in all probability, be readily felt on a careful manual examination; and in many cases the eye will at once detect the fact that a thin membrane alone obstructs the orifice. In such instances as these, there can be no doubt as to the practice which is to be pursued; a cautious incision over the spot in which the anus exists, or should exist, at once suggesting itself to the mind of the reflective surgeon. But this practice must be carried out with considerable care, and the finger should be the pilot. The incision must be carried backwards towards the sacrum, and not forwards towards the urethra or vagina, and it should be tolerably free; and under such circumstances, a free discharge of the retained meconium will in these simple cases be generally obtained.

In the more obscure class of cases of occluded anus, in which no such bulging of the bowel is to be seen or even felt, the practice which is to be carried out is not so certain, at any rate in its results; this uncertainty being due to the fact of its being perfectly impossible for the surgeon to form any opinion as to the true position of the malformed bowel. The rectum may be in its natural place, or it may not; it may terminate at the brim of the pelvis on the left side, or on the right, or it may not exist; and, under these diverse circumstances, the success of an exploratory operation in the perinæum cannot but be uncertain; although I believe it to be justifiable if carried out with care.

The plunging of a large trocar and cannula into

the pelvis with the vain hope of puncturing the distended intestine, is a practice which must be unhesitatingly condemned. It is unscientific on principle and unsuccessful in practice. It is injurious to surgery, as it is not based on a correct foundation; and injurious to our patients, as it is most fatal in its effects. Nevertheless, I believe that an exploratory operation in the perinæum, if conducted with care, is the best practice which can be primarily carried out.

An incision should be made in the same region as pointed out in the last class of cases—that is, in the position in which the anus should be, when naturally placed; and then, guided by the finger in the direction backwards and upwards, keeping the sacrum as the guide, the surgeon may fairly make an attempt to reach the bowel.

The tension of the distended intestine is to be readily recognised, particularly when it has been once felt; and, having opened it, the operator should use all fair endeavours to draw down the intestine to the margin of the external opening, and to fasten it to the integument whenever it is found possible. But the hope of being able to succeed in doing this is not great, although the advantages which are to be acquired by success warrant the attempt.

The bowel, in the majority of cases, however, terminates at some distance from the surface. Mr. Curling states that "it is rarely found at a less distance than an inch from the perinæum"; and when we consider the shallowness of the child's pelvis, this depth is very great; the fact fairly indicating to us the probability that the rectum terminates in the majority of cases at the brim of the pelvis, and seldom dips down into it.

Out of twenty-six cases of this variety, which Mr. Curling has tabulated, the bowel was opened in fourteen; and in the remaining twelve, failure followed the attempt. Of the fourteen cases in which the bowel was opened, five only proved successful; whilst of the twelve cases in which the attempt failed, the bowel was subsequently opened either in the loin or groin in ten cases, and three of these died; the remaining two dying without anything further being done.

It must, however, be added that the great fatality of the instances in which the bowel was reached is to be explained by the rashness with which the exploratory operation was performed; a blind perforation of the parts with a trocar, with the vague hope of securing success, forbidding, in many cases, any prospect of recovery; the *post mortem* examination too often revealing the fact that the bladder, uterus, and peritoneum had been freely punctured, and that death was the result of the secondary peritoneal inflammation.

These figures prove to us the danger of the perineal exploratory operation, and shew that, unless it be undertaken with great care, more harm than good will probably ensue; nevertheless the propriety of making the attempt cannot be questioned, although it must be conducted with extreme caution.

Treatment of the Second Class of Cases. In the second or more complicated class of cases, in which the anus exists in its natural condition, but opens into a *cul-de-sac*, the rectum being partially or wholly deficient, the uncertainty of being able to form any opinion as to the true position of the lower bowel, renders any operative measure as hazardous, as it has been shown to be in the former division; although it can be proved that, when the attempt to relieve has proved successful, a large proportion of the cases terminate well.

The upper portion of bowel may be in contact with the extremity or side of the *cul-de-sac*, or it may be some distance from it; but there certainly appears to be a stronger probability that the two extremities of the bowel will be found nearer in position in these cases, than in the former class in which no *cul-de-sac* exists.

The upper bowel, in almost every instance, terminates somewhere at the pelvic brim; although it appears to be quite a matter of chance whether its terminal end lie to the right or left side of the pelvis, or on the sacral promontory; and as the *cul-de-sac* is evidently an attempt of the lower part to meet the upper portion of the bowel, the distance between the two ends is not generally very great.

Under such circumstances, an exploratory operation at the extremity and posterior part of the *cul-de-sac* appears to be justifiable on principle; and, when conducted with judgment, it has also been practically proved of value.

Mr. Curling gives us thirty-one examples of this class of cases. In twenty-seven, an attempt was made to reach the bowel, and in sixteen the attempt was followed by success, and ten of these subsequently recovered. In eleven instances, failure followed the attempt; and, although other measures were carried out, all died. In four cases, colotomy was alone employed; three in the groin with success, one in the loin which died.

In these cases, it would therefore also appear that an exploratory operation at the part is perfectly justifiable when conducted with caution; and that, if such should fail, colotomy is to be performed.

The exploratory operation must, however, be cautiously carried out; if a bulging at any spot can be detected, the attention of the surgeon should be directed to this part. An exploratory puncture may be made; a fine trocar and cannula, I believe, being as good an instrument as any that can be employed. It must be introduced carefully, and in the direction indicated, avoiding the anterior portion of the passage, and directing the point backwards and upwards. If any evidence can, in this way, be obtained of the bowel being perforated, the trocar may be taken out, and a grooved probe introduced in its stead, over which the cannula can be readily removed. The opening may subsequently be freely enlarged by means of a bistoury, and the divided bowel brought down and stitched to the *cul-de-sac* when found possible.

In the following case, the practice thus briefly sketched was carried out; and if a successful result forms a recommendation for the practice, it can in this instance be adduced.

Case I. Edward B., aged 10 days, was brought to me at Guy's Hospital on January 15th, 1862, from Lower Norwood. He had not passed any motion since his birth, and had vomited freely. The child's general condition, however, appeared to be good.

On examining the part, a good anus was readily observed, and this led into a canal, which was about one inch long, ending by a *cul-de-sac*. The extremity of this was smooth, firm, and unyielding, and no evidence of any bulging of the bowel could be detected.

An exploratory operation was, however, deemed advisable; and I therefore introduced a fine exploring trocar and cannula, no larger than a fine probe, into the upper and posterior part of the *cul-de-sac*, and, using considerable care in the exploration, came against an elastic, firm body; this was punctured, and evidence of fæces was tolerably clear; a grooved probe was then passed through the cannula, and over it the cannula was removed; by means of a curved bistoury, the opening was subsequently enlarged, and about an ounce of meconium came away. In half an hour afterwards, however, the bowels were freely relieved; the fæces being of a semisolid consistence.

For domestic reasons, the mother was unable to stay at the hospital, and the child was therefore taken home. On the second day, the child appeared to be well in every respect; it had apparently been free from all abdominal pain; the motions had passed readily, and were of a healthy character; the abdomen was small, and all vomiting had ceased since the operation. The finger could be passed readily into the bowel, although a tight ring was at once observed. This digital dilatation was directed to be maintained daily; and Mr. Baker, the medical adviser of the family, kindly undertook to watch the case.

On March 7th, I had a letter from Mr. Baker, which contained a favourable report. Everything was going on well. The dilatation of the opening was persevered in, and no contraction had apparently taken place. The child's health was also good. Mr. Baker, however, added his fear that, unless constant dilatation was persevered in, contraction would follow.

The last report was on Dec. 10th; after which, the child having left the neighbourhood, Mr. Baker could give no intelligence.

In this instance, the success which followed the measures which were employed appears to me perfectly to justify the practice; and I do not think that a careful exploratory puncture by means of a fine trocar and cannula can be looked upon as less scientific or valuable than a cautious exploratory incision with a bistoury. The evils of a reckless and incautious introduction of a trocar and cannula cannot be too strongly condemned; but the same recklessness in the operator would attend the exploratory incision by means of a scalpel, and an equally bad result would probably follow.

To attain permanent success, however, in these cases, considerable attention is afterwards rigidly demanded. Repeated dilatation of the perforated bowel is absolutely essential to maintain its patency; for otherwise, like all artificial openings, its subsequent contraction will take place, with all the evils and fatal results of an ordinary stricture.

It will be gathered, however, from what has just been stated, that, in a large proportion of the cases of imperforate anus and obstructed rectum, a successful exploratory operation in the ano-perinæal region is not always to be recorded; for, in nearly half the recorded cases, or in 43 per cent., failure followed the attempt; and, as a consequence, the surgeon has in like instances to consider the important question as to the best means for affording any further prospect of relief.

Two operations suggest themselves for consideration: first, the opening of the bowel in the left loin, known as Callisen's or Amussat's operation; and, secondly, the one known as Littre's, or the opening of the bowel in the left groin.

The former operation, known as Callisen's, Amussat's, or the lumbar operation, is not one which offers many advantages. The irregularities in the position of the colon in the left loin, even in a healthy subject, become still greater in these cases of maldevelopment; and to the operating surgeon, they are, therefore, sources of considerable difficulty. The depth of the colon, when naturally placed in the young child; the probability of the kidney occupying the position of the colon; and the prospects of finding the bowel empty at the time of operation, —are also additional arguments against its performance; but the strongest of all reasons remains to be repeated, and that is the bad success which has followed its adoption; for, in seven instances in which it has been performed, five died. The operation is, therefore, one of uncertainty, difficulty, and danger; and these points become of greater power when it can be shewn that Littre's, or the inguinal operation, is attended with greater certainty, less difficulty, and a better success.

I need hardly repeat, that Littre's operation consists of the opening of the sigmoid flexure in the left groin. The integuments in this region are thin and readily divided; the bowel lies immediately beneath, and can without difficulty be opened; and it can be hardly said that the inconveniences of an artificial anus in this region are greater than they are in the lumbar operation. In these respects, therefore, the inguinal operation has the preference; and the greater success with which the practice has been attended tends to support it still more. Out of fourteen instances in which it has been performed, nine recovered; and it will be remembered that two only out of seven recovered after the lumbar operation.

It can, therefore, I think, be fairly stated that the inguinal operation is the one which the weight of evidence tends to support; and that, in the cases in which a careful exploratory operation in the ano-perinæal region has failed to afford relief, such may be looked for with some confidence through these means.

[*To be continued.*]

Parliamentary Votes for Hospitals. The following votes have been taken in the House of Commons.—£1,600 for the Lock Hospital; £700 for the Rotunda Lying-in Hospital; £200 for the Coombe Lying-in Hospital; £4,600 for the House of Industry; £1,500 for the Cork Street Fever Hospital; £600 for the Meath Hospital; £100 for St. Mark's Ophthalmic Hospital; £1,300 for Dr. Steevens's Hospital; £245 for the Board of Superintendence and Dublin Hospitals.

Extraordinary Death. A warder of the Bagne at Toulon, has just met his death in the following manner: He was amusing himself, while off duty, with fishing in the dock, when, having caught a fish about seven inches long and two broad, and not knowing where to place it, while baiting his hook conceived the idea of holding it between his teeth. The fish struggling in the convulsions of death, ended by slipping its head first into the mouth and thence owing to the viscous matter, with which the scales were covered, down his throat, completely filling up the cavity. The man rushed about for aid, but soon dropped dead from suffocation.

Original Communications.

CASES SHEWING THE NECESSITY OF MAKING CAREFUL VAGINAL EXAMINATIONS AND INSPECTION OF CLOTS IN HÆMORRHAGE AFTER ABORTION.

By Edward Copeman, M.D., Norwich.

Case I. Mrs. C. miscarried on September 10th, and had such severe flooding afterwards, that I was summoned ten miles into the country to consult with her surgeon as to what means should be adopted to secure her from loss of life. A fœtus of about three months had been expelled in the morning, after which several clots passed, and hæmorrhage more or less had been going on all day, accompanied now and then by severe abdominal pain and forcing. All was thought to be over, but no one had seen the placenta, and I suspected the hæmorrhage and pain were caused by its retention. On examination, I found this the case; a small portion could be felt presenting at the os, and by means of the expulsive pains excited by my manipulations, a large firm placenta was soon sufficiently protruded to enable me to take it away. Hæmorrhage ceased after this, and I left her next morning suffering only from faintness and vertigo from previous loss of blood. She had a good recovery; and has never been pregnant since.

Case II. On July 12, 1852, I was summoned to a lady on account of severe hæmorrhage in what she stated to be the third month of her fifteenth pregnancy. She was of good constitution; had nine children alive, twelve born at full period; an abortion three years ago, another last year, and now a third. As may well be supposed from these circumstances, her life was a most valuable one, and her surgeon was alarmed at the amount of hæmorrhage now going on. On the 7th, five days before I saw her, she missed her step in getting out of her carriage, and felt a shock to which she ascribed the present occurrence. On the 9th, slight hæmorrhage began, which two days afterwards increased considerably; and on the morning of the 12th, on getting out of bed, she had great loss, preceded by pains, and sent for her surgeon. A great many clots had passed, some of them very large, but no ovum was discovered. He at once plugged the vagina with sponge dipped in vinegar and water, and requested my assistance. I found her very faint, but with a fair pulse, and but little hæmorrhage until the plug was removed; but then there was free oozing, and on examination, I found the os uteri patent, and a substance presenting about the size of the end of the finger, but not projecting far enough to be caught and pulled away by the finger. I recommended the re-application of the sponge, and perfect quiet. Several doses of ergot, I believe an ounce of Battley's essence, had been given; but without effect. I thought that, unless an ovum had passed, there must have been a mistake about the date of pregnancy, as the uterus did not seem to contain anything nearly so large as an ovum of even two months; but the patient persisted in her statement that she was three months gone. She was very faint several times after this, but had no hæmorrhage, and felt better all the next day; but, on removing the sponge in the afternoon of the 14th, some pieces of membrane came away upon it, and the substance felt presenting on the two previous days, could no longer be felt at the os uteri, having escaped into the vagina, from which several portions of chorion were removed. The os uteri was more closed; the uterus itself was more contracted, and there was no hæmorrhage. The patient was in a much more satisfactory state, and I could not help thinking that the ovum, with the exception of the portions removed this day, passed two days previously, and had been mistaken for a clot of blood. For several days, she suffered from nervous debility and the usual effects of loss of blood, but eventually recovered satisfactorily, and is now (1863) in the enjoyment of excellent health. She never afterwards became pregnant.

Case III. I was summoned to a lady of middle-age, who had had several children, on account of violent hæmorrhage from abortion at about two months. Her surgeon was called in at about 3 A.M., and found hæmorrhage going on so profusely that he immediately plugged the vagina without ascertaining precisely the state of the uterus, there being a pressing necessity to prevent further loss, and administer nutriment and stimulants. He also gave several doses of ergot. When I arrived at 1·30 P.M., the patient had rallied a little, and been asleep more than an hour. There was no hæmorrhage going on, and the vagina was well plugged; but the quantity of blood that had been lost was enormous. A careful examination of the clots discovered no ovum, and the uterus was of sufficient size to prove it had not emptied itself of its contents. In the absence of hæmorrhage, I advised letting well alone, and not at present to interfere, except by giving nourishment with brandy, and supporting the system as much as possible. The uterus felt hard, and about the size of a pear. In about two hours, there appeared to be a little uterine pain; and on placing my hand upon the abdomen, I found the uterus diminished in size. Just at this time, the patient vomited, and the plug was partially forced away. I took this opportunity of examining the state of things; and finding a portion of the ovum projecting through the os, I passed my finger round it as high as I could, and then advised Mr. —— to introduce his hand into the vagina and take it away. This he did without difficulty, removing the entire ovum, and the os immediately after contracted so as to refuse the end of the finger. No hæmorrhage occurred at the time, nor up to the period of my leaving at 7 P.M. For several weeks this lady was in a desponding state, and believed she would not long survive; but she gradually recovered, and I have seen her several years since in very good health. She has never been pregnant since.

Case IV. On August 21st, 1856, I was requested to visit, in consultation with two surgeons, a lady, who was suffering from severe hæmorrhage. She supposed herself three months gone in the family-way. About six weeks previously, she had a sanious discharge which soon disappeared. Last week, while at the sea-side, she suddenly felt something snap while she was in the water-closet, and a good deal of blood passed from the vagina, but she had no pain. She was past middle-age, and had had several children. The hæmorrhage soon ceased, but returned again next day, and a surgeon prescribed acids, etc., and advised her to come home. On Sunday morning she had a severe return of hæmorrhage, and Mr. —— was sent for. On Monday, it recurred at the same time, and again on Tuesday. On Wednesday, she was much better; but on Thursday (the day I was called in), the hæmorrhage returned so severely as to cause serious depression, and another surgeon was called into consultation. In the afternoon, the fainting was so continued and threatening that my assistance was requested, and I saw her about 4 P.M. She had then rallied somewhat, and the question put to me was whether, on the supposition that a placenta was left behind, it would be safe and right to introduce the hand and remove it. Mr. —— believed he could feel placenta through the os uteri, and there was some offensive putrid discharge; but as she had been so long and dangerously faint, it was doubtful whether she could bear the pain and disturbance of any operative proceeding. On examining, I could not feel anything projecting into the cervix or through the os, nor could I distinguish any enlargement of the uterus through the walls of the abdomen. I thought it doubt-

ful whether the uterus contained anything more than perhaps small portions of putrid membrane, and advised the introduction of a sponge dipped in vinegar to prevent further hæmorrhage. She also took five grains of gallic acid every four hours, and mild nourishment. At 9 P.M., no more hæmorrhage had occurred; the rectum was emptied by means of a cold water injection, and we gave an opiate at night.

August 22. The patient passed a quiet night, without hæmorrhage. Pulse improved. The sponge was withdrawn, and a fresh one introduced after washing out the vagina with cold water. The sponge we removed was not tinged with blood, but was covered in places with an offensive purulent discharge. Nothing presented at the os uteri.

August 24. No more hæmorrhage had occurred. The sponge had been changed, and the vagina washed out with cold water each morning. The bowels acted well on the 23rd, and to-day the gallic acid was continued. The patient was rallying satisfactorily.

August 29. There was still no hæmorrhage. She had left off the gallic acid, and was now taking a grain of quinine every four hours. The sponge was continued. The discharge was less purulent, but still offensive. The uterus was regaining its normal condition, and was, I believe, empty.

The lady soon recovered, and has never since been pregnant.

CASE V. Mrs. B., of middle-age, was seized with flooding at 3 o'clock in the morning of July 29th, being about two months advanced in pregnancy. She had been married about eight years, had two children at full term, and four abortions. There was also some indistinct history of her having had some uterine disease. She lost a good deal all the day, complained of oppressed breathing and dying feelings, and was frequently very faint, the pulse being at times imperceptible. Ergot had been given several times without exciting uterine action. Her surgeon summoned me at 5·30 P.M.; and on examination, I felt a portion of placenta projecting at the os uteri, but not far enough to be taken hold of by the fingers; and as I could not easily introduce my hand into the vagina, I put a sponge soaked in vinegar and water up to the os uteri, hoping the uterus would ere long expel the remaining portion of its contents, and that she would meanwhile be secured against hæmorrhage. We gave her brandy several times, but she remained very faint for some hours, and we were not able to leave her until late at night.

July 30. 11 A.M. The patient fainted several times in the night, but was soon restored by means of jelly and brandy and water. She had some nice sleep; pulse restored; skin warm. No hæmorrhage had occurred. Renewed the sponge, and felt the portion of ovum slightly more protruded. There had been a little uterine pain once or twice in the night.

11 P.M. No hæmorrhage had taken place all day, and the sponge was scarcely tinged. Pulse 100. She had not been faint since the morning, and her manner was altogether improved. She had uterine pain several times in the afternoon; and I was able at night to draw away a portion of chorion large enough when spread out to cover the palm of the hand. I could still feel a small portion at the os, and replaced the sponge.

July 31. There was no hæmorrhage. The sponge was removed, and replaced. The os uteri was less patulous; and I removed another portion of membrane which was lying at the os, but too small, it would seem, for the uterus to act upon sufficiently to expel it.

August 1. The sponge was slightly tinged this morning, but there was no hæmorrhage, neither could I feel anything at the os, which was regaining its natural form. The sponge was not reapplied, as there seemed to be no danger of further bleeding.

August 2. No hæmorrhage had taken place. All was going on well.

CASE VI. Mrs. B., between 30 and 40 years of age, had some time before, I understood, suffered from displacement of the uterus, for which she had undergone treatment. About four months ago, she had an abortion at between the second and third month of pregnancy, expelling a fœtus simply, without any fluid, placenta or clots. A short time afterwards she began to feel some pain and inconvenience, and hæmorrhage to a moderate extent took place, but she soon got better and went to the sea-side. Then hæmorrhage recurred at intervals, with greater or less severity; and on examination *per vaginam*, her surgeon discovered an enlargement which he supposed to be either a retroverted uterus or uterine tumour pressing downwards on the perinæum, and tilting the os uteri towards the arch of the pubes. For some time doubts were entertained about the nature of the case; her general health became deteriorated by repeated attacks of hæmorrhage, and it was suggested by a friend that she should go up to London to consult Dr. ——; but she demurred to this, and I was requested to meet her surgeon. I saw her on June 14th, 1860, and found the uterus quite retroverted, the fundus lying on the perinæum, and the os high up against the pubes. The os being a little patent, I succeeded in introducing my finger into it, and by pulling it downwards and pressing against the fundus with my thumb, I quickly restored the uterus to its proper position. I could then discover by the touch that the uterus contained something in its cavity; and expressed a belief that it was a placenta, although I think sixteen weeks had elapsed since the expulsion of the fœtus, and she was supposed to have recovered from the abortion. On a more careful examination, I was convinced of the correctness of this opinion, and proceeded to separate the mass from the uterus, so that it lay unattached in its cavity; it was previously universally adherent, and therefore not at all decomposed. I was not able to hook it with my finger and so pull it away; but as it was entirely separated from the inner wall of the uterus, there was no fear of a recurrence of hæmorrhage; therefore, instead of making any prolonged effort to get it away, a piece of sponge was passed up against the os in the expectation that, when it was withdrawn, the placenta would be found lying in the vagina. Accordingly, on removing the sponge the following morning, Mr. —— found the entire placenta loose in the vagina and took it away. No hæmorrhage occurred in the night; the patient's mind was relieved by the disclosure of her case, and she soon recovered her usual state of health.

CASE VII. On July 21st, 1860, I was summoned in great haste to a lady about 35 years of age, living a distance in the country, in consequence of severe and alarming hæmorrhage after an abortion of about two months. The fœtus had passed two days before (on Thursday the 19th), and was seen both by the surgeon and the nurse, both of whom also believed the placenta to be there also. For some hours all went on well; but on the Friday, hæmorrhage occurred several times, causing fainting, for which brandy was freely given. Late at night, the hæmorrhage increased so much that her surgeon was hastily sent for, and he found her losing so much that at 4 A.M. on Saturday, he plugged the vagina and directed the husband to send for me. She was then so bad that her husband despaired of getting me there in time to see her alive, as it was twelve miles from Norwich. However, I arrived at about 10.30 A.M., and was told that when they sent for me she was unconscious; but after taking an opiate, she fell asleep and was asleep more than an hour, awaking just before I arrived. She just knew me, but was nearly bloodless, breathing very laboriously, tossing about the bed, cold from head to foot, and it was impossible to keep her covered with the bedclothes. Cold had been assiduously

applied to the vulva and lower part of the body, and a window near her was wide open as she craved every breath of air, and said she was so hot. A whole bottle of brandy, besides wine, had been taken during the night, and she had frequently been sick; the vomiting, indeed, continued, and it was useless to attempt to put anything into her stomach, for it returned immediately. I could, however, just distinguish a pulse, and the sponges in the vagina restrained the hæmorrhage; so I removed all the cold wet things, covered her with a hot blanket, put several bottles of hot water in the bed close to her icy cold legs and feet, and injected milk and brandy into the rectum. It was not until 2 P.M. that any satisfactory reaction commenced, but about that time she became warmer, said she felt a little better, and took another brandy and milk enema. In another hour, she expressed a wish to receive the sacrament, and her brother-in-law, who was in the house, administered it to her. In consultation with her surgeon, I expressed a strong opinion that the placenta was still in the uterus, as I had never seen so serious a hæmorrhage after an abortion when all had passed away. He heard this with no little surprise, as he had been convinced in his own mind that the afterbirth had passed away and *that he had seen it.* We questioned the nurse, who also said she was certain it had passed away, and that she had shewn it to the surgeon. Still, knowing from experience how often nurses have been mistaken, and as Mr. —— acknowledged he had not particularly examined what the nurse had shewn him, I did not feel convinced that the placenta was away; or rather I ought to say, I did, in spite of these circumstances, feel convinced that it was still *in utero;* this feeling was strengthened by the fact of a little fœtid discharge passing from the vagina; and at 5 P.M. as she seemed to be sufficiently rallied to admit of the necessary examination, I carefully removed the sponges from the vagina, and then discovered a large mass partially protruding through the os uteri, which, by a little manipulation I extracted. It proved to be the entire placenta, a portion of it beginning to be decomposed. No hæmorrhage followed its removal, and I left her an hour afterwards in a more satisfactory state than might have been expected.

I visited her again the following morning, and all was going on well. She was disposed to sleep, and intolerant of noise and light; suffering in fact from the effects of loss of blood, but in no other respect uncomfortable. A fortnight afterwards, I received a very favourable report, and the patient soon got quite well.

CASE VIII. On October 6th, 1862, I received an urgent message to visit a lady at a distance of thirty miles, who was suffering from hæmorrhage after abortion. I arrived at about 8 P.M., and found she had been flooding so much for several hours that her surgeon, thinking her in imminent danger, had plugged the vagina. This had been effectual in stopping the hæmorrhage for a time, and hopes were expressed that it would not return. The patient was of a delicate constitution, and the loss she had suffered had made a serious impression upon her, producing great exhaustion and a very feeble pulse. It was supposed she had miscarried soon after the loss commenced, but the nurse, as usual threw away what she believed to be the ovum, and the surgeon did not see it. As so much hæmorrhage occurred afterwards, I doubted the fact, and was unwilling to leave the case without further examination, especially as I discovered some oozing going on in spite of the vagina being very carefully plugged. After waiting several hours, until she had somewhat rallied and had a little sleep, I carefully removed the plug, and found, as I expected, an entire ovum partially protruding through the os; this I was able to remove without much difficulty, and the hæmorrhage quite ceased. It appeared to be an ovum of eight or ten weeks and corresponded with the period she supposed herself to be advanced in pregnancy. I left her at 5 o'clock the next morning, still faint, but with a better pulse and tolerably comfortable; there had been no more hæmorrhage, and she had slept at intervals, taking a little nourishment now and then.

She took some time to recover her strength, but eventually recovered her usual state of health.

A PUZZLING CASE, AND A WARNING!

By HUGH NORRIS, L.R.C.P.Ed., South Petherton, Somerset.

A. C., a labourer's wife, aged 31, pale and anæmic, with an eye full and prominent, and presenting somewhat the dropsical appearance so graphically described by Dr. Begbie, walked three miles and a half to my house on February 16th, 1863, to consult me about a prolapsus of the womb, from which she had suffered at least eight or ten years.

On examination, I found the os uteri protruding between the labia externa, the cervix very flaccid, and at least an inch and a half long, the whole organ being apparently much enlarged.

Having occasion to pass her house in the course of my morning round, I sent her home at once, desiring she would await my arrival in bed, when I would further investigate the case.

During my visit, I was informed for the first time that she had been unable to pass urine for three days. I at once proceeded to use the catheter in bed, and drew off a goodly quantity of urine, pale and opalescent, but not apparently ammoniacal. There was a considerable uterine tumour in the hollow of the sacrum, globate but irregularly hard; and the os was now tilted up so high forwards that I could only reach it by considerable manipulation.

I at first suspected pregnancy, and that (as I had several times before seen) the uterus in escaping from the pelvis at "quickening," had missed its aim, and meeting the promontory of the sacrum had become retroflexed, and thus opposed a mechanical impediment to the bladder's emptying itself. The idea of pregnancy was quite scouted by the patient and her friends, and on questioning them, I obtained the following history.

The patient was 31 years old; had been married four years; had never been pregnant; was always an unhealthy child and woman; did not begin to menstruate until past the age of 24; had never been "regular," oftentimes seeing nothing for three or four months together, and the catamenia had always been scanty and pale in colour; she had suffered from prolapsus uteri for eight or ten years past, even to the extent of external protrusion, but had never worn a pessary; had frequently felt difficulty in passing urine, but never before suffered from total retention; her occupation, in a neighbouring flax-mill, necessitated much standing.

After passing the catheter, I examined the abdomen; but although I pressed over the pubes until I could feel the pulsating aorta just above its bifurcation, I could detect no tumour. Still, I left with an impression that after all I might be right as to her being pregnant; but there had been none of the ordinary positive or sympathetic signs of pregnancy; there had been no sickness; the breasts were not fuller than usual; she had seen some scanty appearance of what she deemed her "courses" twice within the four months last past; there was no particularly dark areola around the nipples, but there existed three or four papillary prominences around each, and these indeed were the only affirmatory indications of pregnancy I could at all detect. I gave an active aperient, and followed it up by a mixture containing some Dover's powder to be taken every four hours.

On the 17th (*i.e.* next day), I passed the catheter in a *standing* position (because I had reason to believe that the bladder was not thoroughly emptied on the previous

day), and drew off this time a third more fluid than before, clear, of a pale colour, and having no unpleasant smell.

On the 18th, I passed the catheter again, standing; and, finding the os uteri presenting downwards but not protruding, although there was still the sacral tumour, I introduced Dr. Simpson's uterine-sound, and, to my amazement, it passed in upwards and forwards with ease, to the extent of six inches and a half. No discharge, either coloured or uncoloured, succeeded this exploration, and it caused no pain; but on withdrawing the instrument, I noticed a bit of what appeared to be thick vaginal mucus adhering to it, near its tip. The patient was ordered to keep perfectly quiet, and to continue the mixture.

On the 19th, in the morning, I received the welcome intelligence that she had passed urine voluntarily twice since my last visit, and was much better in every respect. I have no doubt the sound had helped the uterus to right itself in the pelvis.

On the 20th, on my visit I found that a four months fœtus had made its appearance; and I removed the placenta, which was chiefly in the vagina, but causing some hæmorrhage by reason of not having completely emerged from the os uteri. The woman did well, and thus my case terminated.

Now for the application.

The result shows how very fallacious it is in some cases to trust to the ordinary signs and symptoms of pregnancy; and, even where we suspect it, how we may be thrown off our guard by unlooked for complications. For my part, on my first examination, I felt almost sure that the tumour in the hollow of the sacrum was the retroflexed gravid uterus, and I tried again and again to help it out of the pelvis by placing the woman on her elbows and knees whilst I manipulated; but in vain. Subsequently, after a long and careful consideration, I came to the conclusion—a very erroneous one, however—that the case was one of fibroid uterine tumour, until I introduced the sound so easily to the extent of more than six inches; and even then I was puzzled, for we know how hypertrophied the uterus may sometimes become when occupied by a tumour. Of course, I should not have introduced the sound had I known pregnancy to exist, for doubtless in a few days the uterus would have contrived to escape from the pelvis; but I was led to infer the contrary from—

1. The patient's previous history.
2. The absence of all positive signs.
3. The extreme improbability of conception taking place in such a state of uterine displacement as had existed for eight or ten years at least.
4. My inability to reduce the retroflexion of the uterus; for in three cases at least, where I had previously seen the pregnant organ impeded in its attempt to escape from the pelvis, I had found no difficulty in correcting its malposition very soon after the bladder had been emptied, and the bowels moved.

Here the question will arise: "How far did the passage of the sound contribute to the result?"

I have little if any doubt that it helped to rectify the position of the uterus. When I found the sound enter to the extent it did, I at once desisted from any further exploration, but most carefully withdrew it instantly; and there was not the slightest flow of either blood or liquor amnii, nor did any pains supervene until the middle of the next day, (*i.e.*, at the expiration of twenty-four hours at least) and then almost immediately after passing a copious amount of urine.

A second question is: "Supposing the sound had not been introduced, have we any reason to believe that abortion would have taken place?"

I think we have: for the uterus had undergone a considerable amount of irritation from the five or six days retroflexion (it was not mere retro*version*), and without more care than a woman in my patient's class of life would usually take of herself,* we could scarcely hope that a flaccid habitually prolapsed womb would long retain its burden, after suddenly regaining an erect position; and although I used the sound, yet, in my own mind, I am inclined to attribute the abortion to the above cause.

I must apologise for the length to which my communication has run, but I do not think I could have made my case understood in much less space; and, although on reviewing it, I cannot say it tells greatly in my favour, yet I think it so full of interest and instruction, that I should do wrong not to make it known for the sake of others, who meeting perchance with a similarly perplexing train of symptoms, may be able to regard this record as a landmark, and hence avoid the mistake of ever passing the sound into a pregnant uterus.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

CASE OF LITHOTOMY FOLLOWED BY PHAGEDÆNIC ULCERATION AND PNEUMONIA: RECOVERY.

By William Eddowes, jun., Esq., House-Surgeon to the Salop Infirmary.

[*Read February 13th*, 1863.]

B. D., aged 4 years, a native of Dawley, was admitted into the Salop Infirmary, under the care of Mr. Wood, for stone in the bladder. He was a fine, fat child, and appeared to be in good health.

Upon two examinations, a stone was detected in the bladder. It appeared to be a small one, from the fact that it could be seldom struck with a sound.

On November 10th, he having been put under the influence of chloroform, Mr. Wood performed the lateral operation, and extracted a small lithic acid calculus. The patient was then placed in a double-bedded ward adjoining the operating-room (specially reserved for patients after severe operations), together with another patient whose thigh Mr. Wood amputated on the same day for disease of the knee-joint.

In five or six days, symptoms of pyæmia came on in the amputation case, from which the patient subsequently died; and, shortly after the occurrence of pyæmai in this case, the edges of the wound in our little patient became somewhat hard and erysipelatous looking. He was ordered a mixture of tincture of sesquichloride of iron, with beef-tea *ad libitum;* and a poultice to the wound.

Nov. 27th. The erysipelatous appearance of the wound had gone on increasing; and now, seventeen days after the operation, it was found to be covered with phagedænic ulceration; the surface being coated with a yellowish tenacious secretion, and the edges hard and brawny; it was also very painful. Strong nitric acid was freely applied over the surface of the wound, a carrot poultice laid on, and a mixture containing ammonia and bark administered.

Dec. 1st. The wound appeared about the same; the pulse was very weak; the tongue moist and furred. The patient was evidently much weaker. Wine was ordered, and the mixture was continued.

Dec. 3rd. The ulceration was excavating the tissues of the perinæum, and the edges remained hard. Strong nitric acid was again rubbed freely over the wound; chlorate of potash was added to the mixture; opium was added at bedtime; and the wine was increased.

Dec. 9th. The ulceration was still spreading, and ex-

* I insisted from the first on my patient's lying in bed, but to no purpose.

cavating the tissues more deeply; in fact, quite a chasm was formed in the pelvis, which the urine, in passing through, irritated very much. The patient was weaker; the tongue furred, but moist; and the pulse weak and very quick. Chloroform having been administered to him, strong nitric acid was a third time freely applied to the wound; and a dressing of lint, dipped in a mixture of two drachms of tincture of benzoin and an ounce of resin ointment, was applied hot to the wound. The wine was increased to sixteen ounces in twenty-four hours.

Dec. 14th. He was weaker; tongue furred; pulse very quick and feeble; the appetite bad. Wine was almost the only support taken. He appeared to be sinking. The same dressing and mixture were continued; and oxygen gas was now ordered to be diffused under the bedclothes and inhaled.

Dec. 15th. A change for the better had taken place. The tongue was moister. He had taken an egg and some fowl, in addition to the wine. Superficial sloughs appeared to be separating over the surface of the wound; small granulations were becoming evident; and the discharge was more profuse. Oxygen was twice administered on this day.

Dec. 18th. The wound was suppurating and granulating healthily; it was washed with Condy's solution before the application of the dressing. The feet were œdematous. He took beef-tea and arrowroot, in addition to his wine. The bowels acted naturally.

Dec. 19th. He was better; pulse stronger; appetite good. He had had a good night. The feet were less œdematous, and the wound was beginning to fill up.

Dec. 23rd. The wine was decreased to ten ounces in twenty-four hours.

Dec. 25th. The wound was filling up. The bowels were regular, but the motions white. Castor oil was ordered, and hydrargyrum cum cretâ.

Dec. 30th. He was better. All the urine still passed through the wound. The hydrargyrum cum cretâ was repeated.

Jan. 2nd, 1863. The motions had regained their natural colour, and the patient was progressing favourably.

Jan. 6th. Now, for the first time since the occurrence of the ulceration, the urine was observed to pass *per urethram*. A short cough and quickness of breathing came on this day, and there were spasmodic twitchings of the muscles of the face. He vomited all that he took. The pupils were dilated. Ammonia and chloric ether were administered.

Jan. 7th. Vomiting had ceased.

Jan. 8th. His breathing was very quick; pulse quick and feeble; tongue much furred. A mustard poultice was applied to the right side of the chest. Crepitation was heard over the right lung.

Jan. 12th. He was not so well. There being extensive dulness over the lower part of the right lung, a blister was applied, and a mixture ordered of ipecacuanha, conium, and chlorate of potash.

Jan. 14th. He was relieved. The remedies were continued.

Jan. 19th. He was much better. The lower part of the right lung had become resonant, a little crepitation only remaining.

Jan. 22nd. He was almost well, and was carried out of the ward. The wound had healed, except a slight superficial sore; and no deformity remains.

Jan. 31st. He was this day discharged cured. He appeared quite well, gaining flesh! and his appetite was very good.

Remarks. The chief objects of interest that I would mention are: the previous good health of the patient; the occurrence of the phagedænic ulceration; and the wonderful rallying power of the patient, to have enabled him to recover from such severe relapses after the operation. The child had always enjoyed good health, except what arose from the inconvenience of the stone in the bladder. Knowing this, one would ask: How did this particular form of ulceration come to attack him? The ward in which this patient and the man who died of pyæmia were placed is adjoining the operating-room, and sometimes for weeks together is without an inmate. It was, therefore, evidently not from overcrowding; nor would one think that it was owing to the neglect of ordinary sanitary precautions, for the rest of the patients appeared to progress as well as could be wished for in any hospital. With the exception of one with necrosis of the first metatarsal bone, who was attacked a few days afterwards with similar ulceration, only one other case of this kind occurred, and that after a period of six weeks, in a case of necrosis of the tibia.

Erichsen, in his work on *Surgery*, states that, at the time of the two outbreaks of hospital gangrene at University College Hospital, erysipelas, influenza, and *phlebitis* were very prevalent; and as these poisons appear to be so nearly allied, and so very insidious, one can arrive, I think, at no other conclusion but that the poison originated in the case of pyæmia, and, being conveyed to this patient, caused in him this dreadful form of ulceration.

It must be recollected that the turning point in this interesting case was immediately after, and concurrent with, the administration of the oxygen gas. How far the recovery is to be attributed to this agent is an open question; but when we consider the nature of this powerful stimulant, the change it produces in the blood, thereby renovating the nervous power, it is not too much to suppose that it gave that bias to the scales, just on the balance between life and death, that decided the turn. At any rate, it leads us never to despair where there is no organic disease, and suggests a further trial of this agent in similar cases. The nitric acid had been thrice applied, and it did not seem as if it had been able to arrest the disease; for when the sloughs separated on the first two trials, the parts beneath were still in a state of ulceration.

A Yankee Notion of British Surgery. Dr. D. P. Smith, surgeon of volunteers in a Federal regiment, writes as follows:—"One of the great faults of medical men here (London), is the great tendency to follow implicitly the teachings of some great authority, without any reasoning upon their individual cases. If a Brodie should advise exsection of joints for acute synovitis, or a Fergusson propose division of the peroneus longus as a means of facilitating union in staphyloraphy, or a Bennett hint the weekly application of potassa fusa as a prophylactic, many zealous followers would, to use the usual phrase, try the merits of the procedures advised. The men here, of course passing over the lights of the profession, are too apt to run on rails and rules before laid down, and while, like the locomotive, everything is as before met with, they do splendidly; but the moment anything out of the usual way occurs, they are as helpless as said locomotive off from the track, and an object of commiseration equally with their patients. The habit of continually depending on others to do your own thinking, is a state of things not favourable for mental growth. After considerable time spent, I had almost said wasted, in visiting the hospitals in this metropolis, I have arrived at the conclusion that *relative influence* had more to do with the appointment and continuance in office of some of the surgeons than *relative anatomy*, and *regional connexions* more than *regional anatomy*. *Qualities of blood* have more influence, I fear, than those of the head and heart. After a visit here one is better fitted to read Roux's 'Parallel between English and French Surgery.' I have certainly seen as bad surgery here as did Roux."

Reviews and Notices.

RESEARCHES ON THE NATURE, PATHOLOGY, AND TREATMENT OF EMPHYSEMA OF THE LUNGS, and its Relations with other Diseases of the Chest. By A. T. H. WATERS, M.D.; Member of the Royal College of Physicians of London; Physician to the Northern Hospital, Liverpool; etc. Pp. 114. London and Liverpool: 1862.

DR. WATERS has already established for himself an honourable reputation by the able essay which he published a few years ago on the Anatomy of the Human Lung, and for which the Fothergillian gold medal was awarded to him by the Medical Society of London. He now brings forward the result of his researches, literary and practical, on one of the morbid structural changes to which the pulmonary organs are liable; and, in doing so, has at least established a claim to be enrolled among the most able and diligent of those who have striven to explain the nature and mode of production of emphysema, regarding which considerable difference of opinion still exists among pathologists.

The book is divided into six chapters.

In the first chapter, the author describes the Morbid Anatomy of Emphysema. After a brief historical notice, given with the object of shewing the present uncertainty of our knowledge as to the nature and pathology of the affection, he describes in outline his views as to the minute anatomical structure of the healthy lung. He then goes on to describe pulmonary emphysema as of two kinds—vesicular and interlobular; the former being the most frequent and important, and the latter occurring rarely, except in advanced cases of the vesicular form. Vesicular emphysema is further divided by him into *partial lobular*, where a few air-sacs or a single lobulette are affected; *lobular*, where the whole of a lobule is affected; and *lobar*, "where the whole of one lobe of a lung, or more frequently the whole of the lung itself, is involved in the disease." Lobar emphysema is regarded by Dr. Waters as the most important form of the disease.

The condition of the pulmonary tissue in the various stages of emphysema has been carefully examined by Dr. Waters. In the early stages, the air-sacs are dilated, the alveoli increased in size, and the alveolar walls partially obliterated. This obliteration increases as the disease advances; so that, instead of presenting the honeycombed appearance arising from the depressions or alveoli in their walls, the inner surface of the air-sacs becomes smooth. The walls of the air-sacs, being distended, become thinned and perforated; so that "in some instances, the whole of the walls of the air-sacs and the septa of the alveoli are perfectly riddled with small openings, so that a horizontal section of the lung-substances has a general cribriform appearance." Further changes consist in greater distension of the air-sacs, enlargement of the perforations, and rupture of the fibres composing the walls, with consequent coalescence of the openings; until, in the most advanced stages of the disease, the partitions between the sacs may form mere shreds. Dr. Waters has observed a difference in different lungs which he thinks important; viz., in lobular emphysema he has found much distension and little perforation; while in lobar emphysema there has been extensive perforation with sometimes even less distension than in the lobular form. This greater liability to perforation in lobar emphysema he believes to point to the presence of degeneration of the lung-tissue.

In the second chapter, Dr. Waters discusses the Pathology of Emphysema, and brings forward some very ingenious views. He observes that the great question is, whether emphysema is preceded or attended by any degeneration of tissue; and he holds that lobar or general emphysema is produced under different conditions from those which prevail in the lobular or partial form of the disease. Regarding the latter, he says:—

"Where the disease is partial, and situated, as is then usually the case, along the margins and at the apex of the lung, and is associated with or has followed some other pulmonary affection—as, for instance, chronic bronchitis, or, in fact, any disease which has been attended with long standing or violent cough,—I believe the morbid changes may have been brought about mainly by mechanical violence, without there having been any preexisting affection of the lung-tissue. The general appearance of the lung substance, in these cases, is very different from that which characterises the disease to which the name of lobar emphysema has been given; the tissue has more the appearance of that of the healthy lung, but it is paler and more anæmic than the latter. It is quite true that in these cases the same anatomical changes—dilatation, perforation, etc.—take place in the progress of the disease, as in the larger and more formidable affection; but these changes necessarily ensue, not merely from a rupture of the elastic fibres and basement membrane, but also from the giving way and absorption of the capillary blood-vessels—circumstances which lead to imperfect nutrition and consequent atrophy." (Pp. 24-5.)

On the other hand, speaking of lobar or general emphysema, he observes:—

"That this form of the disease differs very materially in its pathology from partial emphysema.... will, I think, be admitted by all who will give a careful attention to the subject. The insidious manner in which the disease comes on; the almost entire absence of cough frequently observed, as well as of all other symptoms except a gradually increasing dyspnœa, and, as the patients constantly describe it, 'a smothering in the chest'; the occasional rapidity with which the affection progresses; the secondary consequences which ensue; and the general cachexia which supervenes—all point to the grave character of the malady, and, I believe, to its constitutional origin in some degeneration of the pulmonary tissue." (P. 26.)

What the nature of this degeneration is, D Waters does not pretend to determine. Mr. Rainey and Dr. C. J. B. Williams have believed it to be fatty; Dr. Jenner holds that fibrous degeneration is the most common change in emphysema. Neither of these conditions, according to Dr. Waters, is sufficiently constant to be regarded as a cause. He has found fatty degeneration in some cases; but it has here sometimes not only affected the pulmonary vessels but also the aorta; and he questions whether it may not be "the result of the imperfect nutrition which necessarily ensues in the progress of the disease."

The author thus sums up his reasons for believing emphysema—*i. e.*, lobar—to be the result of a degenerative process of constitutional origin:—

"1. The high degree of development which the disease often reaches, without any previous history of violent or long-standing cough, either in connection with bronchitis, hooping-cough, or any similar affection.

"2. The frequency with which the disease attacks the whole of both lungs; and the uniformly equal character of the morbid change often observed throughout all parts of the lungs.

"3. The hereditary nature of the disease.

"4. The manner in which the disease is influenced by certain remedial measures which are known to act beneficially on other diseases attended with degeneration of tissue." (Pp. 34-5.)

In the third chapter, the Determining Causes and Mechanism of Emphysema are examined. The author here notices the two principal theories which have been proposed—the inspiratory, in which it is assumed that the dilatation of the air-sacs is produced by inspiration; and the expiratory, which refers the morbid change to the effect of expiration. The views of Laennec and Gairdner especially are noticed; and, after an examination of the arguments for and against each of the theories to which reference has been made, Dr. Waters arrives at the conclusion that, while lobular emphysema may be produced by expiration, the lobar form is produced by inspiration.

"From a knowledge of the peculiar arrangement of the walls of the chest, and a consideration of the action of those muscles which are concerned in expiration, it appears to me that, with violent expiratory efforts, the lungs *must* be unequally compressed, and that air must be driven, first to those portions of the lungs where the walls are least resisting, and secondly, to those portions which contain the least volume of air." (P. 47.)

This remark applies to the *partial lobular* and *lobular* forms of emphysema, which Dr. Waters believes arise most frequently from violent expiratory efforts, as cough. With regard to emphysema affecting the whole or a large part of one or both lungs, where no such obvious cause is present, Dr. Waters observes:—

"From the non-existence of cough and bronchitis, and the prevalence of the disease throughout the entire lung, we cannot attribute any effect to expiratory efforts; and I am disposed to think that the distension is brought about by inspiration; that the lung-tissue, being in an unhealthy condition, and abnormally weak, gives way before the pressure which it would in a state of health resist; that, having once yielded, it is unable to recover itself, from having lost its elasticity. Consequently, it undergoes further distension, as increased efforts are made to dilate the chest in order to meet the requirements of respiration; until, at length, the thorax having reached its extreme point of dilatation, no further enlargement of the lungs can ensue." (P. 52.)

In the fourth chapter, Dr. Waters describes the Symptoms and Physical Signs of Emphysema; and in the fifth, the Sequelæ of Emphysema, and the Diseases associated with it.

In the last chapter, on the Treatment of Emphysema and of the Diseases connected with it, Dr. Waters, holding to the view already expressed by him of the constitutional and degenerative nature of the disease, advises the employment of "all measures which invigorate the system, give tone to the walls of the vessels, and improve the condition of the blood." The most useful remedy in his hands has been iron, sometimes combined with small doses of quinine. Mild bitters, and mercurial, with rhubarb pill, are sometimes required to relieve dyspeptic symptoms. Cod-liver oil has been found of service in cases attended with much wasting. He has confined himself mostly to iron and quinine, "except in regard to the sparing use of expectorants, and remedies addressed to the bronchitic and asthmatic conditions from which the patients generally suffer more or less." The diet should be as nutritious and digestible as possible; a main object being "to keep the blood moderate in quantity but rich in quality." For other particulars as to treatment, we must refer to the work itself.

In concluding this notice of Dr. Waters's work on *Emphysema*, we feel bound to express our hearty thanks to him for the ability and diligence with which he has endeavoured to clear up one of the obscure points in pathology; and, while we congratulate him on the success which has hitherto attended his labours, we hope that he will continue his researches in the path on which he has entered with so much credit to himself and promise of advantage to science.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. By GUNNING S. BEDFORD, A.M., M.D.; Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York, etc. Third edition, carefully revised and enlarged. Pp. 743. New York: 1863.

THIS work consists of forty-seven lectures, on the subjects usually treated of in systematic works on Midwifery. In its general plan, and in the doctrines inculcated in it, the book presents nothing remarkable. But for the completeness, clearness, and general soundness of the instruction which it contains, it is fully worthy of being placed in the foremost rank among books of its kind. That the profession in America have arrived at this conclusion, may be reasonably inferred from two facts stated by Dr. BEDFORD in his preface; viz., that this—the third—edition has been called for within little more than thirteen months from the first appearance of the work; and that the treatise has already been adopted as a text-book in nine of the medical colleges of the United States.

While, however, it is not necessary to give an elaborate analysis of the work, there are one or two points in it on which it may be interesting to know the author's opinion.

In regard to the recently discussed question—the management of twin-labours—Dr. Bedford points to what takes place when the progress of the case is left to nature, as a guide to the practitioner. The statistics collected by Dr. Collins tend to show that, if left alone, the birth of the second child follows that of the first at an interval generally ranging from fifteen to thirty minutes. Hence, his advice is to wait, unless there be some complication, such as hæmorrhage or convulsions, at least half an hour before attempting to expedite the birth of the second child. If it be then necessary to interfere, ergot may be given; and, if the fœtus be not expelled at the end of two hours, turning, or the forceps if the head have descended, should be employed. He regards it as important that, as a general rule, the accoucheur should not leave the room until the delivery of the second child has been accomplished. But he admits that these instructions as to the

management of twins must not be regarded as of universal application; for instances sometimes occur—as in premature delivery—where the birth of the second child is delayed two or more weeks after the birth of the first.

In speaking of Dr. Simpson's recommendation to substitute turning for craniotomy in cases of deformed pelvis, Dr. Bedford holds that, if the contraction in the antero-posterior diameter of the pelvis at the inlet be less than three and one-eighth inches, the delivery of the head by version would be physically impracticable.

"But again, if there be a space of three inches and an eighth, it is possible that the head may descend in a vertex presentation, for the reason that the transverse diameter of the arch will occasionally, through the overlapping of the bones, yield to the extent of half an inch. Therefore, with such a pelvic deformity—such as we have described, it is far better to trust, all things being equal, to the resources of nature than to attempt delivery by version. . . . . Turning, under the most favourable circumstances, is an operation of peril both for mother and child; and just in proportion as the natural dimensions of the pelvic canal are abridged, the peril will be enhanced. Again; another solid argument, it seems to me, against version in pelvic deformity, is the very probable contingency, after having subjected parent and child to the danger of the alternative, that the delivery will be required to be terminated by craniotomy. My advice to you is this—if the antero-posterior diameter do not measure more than three and an eighth inches, trust, as long as circumstances will justify it, to the resources of nature; if these be found inadequate, and there should be indications of peril either to mother or child, then, in lieu of version, have recourse to the forceps; for although, as a general rule, when the head is at the superior strait, I prefer turning to forceps delivery, yet, in the event of pelvic deformity, such as we have been considering, my choice would be the instrument. The safest practice, however, would unquestionably be the induction of premature delivery; but this would, of course, involve the necessity of ascertaining the existence of the deformity at some time prior to the completion of utero-gestation." (Pp. 54-56.)

In concluding, we must not omit to notice the elaborate manner in which certain operative details are described by Dr. Bedford. We refer in particular to the lectures on the use of the forceps; where special directions are given for the application of this instrument in each position of the child's head in which it may be necessary to use it.

Dr. Bedford's book is a very complete exposition of the present state of obstetric knowledge; and, as such, is worthy of a favourable reception in this country as well as in America.

Extraordinary Longevity. For some time past the obituary of *The Times* has exhibited some rare instances of old age. Our impression of Tuesday last published the deaths, among others, of six persons, whose united ages amounted to 519 years, or an average of 86 years and 6 months for each of them, five being women, the youngest being 82, and two numbering 91 years each. The gentleman was 84. The obituary of yesterday was still more remarkable than that of the preceding day, inasmuch as the deaths of seven persons are given, whose united ages amounted to 611 years, or an average of 87 years 3 months and 12 days; and again the ladies take the lead, there being four to three of the opposite sex, the youngest being a man (82), and the eldest a lady, reaching the great age of 91 years. (*The Times.*)

British Medical Journal.

SATURDAY, APRIL 11th, 1863.

DR. WATERS.

The profession will warmly congratulate Dr. Waters of Chester upon the result of the action to which he has been subjected. Not only has Dr. Waters been subjected to an action at law; but he has for many months past had to bear the still greater burthens of the suspicion attaching even to the very bringing of such a charge against a man in his position, of the malignancy of enemies, and of the lukewarmness of friends. This has been no ordinary action; nor has it been carried on in an ordinary way. Dr. Waters has had to contend against powerful influence and wealth. Whatever money can do to assist in bringing home such a charge against a man, has been thoroughly done in this case. We believe we are correct in stating, that the expenses of the parties who have backed the hysterical female in the attempt at carrying out her slanderous accusation cannot amount to less than £3000! This will give our readers an idea of the influence against which Dr. Waters has had to contend—of the battle which he has had to fight. Of course, under such circumstances, the triumph of his cause becomes all the greater.

We need hardly allude to the history of this case. Dr. Waters gives, kindly and unfortunately, his gratuitous services, at his own house, to a hysterical female, the servant of one of his patients. He examines her with the speculum, finds superficial ulceration of the os uteri, and applies lunar caustic six or eight times. The woman is long under his observation. She at last goes to Malvern, where she comes under Dr. Gully's care, and complains of a swelling in her stomach, the nature of which was not appreciated by the extensive experience in hydropathy and homœopathy of the presiding doctor. Eventually, and to her great astonishment (?), the female is delivered of the tumour in the shape of a child. She had never had connexion, she swore, to her knowledge, with any man; therefore she must have been impregnated—in other words, raped—by Dr. Waters in his own house, on the occasion of one of her visits to him. She was, as her tale runs, made insensible during two hours by a potion administered to her by Dr. Waters, and in that condition the deed was effected. She named the time and day on which the thing was done.

This was her statement, which the jury by their verdict, and the judge in his charge, pronounced to be an infamous lie. The woman was of the class of clever, cunning, hysterical impostors; and by her

plausibility had won the complete confidence of her mistress, who, out of kindness to her servant, was determined to have justice done upon Dr. Waters.

We need hardly add that there was not a shadow of suspicion attaching to Dr. Waters in the matter. He has been most cruelly subjected to an accusation to which every member of the profession is every hour liable. And, therefore it is that he has especially a right to ask at the hands of his medical brethren their warmest sympathy and, if need be, pecuniary support.

But how comes it that those high in rank in the profession are to be found to lend their countenance to the carrying on of such an action as this? We think the profession has a right to demand an explanation from gentlemen who appear against a medical brother in such a case as this. Heaven forbid that we should for one moment support the doctrine, that medical men are not to give evidence against an accused party merely because he is a medical brother. No! let justice be done under all circumstances. But what we do unhesitatingly affirm is this: that when medical men, and especially medical men of note and mark in the profession, travel all the way from London to Chester, to assist in the prosecution of a medical brother, in a prosecution which, if successful, would for ever blast that medical brother's name, destroy his family, drive him from society, drive him from his country, ruin him in money, and ruin him in character, medical men should have the most convincing proofs of the guilt of the party inculpated before they lend the influence of their high names to the furthering of such a fearful charge. They should not appear as mere partisan experts, summoned on an action for damages against a railway company.

We have carefully read through the medical evidence (as reported in the *Chester Courant*) given by Dr. Lee and Dr. Ramsbotham; and we say, without hesitation, that such evidence never ought to have been given by them. The learned judge said that the theory of the plaintiff's case was this, as he understood it:

"The young woman had to go to Dr. Waters, and he had applied the speculum to her without good medical reason for it, but in order to gratify some filthy desire either in inspecting her person, exciting her lust—or getting possession of her person. That finally he committed the offence whilst she was insensible, rendered so, as alleged, by the use of drugs. That was the theory propounded by the plaintiff. If they came to the conclusion that the treatment was improper, and directed to that end, it was no doubt a corroboration of the young woman's statement."

Well; and here we find Dr. Lee and Dr. Ramsbotham both declaring that the treatment was improper. Both the doctors together examined the female; and said Dr. Lee, "In my opinion, no ulceration ever existed there at all, and the speculum has been most grossly abused." We have, therefore, both these gentlemen "corroborating the young woman's statement" by declaring that the treatment was improper. Now we are not going to say a word in favour of the modern use of the speculum; we may agree with Dr. Lee that the instrument is grossly abused; but we nevertheless affirm that Dr. Lee and Dr. Ramsbotham were utterly without justification in lending their great names to the support of this prosecution—resting their positive assertions on what is manifestly nothing but a mere matter of *opinion*, on their *medical opinions*. For what, after all, is their assertion, but a mere opinion? They assert that the treatment was improper. Well, here are, then, equals in celebrity to themselves—Dr. Simpson of Edinburgh, Dr. Keiller, and Mr. Brittain, and Dr. Fyfe—who go into the witness-box and swear that the treatment adopted by Dr. Waters was, in their opinion, right and proper, and just the very treatment which they themselves would have adopted!

What must the world, and what must the profession think of the conduct of medical celebrities who go into a court of justice to assist, on the strength of a mere opinion, in bringing home such a charge as this against a professional brother? And who can tell what baneful influence such evidence as this might have had on the minds of the jury, had not Dr. Waters, happily, been able to avail himself of the counter-evidence of Dr. Simpson and Dr. Keiller?

It is high time that some serious steps were taken by the profession to put down this most unseemly persecution of medical men by medical men. How often have we not of late had occasion to refer to such scenes as these, where medical men too eagerly appear in court to assist in the blasting a brother practitioner's fair fame! The very fact of men in the position of Dr. Lee and Dr. Ramsbotham appearing in the case, gives an immense impulse to the accusation. Nay, we may even venture to believe that, but for their countenance, such an action as this could never have been brought at all. Is it not, indeed, reasonable to believe that their influence could have even arrested the action? Surely no men should know better than they how scrupulously cautious a medical man should be in accepting the one-sided statements of a clever hysterical female; and especially so when, as was evident, the blasting of Dr. Waters's fame would be the saving of her own reputation!

As regards Dr. Taylor, we will only remark that we regret to see his name connected with a prosecution in which he positively had no special evidence whatever to give—where his presence was, in fact, quite superfluous. The only statement of consequence which he made was one which, we believe, he would have the very greatest difficulty in substantiating by fact; namely, that impregnation can take

place during the insensibility of the female. Every one will theoretically at once admit the thing as possible; but can Dr. Taylor give any proof sufficient that impregnation has ever taken place under such circumstances? And if he cannot, for the sake of his medical brother, why did he not say so? We would remind him of his own quotation concerning this point in his work: "*Non omnes dormiunt, qui clausos tenent oculos.*" Why not at least have given Dr. Waters the benefit of the doubt?

We may have occasion again to return to this subject; and will only now add that we consider the profession has a right to call upon these gentlemen to justify themselves for the part which they have played in this most serious trial, wherein what is of more importance to a medical man than life itself has been the stake played for.

JOURNEYMEN BAKERS.

The wrongs of the journeymen bakers have been often brought under the notice of the public. We are glad to see that they are now to come under the especial notice of the House of Commons.

Mr. Bruce has brought forward a bill to regulate the employment of bakers, and his bill has been ordered to be printed. It is called the Bakehouses Regulation Bill. According to its terms, persons under the age of eighteen are not to be employed in bakehouses between the hours of nine o'clock P.M. and five o'clock A.M.—*i.e.*, during the time when people ought to be in bed. Again, in this bill, provisions are made to enforce the cleanliness of bakehouses; bakehouses are to be painted and limewashed according to Act of Parliament. The measure seems strong, and contrary to his-house-his-castle idea of the Englishman; but it is undoubtedly warranted by the requirements of the case. The ventilation of these places is also to be provided for, and they are to be kept free from all offensive odours. Sleeping places are not to be permitted on the same floor with the bakehouses unless under certain strict regulations.

This bill is founded on the reports of Mr. Tremenheere, who has inquired into the subject at the instance of Sir George Grey. In fact, the result of Mr. Tremenheere's investigations was the following recommendations:—

"1. That no youth under eighteen be allowed to work in a bakehouse later than nine P.M. or earlier than five A.M.

"2. That bakehouses be placed under inspection, and subjected to certain regulations in regard to ventilation, cleanliness, etc.; and

"3. That it would be desirable that the provisions of the Act 'for Preventing the Adulteration of Articles of Food' should be made more effectual."

The following extract from the *Social Science Review* will give our readers an idea of the evil which this bill seeks to remedy:—

"The work of a London journeyman baker begins at about eleven o'clock at night, at which time 'he makes the dough.' This is a laborious process, and lasts from half an hour to three quarters of an hour. He then lies down upon the kneading-board, which is also the covering of the trough in which the dough is 'made,' and with one sack under him and another rolled up under his head for a pillow, he sleeps for about two hours. He is then engaged continuously for about five hours, 'throwing out the dough,' 'scaling it off,' moulding it, putting it into the oven, taking it out of the oven and up to the shop, etc. When the bread and roll making is ended, the distribution of it begins, and a considerable proportion of the men thus employed during the night are upon their legs for many hours in the day, carrying baskets or wheeling handcarts, and sometimes in the bakehouse at work again. Some of these men leave off work at various hours between one and six p.m., according to the season of the year or the amount of their master's business, while others are engaged again in the bakehouse, 'bringing out' more batches, until late in the afternoon.

"It appears from the evidence that a very large majority of the journeymen begin to work in this manner when they are under eighteen; usually when only sixteen, and frequently when fifteen and even fourteen years of age. The total number of journeymen bakers in the metropolis is now considerably more than fourteen thousand, and of this number two thousand are under eighteen years of age.

"The locality in which the bread of London is made is what in houses in general is the coal-hole and the front kitchen. The ovens are usually under the street. Mr. John Bennett stated in his evidence, 'that many bakehouses in London were in a shockingly filthy state, arising from imperfect sewerage and bad ventilation and neglect; the bread therefore, during the process of fermentation, became impregnated with the noxious gases surrounding it; also, that many journeyman bakers in London slept under the pavement, in the bakehouses.' Another witness said, that 'the places where he had worked had almost always been arches under the ground with no means of ventilation, except through the doors. These were generally fearfully hot, and many of them infested with vermin. The bakehouses were also often so close to the drains that they smelt very bad. It was a common practice to lock the bakehouses at night, while the men were at work; consequently, there being no ventilation except through the doors, it was very stifling, and apt to injure the men's health.' Mr. Neville also stated, that 'he had known many bakehouses in a shocking state, as places of work, and most injurious to the men, and so infested with rats, beetles, cockroaches, and so full of noxious smells, that they must infect the bread.' Other witnesses spoke of the extreme dirt in the bakehouses, of the large cobwebs which hung from the ceilings, of the blackness of the rafters caused by the sulphurous exhalations from the oven, of the animals which crawled in considerable numbers in and out of the troughs where the bread was made, of the smell from the drains, the draught of the oven continually drawing the effluvia through the bakehouse, and of the foul gases with which small bakehouses in particalar are overloaded, from the drains, the ovens, the fermentation of the bread, and the emanations from the bodies of the workmen.

"No person who has not seen it can form an idea of the process which flour undergoes in a London bakehouse in the course of its being converted into bread. Even under the most favourable circumstances the process is such that no one would wish to witness it a second time. Presuming the utmost cleanliness on the part of the foreman, who is obliged to plunge his arms into the semi-liquid mass in the trough in which he mixes the ingredients for the bread, this method cannot

but suggest frequent impurities. For instance, in the process of making the dough, in particular, the work is so severe, the posture so disadvantageous, and the heat of the bakehouse so intense, that it frequently happens that the perspiration drops from the men's faces into the dough; and their arms, immersed in the dough, are necessarily at the same time covered with perspiration. Another fact is that, during the process of making the dough, which usually lasts from half an hour to three-quarters of an hour, the men inhale the flour-dust, and the carbonic acid gas, generated by the fermentation, both prolific causes rendering them so liable to lung disease. The attention of Mr. Tremenheere was called to these facts by several witnesses, and, from their unvarying testimony, he came to the conclusion that it was next to impossible to prevent the perspiration of the men employed in making the bread, according to the present system, from mixing more or less with the batch of bread so made. One of the witnesses stated that, on a cold day in November, in a large bakehouse which was cool, he had seen one of the men making the dough, from whose face the perspiration was dropping, and yet he was standing within four feet of an open door."

A PHYSICIAN KEPT BY A DRUGGIST.

We have received the following, which is printed on paper of the size and shape and quality which are met with at certain useful corners of streets. We are assured that the physician alluded to is not a mere abstraction, but is a person who holds a position of some mark in the profession. We trust that our informant is mistaken.

"J. H. Morton, Medical Hall, Upper High Street, New Brompton, respectfully invites attention to the superior quality of the medicines sold at his establishment, and solicits a trial of the following preparations, the large and increasing sale of which is a sufficient proof of their efficacy. Morton's Tasteless Antibilious Pills. Morton's Celebrated Powders for Children. Morton's Tasteless Castor Oil. An experienced physician attends every evening. Advice Gratis. Urgent cases, accidents, or midwifery, attended at any hour."

THE WEEK.

The deaths of Mr. Stewart and his assistant, of Edinburgh, after accidental inhalation of nitric acid vapour, have called the attention of several persons to the subject who have themselves witnessed similar dangerous consequences. In the *Chemical News*, Mr. F. Trachsel of Manchester writes:

"The notice of the deaths at Edinburgh of Mr. Stewart and his assistant reminded me of a similar lamentable case which occurred some years ago to a friend of mine, Mr. James Heywood, lecturer on chemistry at Sheffield. His death was occasioned by the breakage of a carboy of mixed acids, nitric and sulphuric, which he used for exciting some voltaic batteries. During the act of pouring out into a jug the acid, he slipped and fell; the glass vessel broke, cutting his hand severely. The pupil who assisted him had his clothes burnt; he was quickly taken to a pump; he did not die. But poor Heywood went home; in a short time his feet became very cold, he felt an increasing difficulty in breathing, and died in the night."

Mr. Trachsel attributes the cause of death to coagulation of the blood produced by the action of the nitric acid vapour. Another case, illustrating the injurious effects of the acid, is related of himself by Mr. J. S. Blockey, who writes in the *Chemical News*:

"Some years ago, after experimenting for some time with Callan's battery, I was attacked with a sort of pleurisy, which the doctor (Mr. Nichols of Savile Row) attributed to the fumes of the battery."

Again, Mr. Peter Spence, of the Pendleton Alum-works, in the same journal remarks:

"I fully agree with Mr. Swindells as to the lamentable characters of the accident at the Edinburgh Institution, by which the lives of Mr. Stewart and his assistant were sacrificed. Sad experience, however, makes me differ entirely with him as to the occurrence being singular; and, if not more careful, it would not surprise me to hear of his being the next victim to the deadly power of nitrous acid gas. The following analogous case in my own works may serve as a warning to him and others who might by his letter be thrown off their guard. Last October, at my works at Goole, in Yorkshire, it became needful to clean out a vitriol-chamber for repairs. It had been off work for ten days, and was thought to be well ventilated. Some men were sent in; and, while cleaning out the accumulated sulphate of lead, nitrous fumes arose freely. The men naturally complained; and my manager, a most worthy and faithful man, whose only fault was a reckless determination always to do his duty whatever the consequences, went in along with them, and continued longest exposed. He came out apparently none the worse, sat down and wrote me his daily letter, in which he detailed the event, merely saying that it was not pleasant. He went home, took tea, dressed, and actually went to a meeting in the town, where he was seized with Mr. Swindells' symptoms of difficulty in breathing; and for twenty-four hours this continued with varying symptoms, followed by violent inflammatory action of the brain; and, in about forty hours after the exposure, he died. One of the men, who had been exposed for a shorter time, after a similar attack died the following day. No gas is, I am convinced, more dangerous; its worst feature being, that an exposure deadly in its ultimate result may give its victim no particular uneasiness for some time after he has inhaled a fatal dose."

The subject is one of much interest, and has not, we venture to think, received from the profession all the attention it merits.

We copy the following from a daily paper, and can only trust that such unseemly and unjustifiable remarks, made in court by one professional man respecting the treatment adopted by another professional man, have been wrongly reported. If we were satisfied of the correctness of the report, we should give the gentleman's name who uttered them, and also state our opinion of his behaviour in the matter.

"The *post mortem* examination", he is reported to have said, "showed that the ribs were fractured from violence. There was also chronic inflammation of the chest from long standing disease. He was of opinion that death resulted from the fracture, badly managed in the first instance by the gentleman who was called in, and acting on a constitution already enfeebled by illness. The ends of the ribs had not been placed in apposition. It was possible that she might have lived if the ribs had been properly set; but it was most difficult to say that she could have recovered from such injuries."

It does not appear to be sufficiently well known that candidates for the membership of the Royal College of Physicians of London are expected to give proofs of their knowledge of the Latin language. A knowledge of this language by candidates for the membership is considered by the College a *sine quâ non*. Candidates may also, if they please, translate passages from Greek authors, and exhibit a knowledge of the modern tongues; but this part of the Member's programme is not obligatory, like the former.

At a late meeting of the Cork Medical Protective Association, Dr. Mackesy proposed a resolution and made the following remarks relative to medical representatives in Parliament :—

"Dr. Mackesy proposed the resolution :—

"'That we still keep in view, in the event of further parliamentary reform for the United Kingdom, the justice of having the medical profession represented in the House of Commons.'

"As, fortunately, reform at the present moment is totally forgotten, the object of this resolution is to keep the subject of medical parliamentary representation under the notice of the public and of the medical profession. The England people have proved their sound judgment and good sense by the manner in which they ignored the reform bills that had been brought forward by different governments, which only dealt with the masses of the community, and gave no adequate conceded representation in Parliament to the educated classes. It is, therefore, to be presumed that, when Government shall again introduce a reform bill, the educated classes will receive proper consideration, and amongst them the unrepresented educated classes. The Colleges of Physicians and Surgeons of the United Kingdom occupy the first place—each College having a numerous, respectable, well-educated constituency, regularly and legally registered under the judicial act, and when those Colleges shall be enabled to send representatives to Parliament, I expect that voting by voting papers will be granted to them, the same as to the Universities, thus enabling the most remote medical practitioner to record his vote without trouble or expense. The advantage of having medical men of station and acquirement in their profession in the House of Commons to arrange the many sanitary measures introduced and generally so mismanaged as to render them in many instances inoperative, is too obvious to require observation, and render medical parliamentary representation of more consequence to the community at large than to our profession."

Some interesting particulars of the epidemic of yellow fever which reigned in Lisbon in 1857 is recorded by M. Alvarenga, have been lately given by Dr. Simonot to the Medical Society at Paris. The epidemic began on September 9th, 1857, and lasted to December 27th. During this time, out of a population of 200,000, there were affected by the disease 13,757. Of these, 7,842 were treated in private, 5,161 in hospitals, and 754 in military hospitals. Of the deaths, 3,466 occurred in private, 1,933 in hospitals, and 254 in military hospitals. In the special hospitals, of 155 *employés*, 34 were affected, and 8 died. At the Hospital San José, situated in the midst of the most infected part, of 242 *employés*, 43 were affected and 21 died. 33 ecclesiastics and 3 medical men, who attended the sick, also died. Thus there was one person affected in 14.53; and one death in 35.38 of the population; moreover, there was one death in 2.43 of patients. Hence, this epidemic of yellow fever at Lisbon was more fatal than the cholera at Paris in 1832—the mean mortality being 21.83 in 1000 of population. In the vast establishment of Desterio, the total number of patients was 2514. At the outbreak, M. Alvarenga courageously shut himself up with them; and it was here that he made his clinical observations on sixty-three autopsies, in which all the organs were examined with the greatest care. M. Alvarenga has published a most minute, and no doubt faithful, account of the observations thus taken by him.

M. Becquerel has communicated to the Academy the results of his new researches respecting the temperature of the air. There exist, according to him, in every place two mean temperatures: one which depends upon latitude, and another upon the nature of the earth's surface. The latter temperature has hitherto been neglected by travellers, and it is the one to which he now calls attention.

Erysipelas is always present in Parisian hospitals. During January last the number of cases have been notably increased. Lariboisière has still the sad reputation of affording the greatest number of cases and the greatest mortality; four out of fifteen cases were mortal.

Dr. Schreber of Leipzic recommends the use of clay as the most "energetic, the most innocent, the most simple, and the most economical of palliative applications to surfaces yielding foul and moist discharges." He moreover considers that it has a specific action in accelerating the cure. Clay softened down in water, and freed from all gritty particles, is laid, layer by layer, over the affected part to the thickness of about a line. If it become dry and fall off, fresh layers are applied to the cleansed surface. The irritating secretion is rapidly absorbed by the clay and the contact of air prevented. The cure thus goes on rapidly. This clay ointment has a decisive action in cases of fœtid perspiration of the feet or armpits. A single layer applied in the morning will destroy all odour in the day. It remains a long time supple, and the pieces which fall off in fine powder produce no inconvenience.

The thirtieth session of the Scientific Congress of France is to take place this year at Chambéry on August 10th and 12th. Amongst others an interesting subject figures for discussion on the programme; viz., Is it for the benefit of medical science, that centres of instruction should be multiplied in proportion to the clinical and material resources of the empire?

THE LATE JOHN SMITH SODEN, Esq.

Died at Bath, on the 19th of March, John Smith Soden, one of the oldest members of our profession, one of the founders of this Association, and one who leaves behind him an honoured and respected name.

Mr. Soden was born at Coventry on the 29th of March, 1780; a few days longer of life would have completed his eighty-third year. He was educated at the King Edward's Grammar School of his native city. He commenced his professional career under the tutelage of Mr. George Freer, a distinguished surgeon of the Birmingham General Hospital, with whom he resided five years. He then went to London and became a pupil of St. George's Hospital, and attended lectures at the Hunterian School in Great Windmill Street. On March 20th, 1800, he became a member of the old Corporation of Surgeons, immediately before its elevation to the dignity of a College. In the same year he entered the medical service of the army, and was appointed assistant-surgeon to the 79th Highlanders. He joined this regiment in June, and immediately afterwards embarked with it on that expedition which landed on the shores of Egypt on March 1st, in the year 1801.

Mr. Soden served throughout the whole of the Egyptian campaign, and was present with his regiment both at the landing and at the battle of Alexandria on March 8th. He returned with the army to England on the termination of the war; and then, his health having in some degree suffered, and influenced by the belief that the peace of Amiens would be permanent, he retired from the service and settled in practice in his native city. He remained there a few years, and in 1812 established himself at Bath, where he continued to practise until 1845, when he retired from the active duties of his profession. For the last twelve years, Bath was again his residence. Within a year of his removal to Bath, he was appointed surgeon to the Eye Infirmary then just established, and also to the City Dispensary. The latter appointment merged with the charity itself into the Bath United Hospital, in which Mr. Soden continued to fill the same office till his retirement from practice. His professional services were also given for many years to the Bath Penitentiary, with which charity he was connected from its foundation. After his retirement from active professional life, he ever manifested the warmest interest in the support and success of these humane institutions.

From this sketch it appears that Mr. Soden was early thrown into active and responsible positions, and that he enjoyed great and varied opportunities of acquiring practical experience, of which he fully and zealously availed himself. This initiation produced an earnest love for his profession and an enthusiastic estimate of its high calling. The natural tenor of his mind, an excessively modest appreciation of his own capabilities, and a fervid admiration of the labours and powers of others, led him rather to study and acquire the knowledge that existed than to seek its extension by original experiment and research; consequently, his mind was a storehouse of medical literature, and few of his contemporaries were so well acquainted with the works of English medical writers and the existing condition of his profession. His memory was singularly retentive, and, following the dictates of his natural tastes, he had accumulated a vast fund of not merely the useful but of all that was quaint and remarkable in medical lore, whether concerning the writings or the deeds and characters of those to whom it relates.

His early experience, his extensive knowledge, combined with great powers of analysis, a sound judgment, and a calm and even temperament, essentially contributed to render Mr. Soden the good and successful practitioner which he was justly allowed to be by all who were in any way associated with him. From his retiring disposition and natural diffidence of manner, he did not take that lead in extent of practice that might have seemed the just reward of his qualifications; but he filled a high professional position, and largely enjoyed the confidence both of the profession and of the public.

In one branch of practice, that of diseases of the eye, he stood preeminent. As an operator, he had perfect self-possession and steadiness of hand, as was well exemplified in his operations for cataract. The writer has often seen him extract the lens, and, with full experience of the skill of contemporary operators, he can justly place Mr. Soden on a par with the most successful. His mode of operating was a good test of his powers. After the fashion of his time, he always made the lower section, and was ambidexter. Sitting in front of his patient, who was also in the sitting posture, Mr. Soden punctured the cornea almost vertically; he liked to see the little jet of aqueous humour issue by the side of the knife, as it assured him that the point of that instrument had penetrated all the layers; he then slowly carried the knife across the anterior chamber, and with such steadiness that he was never known to touch the iris or to fail in his section.

In general operations, it must be recorded that he was one of the first who successfully tied the external iliac artery. The case is published in the seventh volume of the *Medico-Chirurgical Transactions*.

As may be supposed, such a lover of books was likely himself to make use of the pen. He was not a voluminous writer, but he contributed several papers to the medical periodicals and local societies. These papers were of a practical nature, excellent epitomes of all that was known on the subjects of which they treated, and valuable records of the writer's own experience. Among them may be enumerated "A Case of Malformation", in the *Edinburgh Medical and Surgical Journal*, vol. iv; "Poisoning by Arsenic", in the *Provincial Medical and Surgical Journal;* "On the Use of Ergot of Rye"; "On Benzoic Acid"; "On Purulent Ophthalmia"; etc. He also gained the Jacksonian Prize of the Royal College of Surgeons in 1810, for his essay on "The Bite of a Rabid Animal". He wrote fluently, with clearness, and in an easy, inviting style, as was well exemplified in an interesting address on his early recollections of the changes that have taken place in professional practice, particularly with reference to bloodletting, delivered at a Branch meeting of the Association

in Bath on the last occasion of his being President, in 1854.

It would be doing scant justice to his memory to terminate our notice with this record of Mr. Soden's professional characteristics. It was the combination of these special qualifications with the general attributes of his mind that renders his name worthy not only of the honour of passing attention, but also of that lasting remembrance that the profession accords to those whose lives have been a credit to their order.

Mr. Soden strove to promote a spirit of good fellowship amongst his brethren, and to maintain a high tone of interprofessional relations; and to this end he was throughout an earnest supporter of the British Medical Association. He also, by the example of his own uprightness, his warm and benevolent heart, his power of attaching friends, his varied and extensive knowledge, and his gentlemanly deportment, presented to society at large the true type of a professional gentleman, and tended to elevate his profession in public estimation by the respect he exacted for it in his own person. It has been most justly observed of him by a provincial contemporary (the *Bath Chronicle*): "Those who knew him and saw him frequently in ordinary life could not help admiring the serenity of his temper, his calm self-possession, and the sweetness of his disposition. During his closing days, notwithstanding great physical weakness, his mind was fresh and unclouded to the last. Few men have sunk more gracefully to their rest, or better deserved the encomiums pronounced upon him by his friend and pastor, the Rev. H. M. Scarth, at the close of a sermon preached last Sunday morning from the text, 'Mark the perfect man, and behold the upright: for the end of that man is peace.' (Psalm xxxvii.)"

J. S.

On the Function of the Liver. Henle remarks that Handfield Jones has the merit of first pointing out that the bile is prepared in the biliary ducts from the blood of the hepatic artery, and that the parenchyma of hepatic cells serves for the formation of sugar only. Henle has come to a similar conclusion from anatomical research. He believes the bile to be the secretion of particular glands opening into the bile-ducts, which have no connection with the lobules of the liver and their component cells. These latter form from the portal blood a substance hitherto identified with sugar. Ligature of the hepatic artery arrests in the most constant manner the secretion of bile. That the ligature of the portal vein should not offer a result so purely negative, Henle explains from the circumstance that the venous branches which arise from the capillaries of the hepatic arteries reach the hepatic veins through the portal system, consequently a disturbance of the portal current can react on the hepatic artery. He expects no change of the glucogenic function from obliteration of the hepatic artery; but a cessation of the glucogenic function would arise from obliteration of the portal vein, as indeed occurred in two pathological cases reported by Frerichs, and also in the experiments of Stokvis and Moss. From a teleological point of view the sugar in the liver may be regarded as consisting of the constituents of the bile as they are again taken up from the intestine; in other words, the bile can directly, through this channel, reach the cells of the liver. (*Henle und Meissner's Bericht*, and *Edinburgh Medical Journal.*)

Special Correspondence.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

I am delighted to be able to report the apparent success of the bold but necessary step lately taken by the Medical Society in doubling its subscription for town members. The falling off in our numbers which was prophesied by its opponents, and feared, to some extent, by its supporters, has not taken place except in a very trifling degree, and that has been compensated by the addition of new members. More than one of our leading physicians has joined us since, assigning the very change as their reason for doing so. A successful future appears to lie before us; great additions have already been made to our list of new and valuable books; and altogether there seems to be taking place a "renewal of life." The number of readers is already on the increase: and our late meetings have been very interesting and well attended. Our library promises to be far the best out of the metropolis. It is already rich in old works of reference and valuable foreign books; and we shall now be enabled to keep pace with the progress of recent literature at home and abroad. The next step that I hope to see in progress is the formation of a pathological museum.

I cannot say, however, that the most interesting topic with the profession in Manchester at the present moment is connected with scientific medicine. Our attention has been rather turned of late to subjects touching our general social polity, and your articles on the subject of medical evidence have not been without an echo amongst us. At the last meeting of the Medico-Ethical Society, Dr. Walsh brought the question of medical evidence before the members in an able paper, touching lucidly on most of the points involved. Though no action was taken on the matter, it promises to come again before them at an early day; and I should like to draw your attention to a matter in connection therewith which has been keenly felt here, and should call for some expression of opinion by the medical press. Dr. Evan Thomas was, as you are aware, condemned at the present Lancashire assizes for wilful perjury before a coroner's court. A brief detail of the case appeared in your last number. He was found guilty and duly punished, and severely reprimanded by Mr. Baron Martin. So far all well; but I enclose for the benefit and due humbling of your readers a portion of this reprimand, as reported in the *Manchester Guardian*:—

"It is immeasurably sad that a person in your position as a surgeon should be guilty of such an offence. I find that in railway cases medical men frequently are examined as to the probable extent of injuries received in cases of accident, and the nature of their evidence has cast a doubt upon all such testimony; and such will be the result in this case. It will be said, 'How can we believe a medical man after the conviction of Evan Thomas by a Lancashire jury?' I regard it as a national misfortune that such a thing should have occurred. It will throw doubt and disgrace upon the medical profession."

Such language hardly needs any comment. That

some foolish persons may argue as here supposed is possible; but a judge upon the bench, if he referred to such reasoning at all, should have done so only to expose its fallacy and injustice. How many medical men have been even accused of perjury during the last half-century? Are there no black sheep in any profession or trade except ours, that we are thus to be all gibbeted for the sins of one who has been convicted almost solely by our own evidence? We have heard of men even upon the bench who were by no means ornaments to society. To speak thus of a profession numbering many thousands of hard-working, conscientious, and honourable men, and including many whose names will be handed down to a grateful posterity that will have utterly forgotten such men as Mr. Baron Martin, however respectable in their own sphere, is unjust, impolitic, I had almost said impertinent. Why on earth should railway trials have been dragged into the question? We know, unfortunately, that they have sometimes brought forward men who have acted rather as advocates than as witnesses; but, as a body, we deplore such conduct, and are not unmindful that the evil is caused by our contact with the gentlemen of the long robe. Besides, the cases are utterly different. Here was a man tried for a distinct perjury as to facts for a definite object; while the evil in these railway trials is simply a difference of opinions, which opinions are thought to be biased by the retaining side. But of all men to cast the stone in such a case, a great lawyer should be the last. I will almost be bound that, in the very case then being tried, the counsel on each side held different opinions as to the result, and that half a dozen other judges would have differed as to the precise amount of guilt incurred. But I have said enough to show you that, in other cases than those of criminal lunatics, we stand in need of some way of asserting our professional status.

Another case has just come to light during the last two or three days, which shows the dangers to which on all hands we are exposed. Dr. Waters of Chester, a gentleman high in professional esteem, and very lately President of our Branch of the Association, was accused by a wretched servant girl of having, while treating her for an uterine affection, administered a narcotic potion, and thus seduced her. Of course, the affair was a complete fabrication, and Dr. Waters was acquitted; but I sincerely trust that his acquittal may not have been such a costly affair as that of Mr. Adams. From the sort of evidence, and the leaning of juries to the side of the weaker sex, it is not impossible that a younger or less esteemed man might have succumbed; at any rate, it would have given his character a shake that years of good conduct alone could have lived down.

I must conclude with apologising for having filled my letter with matter which has but little of a scientific cast about it, but which, nevertheless, I thought deserving of notice.

Dr. Armstrong, R.N., who accompanied his Royal Highness the Prince Alfred home, has left Windsor Castle, having previously received the Queen's thanks for his care and attention during his Royal Highness's alarming illness.

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

The next meeting (the fourth of the sixth session) is appointed to be held at the Bull Inn, Dartford, on Friday, April 24th, at 3.15.

Dinner at 5 o'clock. Price of tickets, 5*s*., exclusive of wine.

Trains leave Dartford for London at 7.40 and 8.40; and for Maidstone at 8 o'clock.

Frederick J. Brown, M.D., *Secretary*.

Rochester, April 6th, 1863.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

March 19th, 1863.

James Hakes, Esq., Vice-President, in the Chair.

Perforation of the Stomach. Dr. Gee shewed a specimen taken from a poor woman aged 65, who had died in the Workhouse Hospital. She had been in the hospital for four or five weeks, and had been ill for some time before. On admission, she was much emaciated, and had pain in the epigastrium, where a small tumour could be felt. She had great distaste for food, but no vomiting whatever. She died gradually of asthenia; and at the *post mortem* examination, the coats of the stomach were found very thin, and there was a perforation of about the size of a crown piece in the central part of the posterior wall. This was bounded behind by the pancreas, which had become adherent to the stomach, and had so prevented extravasation of the contents of that viscus. No cancer-cells were found in fluid taken from the pancreas. The heart, liver, and kidneys had all undergone fatty degeneration. Dr. Gee thought the ulcer of the stomach had probably been of long standing.

A Bladder from which Hæmorrhage had taken place. Mr. Fletcher shewed a specimen from a case of paraplegia. The discharge of blood by the urethra had been copious, and neither tannic acid, nor acetate of lead with opium, checked it at all. The patient died apparently from hæmorrhage. The mucous membrane of the bladder was deeply stained with blood.

Dr. Stookes had recently given small doses of turpentine with good effects in a case of hæmorrhage from the bladder.

The Chairman observed that this specimen was an example of what we frequently see, inflammation and disintegration following deficient innervation from paralysis.

Ligature of the Femoral Artery for Popliteal Aneurism. Mr. Fletcher related two cases in which he had performed this operation. In the first case, there were, in addition to the aneurism, a cardiac murmur and occasional attacks of stridulous breathing. Mr. Fletcher tied the femoral artery on December 2nd, 1862. The patient went on well until Dec. 9th, when the little toe became discoloured. Subsequently, the whole foot passed into a state of senile gangrene, while, at the same time, a process of moist gangrene went on in the lower half of the leg. The man sank exhausted on February 17th, 1863. The femoral artery was found to be completely cut through by the ligature, and obliterated up to the origin of a large muscular branch. There was dilatation of the whole arch of the aorta, and an aneurism

of the innominate pressing on the trachea. There was an aneurism of the left subclavian artery commencing.

In the second case, the patient, a man aged 40, who had been a hard drinker and the subject of syphilis, was admitted into the Workhouse Hospital on October 21st, 1862. On October 25th, Mr. Fletcher tied the femoral artery with a silk thread, and the pulsation in the aneurism completely ceased. On the 30th, there was some return of the pulsation; and on Nov. 2nd, this was very distinct. A splint was placed along the front of the knee, and a strong compress and bandage applied to the tumour, and on Nov. 10th pulsation had entirely ceased. On the 12th, about a tablespoonful of blood escaped from the wound; and on the 13th, there was smart hæmorrhage which recurred near midnight. With Mr. Hakes's assistance, Mr. Fletcher extended the wound and laid bare the artery above and below the former ligature. No clot had formed above the ligature; and the blood had come from a small hole just above the point of ligature. The vessel was secured by a ligature half an inch above and another half an inch below the old one, and one was also applied close to the seat of the latter. The wound was brought together with sutures. On the 21st, the patient had a rigor; on the 22nd, there was great pain and redness about the ball of the great toe. This toe mortified and separated a little above the joint between the first and second phalanges. On March 23rd, he was seen, and was well with the exception of a small fistulous opening on the side of the foot near the ball of the great toe.

Mr. FLETCHER remarked that in the last case the man recovered with the loss of his toe; the hæmorrhage he attributed to his not having tied the thread sufficiently tight. With regard to the first case, he thought himself justified in operating, as the aneurism was rapidly increasing and threatened to burst. The man's life was prolonged for a time.

The CHAIRMAN said he had seen this case, and it was one of difficulty as to the treatment to be adopted. On the one hand, there was the stridulous breathing and cardiac murmur; on the other, the fact that the aneurism was certainly getting larger, and the skin thin, and this might very soon have given way.

Mr. FLETCHER said the administration of chloroform for the operation had given great relief to the breathing. Mr. Bickersteth had seen the case with him, and agreed that the aneurism was likely very soon to burst.

Cases of Pneumonia; with Remarks on the Treatment of that Disease. By A. B. STEELE, Esq. These cases, Mr. Steele said, he offered as illustrations of a plan of treatment in acute diseases which can no longer be considered novel, but which is still sufficiently recent to justify discussion, and to demand for its confirmation such evidence as the records of well marked typical cases can afford. He alluded to the treatment of inflammatory disease without the use of those remedies which are understood by the term "antiphlogistic."

The cases he brought forward were three in number, and it was worthy of remark that they all occurred within a few days of each other.

CASE I. The patient was a cow-keeper living in the suburbs, a stout, florid man, who had previously had robust health, to which an attack of acute anasarca six years ago, and a few attacks of gastralgia after indulging in drink, have been the only interruptions. On the first appearance of the pneumonia, Mr. Steele gave purgatives, and one-eighth of a grain of tartar emetic and half an ounce of paregoric every four hours, and linseed-meal poultices were applied to the seat of pain. For two days there was no change; but the patient now became worse, and the pain very acute. The medicine was now given every three hours in double doses. Next day he was rather better; but as there was much pain and much prostration, a grain of opium was ordered every two, three, or four hours, as might be necessary, and half an ounce of brandy every hour for the first twenty-four hours. From this time improvement took place. The brandy was given at longer intervals for two or three days, and in seventeen days the man was convalescent.

CASE II. A dock labourer, aged 50, in previous good health, was seized with general bronchitis and pneumonia of the lower half of the right lung. The treatment adopted was similar to that in the last case; but on the second day a glass of wine to be given three times a day was ordered. He progressed slowly but favourably until the tenth day, when an attempt to get out of bed brought on an attack of syncope. Half an ounce of brandy was now given every two hours; but after the first night he refused to take it regularly. He was convalescent on the twenty-fourth day.

CASE III. An old lady, aged 69, who had enjoyed good health up to a recent period, when it began to fail, was seized with acute pneumonia of the right lung. Tartar emetic, in doses of one-sixteenth of a grain, was given for twenty-four hours, and then nitrous ether, ammonia, and paregoric substituted, with half an ounce of whiskey every hour, or *ad libitum*. The latter she would not take regularly. No abatement of the symptoms occurred, except that the sputa lost the pneumonic character in three or four days; but the general prostration gradually increased, and she died on the ninth day from the commencement of the treatment.

Referring to the first two cases, Mr. Steele thought they went to prove that pneumonia could get well without active depletion; and that stimulants are not absolutely necessary at the commencement of the disease. The tartar emetic he had given only in doses sufficient to assist expectoration and the action of the skin. Within the last few years he had seen several cases of pneumonia recover in which no stimulants had been used. The fact of our having discovered that bloodletting, salivation, etc., are no longer required, does not justify us in rushing to the conclusion that acute inflammation is to be treated by the free and full administration of alcohol. He quoted as applicable to the treatment of acute disease, the words of the author of *Horæ Subsecivæ*. "Indeed here, as elsewhere, man's great difficulty is to strive to walk through life, and thought, and practice, in a straight line; to keep *in medio*—in that golden mean which is our true centre of gravity, and which we lost in Eden."

Dr. GEE agreed with the author in many respects. He would not be disposed to commence the treatment of pneumonia with stimulants, nor on the other hand to delay their use too long. He believed that in sthenic pneumonia in country districts a blood-letting may be most useful, but in the town he used antimony freely, and always with good effect. Those who give stimuli from the first ought to favour us with their reasons. He thought it certainly more philosophical to give antimony when the parts are in a state of hyperæmia, and stimuli when these parts are beginning to lose their tonicity.

Dr. BURROWS insisted on the importance of being guided by the stethoscope in these cases. He was satisfied of the great value of tartar emetic. How could the violence of inflammation be more likely to increase after depressing, than after stimulating treatment?

Dr. VOSE thought this matter was in a transitional state. With regard to inflammation, principles have proved wills-of-the-wisp, and left us floundering in the mud. We must now depend on experiment, and all cases honestly reported are valuable contributions to this end. As to the difference between the treatment suitable in town and country, he read a case that had been reported to him by his friend Dr. Parr, of New Brighton. A sober and industrious man, aged 25, was attacked with well marked pneumonia, affecting two-thirds of the right lung. He had "a hot skin, flushed face, quick full pulse, and hurried breathing." Liquor ammoniæ acetatis was ordered. Next day, all the symptoms were aggra-

vated, "the expectoration was scanty but permeated with blood, the face very anxious, the breathing very hurried and oppressed." Brandy was ordered in doses of half an ounce every two hours, and it was next day increased to six drachms every two hours. The night but one following, he was reported much worse; his breathing was very short, and he was insensible to the passing of the contents of the bowels; double the quantity of brandy was now ordered; next day he was better, and the increased dose of brandy was continued. He was in bed three weeks, and his recovery is perfect; and he has now returned to work. Here then, Dr. Vose said, we have a young man in a rural district, who underwent no depletion, passed through a most severe attack, and gets well. He himself had recently brought forward a case of pneumonia, and also one of pericarditis, both treated from the first stimulants. Referring to the statistics on the subject, he said, Dr. Bennett shows that Andral, who relied on bleeding in all cases of pneumonia, lost half his cases, while Dr. Bennett himself, who scarcely ever bleeds at all, but relies on diaphoretics, mild nutriment, and a cautious use of alcohol, only loses one case in thirty-five. It is notorious that inflammation is not a disease of health, but let a man be reduced in any way and he becomes a subject for inflammation. The most devastating forms arise in those who are already suffering from some organic disease. Without attempting to teach that inflammation must be always treated with stimulants, it may be believed that where there is inflammation we need not further debilitate.

Mr. Hodgson said he had under his charge eight hundred foundry-men, who worked in hot places, half naked, exposed to draughts. Pneumonia was frequent among them, and it was a common thing for several of them to be attacked about the same time, confirming a remark in Mr. Steele's paper on the frequent coincidence of these cases. In no case in the last year had he found it necessary to give stimulants in the early stage, but he always gave tartar emetic at first, and had recourse to stimulants in the latter stages when necessary. The disease seemed generally of a low type, though these were strong men who lived well. In the case of an old lady, however, he was satisfied that the very free use of stimulants was the saving of her life.

Mr. Fletcher had seen very great benefits derived from stimulants, particularly in the form of pneumonia that occurs in fever.

Mr. Steele, in reply, said he should be guided in giving stimulants, not by the fact that there is pneumonia, but by the general symptoms. As to the occurrence of inflammation in debilitated people, he did not find inflammation in general, nor pneumonia itself, so frequent among his poorer patients as among those rather higher in the social scale.

St. Bartholomew's Hospital. The expenditure of St. Bartholomew's Hospital during the past year was £40,000; and its income £54,000

Vacancies. The following appointments are vacant: Physician, and a surgeon to the Western district of the Chelsea, Brompton, and Belgrave Dispensary; assistant-physician to the University College Hospital; two assistant-physicians for the diseases of women and children at King's College Hospital; resident physician and medical superintendent to the Lunatic Asylum at Garlands, near Carlisle; physician to the Finsbury Dispensary; assistant house-surgeon to the General Hospital, Nottingham; assistant medical officer for the female department of the Middlesex County Lunatic Asylum, Colney Hatch; medical officer for the Shardlow District of the Shardlow Union, Derbyshire, and a medical officer for the Workhouse of the same Union; medical officer for the Orton District of the East Ward Union, Appleby, Westmoreland; and a medical officer for the Woodstown Dispensary District of the Waterford Union.

Correspondence.

PROSECUTIONS AGAINST MEDICAL MEN.

Letter from Jonathan Toogood, M.D.

Sir,—Persecutions against medical men are become very common of late; but those of one of our profession against a brother practitioner are rare.* Some years since, an action was brought against me for defamation of character by a medical practitioner, the damages being laid at £500. The facts of the case were as follows.

A woman, after having been under his care for several months without deriving any benefit, became a patient at the Bridgwater Infirmary, where she was carefully examined by all the surgeons of that institution, who agreed that her left hip was dislocated from long continued disease. The head of the bone could be easily dislocated from its socket, and as readily replaced. She stated that her hip had never been examined, although she had repeatedly called the medical man's attention to that part; and he had assured her that no disease existed there, and she had only to follow his plan—the homœopathic—which he had lately adopted. In consultation, it was determined to replace the head of the bone in its natural position, and retain it by moderate permanent extension; and to make an issue near the hip. Little hope of benefit from any treatment was held out, and she was distinctly told that she would most probably be always a cripple. She soon became tired of the infirmary, and left at the end of three weeks, expressing herself grateful for the attention she had received. Three months after this, I received a letter from the homœopath's attorney, charging me with having said to the woman that "her hip was out; that the homœopath was a fool; that she had been improperly treated; and that she might have been cured in a fortnight." Through my attorney I gave a full and unqualified denial of having used the language imputed to me. Instead, however, of observing that course which is usual amongst gentlemen, or what is due from one professional man to another, with whom he was on the ordinary terms of professional friendship, and from whom he had never received anything but attention and civility, the homœopath was unwise enough to go to a lawyer, and he was wise enough to get up a law-suit. Homœopathy was but just introduced into the neighbourhood, and it was necessary for its success to give it as much notoriety as possible. I was, therefore, selected as the victim, as of long standing and generally known.

The action was tried at the assizes at Taunton, before a judge, a great favourer of homœopathy, and who had suffered a dislocation of the shoulder, and either could not or did not distinguish dislocations from accident or disease. In vain did my colleagues, the house-surgeon, the nurse, and the patients in the adjoining beds, swear that I had never used such words; for, if I had, they must have heard them, being present. The woman was so well drilled, the learned serjeant browbeat my witnesses so unsparingly, and the judge summed up so directly against me, that the jury (a special one) could not agree, and were locked up for many hours.

Fortunately, a retired physician, a gentleman whose name I had never heard, was one of the jurors, and, some time afterwards wrote me a full account of the scene which passed. His letter is too long for insertion, but some extracts from it may be acceptable.

On retiring, several of the jurors proposed giving a verdict for the plaintiff, damages £700. Against this the doctor protested; and stated that, in his opinion, the verdict should be for the defendant. He goes on to

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* We are sorry to say that we cannot endorse this opinion of our respected correspondent. Editor.

say: "I never believed the slanderous expressions imputed to you. It was upon conviction that I gave my verdict as a juror; and I should have held out for a verdict for the defendant, were I not apprehensive, from the judge's charge, that the plaintiff's lawyer would have advised a new trial, which would have occasioned fresh troubles. The judge's charge was the most one-sided address I have ever heard from the bench to a jury. He is a clever man; but I question whether he is fit for the bench. It is not every man that can administer justice without leaning to the right or to the left. Equity is a science for which every mind is not adapted. The hopeless and helpless state of the woman made a deep impression on the court and jury. There was an internal evidence in her statement which made me doubt her veracity, and that she swore to a tissue of falsehoods. I showed my brother jurors that no reliance was to be placed on her evidence, as all the witnesses had contradicted her on matters of fact. I asked those who were for heavy damages whether they would hang a man on the evidence of such a witness, so contradicted by credible witnesses. They declared they would not; to which I replied, 'Then why should you rob him?' This turned the scale, and caused a new train of thought; and it was then left to me to name the verdict and the damages, which were assessed at one farthing. The refusal of the two judges, in consultation, to certify for costs, ought to convince both parties that justice was done."

I regret to add that medical men were found willing to support the plaintiff's case (from some of whom better things might have been expected); but either from dislike of being subjected to cross-examination, or shame of being mixed up in so disgraceful an affair, they did not appear.

Entirely agreeing with the late Dr. Blackall that homœopathy is the greatest insult ever offered to the human understanding, I have steadfastly declined all acquaintance with men who, having failed in the profession for which they were educated, have joined the ranks of quacks.

On my relating this case to the late Sir Benj. Brodie, he remarked that, if surgeons were to be subjected to actions in such cases, scarcely a week passed in which he did not render himself liable.

My defence against this iniquitous action cost me one hundred pounds. I am, etc.,

JONATHAN TOOGOGD.

Bridgwater, April 1863.

DR. MAYNE AND DR. FOWLER: REPORT OF THE REFEREES.

SIR,—Having been appointed referees in the questions in dispute between Dr. Mayne and Dr. Fowler as to their works published under the title *Medical Vocabulary*, we beg to forward a copy of our decision, and would feel obliged if you would insert it in an early number of the BRITISH MEDICAL JOURNAL.

We are, etc., THOS. B. PEACOCK.
A. MEADOWS.

Report.

1. Dr. Mayne states that Dr. Fowler first announced his *Medical Vocabulary* about two months after the publication of the *Expository Lexicon*, which, he says, appeared on the 17th of September, 1860; thus fixing the announcement of Dr. Fowler's work as having been first made *about* the 17th of November, 1860. He also states that its publication did not take place till the 5th of January, 1861; or four months after the appearance of the *Expository Lexicon*.

In answer to this, Dr. Fowler has proved to our satisfaction that his *Medical Vocabulary* was first announced on the 27th of October, 1860; was advertised as "now ready" on the 17th of November, and as "just published" on the 24th of November, and was actually distributed on or before the 27th and 28th of that month; this being two months after the publication of the concluding part of the *Expository Lexicon*. Dr. Fowler has also shown that his work was commenced in 1858; that the whole of his manuscript was in the hands of the printers at the end of June or beginning of July 1860; that the first revise was despatched to him on the 29th of August, and the last on the 7th of November, of the same year.

Dr. Mayne rejoins, that the tenth or last part of the *Expository Lexicon* being entirely an appendix, the work was in effect completed by the publication of the ninth part, which appeared in November 1859, just twelve months before the appearance of Dr. Fowler's work.

It thus appears that Dr. Mayne's statement on the above points was not entirely correct; but the difference is of little importance, for Dr. Mayne's *Lexicon* having appeared in parts commencing in 1853, it was quite possible for Dr. Fowler to have made an improper use of the earlier portions of the work in the compilation of his own.

2. Dr. Mayne charges Dr. Fowler with having appropriated "the idea, the very title of his original *Medical Vocabulary* of 1836."

It appears to us that the compilation of Dr. Fowler's work and its title were suggested by Dr. Mayne's earlier work. In making this statement, we do not in the slightest degree doubt the correctness of the assertion of Dr. Fowler, that he had never seen the original *Medical Vocabulary* of Dr. Mayne.

But Dr. Fowler states that the proposition to compile the *Vocabulary* proceeded from Mr. Renshaw; and Mr. Renshaw was evidently acquainted with the original work, and expresses the opinion that such a publication "was a necessity of the day". That this is the correct statement of the origin of the work, is tacitly admitted by Dr. Fowler in the pleas which he advances for the employment of the title by himself; viz., that Dr. Mayne's work was published anonymously, and that it had been long out of print.

Dr. Mayne says that he announced himself as the author of the original *Medical Vocabulary* in the prospectus of the *Expository Lexicon*. This, he previously stated, appeared in 1852; but he has proved to us that the announcement was first made in 1851.

Dr. Mayne also states that he had long been collecting materials for the publication of a second edition of the *Vocabulary*, but that he did not commence the arrangements for the *printing*, etc., of the work till about March 1861, or two months after the period at which he had previously asserted that Dr. Fowler's work was published, and nearly four months after the appearance of the work, as shown by Dr. Fowler. It does not appear that Dr. Mayne announced his intention of publishing a second edition of the *Medical Vocabulary* at any previous period.

3. Dr. Mayne charges Dr. Fowler with having appropriated "the plans, peculiar arrangements, style, and general aspect of his *Medical Vocabulary* of 1860."

On this point we have failed to see the similarity which is contended for by Dr. Mayne. There appears to us no greater resemblance between the two works than is quite compatible with the supposition of their independent authorship.

4. Dr. Mayne has furnished us with a list of certain words which appear either in the original *Medical Vocabulary* of 1836, or in the *Expository Lexicon*, and which he regards as showing that an unfair use has been made of such works by Dr. Fowler in the compilation of his *Medical Vocabulary*.

This charge he bases upon the *assertion* that the works referred to had either not appeared in any me-

dical dictionaries published prior to the works of Dr. Mayne, or that the derivations given, the character of the definitions, or the spelling and mode of insertion of the words, were too closely similar in the several works to be ascribed to accidental circumstances. These words we have very carefully gone over, and we do not find the assertions of Dr. Mayne to be substantiated. We have ascertained that many of the words were inserted in dictionaries published prior to either of Dr. Mayne's works, and with similar derivations and definitions; that others are contained in treatises to which Dr. Fowler had access equally with Dr. Mayne; while yet others, though new, have come to be of such common employment in medical works, that they would almost necessarily be inserted in any modern medical dictionary or vocabulary.

In conclusion, we are of opinion—

1. That the title of Dr. Fowler's work was derived from the original *Medical Vocabulary* of Dr. Mayne; and we do not consider that the anonymous publication of the original work, the long period which had elapsed since its first appearance, or the circumstance that no second edition had been announced prior to the publication of Dr. Fowler's *Vocabulary*, justify the appropriation, so long as the copyright of the original work existed.

2. On the other hand, we do not find anything in Dr. Fowler's work which leads us to suppose that he has copied in his *Medical Vocabulary* the plan of the work first published by Dr. Mayne; nor have we found such similarity in Dr. Fowler's *Medical Vocabulary* to Dr. Mayne's *Expository Lexicon* as would indicate that Dr. Fowler had availed himself of the use of that work in the preparation of his own. We are, therefore, of opinion that the charge of plagiarism against Dr. Fowler, implied, if not directly expressed, by Dr. Mayne in the preface to the second edition of his *Medical Vocabulary*, has not in any degree been substantiated.

(Signed) Thos. B. Peacock.
A. Meadows.

London, March 26th, 1863.

LACRYMAL OBSTRUCTION.

Letter from E. C. Hulme, Esq.

Sir,—I am very glad to find, from a perusal of an article in your last number (April 4th, 1863), by Mr. Walton, that he has introduced into his private practice, with a great amount of success, a plan of treatment for the remedying of lacrymal obstructions which I submitted to the profession in the *Medical Times and Gazette* of May 21st, 1859. The plan of treatment which Mr. Walton describes is essentially the same; and, although I have not seen Mr. Walton perform the operation, the description he gives of the use of the silver wires of various diameters tallies completely with the method which I adopt myself. Those interested in this subject might refer to the two papers of the above dates. As an improvement upon my plan (in order that the cut end of the wire, which hung about a quarter of an inch over the cheek, might not irritate), the Messrs. Weiss nearly three years ago made for me some styles of soft metal, with a capped head to them, and a narrowing round its neck where it bends over the edge of the lid. I have had these made of various diameters; and the full-sized one I have found useful to introduce, and for the patient to wear when the obstruction has been of such a nature that force has been absolutely necessary to obtain a passage.

My adoption of the virgin silver wires, as I have acknowledged, was but a modification of Mr. Bowman's "bent styles" described in the *Ophthalmic Hospital Reports*, vol. i, p. 19; and the only advantage I claimed was a more rapid dilatation than the passing of probes, with a saving of time to the patient, and an absence of irritation to the eye of the patient, by the shorter angle being bent over the cheek.

An extended experience of the treatment of these complaints for the last few years has convinced me of the great advantages obtainable from the early slitting up of the canaliculus when the first symptoms of obstruction manifest themselves. I believe that abscess of the sac and other consequent complications are very much rarer than they used to be, in consequence of free vent being given to the accumulated secretions of the sac; and the treatment I always myself adopt in threatening suppuration is to open the sac through the canaliculus at once. The free opening, and the few drops of blood which escape, almost invariably afford relief, and prevent the skin from giving way in front of the sac. There are, however, some cases in which obstructions are of a very obstinate character, and must be overcome; for such, I know no better plan than the one I have now long advocated, and it gives me some satisfaction to find it is followed out by Mr. Walton.

I am, etc., E. C. Hulme.

19, Gower Street, April 6th, 1863.

MEDICAL PROVIDENT ASSOCIATION.

Letter from Robert B. Carter, Esq.

Sir,—I beg leave to inform you that, in consequence of the various letters that have appeared in the medical journals on the subject of Health Assurance, a meeting of medical practitioners was held at Cheltenham, on the 31st ultimo, for the purpose of taking the matter into consideration.

The meeting was held at the house of W. Dalton, Esq., F.R.C.S., under the presidency of Dr. Abercrombie, F.R.C.P It was convened by circulars, signed by the above gentlemen, as well as by Dr. Colledge, Mr. Ramsay, Dr. Eves, Dr. Rooke, and myself.

I will not attempt to give anything like a *verbatim* report of the remarks of the various speakers; but will only say that the meeting regarded the question under a threefold aspect; wishing to ascertain, first, whether a provident association, for the purpose of giving its members an income during sickness, would be generally acceptable and useful to the profession? Secondly, what would be its proper scope and aim? Lastly, what would be the cost of maintaining it in operation? It was the opinion of the meeting that the first two questions must be satisfactorily answered by the profession, as a necessary preliminary to the solution of the third by an actuary.

It was therefore moved by Dr. Eves, seconded by Mr. Dalton, and carried unanimously:—

"That the proposition for the formation of a Medical Provident Association is one entitled to the best consideration of the profession."

It was moved by Dr. Hobson, seconded by Dr. Philson, and carried unanimously:—

"That the editors of the medical journals be requested kindly to give publicity to the following questions; and that individual practitioners be requested to reply to them:—

"1. Do you think such an institution desirable for the profession generally?

"2. Should you be inclined to become a subscriber?

"3. What has been, in weeks, your own annual average of sickness, sufficiently severe to disable you from practice?"

Having intimated to the meeting that I was prepared to receive and arrange the answers to these questions, I was requested to undertake the task. I hope that all gentlemen who feel interest in the matter will favour me with early communication; and, in a fortnight from the publication of this paper, I purpose to commence an analysis of the letters I receive. If the scheme should

be generally approved, a second meeting will be in a position to make public an outline of the scope and aim of the association, as a basis for the discussion of details into which it would now be premature to enter. As soon as this can be done, it would be advantageous to hold meetings in various parts of the country; but, at present, in the absence of further information, such meetings would hardly produce benefit equivalent to the trouble and inconvenience of holding them.

Having said thus much as the mouthpiece of the meeting, I would beg leave most earnestly to urge the matter upon the attention of my professional brethren. If a provident association can be carried out at a moderate cost, it will be a great benefit to a large number of practitioners; and on the other hand, if there be insuperable difficulties or objections in the way, they may now be brought to light, and the question set at rest for ever.

I am, etc., ROBERT B. CARTER.

Stroud, Gloucestershire, April 4th, 1863.

Medical News.

APOTHECARIES' HALL. On April 2nd, the following Licentiates were admitted:—

Bateman, William Adolphus Frederick, Richmond, Surrey
Goold, Horatio Bate, Gosport
Purvis, John Prior, Blackheath, Kent
Thomas, George Jenkyn, Haverfordwest
Trevan, Matthew, St. Bartholomew's Hospital
Wicksteed, Frank William Slow, St. Bartholomew's Hospital

At the same Court, the following passed the first examination:—

Ashton, John Henry, St. Bartholomew's Hospital
Cooke, Alfred Square, St. Bartholomew's Hospital
Gooding, Ralph, King's College
Martin, Paulin, St. Bartholomew's Hospital
Shaw, Thomas Claye, King's College
Taylor, James Mare, Queen's College, Birmingham

APPOINTMENTS.

EMPSTER, F. H., M.D., appointed Resident Surgeon to the Melbourne Hospital, Australia.
OODCHILD, Frederick, M.D., elected Physician to the Warwick Dispensary.
ITTLE, Frederick, Esq., appointed House-Surgeon to the Loughborough Infirmary.
ACINTOSH, William C., M.D., appointed Medical Superintendent of County Lunatic Asylum at Murthly.
MITH, Charles S., Esq., appointed Surgeon to the Marlborough Railway Works.
HOMPSON, Edmund Symes, M.D., appointed Assistant-Physician to the Brompton Hospital for Consumption.
OULMIN, Frederick J., Esq., appointed Consulting-Surgeon to the Stamford Hill Dispensary.

OOR-LAW MEDICAL SERVICE.

OYE, William, M.D., to be Medical Officer to District No. 2 of the Bradford-on-Avon Union.
ASSON, William, Esq., to be Medical Officer to the Edgware District of the Hendon Union.
OWN, John W., Esq., to be Medical Officer to the Wymeswold District of the Loughborough Union.
LLENDER, John, Esq., to be Medical Officer to the Ryton District of the Gateshead Union.
NDY, John, M.D., to be Medical Officer to the Alstonfield Parish and Workhouse.
OPER, Richard W., Esq., to be Medical Officer to the Silverstone District of the Towcester Union.
IRWEATHER, A. J. A., M.B., to be Medical Officer to the Parish of Kirkowan, Wigtonshire.
WTHROP, Joseph, Esq., to be Medical Officer to the Clayton District and the Workhouse of the North Bierley Union, Yorkshire.
LD, Richard, Esq., to be Medical Officer to the Tong District of the North Bierley Union.
CABE, Francis X., L.K. & Q.C.P.I., to be Medical Officer to the Kilmakevogue District, Waterford Union.
CLEY, Thomas, Esq., to be Medical Officer to the Wilsden District of the North Bierley Union.
RKS, Alexander H., M.D., to be Medical Officer to the Shinrone District of the Roscrea Union.
Y, William G., Esq., to be Medical Officer to the Riltormer District of the Ballinasloe Union.
RCALFE, Robert, Esq., to be Medical Officer to the Checkley District of the Cheadle Union.
OSWALD, James W. J., Esq., to be Medical Officer to the Workhouse and Rochford District of the Rochford Union.
STURKEY, Henry G., L.R.C.P.Ed., to be Medical Officer to District No. 2 B of the Wisbech Union.
WELCH, John, M.D., to be Medical Officer to the Eastern District of the Strand Union.

ARMY.

BROCK, Staff-Assistant-Surgeon E., to be Assistant-Surgeon 1st Foot, *vice* J. A. Fitzpatrick.
FITZPATRICK, Assistant-Surgeon J. A., 1st Foot, to be Assistant-Surgeon 1st Dragoon Guards, *vice* E. L. McSheehy, M.D.
JACKSON, Staff-Assistant-Surgeon R. W., to be Assistant-Surgeon 86th Foot, *vice* T. S. Barry.
WALL, Assistant-Surgeon W. R., 18th Hussars, to be Assistant-Surgeon 81st Foot, *vice* H. P. Gregory.

To be Staff-Assistant-Surgeons:—

BARRY, Assistant-Surgeon T. S., 86th Foot.
GREGORY, Assistant-Surgeon H. P., 81st Foot.
MCSHEEHY, Assistant-Surgeon E. L., M.D., 1st Dragoon Guards.
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CARTER, N., Esq.
CLAPP, W. H. B., M.D.
CLOSE, C. S., Esq.
CUMMING, K. W., M.D.
CURTIS, J. L., Esq.
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DUNBAR, F. H., M.D.
FANNIN, J. E., Esq.
FLOOD, S., M.B.
FOLLIOTT, W., Esq.
HALL, R., M.D.
HARE, R. W., M.B.
IRVINE, G. N., M.D.
LANGDON, J., Esq.
MACKIE, D., M.D.
MAUNSELL, C. A., M.D.
O'FARRELL, I. M., Esq.
OLIVER, J. H., Esq.
POWER, W. H. T., Esq.
REED, B., Esq.
ROSS, W. G., M.D.
RUTHERFORD, J., M.B.
SCOTT, F. B., M.D.
THURSFIELD, W. N., M.D.
WATERS, J. M., Esq.

ROYAL NAVY.

CRUICE, William H., Esq., Surgeon, to the *Alecto*.
FINNCANE, Daniel, Esq., Surgeon (additional), to the *Meander*.
SMITH, H. H., Esq., Surgeon (additional), to the *Meander*.

BIRTH.

ROOKE. On April 8th, at Cheltenham, the wife of *T. Morley Rooke, M.D., of a daughter.

DEATHS.

CLARKE. On January 2nd, at Melbourne, Australia, Cuthbert C., eldest son of the late Dr. Clarke, R.N.
JONES, Michael T., Esq., at Shardlow, near Derby, aged 69, on March 30.
MARCHANT. Lately, at North Curry, Somerset, Sarah, wife of *Robert Marchant, Esq.
MARTIN, Robt. E., Esq., Surgeon, at Ipswich, aged 44, on March 25.
*SURRAGE, Thomas L., Esq., at Clifton, aged 83, on March 31.
WATERMAN, Henry, Esq., Surgeon, at Saigon, China, on Jan. 14.

TESTIMONIAL TO MR. P. HUMBLEY BANKS, M.R.C.S., AND HIS WIFE. On the occasion of Mr. and Mrs. Banks leaving Essex to reside at Risley, Bedfordshire, they were presented, the former with a time-piece, and the latter with a silver salver. The inscription on the time-piece was as follows:—"Presented to Mr. P. H. Banks, M.R.C.S. and L.A.C., by a few friends, in token of their high esteem for his kind and energetic conduct in promoting the welfare of the inhabitants generally of this locality." The inscription on the silver salver was —"Presented to Mrs. P. H. Banks, with kindest wishes, by a few lady friends of Barking Road, Essex."

ROYAL COLLEGE OF SURGEONS. The following address has just been forwarded to the Queen:—"To the Queen's Most Excellent Majesty. We, your Majesty's dutiful and loyal subjects, the President, Vice-Presidents, and Council of the Royal College of Surgeons of England, beg permission humbly to approach your Majesty to express our dutiful and heartfelt congratulations on the union of his Royal Highness the Prince of Wales with her Royal Highness the Princess Alexandra of Denmark. We fervently pray that this auspicious event may conduce to the personal felicity of your Majesty, and we feel satisfied that it will ensure the continuance of that high moral example of your Majesty's domestic life which has been of such infinite importance to the happiness and welfare of this country, and to its influence with the other nations of Europe. Given under our common seal, at the College, this 25th day of March, 1863. (Signed) James Luke, President."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. Gay, "On Intestinal Stricture."—Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Henry Thompson, "On Treatment of Severe Stricture of the Urethra by Gradual Distension at a Single Sitting"; Dr. H. Weber, "Pathology of Crura Cerebri."—Ethnological.

WEDNESDAY. Society of Arts.

THURSDAY. Harveian Society of London. Dr. Cock, "On Rickets, and the Connection of Laryngismus Stridulus or False Croup with that Disease."—Zoological.—Royal.—Antiquarian.—Linnæan.—Chemical.

FRIDAY. Western Medical and Surgical Society, 8 P.M. Practical Evening for the Narration of Cases and the Exhibition of Specimens.—Royal Institution.

SATURDAY. Association Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—APRIL 4, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys .. 955 / Girls..1017	1972	1675
Average of corresponding weeks 1853-62		1924	1368

Barometer:
Highest (Tu.) 30.083; lowest (Sun.) 29.670; mean, 29.914.

Thermometer:
Highest in sun—extremes (Th.) 95 degs.; (Sat.) 73 degs.
In shade—highest (Fri.) 61 degs.; lowest (Wed.) 28.3 degs.
Mean—45.3 degrees; difference from mean of 43 yrs.+1.5 deg.
Range—during week, 32.7 degrees; mean daily, 20.9 degrees.
Mean humidity of air (*saturation*=100), 77.
Mean direction of wind, Var.—Rain in inches, 0.04.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

A MEMBER.—We cannot state with certainty who is the London agent for the *Gazette des Hôpitaux*; as we receive our copies direct from the office of publication, 18 rue Bonaparte, Paris. Perhaps, Messrs. Williams and Norgate of Henrietta Street, Covent Garden, or Mr. H. Baillière of Regent Street, would import the *Gazette* for subscribers. Our correspondent is of course aware, that odd numbers of the foreign medical periodicals are not to be obtained in London: the whole year's volume must be subscribed for. If he wish particular numbers, he had better apply direct to the office in Paris.

THE MEDICAL COUNCIL.—SIR: By a curious coincidence, your editorial leader on the failure of the Registration Clause in the Medical Act, appeared in the same number of the JOURNAL which contained a list of new members, and amongst them the Registrar of the Council. The leader conveys the impression that, in its original form, it was a ruder onslaught on the Medical Act; and I have no doubt it told some home truths, and showed the utter failure of the Registration Clause, as regards its protecting power of the interests of the forty shilling-holders; but it certainly was so toned down in its present form, that it will not offend even the bland and courteous Registrar.

I maintain that registration is simply and solely a fine, and nothing more or less, for being dubbed a physician or surgeon. Originally, the rank and file of the profession were told that it was a great protecting power; all who entered through its portals were safe; and woe betide those who practised on Her Majesty's liege subjects without the license! What are the results? It allows full play to charlatanism, encourages irregular practice, and publishes the fact to the οἱ πολλοὶ, that any one may bleed and physic whoever he pleases, without let or hindrance.

I have to thank Dr. Heygate for coming to the rescue; and I fervently hope that, with his powerful aid, the Medical Council will not grudgingly but cheerfully take the initiative, and endeavour to have the Registration Clause so amended, that at any rate we may have a real and not a fictitious license.

Apologising for occupying your space.

March 17th, 1863. I am, etc., AN OLD ASSOCIATE.

[Our correspondent seems to assume that the Medical Council have the power to put down irregular practitioners. It is clearly useless to abuse the Medical Council for not exercising powers which they do not possess. Let those who thus cry out show the legal powers under which the Council can do what they desire should be done. Our correspondent must have a strange idea of the management of this JOURNAL, if he thinks that the appearance of a name in the list of associates could alter the sentiments expressed in a leading article. EDITOR.]

COMMUNICATIONS have been received from:—Mr. THOMAS BRYANT; Mr. R. S. FOWLER; Mr. R. B. CARTER; Mr. AUGUSTIN PRICHARD; Mr. LOWNDES; Mr. G. W. PRETTY; Dr. HUGH NORRIS; Dr. AITKEN; Dr. F. J. BROWN; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. LIONEL BEALE; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Dr. THORBURN; Dr. J. O. FLETCHER; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Mr. GREAVES; Dr. W. PRICE; THE HONORARY SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. GRAILY HEWITT; Mr. A. B. STEELE; Mr HODGSON; Mr. GASCOYEN; Mr. T. M. STONE; Mr. HULME; Dr. PARKES; Dr. W. H. DAY; SIR HENRY COOPER; Mr. J. SPROULE; Mr. T. H. SMITH; Dr. BOWER HARRISON; Dr. T. M. ROOKE; Mr. R. PROSSER; Mr. FURNEAUX JORDAN; Dr. F. PAGE; Dr. HABERSHON; and Mr. J. ESSEX.

BOOKS RECEIVED.

1. Uterine Therapeutics. By E. J. Tilt, M.D. London: 1863.
2. The Calabar Bean. By D. A. Robertson, M.D. Edinburgh: 1863.

ADVERTISEMENTS.

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See *British Medical Journal*, March 22, and other Medical Journals.

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Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture I. (*Concluded.*)

Malformations of the Anus and Lower Bowel.

Having, then, satisfactorily arrived at the conclusion that the inguinal or Littre's operation is the soundest practice to carry out, when relief cannot be secured by any operation in the anal region, we have next to determine whether the intestine should be opened in the left side, in which it was originally suggested, and has hitherto been practised; or whether it would not be a more certain and equally effectual operation to open the colon in the *right* groin. After carefully reviewing the chief facts connected with this subject, I believe that the best practice lies in the performance of this last suggestion; and my opinion is based upon the following reasons.

Firstly: The large intestine will to a certainty be found in the right iliac region, whilst in the left this certainty does not exist; this has been shown by Mr. Curling even in normal subjects, in which no deformity exists. In two instances out of twenty in which he practised this operation upon the dead child, the colon could not be found in its natural position; and, on subsequent dissection, it was found to be lying on the right side.

In cases of maldevelopment, there is strong reason to believe that this irregular position of the descending colon exists in a larger proportion of cases; and that in such the terminal portion of the bowel will be found more frequently on the right side than in well developed and well formed children; or it may perhaps have assumed some median position. Under these circumstances, the attempt to open it in the left groin would necessarily fail, and the life of the patient be probably sacrificed.

It appears, therefore, to me to be a more certain and equally scientific practice to open the colon in the right groin; for if the descending colon pass in that direction, it can be opened; and if otherwise, the cæcum can readily be secured; and, without doubt, under both circumstances an equal relief will be afforded to the patient.

The difficulties of the operation in the right or in the left groin are the same; and the certainty of finding the large intestine on the right than on the left is much greater. The relief which is to be expected by either operation is the same; for I imagine, even if the cæcum or ascending colon be the part opened, there will be no difficulty in securing the emptying of the lower portion. At any rate, it will be no greater than is experienced in Callisen's or the lumbar operation.

In one case which I now bring before you, this operation was carried out; and, although ultimate success was not secured, the following details will not supply any argument against the practice; but, on the other hand, I believe that they will materially tend to support the recommendation which I have just made.

Case II. *Imperforate Rectum; Anus terminating in Cul-de-Sac; Exploratory Operation in the Anal Region failed; Operation in the Right Groin; Death of Patient.* Eliza S., aged 17 days, was brought to me at Guy's Hospital on July 31st, 1862. It was a well nourished and apparently healthy child; and, with the exception of the absence of any action of the bowels, had been free from all symptoms of obstructed intestine till the ninth day, when some slight vomiting appeared. Since that date, this symptom had returned at times, but was not in any way severe.

When seen, the abdomen was full, but not tense. The anus was perfect, and communicated with a *cul-de-sac*, which was about one inch long. On a careful examination of the part, no trace of bulging of the bowel could be detected, and no indication of granulation at the upper extremity of the *cul-de-sac* could be observed. An exploratory operation, however, in the region of the deformity, was at once performed by means of the fine trocar and cannula, but without success; consequently, the opening of the bowel in the groin was at once decided upon. Chloroform was, therefore, administered to the child, and a careful abdominal examination made, when a curious coil of intestine became visible on the left side. There was no projection of the distended colon in the left iliac fossa, but rather a deficiency; and marked tympanitis existed upon that side. There was, however, a distinct prominence in the right iliac fossa, with palpable dulness; and from the left loin the intestine apparently passed across the abdomen, and terminated in the centre beneath the umbilicus.

Having previously well thought over the operation which appeared to be the most applicable in cases of this description, and having determined that the opening of the colon in the right groin offered advantages which did not exist when the left was selected, I at once proceeded to carry out the practice; the case before me being apparently a good instance for the realisation of my views. I therefore made a vertical incision at the distance of one inch from the anterior superior spinous process towards the umbilicus; and, having divided the muscles and peritoneum, came down at once upon distended large intestine. Two thick ligatures were then passed through one margin of the integument, and carried completely through the intestine and integument on the other side; after which the bowel was opened, its thick clayey contents at once escaping. The walls of the intestine were observed to be considerably thickened, and felt quite leathery, being evidently much hypertrophied. It must be added also, that when the peritoneum was opened, a fimbriated growth, which turned out subsequently to be the Fallopian tube, made its appearance, which was, of course, at once returned.

The parents, contrary to all wishes, removed the child home; and some few hours afterwards, during a fit of coughing, the stitches gave way, and several feet of small intestine protruded. Medical advice was subsequently taken, but too late to afford relief, the child dying ten hours after the operation.

The following day, a *post mortem* examination was obtained, when the following appearances were observed.

About six inches of small intestine were extruded from the abdominal wound; these were dry, and of a dark colour. Upon opening the abdomen, it was at once detected that the *descending* colon had been opened by the operation; that some of the stitches had given way, and had allowed it to fall from the abdominal wall, small intestine passing in front of it, and protruding through the wound. The cæcum was situated to the outer and upper portion of the descending bowel; the transverse colon was placed in its natural site, and passed towards the left loin; to this it was connected by loose tissue and a distinct mesentery, proving that all attempts to open it by Callisen's operation would have completely failed. From this point it diverted from its natural path, and, instead of passing downwards over the left ileum to the pelvis, it took a transverse direction obliquely across the abdomen over the sacral promontory, to terminate at the brim of the pelvis on its right side. The intestine terminated by a distinct pouch at the brim of the pelvis; and it was, therefore, a considerable distance from the anal *cul-de-sac*. The exploratory operation had done no harm, not having touched any of the pelvic viscera or the peritoneum. The trocar had only passed into the cellular tissue at the posterior portion of the pelvis. It was then seen that it was the right Fallopian tube which had protruded from the wound during the operation; it was resting at its lower border.

It thus appeared that, by the operation in the right groin, the descending colon had been unexpectedly opened; and, had proper care been taken of the child, there is every reason to believe that a good result might have been secured.

This case must certainly be brought forward as a good one to illustrate the wisdom of selecting the right groin for the inguinal operation in preference to the left, and well supports the arguments in its favour which have been given in another portion of this lecture.

Should another opportunity offer, I shall follow the same practice, believing it to be the best. I have since seen that this suggestion was made some time since by M. Huguier at the Imperial Academy of Medicine in 1858-59; but I believe that it has not been put into practice until the present occasion.

It would appear, therefore, that in both classes of cases to which our attention has been directed, a primary exploratory operation in the anoperineal region appears to be the best practice which can be followed. Great care and caution in the attempt being absolutely essential; should it fail, as past experience has proved that it will in nearly half the cases, the inguinal operation is to be preferred; and I believe that the right groin is the preferable seat.

In the subsequent treatment, constant dilatation is a necessary point of practice in order to prevent the recontraction of the part which will otherwise to a certainty take place.

Treatment of the Third Class of Cases. We will now pass on to the consideration of the third and last division of cases: in which the anus is imperforate, and the rectum terminates either in the urethra, vagina, or some other abnormal position.

It will scarcely be necessary to occupy your attention by describing all the vagaries of development which have been seen in practice at different times; for I believe that there is hardly a point in the median line of the perinæum, from the coccyx to the pubes, in which the rectum has not been seen to open; and that the vagina from its orifice to its end, the urethra from its vesical termination to its close, have at different times been found to have received the contents of this malformed and ill-directed intestine.

The difficulties which are experienced in the treatment of these cases are peculiar to each; and although every example must be treated on its individual merits, some general rules of practice may be laid down. It would appear, from Mr. Curling's researches, that it is into the urethra that the rectum most frequently finds an outlet; for out of forty-three cases which he collected, the bowel terminated in the urethra in twenty-six, in the vagina in eleven, and at some other part of the perinæum in six examples.

There is a practical point connected with this subject which claims our notice; and that is, in these cases of maldevelopment, the rectum, as a rule, is present, although misplaced. As a consequence, there is always a good hope that an operation in the seat of the natural anus will terminate with success.

When the urethra is the part implicated, the exploratory operation must be conducted in the anal region in precisely the same way as it has been recommended to be practised in the first class of cases which have been related, and in which no outlet exists; and judging from past practice, the bowel will be reached in nearly two-thirds of the cases operated on. The intestine must, however, be forcibly brought down and firmly stitched to the integumental margin; for, if this point be disregarded, the opening will subsequently contract, and disappointment will, to a certainty, be eventually experienced. Should success follow this effort for relief, it is unfortunate, however, that nothing can be done in the way of closing the urethral orifice; if the anal opening be a free one and remains permanent, there will always be a solid hope of the abnormal passage in the urethra closing; but unless the former be kept open by surgical means, a double passage may remain for ever; the freedom of the flow of the fæces through the normal channel being the only condition upon which the slightest hopes of the ultimate closure of the unnatural channel can be based.

When the vagina is the canal into which the rectum passes, a much better prospect of ultimate relief can be offered to the sufferer, than in the last class of cases to which we have alluded. In these the outlet is often free, and, as a consequence, there is but little immediate danger to life arising from this maldevelopment; but the private and social disadvantages which the subjects of this deformity experience render any operation which offers a probability of relief, not only justifiable, but necessary.

In the majority of cases which have been operated upon, no difficulty has been experienced in opening the rectum in the anal region; for in eleven cases in which a record has been preserved, the gut was opened in all; and, in like instances, this same result can be readily secured by making a free section in

the anal region upon a bent probe with a button end made to project in the perinæum, after being introduced through the vaginal orifice.

The most difficult step of the operation, however, remains to be performed; and that is, to fix the walls of the intestine to the integument. This must be done by means of sutures; lateral incisions through the skin and tissue being made should any difficulty be experienced. If success follow this operation, an attempt to close the vaginal orifice may be made by a plastic operation; but this latter hope appears somewhat vague; for, judging from past experience, there is not one case on record in which it has been realised. In one instance, the ultimate closure was secured; but this closure was spontaneous, and it took place two months after the new one was established.

Two instances of this deformity have fallen under my care; and the following brief records of the cases may be read with interest.

Case III. Henrietta D., aged 8 months, was brought to me at Guy's Hospital, on Nov. 8th, 1857, with an imperforate anus, and a small orifice communicating with the bowel at the mouth of the vagina. The child was well nourished, and apparently quite healthy.

Upon examination, this abnormal opening was found to be directed backwards, and to communicate directly with the bowel; and a bent probe, when introduced, was readily observed in the perinæum, in the position in which the natural anal outlet should have existed. A puckering, as of an anus, was also to be detected; and it appeared as if the orifice were closed by integument alone. An incision was therefore at once made in the site of the anus, the bent probe acting as a guide, and fæces at once escaped. In a week's time, when I next saw the child, the fæces had passed freely the right way, but little coming through the vaginal opening. There was a good control also over the action of the bowels; and in other respects the child appeared well.

She remained under my observation for three months; and, when she disappeared, the original vaginal orifice had completely closed, and the artificial and normal anus was firmly established. The control over the bowels' action was complete; and no signs of subsequent contraction had taken place. Indeed, the anus appeared to be as natural as if it had always existed.

This case cannot but be regarded as being most satisfactory. It is true that an anus apparently existed, although it appeared to be closed with integument; and no great thickening of tissue had to be divided. The spontaneous closure of the abnormal opening, after the reestablishment of the natural outlet, with an absence of the subsequent contraction of the anus, are points also of considerable interest.

Case IV. Ellen H., aged 8 months, was brought to me on May 14th, 1862, with the following congenital defect. The perinæum was altogether absent; there was not more than a quarter of an inch between the extremity of the coccyx and the median fissure, which fissure extended forwards to the pubes, and was bounded by labia. In this fissure were the orifices of three canals. Each canal was divided by a membranous septum, and their extremities were most distinct. The posterior canal was small, not being larger than a swan-quill; it was also the most prominent. The vaginal tube was large and very patulous, its anterior wall apparently falling forwards; the orifice of this canal being evidently less advanced than the anal; and above this passage, and more deeply placed, was the opening of the urethral canal. In other respects the child appeared perfectly sound and well developed. There was no control, however, over the bowels' action; fæces were always passing with perfect facility, complete absence of sphincter being very apparent.

In this case nothing could apparently be done. The outlet of the bowel was sufficiently free to allow of its complete evacuation; and there was nothing to lead one to hope that the least benefit could be obtained by an operation. The peculiarity of the case, indeed, appeared to consist in the complete absence of the superficial perinæal muscles, and the distinct presence of the three canals—the rectal, the vaginal, and the urethral.

As a general summary of the subject, the following conclusions may be given.

1. In all cases (with some rare exceptions), whether of imperforate anus, obstructed rectum, or misplaced anus, an exploratory operation in the normal anal position is perfectly justifiable; and it may be attempted with the fair hope that, in nearly half of such cases, primary success will be secured.

2. Such exploratory operations, however, to be successful, must be conducted with great caution; and that the exploratory puncture or incision is to be made upwards and backwards towards the sacrum.

3. If these measures fail, or if from some peculiarity in the case they appear useless and unjustifiable, the intestine is to be opened in the groin; the lumbar or Callisen's operation being quite inapplicable.

4. In the inguinal operation, the right groin appears to possess advantages over the left; as the intestine is found with more certainty, and the benefits to be expected from the operation are equally great.

5. The treatment of these cases does not terminate with the success of the primary operation; for constant dilatation of the artificial anus is a necessity to preserve life.

A Belligerent Doctor. At the conclusion of the Cork Medical Protective Association, the following incident is reported:—Dr. Wall said, "Before you leave the chair, sir, I would wish to make a few observations. I saw by the *Medical Press* a while ago, some observations creditable to a countryman of ours in London (hear.) Some distinguished graduate of Heidelberg (laughter)—an individual named Dr. Rogers—had the temerity, the audacity to asperse the Irish medical profession—he had the impertinence to do so; but it was well that in his own immediate vicinity an Irishman was placed in *juxtaposition* with this graduate of Heidelberg (laughter.) That Irishman is Dr. O'Connor of London, who is a Kerryman (great laughter), and therefore he is in truth an Irishman (hear, and continued laughter.) I now take the present opportunity of introducing this matter, and of proposing that the thanks of the meeting be given to Dr. O'Connor for his manly stand against this asperser of the dignity and attainments of our Irish profession (hear.) It was well for this man from Heidelberg that I was not near him, for I would make him know what Paddy could tell him (hear, and laughter)." (*Cork Constitution.*)

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Under the care of J. Vose Solomon, Esq., F.R.C.S.

A disease for which the common tarsal tumour—the grando or chalazion of technologists—may be mistaken, is syphilitic tubercle of the lid.

The tarsal border in this affection becomes the seat of a well defined and hard tumour, in the centre and free border of which a yellowish spot is apparent. At this stage, the tubercle bears a rude resemblance to hordeolum or stye.

The yellow spot sooner or later ulcerates; and if the molecular changes be not controlled by mercury, a deep triangular notch is made in the border of the eyelid, and remains as a permanent deformity. The ulcer is at first superficial and of a dusky yellow colour, and the lid-tissue around is widened out by a circumscribed and dense exudation, as in the Hunterian chancre.

Case I. My introduction to this form of syphilis of the lid was made many years ago, in the case of a married lady, who consulted me respecting a tumour such as I have described. One of her eyelids was disfigured by a notch, which she told me marked the site of a tumour similar to the one which now concerned her, and which had run a natural course. The disease was not "tarsal tumour," for this never ulcerates or suppurates at the free margin of the tarsus. The chronicity of the disease and appearance of the yellow spot forbad the idea of its being hordeolum. On calling upon the surgeon who attended the family, I learned from him that the patient had been infected with syphilis by her husband two years ago, and had been treated for secondary symptoms.

The following case affords a good clinical picture of the early stage of syphilitic tubercle.

Case II. A young woman aged 20 (married) applied at the Eye Hospital on Oct. 21, 1856, with a hard tubercle on the edge of the right upper lid close to the outer canthus, and a similar tumour on the corresponding situation of the left lower lid. They were not inflamed; but presented, upon the integument at its line of union with the muco-cutaneous surface of the tarsus, an excoriated ulcer, of small size and oval shape. The ulcer on the right side was covered by a sticky secretion of yellowish colour.

The face of the patient was disfigured by syphilitic papulæ.

The disease of the lid had existed upwards of three months, and that of the throat a little more than half a year. She denied having suffered from sores on the genitals, leucorrhœa, ardor urinæ, or blotches on the surface of the body or face.

The velum palati was œdematous, the tonsils foul and deeply ulcerated, and one side of the tongue presented a blanched patch, in the centre of which was an ulcer. Plummer's pill was ordered.

In three days (Oct. 24), the right lid was much inflamed and swollen. The ulcers had extended; they were oval, and covered by a dirty gray crust (epithelial scales), on the removal of which a tawny surface was exposed.

Treatment was now directed to the relief of the inflammation of the integument; and gray powder in combination with the extract of conium was substituted for the Plummer's pill, which did not appear to agree.

℞ Hydrargyri cum cretâ, ext. conii, āā gr. v. Fiant pilulæ ij ter in die sumendæ.

The importance of abstinence from alcoholic stimulants, the necessity of a nutritious diet, and of keeping the body warm, were fully explained to the patient.

My notes for Oct. 28 state:—"There is less inflammation of the lid, the tubercles are smaller and softer, but the ulcers remain unchanged. The woman looks better, and says she feels so."

In six days afterwards (Nov. 3), the thirteenth of the treatment, the ulcers had cicatrised, and the surrounding hardness had disappeared. The appetite was good, and the complexion wore the aspect of health. It was a long time, the poor woman said, since she had felt so well as now. She remained under observation for a time, taking small doses of the mercury and iodide of potash. There was no relapse.

For the cure of this disease, all that is needed is a course of mercury adapted to the constitutional power and idiosyncrasy of the patient. The supervention of inflammation is to be met by the application of such remedies as would be appropriate if there were no syphilitic complication.

The inflammation should not be considered as belonging to the venereal complaint, but as an independent disease; hence a leech or two and an evaporating lotion may be necessary in addition to the mercury.

In syphilis of the eyelid I have not been able to satisfy myself of the value of yellow or black wash as a topical application. The occasional touching of the sore with a crayon of nitrate of silver, in combination with nitrate of potash, is useful. A solution of nitrate of silver in distilled water, to which so much glycerine has been added as will give a coating to the ulcer, is a good form of application.

I have encountered a difficulty in the administration of mercury in two cases. Both were females: one was phthisical; the other suffered from tertiary osseous symptoms, and was old and feeble.

Cancer of the eyelid is to be distinguished from syphilitic tubercle by its history, the absence of secondary symptoms; by the accompanying tumefaction being less, and of a different feel when manipulated; by the inefficiency of mercury; and by the results of a microscopic examination of the diseased structure. I have not laid stress on the generally more advanced age of cancer patients, because I have seen a flat syphilitic tubercle on the integument of the eyelid of a woman who was nearly 60 years of age, and which rapidly disappeared under mercurial treatment; nor upon slight enlargement and tenderness of the preauricular gland, as they are common to syphilis, cancer, and hordeolum.

Case III. A woman, aged 25 years (married to a policeman), of strumous diathesis, complexion rather white, moderately plump, presented herself on March 17, 1863, with a red swelling of the lid, situated very near to the right tear-sac, and was prescribed for by Mr. Bowen, our intelligent house-surgeon.

On March 20th, I saw her for the first time, and noted the following symptoms. The integument of the inner half of the right lower lid is shiny and of a slightly coppery hue; and its surface slightly uneven. On taking the lid between the finger and thumb, a swelling occupying nearly one-half of the lid, of soft cartilaginous feel and slightly lobulated in front, is discovered; to the touch it closely resembles the remains of a large Hunterian chancre of the prepuce, for which mercury has been somewhat recently administered with effect. The margin of the swelling can without difficulty be clearly defined, there is no sort of blending with the surrounding tissue.

The voice of the patient is "veiled." In the base of

the uvula is a small hole with a sharply defined and rounded edge; there is no secretion from it; the velum palati is white, and chronically œdematous; the right pillars of the fauces are in the same condition, and there is a little notch in the centre of the free margin of the anterior pillar, marking the seat of a cicatrised ulcer. These parts present a diffused pale pink shade.

The patient denies all knowledge of a primary sore of the genitals, and the existence at any time of leucorrhœa or ardor urinæ. The throat has been affected upwards of six months, and the eyelid about three months and a half. She has had medical treatment, which does not appear to have included mercury in any form, or specific treatment of any sort.

The disease commenced at the inner end of the lid and was believed to be a stye, but it never suppurated. It was at one time inflamed, and became of a large size; a leech was applied with great relief, and the swelling diminished much. At the present time, the part is not inflamed or tender, and the conjunctiva is healthy. She was ordered to take every night a pill containing hydrargyrum cum cretâ and extract of conium, two and a half grains of each; and a drachm of syrup of iodide of iron in a cup of milk three times daily.

March 31st. The tumour is nearly gone; the copper coloured stain continues, as on the 20th, well marked. The patient is looking more healthy; she says she feels better than she has done for five years, and that her appetite is now excellent. Four pills only have been taken.

The preceding case affords an example of tertiary syphilis, of the same nature as the indolent nodes (lumps?) which sometimes form in the skin of the arms or its subjacent cellular tissue, and are much benefited by preparations of iodine and sea-air.

HULL GENERAL INFIRMARY.

REPORTS OF CASES.

[Reported with remarks by C. J. Evans, Esq., House-Surgeon.]

Case I. *Obstruction of Bowels; Death; Autopsy; Biliary Calculus found in Small Intestine.* Sarah L., aged 40, married, but without family, was admitted into the Infirmary under the care of Dr. Sandwith, on May 6th, 1858. She stated she was the wife of the master of a vessel, and had been poorly for about two months, though able to get about; was generally of a costive habit, and required medicine to relieve her bowels. On April 29th, seven days before, she had been taken very sick, and was obliged to take to her bed. The vomiting had continued ever since, occurring three or four times in the night, as well as the day. The bowels had not been moved since the same day (April 29th), when she took aperient medicine. On May 2nd, four days after the vomiting commenced, she noticed that the vomited matters possessed a fæcal odour; and this had continued up to the time of admission. She had aperient medicine and injections, by the advice of, but had not been seen by, a medical man. She stated that she had never had a rupture.

On admission, she complained of sickness and pain in the abdomen, which was tumid, though not tense, but tender on pressure, and resonant everywhere except in the lumbar regions. The countenance was somewhat anxious, though not indicative of much distress; tongue pale and flabby, thinly coated on dorsum; pulse 128, small and sharp. No protrusion of the abdominal contents could be detected in any of the usual situations. She was ordered to take at once six grains of calomel in a pill; also, every three hours, two tablespoonfuls of the following mixture, with twelve grains of citric acid.

℞ Potassæ bicarbon. ʒiss; magnesiæ sulphatis ʒvj; aquæ menthæ ad ℥vj. Fiat mistura.

She vomited once, after taking the medicine, a brownish fluid, of stercoraceous odour; but she thought the pill had not returned. Vomiting of a similar fluid recurred in the evening, and she had occasional hiccup. She was ordered to take one grain of solid opium at bedtime.

May 7th. She got but little sleep. There had been no action of the bowels. Pulse 120, feeble. She was directed to omit the mixture, and take a grain of opium every four hours.

6 P.M. Fæculent vomiting continued. The abdomen was more tense, and tympanitic; pulse very small and feeble; countenance more anxious. The pain in the abdomen was not fixed in one part, but generally diffused. She stated that she had suffered before from cramps in the abdomen.

She was seen by Dr. Sandwith again at 9 P.M. He ordered ten grains of calomel to be taken at once; and a warm water enema to be administered every four hours; and an ounce of brandy.

May 8th. The stercoraceous vomiting continued. She was ordered to have an injection composed of an infusion of ten grains of tobacco-leaves in six ounces of water; and to take, every four hours, two tablespoonfuls of a mixture containing a drachm of bicarbonate of potash and a grain of muriate of morphia in six ounces of water.

5 P.M. There was no improvement in the symptoms. The tobacco enema was ordered to be repeated (with fifteen grains of tobacco-leaves to six ounces of water), and followed, after four hours, by an enema containing turpentine and castor oil.

May 9th. She passed a bad night, and there was no relief to the symptoms. There was severe pain in the abdomen, which was more tense and tympanitic. The countenance was anxious, and the eyes sunken. Pulse 120. The tongue was coated with brownish fur. She took, by way of nourishment, beef-tea and brandy; but only in very small quantities. The tobacco enema was repeated; and six leeches were applied to the abdomen, followed by a linseed-meal poultice. Two grains of calomel and a fourth of a grain of opium were ordered to be taken in a pill every four hours.

May 10th. She passed a better night, and vomited only a little watery fluid, not having a feculent odour. She complained of feeling faint and sickly after the injections. The tobacco enema was continued every four hours, alternately with a common enema. The calomel and opium were continued, and taken alternately with a pill containing two grains each of extract of henbane and purified extract of aloes.

9 P.M. She had vomited no fæculent matter during the day, but only a yellowish watery fluid. The abdomen was less tympanitic. Pulse 112, rather sharp. There was no action of the bowels. She has taken more beef-tea, and has retained it.

May 11th. There was no vomiting at all to-day, and she was able to take more nourishment. She was somewhat narcotised. She was ordered to take calomel and opium pills of half the strength formerly given; to continue the enemata, and the aloes and henbane pills. A blister was applied over the region of the cæcum.

May 12th. She vomited stercoraceous fluid once during the day; but, after that, a small quantity of fæcal matter passed *per rectum* at the time of giving the injection, which returned now almost directly.

May 13th. She passed several small stools of healthy colour during the day. There was no return of the sickness, and her pulse possessed a better volume. The enemata were omitted, but the pills continued.

May 14th. Several copious fluid evacuations passed to-day. Her tongue was rather dry. She was ordered to have a dose of effervescing saline mixture every four hours, and three ounces of port wine.

May 15th. She stated that she passed but little urine,

and that with difficulty. There was no dulness over the region of the bladder. The catheter was introduced, and only a few ounces of high coloured urine withdrawn. Pulse very feeble. She was ordered to take every night a pill containing one-third of a grain of muriate of morphia and two grains of purified extract of aloes.

℞ Potassæ bicarbon. ʒij; magnesiæ carbonatis ʒj; acidi citrici ʒj; spiritûs ætheris sulphurici comp. ʒij; aquæ menthæ piperitæ ad ℥viij. M. Fiat mistura, cujus capiat ℥j 3tiis horis.

She was reported in the afternoon to have risen up suddenly in bed, and then fallen backward. When seen, a great change was observed in her condition; and she gradually sank, and died at 12 P.M.

Autopsy, twelve hours after death. There was but little fluid in the peritoneal cavity. The greater part of the small intestines was much distended with flatus, and a good deal congested, especially the lower part of the ileum. The transverse arch of the colon was adherent to the liver. The former, together with a portion of liver, the stomach, and duodenum, was removed *en masse*. The mucous membrane of the stomach presented numerous red spots of extravasated blood (hæmorrhagic erosion), more especially in the cardiac portion. The transverse colon (the part removed) was laid open its whole length, and no unnatural appearance was observed. The duodenum was exposed in a similar manner; and at about an inch and a half from its commencement was found a somewhat circular opening, with rounded edges, which admitted the little finger. There was a bluish gangrenous appearance of the mucous membrane in its immediate neighbourhood, but no increased redness. On tracing the aperture, it seemed to terminate as a *cul-de-sac* in the substance of the liver. Leading from it also was another sac or pouch, about an inch long, passing behind the pancreas, and lined with a rough membrane. The substance of the liver was softer than natural. The gall-bladder was not found. The rest of the large intestines were healthy. In the jejunum was found a biliary calculus, of about the size and shape of a partridge's egg. The intestine above and below it, to the extent altogether of about three feet, was empty and contracted. The bladder was also empty. The lungs and heart were quite healthy.

Remarks. Great difficulty was found, at the *post mortem* examination, in ascertaining the exact nature of the changes which had taken place in the region of the gall-duct. The gall-bladder was not recognised; but it is probable that the sac or pouch, spoken of above as being lined with a rough membrane, was really the remnant of this, though there was no appearance of biliary fluid in or about it. The *cul-de-sac* leading into the substance of the liver from the perforation in the bowel may also have been remains of the common bile-duct. It is tolerably certain that the calculus had been fixed in the position where it was found for some time; that is, from the period of the setting in of the stercoraceous vomiting. Both the contracted state of the intestine above it, and the condition of the perforation in the intestine, with its smooth rounded edges, would seem to favour this view of the case. Moreover, had the obstruction occurred at the time the calculus entered the bowel, its point of entry being so close to the commencement of this, the regurgitation of the contents of the intestine from below would have been prevented, as well as the onward passage of fluid or other matter from above.

The symptoms in this case were very severe. Vomiting had continued for fourteen days without intermission, half that time the matters ejected being stercoraceous. It occurred only once afterwards, following on an intermission extending over two days. There was no action of the bowels also for thirteen days. The symptoms were slow in yielding to the treatment adopted, a part of which consisted of the free yet cautious administration of tobacco enemata, which was apparently attended with a beneficial result. The urgency of the symptoms had subsided; and there was every hope that the patient would ultimately do well, though she was in an exceedingly weak and debilitated condition. But without the least warning, or any evident cause, a sudden change for the worse took place, dating from the act of her suddenly rising up in bed. This was not witnessed by the nurse, but reported by another patient in the ward. Whether the exertion of sitting up in bed, in her weak state, was too much for her system to bear, and produced a shock from which she was unable to rally, is not clear. At any rate, the *post mortem* examination threw no light upon her unexpected and comparatively sudden death.

Case II. *Obstruction of the Bowels; Peritonitis; Recovery.* Robert H., aged 24, a groom, was admitted under the care of Sir H. Cooper, on June 10th, 1862, with the following symptoms. There was considerable pain and tenderness of the abdomen, especially at the lower part; abdomen itself tumid and tense; transverse colon much distended; countenance anxious; pulse rather feeble. The bowels had not been relieved since the 8th, two days previously.

History. He had been taken ill on June 6th, while out exercising, with a sudden and severe pain in his body. An hour or so previously, he had taken a glass of beer, being very hot; and he went home and drank a glass of cold water. He was quite well the previous day. The pain in the body continued more or less the two following days; and he was seen by a medical man on the 8th, when he was violently sick. His bowels had been relieved on the 5th, but not on the 6th nor 7th. On June 8th, an enema was administered, and was followed by one stool.

As the pain and vomiting increased in severity, he was brought to the Infirmary. Ordered hot fomentations to be constantly applied to the abdomen; a grain of calomel and a fourth of a grain of opium to be taken in a pill every four hours; with a dose of saline mixture, containing fifteen minims of compound tincture of camphor. He was placed on milk diet.

He was very sick in the afternoon. The vomited matter was of a greenish black colour, but without a fæculent odour.

Vespere. The pain in the abdomen continued. He was ordered to have six leeches applied to this part.

June 11th. The abdominal pain was somewhat less, but there was great tumidity and tympanitis. The vomiting continued, and there was no action of the bowels. He was ordered to have a common enema at once; and turpentine stupes to be applied to the abdomen. The bowels were moved once or twice in the evening after the enema, but only slightly.

June 12th. The abdominal pain and distension continued, and there was marked and extensive dulness on percussion, showing that there was effusion into the abdominal cavity. Ten leeches were applied; and he was directed to take a grain and a quarter of calomel every two hours, without the opium; and to have an enema administered with O'Beirne's tube.

June 13th. The pain was rather less severe, but there had been no further action of the bowels. There was now also frequent and profuse vomiting of brownish yellow fluid, of decidedly stercoraceous odour. The urine passed freely and naturally. He was ordered to omit all medicine, and to have twice a day an enema of four ounces of beef-tea containing half a drachm of laudanum.

June 14th. He had had several very copious evacuations, semifluid, of light brown colour. The sickness had abated, and the pain in the abdomen was much relieved. He was ordered to continue the nutrient enemata, and have a little rice-milk.

June 16th. The bowels had not been moved for the

last twenty-four hours; and there was considerable distension of the abdomen. A large blister was applied to the abdomen. The calomel and opium pills were ordered to be taken again every two hours; and a turpentine enema, containing two ounces of tincture of assafœtida, to be administered in the evening. He was also directed to have a pint of beef-tea daily; and the nutrient enemata were omitted.

June 17th. The bowels had been freely moved, with the expulsion of much flatus. The gums were slightly touched by the calomel. The pills were omitted.

Vespere. The bowels being copiously moved all through the day, he was ordered an anodyne injection at night, and to have two pints of beef-tea.

June 22nd. He was improving in every respect.

℞ Infusi quassiæ ʒviij; tincturæ strychniæ ʒ ss. Fiat mistura cujus capiat ʒj ter die.

He was ordered common diet.

He was discharged cured on July 5th.

[*To be continued.*]

Original Communications.

OBJECTIONS TO THE STATEMENTS OF DR. FLEMING CONCERNING THE ACTION OF ATROPIA UPON THE EYE.

By Henry Lawson, M.D., Professor of Physiology in Queen's College, Birmingham.

There are few subjects within the very distant limits of physiological science, which have received so much careful consideration as that of the organ of vision; and on that account, it is of the greatest importance that, in adding to the already comprehensive information which we possess concerning the structure and functions of the eye, some attention to the views of the older writers should be paid by those who are about to advance new hypotheses.

In the *Edinburgh Medical Journal* for last month (March), an article has appeared from the pen of Dr. Fleming, in which he speaks of the action of atropia upon the eye. Dr. Fleming's merits as a researcher in the wide field of the science of Materia Medica are too well known to need any comment from me; it is, therefore, with a feeling of some reluctance that I come forward to controvert any statement made by so distinguished a physician. That it is my intention to question their accuracy, I frankly confess; not, however, from a spirit of opposition, but rather with the hope that their author may take further steps to maintain the truth of what he is pleased to term *his* theory.

The conclusions at which Dr. Fleming has arrived may thus briefly be summed up.

1. Adaptation of the eye to distinct vision at different distances is effected in great part by the *iris*.

2. The iris is an erectile structure.

3. The ciliary muscle, in contracting, presses on the veins returning from the iris, and so causes turgescence of the latter, decrease in the size of the pupil, and power of examining near objects.

4. Dilatation of the pupil is due to the contraction of the capillaries, diminution of the quantity of blood, and hence an absence of the necessary erectile fluid.

5. Contraction of the capillaries may be due to a stimulation of the sympathetic nerve.

With regard to conclusion 1, I may observe:—

a. That the view is by no means a novel one, having been proposed many years ago by Pouillet and Mile.

b. That it has been successfully refuted experimentally; and

c. That the case recorded by Von Graefe completely upsets it. In Graefe's case, the iris had been entirely removed; yet the power of adaptation was as perfect after as before the operation.

In proof of conclusion 2, the writer asserts, that the softness of the iris is evidence of its being erectile! It is not necessary to remark, that testimony of so vague a character is hardly testimony at all; but, apart from this, I take the evidence of Mr. Bowman on the matter, in preference to that of Dr. Fleming. The former writer observes: "From what has now been said of the vessels of the iris, it is evidently *not an erectile structure*. If a doubt still remained, it would be dispelled by the fact that the iris will contract and dilate several times after death under favourable circumstances." (*Lectures on the Parts concerned in the Operations on the Eye.* By William Bowman, F.R.S., F.R.C.S., etc.)

The third deduction seems rather hastily framed. It is very questionable whether the veins of the iris are ever *compressed* by contraction of the ciliary muscle; and, even on the author's supposition, the turgescence would remain to be accounted for, inasmuch as it is probable that the arteries would also suffer compression, thus leaving the quantity of blood in the iris the same as before.

I take it, that the fourth conclusion has especial reference to the action of atropia; that, in fact, the dilatation of the pupil after the administration of atropia, is due to an absence of blood. Dr. Fleming has not shewn in any way that, in the case of dilatation of the pupillary orifice after the application of this drug, the vessels *are* constricted. It is quite true (indeed, I myself have observed it in the web of the frog's foot) that a *local* application of atropine does produce a *temporary* diminution in calibre of the capillaries; but this constriction does not continue for days, and *may* be owing to other circumstances.* On the other hand, it has been well ascertained that, in every case of poisoning with belladonna, the brain is fearfully congested—to use Christison's words, "*gorged with blood*"; and, as the vessels of the eye are merely offshoots from the cerebral arteries, we may fairly suppose that *the ciliary vessels are dilated, rather than diminished in capacity, when under the influence of atropia.*

I cannot see upon what facts conclusion 5 is based. I fancy that stimulation of the sympathetic is, in the instance referred to, exceedingly unlikely. It would be much more in accordance with the beautiful discovery of M. Claude Bernard, to suppose that the (functionally) cerebro-spinal nerves, and consequently the dilator muscles, are paralysed, and that therefore the constrictors, having no force to antagonise them, narrow the vessels. I do not for a moment assume that this is the *real* state of things; for I conceive that the vessels are either dilated or in their ordinary condition, and am of opinion that we are not yet in a position to draw *very precise* inferences relative to the control of the two sets of nerves over the movements of the iris. I merely throw out the hint as a suggestive one.

There are two or three other assertions of Dr. Fleming, which do not stand the test of a close examination. Thus, he states that the blindness or faint vision of epileptics is owing to a want of turgescence of the blood-vessels! If the statement be not intended to bear upon the writer's remarks, it means nothing, as it has been before put forward in another shape. But, if it be supposed that the faintness of vision results from an absence of blood from the iris, then I would say—

1. That when the blood has left the iris, vision is not impaired; and

2. That a much better explanation of the phenomenon might be sought in the diminution of the blood

* Such, for example, as the influence of the styptic acid, which is occasionally employed to dissolve the alkaloid.

supplying the cerebrum and retina, as Dr. Brown-Séquard has long since demonstrated.

The most startling fact which the writer announces is that, when the walls of an artery are softened, and deprived of *contractility, there is a much greater quantity of blood transmitted to its ultimate ramifications, than when it was in a healthy condition.*

I shall make no further allusion to this strange assertion, than a recommendation to my readers to consult their senses and their text-books on Physiology, for a corroboration (?) of Dr. Fleming's opinion.

In conclusion, I would submit the following queries, bearing upon the foregoing matter, to the careful consideration of the profession.

1. What becomes of the aqueous humour when the vitreous is pushed forward?

2. If the capillaries of the system can dilate without compression of the systemic veins by special muscles, why may not those of the eye act similarly?

3. If the capillaries of the eye can be dilated by the action of their coats, or owing to an increased demand for blood on account of organic change, what is the office of the ciliary muscle, which in the class *Aves* is composed of even striated tissue?

4. Do we always find that, during congestion of the eye, there is an inability to perceive distant objects?

5. If the vitreous humour be pressed on by the turgescence of the vessels, to an extent sufficient to cause the projection of the lens, will not the retina sustain some injury?

6. Can the pressure be sufficiently great to cause the elongation of the "arteria centralis retinæ"?

I hope, in a memoir which I am preparing for publication, to enter fully into the subject of "adaptation", to review all pre-existing theories, and to enunciate my own opinions concerning the mode in which the refracting power of the human eye is increased and diminished according to the will of the individual. In the meantime, I shall be glad to learn the views of others, when based upon well-ascertained facts, and not merely speculative.

FÆCAL ABSCESS, TERMINATING SUCCESSFULLY.

By Thomas Henry Smith, Esq.

T. J., aged 18, had been delicate from birth. He was first seen on June 18th, 1862, when he had smart febrile symptoms, with deep-seated pain, increased on pressure, over the region of the cæcum; there was swelling, and some dulness on percussion. He was much relieved by small doses of calomel and opium for a few days, with salines and linseed poultices, with an opiate ointment smeared over the surface.

On June 28th, tenderness had subsided, but there was apparently some thickening of the bowel. A blister was applied with benefit; and he seemed to be getting well. Oleaginous aperients had brought away a very large quantity of fæculent matter.

About a fortnight from the commencement of his illness, on lifting a slight weight, he felt a sudden acute pain in the right lumbar region. This pain was relieved by sedative applications from time to time, but it never left him; and on July 8th, I found an ill-defined elastic swelling, without any distinct fluctuation, midway between the last rib and the crest of the ilium. Dr. Habershon saw him with me, and advised leeches, poultices, and perfect rest.

On July 19th, Dr. Habershon saw him again. The swelling had decreased; there was less pain; and we agreed that there was nothing to warrant an opening being made.

He fluctuated for two or three weeks, taking bland, easily digestible food; but, on the whole, decidedly losing ground, emaciating a good deal. During all this time the bowels acted naturally.

On August 16th, I found that matter was evidently coming to the surface, and pointing just above the junction of the middle with the posterior third of the crest of the ilium.

On August 17th, I made a free opening, and out rushed a full pint of intensely fœtid matter, with so much flatus, that there could be no doubt of communication with the bowel; in fact, it was just like opening the distended colon itself.

On September 4th, Dr. Habershon saw the patient for the third time; and the prognostication was very gloomy. Fluid fæculent matter was passing in abundance through the opening, though also naturally by the rectum; emaciation was extreme; the pulse very rapid; and the tongue irritable. He was being well supported with wine, strong animal broths, milk, eggs, etc. Charcoal poultices agreed best with the wound; and, with great attention to cleanliness, prevented fœtor. He took ammonia with chloric ether, and decoction with compound tincture of bark.

From this time, however, he slowly but steadily improved. The appetite kept up; he took abundant nourishment; the discharge lessened; flatus ceased to pass; finally, the discharge was no longer fæculent; and he was able, by the third week in September, to take carriage exercise.

On September 26th, he went to Brighton, and returned on October 24th, so wonderfully improved in health, strength, and amount of flesh, as hardly to be recognised; in fact, he was in much better condition than he had been before his illness. The discharge has now nearly ceased; there has been no ill smell to it ever since September; and he is the picture of health.

There are some points of interest about this case apart from the rarity of its termination.

1. Was the original affection a low form of peritonitis in the cæcal region? or inflammation, running on nearly to abscess, external to the peritoneum, in the abdominal parietes? The diagnosis between the two is at first by no means easy. My first impression was, that the cæcum was alone involved; and, during the first fortnight of his illness, very abundant evacuations passed by the bowel; treble the amount of food taken; showing that there had evidently been a considerable accumulation in this region. But, after the more decided swelling appeared externally in the posterior lumbar region, some effusion and thickening of the cellular tissue between the anterior and posterior parts could be traced: so that the irritation would seem to have been communicated from the cæcum to the cellular tissue in the parietes of the abdomen adjacent to it.

2. Did the bowel give way at first when the sudden pain was felt? or did the perforation take place from without, matter remaining for some time in the walls of the abdomen, and then making its way into the intestine? The latter suggestion is the most probable; for had the bowel given way so early in the case, in all likelihood there would not have been the long period of suspense, and, I may say, of uncertainty, as to whether there was matter or not; it would not have been quiescent so long: there would have been more pain and more constitutional disturbance. Could the matter have been evacuated early, the communication with the bowel might possibly have been prevented; but at the first consultation there was a doubt as to whether there was matter at all; and at the second, the swelling had so lessened that an opening seemed uncalled for.

3. The opening into the intestine was probably *valvular;* had it been *circular*, there would have been less chance of its healing up so kindly.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

WOUND OF THE VERTEBRAL ARTERY.

By Augustin Prichard, Esq., Bristol.

[*Read November* 27, 1862.]

Christopher Wickham, a policeman, aged 39, stout, strong, and very temperate, was taking an offender into custody on the night of Saturday, August 23rd, when the man, who had apparently laid wait for him, stabbed him deeply in the upper part of the neck, on the left side, behind the mastoid process, cutting through the posterior margin of the sterno-cleido-mastoid muscle, and making a long cut obliquely down the neck. He nearly fell backwards at first from the sudden shock and blow; and then, feeling that he was very severely injured, he made the best of his way to the Infirmary, with his hand pressed against the wound, some bystander having previously tied a handkerchief round his neck. He bled freely all the way, which was more than half a mile; and as he held his hand to the wound, the blood ran down his sleeve and up to his shoulder, and thence down inside his clothes, and ultimately out of his boot. He was dressed in uniform at the time.

Pressure was applied, and the hæmorrhage ceased; the wound was brought together by the assistant house-surgeon with two or three stitches, a compress, and bandage. He was much blanched with the loss of blood; but had been able to walk up with some assistance.

He went on well, and union seemed to be taking place in the wound, until the morning of Sunday the 31st, when he asked for more food, and wanted to get up. I ordered him some meat; but he was not allowed to get up, as the wound was not sufficiently healed.

About half-past one in the afternoon of this day (Aug. 31st), the seventh from the receipt of the injury, there was a sudden burst of arterial blood, which gushed out with a jet nearly as large as a quill. When I saw him, the pressure that had been employed had stayed the hæmorrhage, and I plugged the cavity firmly with lint dipped in turpentine, keeping it fixed in its place by some pins through the sides of the wound.

On September 4th, there was considerable suppuration; and as no more bleeding had occurred, I loosened the pins by dividing the threads, and the next day took out one pin about 1 o'clock in the afternoon. At 3, the hæmorrhage recurred in the most violent way from the original place; that is, from the upper corner of the wound, deep in the neck.

I was quite at a loss to determine what vessel had been injured, but inclined to the opinion that the occipital artery had been cut off close to the external carotid. The bleeding had always been arrested by Mr. Board, our assistant house-surgeon, before I saw him.

Upon consultation, it was determined that the common carotid should be tied; and this I did in the upper part of its course, experiencing so much difficulty, that it was the most trying and anxious operation I had ever performed. The jugular vein was very large, overlapping completely the artery, which was very deep. The tissues were hard and thickened, and infiltrated with blood and serum, and the pulsation so feeble that it could not be felt. In addition to these difficulties, I had to operate in the ward where the man was lying, with a very imperfect and unsatisfactory light. No chloroform was used.

On the next day (Sept. 6th), there was contraction of the pupil of the left eye, the side of the injury, and considerable difficulty in swallowing.

The wound began soon to suppurate freely, and looked tolerably well. There was pulsation in the temporal artery shortly after the operation. In this way he progressed for some days, gaining a little strength. I observed on the 12th, that the pus which trickled from the upper part of the wound was slightly streaked with blood.

On the 14th, he seemed better in the morning, but in the evening violent bleeding occurred from the original place, and pressure was used again, and when I came down, I introduced two long steel acupressure needles through the tissues of the neck, and with the aid of three pieces of cork, brought the whole together so forcibly as to promise to check the hæmorrhage.

Bleeding recurred on the 17th, when another pin was introduced; and on the 19th, it returned again. He was now so sunk and weakened by the loss of blood, that his pulse was intermittent and almost imperceptible; his surface was cold; and he became unable to swallow. I ordered an injection of half a pint of strong beef-tea and an ounce of brandy twice a day, and he soon rallied.

On the 20th and 21st, he was still bleeding a little; and finding that pressure was for the time effectual, I had some plaster of Paris poured over the part, so that equable and firm pressure might be made. After this, he again rallied, and became able to swallow his beef-tea and brandy; but small bleedings recurred, and he sank on the 25th; that is, four weeks and five days after the receipt of the injury.

Post Mortem Examination. The pins and ligatures all came away with the mass of plaster of Paris. There was no closure of the carotid artery. Its interior was red and rough, and of course its tube was cut through, the ligature having been dragged out with the plaster of Paris; but no repair of the vessel was evident; nor had any clot formed in its cavity, although there was some dark coagulated blood in the sheath of the vessel which probably came from the original wound. No hæmorrhage from the carotid had occurred, death having taken place before the ligature had come away, twenty days after the operation. The vessel which was wounded was the vertebral artery, cut completely through as it was entering the foramen magnum of the occipital bone, in the middle of the hard fibrous tissue which lies between that bone and the atlas.

I have searched in vain to find an account of any similar case. The vertebral artery arising from the subclavian runs through the transverse processes of the cervical vertebræ for protection. It takes an oblique direction while going through the axis, owing to the form of the aperture in the transverse process of this bone; and then, after forming a curve, it passes through the atlas, and turns round behind and under cover of its superior articular process and then upwards and forwards, through the fibrous tissue of the part, into the skull, to join its fellow, dividing again to form a share of the circle of Willis.

Of course, the ligature of the common carotid artery was altogether useless; but the man's death was not hastened by the operation. I had never seen him bleeding; and, therefore, never had an opportunity of proving that the hæmorrhage was not arrested by pressure on the carotid; and if, from the moment of his admission, I had known what vessel had been injured, I should at once have considered the case hopeless.

Ligature of both ends of the divided vessel would have been necessary, both being entirely out of reach, and held open by the fibrous textures in which the vessel is situated; and pressure, except as a very temporary means, was unavailable.

As to the question of tying the vessels at a distance, it would have been requisite to cut off all the vessels forming the circle of Willis, at the base of the brain; in other words, to tie the two internal carotids and two subclavians.

On one occasion, that is, immediately after the operation, there was no hæmorrhage for nine days; but no clot formed in the vessel.

Progress of Medical Science.

The Mortality after Amputations at the Seat of War in America. All these cases, which are reported by Dr Fisher, of Sing Sing, New York, occurred in the hospitals near Sharpsburg, after the battle of Antietam. The whole number of cases of amputations is fifty-seven; the mortality, including two cases where the prognosis is noted as doubtful, amounts to eleven, the percentage being 19.47. Of the lower extremities there are twenty-nine cases, of which eight were fatal, if we include the two cases of doubtful prognosis; the fatality being 27.58 per cent. There are twenty-eight cases of amputations of the upper extremities, three resulted fatally, or 10.71 per cent. Of amputations of the thigh thirteen cases are given, seven were fatal, including one of doubtful prognosis, mortality 53.84 per cent. Sixteen amputations of the leg are recorded with one fatal case, 6.25 per cent. This *fatal* case was still living, it was by no means certain that he would die; should he recover, we would have sixteen cases of amputation of the leg, and no fatal result. Amputation of the shoulder-joint was performed in only four cases, one died; mortality 25.00 per cent. The arm was amputated in twenty cases, of which two patients died; 10.00 per cent. The amputations of the forearm were all successful. With regard to the "mode" of performing the amputations, twenty nine were by flaps, viz., thigh four, leg nine, shoulder-joint four, arm ten, forearm two. The circular method was resorted to in twenty-eight cases; under this head are included the ordinary circular, and the more decidedly conical mode; viz., thigh circular nine, leg circular six, conical one (= 7); arm circular eight, conical two (= 10). Of the twenty-nine flap operations, five were fatal, 17.02 per cent. Of the twenty-eight circular operations, six were fatal, 20.68 per cent. The four cases of secondary amputation were all fatal; it is quite probable that they would have recovered had the operation been done immediately after the receipt of the wounds. The youngest was 16 years of age, the eldest 46. Pyæmia was the cause of death in eight cases. Chloroform was used in all cases. Twenty-five of the cases were operated upon on the day of the battle, and only one proved fatal; on the next day twenty-four amputations were performed with three deaths; on the second day four with two deaths; on the third day one successful; on the fourth, fifth, and eleventh day one each, all fatal. (*American Journal of the Medical Sciences*, and *London Med. Rev.*)

Pancreatic Digestion. Schiff, in former experiments by himself and Corvisart, had discovered that the pancreas, in order to effect digestion of albuminous bodies, must be charged (*geladen*) by digestion-products reabsorbed from the stomach. Corvisart regards these essential digestion-products as peptones. Schiff has more recently found that the mucous membrane of the stomach also must be charged with digestion-products, but that these may be introduced into the blood through other channels than the stomach. Schiff made it a question whether the presence of certain matters in the blood was not necessary for the function of the pancreas. Then dogs were richly fed, so that the pancreas was perfectly emptied within ten to twenty-four hours. Dextrin or digested flesh was then injected under the skin, and the animals were killed after some hours. An infusion of the mucous membrane of the stomach was always found effective, proving that its mucous membrane was charged; but an infusion of the pancreas was always found, under these circumstances, to be ineffective. Schiff consequently concludes that the matters requisite for the pancreas must be absorbed from the stomach; and he gives the following explanation:—For the charging (*ladung*) of the pancreas certain matters must be present in the blood which can be separated from it as a ferment, but that this ferment be separated in the gland a second agent is required—viz., excitement of the bloodvessels of the pancreas to secretion; this excitement leading to distension of the vessels is probably reflected from the stomach, which must be in absorbing activity. The reabsorption he supposes to be effected by the lymphatics. He tried oil, but found no effect on the pancreas as regards its digestive efficiency. But when emulsionised by gum, oil rendered the pancreas effective Other substances, such as dextrin, the peptones, etc., introduced through the skin or rectum into the blood, by calling into activity the lymphatics of the stomach, produced a charging (*ladung*) of the pancreas. The connection between absorption from the stomach and separation of the pancreatic ferment is effected by the nervous system, for when the cœliac plexus was extirpated no charging of the pancreas occurs. Schiff considers the spinal cord to be the reflector which establishes the connection between the lymphatics of the stomach and the blood-vessels of the pancreas. More recent experiments have convinced Schiff that the spleen also must cooperate with the pancreas in the digestion of albuminous bodies. He fed a cat with flesh, seventeen hours after a full meal tied the splenic vessels and the pylorus, and six hours afterwards killed the animal. An infusion of the gastric mucous membrane proved powerfully digestive, an infusion of the pancreas did not. Thence he concludes that in the spleen the peptogenes taken up from the stomach are so changed that they are rendered capable of forming that material in the pancreatic secretion which digests albumen. After the extirpation of the spleen the pancreatic secretion can no longer digest albuminous bodies; hence the reason why animals from which the spleen has been extracted require a larger amount of food than in the normal condition. (*Henle und Meissner's Bericht*, and *Edin. Med. Jour.*)

A New Method of Performing Tracheotomy. Mr. Bill, Assistant-Surgeon, U.S.A., gives the following description of a new mode of operating:—"The instrument employed consists of a trocar and cannula of peculiar shape. The cannula presents an elliptical section; the point of the trocar is shaped like the point of an ordinary curved bistoury, blunt on the back. The instrument is provided with rings to serve as handles for manipulation. A portion of the rod of the trocar is smaller than the rest, and has a watch-spring temper. There is a fenestrum. The cannula is silver, the trocar steel. Such is the instrument. The operation proposed is the following:—Make an incision through the crico-thyroid membrane parallel to the crico-thyroid arteries. Having sheathed the spear point of the trocar within the cannula by partly withdrawing the former from within the latter, pass the open mouth of the cannula through the incision so made, and carry the instrument as far downwards as is considered safe or necessary, the convexity of course looking towards the œsophagus. When this point has been reached, depress the ring handles of the cannula towards the patient's chin; by so doing the mouth of the cannula is elevated, and also with it the anterior wall of the trachea against which it has been pressing. The great vessels are now of necessity behind and to the outside of the ordinary line of incision; and these can be in no danger whatever when we push the handle of the trocar into its place, and so protrude the knife-edge through the cannula, and through all the tissues lying in front of this. The whole instrument is now to be pushed on, until the mouth of the cannula has made its way through the skin; and then, the stilet being with-

drawn the patient is allowed to breathe temporarily through the cannula by means of the fenestra. If the operation was undertaken for the removal of a foreign body, we should now proceed regularly to work as in ordinary operations, making incisions through the skin and fascia, of one or two inches in length, separating the muscle and securing all tissues each side of the intended incision through the trachea, by passing underneath them bent needles, and twisting a thread over these in the manner of the interrupted suture. All this done, introduce a probe-pointed bistoury into the mouth of the cannula and the lip of the incisions, through skin, fascia, and the muscles being held asunder by blunt hooks, carry cannula and bistoury carefully upward until three or four tracheal rings are divided. Then remove the bistoury from the cannula and withdraw this latter from the wound within the crico-thyroid membrane." (*American Journal of the Medical Sciences*, and *London Med. Rev.*)

The Properties of the Saliva of the Parotid and Submaxillary Glands in Man. Dr. L. S. Beale gives, as the result of his inquiries, the following conclusions:—1. The saliva of the submaxillary gland is always alkaline, that of the parotid in most cases. Sometimes, especially in the morning, the first few drops of the latter are found of an acid reaction; soon, however, this disappears, and an alkaline one takes its place. 2. Immediately after secretion each kind of saliva is perfectly transparent and fluid, and does not contain any cells. Very seldom, however, a few epithelial cells of the ducts are met with; but the corpuscles, so peculiar to the mixed saliva of the mouth, are never found. After a while the fluid of the submaxillary gland gets gradually viscous, and a kind of flocculent sediment is found; whereas the parotid saliva does not change at all, or at most gets a little opaque. 3. Both kinds become opaque when heated, and even small quantities of coagulated matter are formed. By adding mineral acids, solution of the precipitate does not take place. But the quantity of this substance is too small for determining its amount or ascertaining its properties. We shall see that this principle takes part in the physiological action of the saliva. 4. The specific gravity of the parotid fluid is higher than that of the submaxillary gland; and as to the aqueous residue, we find that the same holds. 5. In man each kind of saliva converts starch into sugar. As to this point there is a remarkable difference between the saliva of man and dog. In the latter, according to the investigations mede by MM. Schmidt and Bidder, it is only the mixture of the different fluids of the glands with the fluid of the mucous membrane of the mouth which is able to produce the change just mentioned. In man there is no doubt that the saliva of the submaxillary glands, as well as that of the parotid, acts upon the starch within a very short time. 6. Both fluids have this property when heated for a short time, whereas refrigeration to some degrees beneath zero of the thermometer does not injure them in any way. Remembering the fact 3, we may submit that the conversions of amyloid substances into sugar might be effected by the small quantity of albuminous matter we find in each kind of saliva. 7. Sulphocyanide of potassium, Dr. Beale found only in the saliva of the parotid gland. In that of the submaxillary gland he failed absolutely, although he tried it at different times and on different individuals. (*Archives of Medicine.*)

A New Instrument for Ocularly Examining Strictures of the Urethra. Now that the laryngoscope allows us to examine the interior of the thyroid box, and even to spy the bifurcation of the bronchi, we are prepared for the invention of instruments which will lay bare to the eye such canals as the urethra, the rectum, or uterus. M. Desormeaux, Surgeon to the Necker Hospital of Paris, has used for some ten years past a urethroscope which has very nicely answered the purpose, after having been gradually improved and brought nearer to perfection. The *Gazette des Hôpitaux* of the 14th instant, states that strictures have been clearly seen with the instrument, which consists of a tube containing a metallic mirror, pierced in the centre, and placed at an angle of forty-five degrees with the axis of the instrument. The tube ends in a piece which is intended to be connected with the catheters introduced either into the urethra, the nasal fossæ, the pharynx, or any deep canal. The opposite end of the tube is connected with a diaphragm pierced in the centre like the mirror. At right angles with this tube, a second one is fixed, in which a gas-lamp is placed. The light of this lamp, reflected by a concave reflector, falls on the slanting mirror, which latter directs it upon the region to be examined. A lens may also be used to cause the rays of light to converge on the object to be viewed. Some nicety is required in the handling of the instrument, and a certain amount of practice is indispensable; but the instrument bids fair to turn out very useful. The catheters are open at the side, to allow of the introduction of sponges, etc. (*London Med. Rev.*)

Midwifery Statistics. Dr. Pooley gives the following results of his own midwifery experience:—The following 794 cases of labour occurred in my own practice, of which I have kept careful observations. Sex:—430 males; 364 females. Six cases of puerperal convulsions—all primiparæ—death of one patient soon after delivery. Two cases of placenta prævia, both did well, version in one case, the other terminated by ergot. One child lost in the case of turning, doubtless from the excessive hæmorrhage. I was called to the aid of the midwife in the last extremity. Three cases of arm presentation, version in all cases, the children lost, women saved, but one died the day after from vomiting and exhaustion brought on by the use of chloroform. One case of side presenting, then the arm coming down, delivered by turning. Seven cases of twins, four of breech presentation, one child lost. Three of face, two in the same patient, with malformation of the pelvis and lame, at separate labours, all the children lived. Four of the funis, one child saved, the cord being protected by placing it in the angle formed by the junction of the sacrum and ilium. Two of the feet. Three of the head and hand, no particular difficulty with the placenta, except in one instance, in which the cord was discoloured and easily broken. After introducing the hand, found hour-glass retention of the placenta, but with care and patience removed it entire. One case of hydrocephalus, dead some time, head enormously distended with fluid, and the cranial bones floating in it, the labour lasted about twenty-four hours. One case of embryotomy, the patient died the day after delivery. Nearly all the patients made good recovery, and the satisfactory results were due to the use of common sense and patience, with conscientiously avoiding all unnecessary interference. The following were the only remarkable deviations from the usual convalescence. One case of pelvic cellulitis—following an easy labour—brought on by careless exposure, final recovery. One case of subinvolution, getting about too soon. One case of puerperal fever, recovered after a long illness. One case phlegmasia dolens, and one of incontinence of urine, entirely disappearing after a few weeks. These labours have embraced all classes, from the poorest to the wealthy, and all nationalties, from the age of fourteen years to forty-eight. The most difficult cases have been amongst the Europeans, and the easiest amongst Americans, but the former have commonly rallied the quickest, and borne their labours the best. The forceps have been used but four times, but might have been twice as often advantageously, had not the great distance from my home prevented my procuring

them in time. In conclusion I cannot speak too highly of the use of chloroform in obstetrical operations, and in the treatment of puerperal convulsions. (*American Medical Times.*)

On the Discovery of the Laryngoscope. Mr. Windsor, after a critical examination of the claims of those to whom the discovery of the laryngoscope has been attributed, gives it as his opinion: 1. That Bozzini first attracted attention to the importance of seeing into different cavities of the living body, and to some extent succeeded in overcoming the difficulties inherent in the undertaking. 2. That Dr. Benjamin Babington was the discoverer of the laryngoscope. 3. That Baumès, Liston, Warden, Avery, made apparently independent efforts to examine the larynx. At the same time it must not be forgotten that—4. To Garcia is due the merit of having first made an extended series of examinations of the healthy larynx; but especially,—5. That to Czermak must be awarded the praise of having diffused the knowledge of the instrument and shown its value in disease. (*Brit. and For. Med. Chir-Rev.*, and *London Medical Review.*)

British Medical Journal.

SATURDAY, APRIL 18th, 1863.

THE CASE OF BROMWICH *v.* WATERS.

Dr. Ramsbotham says, in a letter which will be found at another page, that "if he had heard Dr. Waters's version of the story before he gave his evidence, very little difference indeed would have been discovered between his treatment and my own." We are most glad to hear Dr. Ramsbotham say so; but it would have been much more satisfactory to Dr. Waters and to the profession at large, if Dr. Ramsbotham had impressed that idea on the minds of the judge and the jury at the trial. Unfortunately, the judge (by whom Dr. Ramsbotham complains that he was completely misinterpreted) told the jury that Dr. Rambotham's evidence went to prove that Dr. Waters's treatment was improper. Such, at all events, was the impression which his and Dr. Lee's evidence left upon the judge's mind; and which the judge enforced upon the minds of the jurymen. We must repeat the judge's words (as reported) to the jury:—

"If they came to the conclusion that the treatment was improper, and directed to that end, it was no doubt a corroboration of the young woman's statement. But was it made out that the treatment was improper? They had had medical evidence in favour of the plaintiff's case. There was Dr. Lee, who was not altogether a satisfactory witness, although, doubtless, a very learned man. There was Dr. Ramsbotham, who gave his evidence in a very satisfactory manner, and who also expressed his opinion that the treatment was improper."

Moreover, Dr. Lee, in his evidence, says that he examined the woman "in conjunction with Dr. Ramsbotham, and they arrived at the same conclusion. In his opinion, no ulceration had ever existed there at all, and the speculum had been most grossly abused."

Here, then, it is plainly stated, that both Dr. Lee and Dr. Ramsbotham were in conjunction in the examination, and in conjunction in opinion as to the treatment; and we do not find that the latter gentleman repudiated any of Dr. Lee's statements. How then can Dr. Ramsbotham escape from "the charge of being a witness in favour of the prosecution"? Whether it be or be not "just and proper that a medical man who appears in a witness-box to speak to a medical fact, or even to a medical opinion, should be characterised as a partisan of that side which calls him," it is nevertheless certain, that he is so regarded both by the public at large and by the parties who put him into the witness-box.

We believe, and we repeat it, that if neither Dr. Lee and Dr. Ramsbotham, nor any other men in their position, had appeared in the witness-box on the side of the prosecution, this action never could have been carried on; and certainly we cannot understand that any force of subpœna could have brought an unwilling witness from London into the witness-box at Chester to give evidence useful to the prosecution on a mere matter of opinion. Will any one believe, that Sergeant Shee would have put these gentlemen into the witness-box, that the plaintiff would have paid all their heavy fees as witnesses, if they did not see their way thereby to damage seriously Dr. Waters's case?

It is a fact, indeed, that Dr. Waters's solicitor told him before the trial, that the medical evidence was *the* evidence upon which the plaintiff mainly depended for a verdict. The solicitor said, that he had been so informed; and that, in truth, the plaintiff had no case at all, unless supported by that evidence.

When, therefore, we call to mind verdicts which juries have given in cases of this kind, it is impossible not to shudder at what might have been the issue of this case, had not Dr. Lee's and Dr. Ramsbotham's evidence been happily rebutted by men like Dr. Simpson and Dr. Keiller. We firmly believe all that Dr. Ramsbotham says of his desire to sustain the honour of the profession; but we also have a duty owing to the profession, and we can, therefore, only regret that we find nothing in his letter which induces us to modify the remarks which we thought it our duty to make last week on the medical evidence given in the case of Bromwich *v.* Waters.

We are very pleased to hear that Dr. Lee and Dr. Ramsbotham endeavoured to stop the action; but it is incredible that they would have failed in this attempt, had they not expressed to the prosecutor some very strong opinions as to the impropriety of the treatment adopted by Dr. Waters. Indeed, we must infer from Dr. Ramsbotham's letter, that they tried to stop the action, not because they believed

that Dr. Waters's treatment was proper, or that he was innocent of the charge brought against him, but because they believed the charge would fail—being supported solely by the woman herself! It is a clear inference from Dr. Ramsbotham's letter, that the prosecutor had obtained from them a very strong opinion in favour of the impropriety of the treatment adopted by Dr. Waters; and it is equally clear, as the judge put it, that the theory of the prosecution was that the improper treatment was *à priori* evidence of the guilt of the defendant.

It is manifest, therefore, that Dr. Lee, and Dr. Ramsbotham, and Dr. A. Taylor, by entering the witness-box and giving the evidence they did give, are responsible before the profession for having supported the plaintiff in her attempt to bring home what has been proved to be a most atrocious and most infamous charge against Dr. Waters.

As we have already said, Heaven forbid that we should attempt by any words of ours to stifle truth or pervert the righteous ends of justice. If a member of our profession render himself liable to the law's punishments, let him suffer; and let every member of society, medical man as well as another, do his duty in assisting to bring home the charge against him. We are not condemning this. But what we reprobate as utterly unjustifiable is, that medical men, and especially medical men of high standing, should enter the witness-box for the prosecution, and swear, without any kind of reservation, that a particular treatment was improper, that the speculum had been grossly abused, when their evidence is merely matter of opinion, and founded on *ex parte* statements; and when more than the life of a medical man—his honour and reputation—are at stake.

What satisfaction is it to Dr. Waters that Dr. Ramsbotham should now come and say, "Oh! if I had heard your version of the case, I should not have disagreed with your treatment"? Why did not Dr. Ramsbotham, Dr. Lee, and Dr. A. Taylor make themselves masters of Dr. Waters's version of the tale before they came into court? What hindered them from doing so?

Take another view of the matter. What would be the judgment of the profession on a medical man who, on the mere hearing from the lips of an hysterical female her tale of the treatment to which she had been subjected by a former medical attendant, should, without further inquiry, pronounce to the world that the treatment was improper, and that the speculum had in her case been "grossly abused"? Is there a man in the profession who would venture to defend such a proceeding? Whose character and reputation are safe, if such a rule of practice is to guide our professional intercourse?

But what are we to say of such a case, when a professional man's very honour and reputation are involved in the judgment given on the treatment? What are we to say when men—*patres conscripti* of the profession—of vast experience, and high reputation, and acute understanding, pronounce such an *ex parte* judgment on the practice of a professional brother, founding their opinion on the sole assertions of the hysterical female, whose reputation is manifestly saved if she can blast the reputation of her medical attendant—whose nearest interest and wish, in fact, lie in the blasting of his reputation? And all this, be it remembered, when the practice impugned is a matter of treatment about which men of the highest position in the profession hold, as was shown in this instance, diametrically opposite opinions—when men of equal experience and equal reputation with the aforesaid *patres conscripti* swear that the treatment impugned and declared to be improper is just the very treatment which they themselves would adopt under similar circumstances!

But what, indeed, can more completely condemn the medical witnesses for the prosecution in this case than the result of the trial? The plain fact stares us in the face. These gentlemen have assisted, on a point of mere opinion, in the attempt to bring home a most fearful charge against a medical brother, which charge was founded on a most wicked lie; they assisted, not by the production of any positive scientific facts, but by lending the weight of their high reputation to the expression of an uncompromising opinion on a point of treatment, concerning which men of equal reputation with themselves hold a totally opposite opinion.

It is sincerely to be hoped that the profession will not lose this occasion of expressly stating its opinion upon the ethical character of this giving of evidence by medical men against medical men. We believe that it is a point upon which, practically, there is no difficulty whatever in laying down a distinct and equitable rule of practice. That the profession requires some moral restraint to protect itself in this matter, has been only too often shown in these pages during the past years. The question is one which might well receive the consideration of our own Association. We shall take another occasion of pointing out what seems to us to be the clear principle upon which a professional man should act in giving evidence in a court of law against his professional brother.

We rejoice to find that the medical neighbours of Dr. Waters are intent on showing him a strong mark of their sympathy; and we are satisfied that the profession at large—when they reflect upon the fearful ordeal which that gentleman has gone through, the mental torture to which he has for months past been subjected—will gladly give a practical expression to their sympathy by bearing him harmless of all expense attending the trial.

THE WEEK.

At page 410 will be found a letter addressed by many of the medical men of Middlesborough to the Secretary of the United Kingdom Provident Institution. This institution accepts, as we understand, a large number of lives for assurance in small sums, its business lying chiefly amongst the working classes. The premiums being small, the society endeavours to bring down the fee of the medical examiner to meet the smallness of the policy effected. It is argued that the institution cannot afford to pay the medical man his full fee on these small assurances. The medical men, in reply, say: "It is quite true that the usual fee might be too high in such cases, and we should be very sorry to stand in the way of the working classes making the provision for their families which is implied in a life-assurance. What we will therefore do, is this. We will make a compromise with you. We will take a smaller fee with the small assurances; and you shall pay us a higher fee with the large assurances." Nothing can surely be more fair and equitable than the principle upon which this proposed compromise is based; and we sincerely trust that the medical profession in the districts where this provident society is in operation will for once show an unanimity in enforcing it upon the society. This is just one of those cases where the profession has the power of carrying its way, if our brethren would only pull together. Unity here would be the means of adding honour and respect, and increase of income and of personal influence, to the profession. We would, however, recommend the gentlemen who have signed the letter not to bind themselves to more than the principle of the document, unless they have thoroughly made up their minds as to the correctness of the details. Perhaps some of the resolutions might be advantageously modified.

A few weeks since, we mentioned the fact that a most unjustifiable action had been brought by a patient against Dr. Lingen of Hereford. The action has, we learn, been postponed to the next assizes; Dr. Lingen having refused to listen to any pecuniary compromise which had been suggested. The adjourning of this action, merely on account of the large amount of judicial business which had to be gone through at Hereford, is a very great hardship on Dr. Lingen, whose expenses will be, of course, materially increased by the delay.

The Epidemiological Society is in a flourishing state. The following new names have been added to the list of office-bearers:—Earl of Carlisle, Earl of Shaftesbury, Rt. Hon. W. Cowper, Dr. Acland, Dr. Copland, Dr. Farr, Dr. Jenner, and Sir Ranald Martin.

We understand that the expenses of Mr. Adams in the case of Russell *v.* Adams are much greater than it was anticipated they would be—that, in fact, they amount to upwards of £800. It was Mr. Adams's intention to have himself paid all these heavy expenses; but his friends think that, after the strong feeling of sympathy which was shown to him at a public meeting, the profession should be offered an opportunity of giving a practical expression to their opinion of the absurd and abominable charge to which he was subjected, by aiding in a subscription. There can, we think, be no kind of doubt that, in all cases where a medical brother in the discharge of his professional duties has been subjected to gross persecution, his professional brethren are bound to show their sympathy for him, by at all events relieving him of the grievous burden of legal expenses. A committee has been formed for the purpose of carrying this out in the case of Mr. Adams, comprising, amongst others, the following names:—Wm. Bowman, Esq.; Dr. Cape; Wm. Coulson, Esq.; W. H. Covey, Esq.; J. E. Erichsen, Esq.; W. Fergusson, Esq.; J. H. Green, Esq.; Dr. W. W. Gull; Dr. Lankester; James Paget, Esq.; Dr. R. Quain; Dr. B. W. Richardson; Dr. Brown-Séquard. The Committee "desire that the members of the profession should have an opportunity of testifying their opinion of the innocence of Mr. Adams and the baseness of the charge brought against him, and their wish that their sympathy should be expressed in the form of some substantial acknowledgment which would be gratifying to Mr. Adams and his family to receive, and also, as far as possible, to diminish the personal annoyance and the pecuniary loss to him which he has incurred in defending and successfully rebutting the infamous charge brought against him by the Russells."

The *American Medical Times*, in a leading article, gives the following account of the treatment of pauper lunatics in North America.

"These poor creatures are congregated in the almshouses of the different counties of the State, without any adequate provision for their necessities. They are now treated in many instances more barbarously than when the insane were thought to be possessed of the devil. The Senate Committee, which visited these people in 1857, reported that they found many in cells and chains; in some cases the inmates sicken and die without any attendance whatever; the cells and sheds in which they are confined are *wretched abodes*, often wholly *unprovided* with *bedding;* in most cases female lunatics had none but male attendants; instances were testified to of *whipping* of male and female idiots and lunatics, and of confining the latter in loathsome cells, and binding them with chains. In some poorhouses, both males and females were found in cells *in a state of nudity;* the cells were intolerably offensive, littered with the long accumulated filth of the occupants, and with straw reduced to chaff by long use as bedding, portions of which, mingled with the filth, adhered to the persons of the inmates, and formed the ONLY COVERING they had."

M. Bonnafont concludes as follows respecting the effects of consanguineous marriages in producing deaf and dumb offspring:—1. That consanguineous marriages have been considered at all times and by all people as prejudicial to the improvement of the race; 2. That such marriages have been at all times prohibited by laws, civil and religious; 3. That unions of this kind in all probability affect all the other organs of the body, as well as those of hearing; 4. That existing documents prove the bad effects of consanguineous marriages, and are sufficient to point out to society the measures which should be taken in reference to such unions.

La Presse Médicale Belge says that M. the Senator Ribaucourt has demanded, in the Upper Chamber, the establishment of chairs of homœopathy in the universities of the kingdom. Count Robiano supported the motion, which was opposed by MM. Van Schoor and d'Anetham. The question is not yet decided; and homœopathy has, therefore, not yet obtained its official chair, salaried by the state.

An attempt was lately made on the life of a medical man in Italy, who had refused 500 *francs* which had been offered to him as a bribe to declare that a young conscript was unfit for military service. He was shot at by the friends of the conscript, severely wounded, and barely escaped with life.

M. Legrand relates a curious case which occurred lately in a small town in France. A clerk was accused of robbing his master of some bank notes. He denied the charge, but was arrested. Whilst under charge of the police, he was seized with fever, became delirious, and during his delirium frequently cried out, "I am a robber," etc. On his recovery, he was again interrogated by the magistrate, and indignantly denied the charge. Hereupon the magistrate, puzzled, demanded of the prison-doctor "whether the words of a patient suffering from typhoid fever, and uttered during delirium, could be considered as of any value"? The doctor very wisely declined to give an answer, and consulted M. Legrand, who thereupon drew up an answer to the question, which was to the effect that words so uttered could only be considered as mere indications of guilt. The magistrate accepted this view; and, for want of better proof of guilt, the young man was liberated.

M. Babinet, the most *spirituel* of savants, has presented the seventh volume of his *Lectures on the Science of Observation* to the Academy of Sciences. In presenting it, he said: "I feel, being the author, somewhat embarrassed in presenting this volume. If I praise it, I shall seem wanting in modesty; and if I speak ill of it, my bookseller will be dissatisfied."

A French traveller announces to the Academy the early arrival of a new febrifuge discovered in America!

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The appeal of the medical press for sympathy and congratulation on behalf of Dr. Waters of Chester, is likely to meet with a prompt and hearty response on the part of his professional brethren in his own immediate neighbourhood. A meeting of the medical men in Chester and the vicinity has already taken place; and, at an unusually full meeting of the Council of the *Liverpool Medical Institution*, it was unanimously resolved to call an early meeting of the members, as representing the profession of this town, to express their sympathy with Dr. Waters. From what transpired at this preliminary gathering, it is evident that a very strong feeling on the subject prevails here. As to the utter groundlessness of the calumny so maliciously and pertinaciously attempted to be fixed upon Dr. Waters, and in his person upon the honour and integrity of the medical profession, there is but one opinion; and the manly determination and unflinching moral courage displayed by him in repelling this dastardly attempt to destroy his character has met with the warm commendation it so richly deserves. As the leading article in the Journal truly puts it, this has been no ordinary trial. Not only has Dr. Waters had to contend against powerful influence and wealth, but he has triumphed over that which may be truly said to be a deliberate plot, designed with the evident intention of overwhelming and crushing him without mercy. It is actually reported that his movements have for some time past been watched by spies, and that detectives have been employed to discover anything in his antecedents which might be made available as evidence against his character. It was only a few days before the cause came on for hearing, that Dr. Waters was made aware that the evidence of medical experts would be brought against him; and it was only by the greatest promptitude and energy that he was enabled, at the eleventh hour, to secure the attendance of Drs. Simpson and Keiller to rebut the counter-statements of the metropolitan medical witnesses, which, if unanswered, might have placed his cause in the most imminent peril. As a convincing proof of the *mens sibi conscia recti* which sustained Dr. Waters in this trying ordeal, and the noble determination with which he fought his own battle and that of his profession, I can state, on undoubted authority, that repeated overtures were made by his opponents to stay proceedings, if he would consent to withdraw his counter-action for slander. His answer was: "If they stop, I shall go on; nothing but the fullest investigation will satisfy me."

At the meeting which I have mentioned as about to take place here, it may be anticipated that, after expressing their sympathy with Dr. Waters, the profession of Liverpool will not withhold a very decided record of their opinion of the conduct of the medical witnesses who took a journey from London to Chester for the purpose of strengthening the case against a professional brother; and it is not improbable that a suggestion will be made to set on foot a subscription for the purpose of affording the profession an opportunity of recording in some substantial form their appreciation of Dr. Waters' meritorious conduct under these circumstances of overwhelming trouble and difficulty.

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting (the fourth of the sixth session) is appointed to be held at the Bull Inn, Dartford, on Friday, April 24th, at 3.15.

Dinner at 5 o'clock. Price of tickets, 5*s.*, exclusive of wine.

Trains leave Dartford for London at 7.40 and 8.40; and for Maidstone at 8 o'clock.

FREDERICK J. BROWN, M.D., *Secretary.*

Rochester, April 6th, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Ordinary.]	York House, Bath.	Thursday, April 30, 7.15 P.M.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH; GENERAL MEETING.

A general meeting of this Branch was held in the Medical Department of the Birmingham Library, on April 9th, 1863; EDWIN BARTLEET, Esq., in the Chair. There were also present twenty-two members.

New Member. Mr. A. G. Wilkinson, a member of the Association, was unanimously elected a member of the Branch.

Alteration of Law. The following alteration in Law 4, increasing the number of the scientific meetings, was unanimously adopted.

"That, instead of the words, 'That a general meeting of the Branch be held thrice annually,' the words, 'That a general meeting of the Branch be held on the second Thursdays in October, November, December, January, February, and March,' be substituted."

Papers. The following papers were read:—

1. Excision of the Os Calcis. By Oliver Pemberton, Esq. One of the patients attended.
2. On the Action of Medicines, singly and combined. By D. Nelson, M.D.
3. On Extraction of Bullets. By Redfern Davies, Esq.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 4TH, 1863.

H. OLDHAM, M.D., President, in the Chair.

THE following gentlemen were elected as Honorary Fellows of the Society:—Professor Martin, of Berlin; Dr. Beatty, of Dublin; Dr. Pagan, of Glasgow; Professor Braun, of Vienna; Professor Depaul, of Paris; and Professor Faye, of Christiania. Nine gentlemen were elected as ordinary Fellows of the Society.

The President announced that the volume of *Transactions* for the past year would be in the hands of the Fellows in a few days.

Ready-made Plasters. Dr. TILT drew attention to the fact that when a hundred or a hundred and fifty grains of common starch are boiled in an ounce of glycerine, the result is a very stiff glutinous compound, which has no smell, and does not become rancid; and although sticking firmly to the skin, it can be removed and reapplied. Instead of ordering belladonna plaster, Dr. Tilt prescribes three grains of sulphate of atropia to be rubbed down with a few drops of glycerine, then incorporated with an ounce of hard glycerine ointment, and thickly spread by the patient on gutta-percha cloth or impermeable wash cloth. This can be removed for the morning ablutions, and reapplied after spreading a little more ointment on the same plaster. Morphia and other alkaloids are prescribed in the same way. The samples exhibited by Dr. Tilt were made by Mr. Bullock, of Hanover Street.

Uterine Polypus which had Complicated Labour. Dr. MEADOWS exhibited the specimen. The tumour, which had completely filled the vagina, was about twice the size of the fœtal head. During the labour it was entirely protruded by the descent of the child, but was returned on its expulsion. It again, however, descended, and was removed by ligature two days after delivery. The growth was attached by a long pedicle to the cervix uteri, and weighed when removed nearly four pounds. The patient did well.

On Displacement, etc., of the Bladder as a Cause of Tedious Labour. Dr. W. H. BROADBENT made a communication to show that, besides the mechanical obstruction which may be presented by the prolapsed and distended bladder to the descent of the head of the child, prolapsus of the bladder, complete or partial, frequently renders the first stage of labour long and painful. The uterine contractions, causing pain in the displaced bladder, it was said, were replaced by spasmodic contractions of the abdominal muscles, which forced down the uterus, but had no effect in dilating its mouth. These were attended with much suffering, of a character very different from the natural labour pains at this stage, which with tactile examination would lead to a recognition of the cause. The measures recommended for the relief of the pain and for expediting the progress of the labour were, the supine position, prevention of accumulation of urine by the use of the catheter, and, in severe cases, chloroform.

Cases were given in support of these conclusions.

OBSERVATIONS ON OVARIOTOMY, ETC., STATISTICAL AND PRACTICAL; ALSO, A SUCCESSFUL CASE OF EXTIRPATION OF BOTH UTERUS AND OVARIES. BY CHARLES CLAY, M.D., MANCHESTER.

Dr. CLAY gave a brief and interesting outline of his experience on this important branch of surgery. There were 109 peritoneal sections, of which 104 were for ovarian extirpation, 3 for cutting down upon the tumour to establish ulceration where its removal was known to be impracticable, 1 for the Cæsarean operation, and 1 for the removal of both uterus and ovaries. Of the 104 ovarian cases, 72 recovered, 32 died; all the 3 ulcerative cases recovered; the Cæsarean section case lived to the fifteenth day; and, lastly, the case of entire removal of both uterus and ovaries recovered. Of the 32 deaths, 10 arose from the immediate consequences of the operation, 10 from inflammation, 10 from prostration, and 2 from hæmorrhage. The great majority of the first and second series were young females, as well as a portion of the third division. The deaths from prostration were chiefly in elderly females. Some other statistical facts were elicited, as well as the following remarks from the author:—Dr. Clay still defends the raised temperature of the room for operation, and attributes much of his success to its influence; is not certain if chloroform has added anything to the successful results; values it highly as an agent which it would now be difficult to lay aside, although the first 14 of his cases were performed before it was discovered, and of which 9 recovered; and he still thinks, if a woman could face the difficulty without it, it would be in her favour. The large incision is still practised by him, and deemed far preferable to the smaller opening. Of course the author wished to be understood that the incision was to be commensurate with the tumour to be

ctirpated. Dr. Clay gave many reasons for this prefer-
ıce. The distressing vomiting he conceives to be in a
·eat measure owing to the use of chloroform, as he saw
ıt little of it in the first 14 cases, where it was not used.
or this troublesome symptom he advises patients, until
ıe blood has got rid of its load of carbon, the simplest
? drinks, and as little food as possible. Some very well
ıcertained facts of critical days were adduced, which
ould require too much space to dwell upon; suffice it to
y, the third, sixth, and ninth were the principal, and
ıe causes of each were pointed out. No particular age
ems to be prominent in respect to the success of these
ses. Dr. Clay himself stated them to be about equally
ıccessful at all ages from sixteen to fifty-seven. Pur-
tives are not admissible; and he relies on enemata
th ox-gall, etc. This part of the paper was concluded
some interesting remarks on ovariotomy for the last
enty years, and the difficulties the author had to en-
unter, not the least of which was misrepresentation.

The author next gave in detail a new and interesting
eration, which he believed to be the first of its kind,
ccessful at least, in this country—namely, the entire
tirpation of the uterus and its ovaries through the ab-
minal walls, which has ended most fortunately, the
dy returning to her friends on the thirty-fifth day after
e operation, and still continuing well, thus establish-
g another great fact in reference to abdominal surgery.
ıe case was that of a fibroid uterus of eleven pounds
ight, with the ovaries in an unhealthy condition; and
e tumour by its growth had latterly so entirely filled
the cavity of the pelvis as to render the passage of
e fæces and urine extremely difficult. The particulars
the case throughout its progress were given. Dr. Clay
es not suppose that many uterine tumours could be ad-
edly extirpated, but thinks some of these densely hard
roid masses, where the constitution has not been
eatly prostrated, might afford a fair prospect of cure
der the knife.

Mr. Baker Brown warmly thanked Dr. Clay for his
y practical and admirable paper. Mr. Brown wished
had been brought forward a few weeks earlier, as it
s calculated to strengthen the hands of other ovariото-
sts, and enable them to contend against those who
ubted the value of the operation. With regard to the
nperature of the room, he (Mr. Brown) believed that
. Lane, than whom no one had been more successful
ovariotomy, disregarded this subject, as did also an-
ıer gentleman present at the meeting, who had also
d great success. For himself Mr. Brown believed
ıt where the operation was likely to be long, and the
cera long exposed, it was of great importance; but
ıt where the operation was quick, and the viscera kept
k by hot flannels, the question of temperature would
t affect the success. As to the long incision, he be-
ved Mr. Walne followed Dr. Clay; whereas Dr. F.
d and Mr. Lane had contended for the short incision,
d with good results. Mr. Brown always made a small
ision first. If it appeared that on tapping the cyst
tumour could be withdrawn, he did not enlarge it;
t if there appeared strong adhesions, or the tumour
s very multilocular, he found it easy to make the in-
ion larger, and agreed with Dr. Clay that it was advis-
e to see clearly where the adhesions and difficulties
removing the tumour were situated. At the same
ıe, with the very large success of Dr. Clay, it was folly
say that short incisions were preferable to the long.
Clay still preferred the ligature of Indian hemp.
. Brown had used it till the invention of the carpen-
's callipers as a clamp, which he found more conveni-
and comfortable. He could not, however, agree
h Dr. Clay as to the inadvisability of bleeding. In
or three cases where peritonitis had come on
ckly after the operation, he had found venesection
st valuable, and attended with success. He always
ised hot linseed-meal poultices to be applied over the whole abdomen when there was a chance of peritonitis, believing that they kept hot longer than ordinary fomentations. Mr. Brown's experience as to the frequency of the ovary attacked was contrary to Dr. Clay's. He had examined many hundreds, he might say thousands of cases, but thought that one could not decide which ovary was diseased till an incision was made. His experience, from cases submitted to operation, was that the left ovary was most frequently affected. He agreed with Dr. Clay that age does not make much difference. He was glad to hear that Dr. Clay had come to the conclusion that the question of success did not depend on the operation itself, but on the after-treatment. Mr. Brown believed that in his earlier operations he lost more patients because the after-treatment was not so well understood as now. He had learned from Dr. Clay the valuable practice of never giving the patient anything but the most simple food till asked for. He preferred giving beef-tea and wine, if required, by the rectum for three or days after the operation. Mr. Brown considered Dr. Clay's testimony valuable as to the great advantage of small over general hospitals for these operations, not on account of the operation itself, but because the nursing, ventilation, and atmosphere were so much better in small special institutions. Mr. Brown had twice removed both ovaries with success. He thought that the question of exploratory incisions had been unfairly treated by the profession. They were made with an honest endeavour to ascertain the truth before risking the patient's life. Mr. Brown had never seen a fatal result follow them, and thought they should be commended and encouraged, not condemned. He was glad to hear Dr. Clay say that in his last operation he had made it a stipulation that it should be left to him to decide whether he should proceed after making an incision. As to opium, Mr. Brown had at one time been as great an advocate for it as Dr. Clay; but believed that it increased the sickness, and he now never gave it unless imperatively called for.

Mr. Spencer Wells said that he must not be supposed to undervalue the very useful paper of Dr. Clay, or to be ungrateful for the lessons which he had taught by his able advocacy of ovariotomy, if he (Mr. Wells) ventured to discuss two very important steps of the operation in which his own practice, and the practice in London generally, differed from that of Dr. Clay. Dr. Clay still advocated the long incision; and he still left the tied end of the peduncle and the ligature within the peritoneal cavity. He could boast of a success attending this practice of 70 per cent. of recoveries to operations. But his (Mr. Wells's) own experience had led him so decidedly to prefer the short to the long incision, and to keep the tied end of the pedicle outside rather than to leave it in, that he could not help suspecting that Dr. Clay's great experience in the operation had led him to success in spite of a method which more recent experience had modified or corrected, and which men of less experience could not follow without great danger of failure. After long incisions there was so much more exposure or escape of intestine during the operation, so many more serious symptoms after it, and so comparatively protracted a recovery, even in successful cases, that his (Mr. Wells's) experience had taught him to avoid any greater length of incision than was necessary for the exposure and removal of the cyst or tumour. In cases where he had the choice either of making a long incision and removing a tumour entire, or of breaking up a tumour and removing it through a small opening,—even though ovarian fluid might unavoidably escape into the peritoneal cavity and require careful sponging for its removal,—he would prefer this alternative rather than make a very long incision. In his experience, those patients in whom it had been necessary to leave the pedicle and ligature within the peritoneal cavity had suffered so much more after the operation, and their recovery had been so much more protracted than where

the peduncle had been kept outside, that he would always prefer to keep it out if he could, and so avoid the danger of absorption of the putrid matter of the strangulated stump, or the peritonitis connected with the effusion of fibrine thrown out to circumscribe the stump and ligature. It seemed probable that the frequent occurrence of peritonitis in Dr. Clay's practice was in some measure due to his manner of treating the pedicle; for in his (Mr. Wells's) own practice, peritonitis was rare. Of eighteen fatal cases, it had only had any important share in the fatal result in two; in all the others, shock or exhaustion after the operation, or blood-poisoning, had been the cause of death; while in successful cases he hardly remembered peritonitis in any patient where the pedicle had been kept out. As to the temperature of the room, in his earlier cases he had followed Dr. Clay's practice; but latterly he had found it better simply to have the room kept comfortably—not excessively—warm, and after the patient was in bed to keep a good fire burning and a window open night and day. In the use of opium also he had learnt to avoid all excess. If there was pain or restlessness, it was given in moderate doses, and repeated if necessary; but some patients had recovered without taking a single dose, and others with not more than two or three doses. Sometimes it was given to secure a good night, even if there was no pain. With regard to the removal of uterine tumours by abdominal incision, it was only under the most exceptional circumstances—where the life of the patient was in great danger from hæmorrhage or the effects of pressure—that such an operation as that so successfully performed by Dr. Clay could be justifiable. Pedunculated peritoneal out-growths from the uterus might be removed with moderate risk, and so might in-growths towards the uterine cavity or vagina; but any attempt to enucleate interstitial fibrous tumours of the uterus, either by incision through the abdominal wall, or by incising the cervix *per vaginam*, was attended by such very great risk that nothing but the most urgent necessity would justify the practice. He said this rather as the result of his own observation, than as any conclusion suggested by Dr. Clay's successful case.

Dr. Clay, in reply, expressed his great gratification at the manner in which the paper had been received by the Society. With respect to the details of the operation, he adhered to the principles laid down in the paper. It was remarkable that many of the best recoveries after ovariotomy had taken place in his practice after making the long incision, and where the tumour was large he preferred it. The use of Indian hemp for ligatures he still preferred. With respect to the remarkable case of extirpation of the uterus, he would observe that on his way to town to attend the meeting he had accidently met the patient who had been the subject of the operation, at a railway station, and in perfect health.

Insane Paupers. According to the returns of the year 1862, of 946,166 paupers, 34,271 were insane and idiots; viz., 22,960 lunatics and 11,310 idiots. Hence, it appears that 3·62 per cent of paupers were lunatics. 14,936 were males, and 19,335 females.

Bombay News. Professor Girard, of the Grant Medical College, has just published a paper on the moon's influence on malarious intermittent fever. The following is the conclusion:—In each month the number of paroxysms occurring at the "Springs" is singularly near one-third of the total monthly paroxysms, and when all the monthly totals for the year are added together, it is seen that out of 56,175 paroxysms there were 18,077 at the "Springs," and 38,098 not at the "Springs"; thus showing not merely no preponderance in favour of the "Springs," but actually leaving a balance of 648 paroxysms against the doctrine of the influence of the new and full moon in periodic fevers.

Correspondence.

THE ACTION AGAINST DR. WATERS.

Letter from Francis H. Ramsbotham, M.D.

Sir,—In the strictures which you have passed on the evidence of the medical men engaged by the plaintiff in the late case Bromwich *v.* Waters, you say you think the profession has a right to demand some explanation from gentlemen who appear against a medical brother in such a case. I therefore accept your challenge, and request you will allow me to offer that explanation through your columns.

You say that "the very fact of such men as Dr. Lee and Dr. Ramsbotham appearing in the case gives an immense impulse to the accusation". Nay, you venture "to believe that, but for their countenance, such an action could never have been brought at all"; and you ask: "Is it not reasonable, indeed, to believe that their influence would even have suspended the action?"

In reply, I beg to assure you that both Dr. Lee and I strenuously endeavoured to persuade the plaintiff to abandon the action. For myself, I can affirm that, from the first moment I learned that an action was pending, and that it was intended to bring it into a court of justice (for I had been consulted in the case some time before I had the least idea that any trial was contemplated), I strongly recommended that it should be abandoned. This I did more than once, telling both the solicitors and the counsel that I felt convinced they would lose their cause, resting as it did almost entirely on the evidence of one person, and that person an interested witness; and that my evidence would be of no service to them. Your belief, therefore, that but for the countenance of the medical men, the action would not have been proceeded with, must fall to the ground; because not only did they not give their countenance to the measure, but they used their best endeavours to prevent the case being proceeded with.

Again: you say "you have carefully read through the evidence given by Dr. Lee and myself; that such evidence ought never to have been given by us; that we were utterly without justification in lending our names to the support of this prosecution; and that we both declared the treatment pursued by Dr. Waters to be improper."

Now I take leave to say that through the whole of this sentiment you are completely begging the question, at least as far as I am concerned. I did not lend my name in support of what you term "the prosecution"; on the contrary, as I have said, I advised the abandonment of the action; and my evidence did not go to the extent that Dr. Waters' treatment was improper. The judge, I grant, told the jury that I said so; but, with all deference to his lordship, I contend that what I said could not by possibility be so construed. The substance of what I did say was, that it must have been an obstinate case of ulceration to require the use of the caustic every week or fortnight continuously for so many months as the girl swore to, six or seven applications being generally sufficient. Dr. Waters, after my evidence had been given, contradicted her, and swore he did not apply it more than six or eight times, not ten, at the farthest. I said that I never had used the speculum to a chaste, unmarried female, unless it had been had recourse to by some other practitioner previously. This I said believing the girl to have been a virgin when she first consulted Dr. Waters. He swore that, on his first examination *per vaginam*, he discovered she was not a virgin. I said I thought the speculum and caustic should be discontinued, if the application produced such aggravated fits of hysteria as we heard had supervened

this case during the treatment. This latter was really e only point in which I differed with Dr. Waters in e medical management of the case; therefore it was r from correct to say I "expressed an opinion that his eatment was improper". It must be borne in mind at I had not the advantage of hearing his version of e story before I gave my evidence, as Drs. Simpson, eiller, Fyfe, and Mr. Brittain had. If that had been , very little difference indeed would have been disco-ered between his treatment and my own. My evidence as based on what the girl had sworn to. I said also at, when I examined the girl, I found the uterus per-ctly healthy, with no appearance of there ever having isted an ulcer at the mouth. I said that, if any consi-rable portion of the substance of the organ had been stroyed by ulceration, a cicatrix would have been left; it that if a part of the membrane covering it only had en destroyed, that membrane, in common with other ucous membranes, possesses such a restorative power thin itself, that all trace of its having been diseased uld soon disappear. I stated that to require the plication of caustic every week or every other week for ore than a year would imply generally that the sub-ance was affected; but that superficial ulceration or rasion of the membrane had such a tendency to recur, at a return to the former treatment might be neces-ry more than once during that interval. I said also at it did not accord with my experience that hysteric males were invariably given to falsehood, since I knew any hysterical women who were quite truthful; and at marriage was often beneficial in hysterical cases; but at women who had ulcers of the womb were generally parated from their husbands while under treatment.

As far as I recollect, I have here given you the sub-ance of all I advanced; and I do not think my opinions ll be contravened by my professional brethren.

I utterly repudiate the charge of being a witness in vour of "this prosecution"; and I would say generally, at it is neither proper nor just, because a medical man pears in a witness-box to speak to a medical fact, or en to a medical opinion, that he should be character-d as a partisan of that side which calls him. He ay very reasonably be compelled to give evidence by e party, while his sympathies and feelings go entirely th the other. I heartily congratulate Dr. Waters on e fact that he has been enabled to clear himself of ch a grievous and heavy charge, not only for his own ke, but for the honour of the profession to which we th belong. It would give me, indeed, great pain, did feel that I deserved the censure you have passed on e; because, throughout my whole life, my chief desire d object has been to uphold the honour, dignity, use-iness, and respectability of the medical profession.

I am, etc., FRANCIS H. RAMSBOTHAM.

Edinburgh, April 11th, 1863.

LETTER FROM T. R. HEYWOOD-THOMSON, M.D.

SIR,—As a member of the British Medical Association, beg to thank you most sincerely for the bold and un-mpromising tone in which, through the medium of the URNAL, you enunciated the case of Dr. Waters. Where there an honest man in the profession who will not dorse the sentiment, "Heaven forbid that we should one moment support the doctrine that medical men e not to give evidence against an accused party merely cause he is a medical brother"? or who does not coin-le with you that "it is high time that some serious ps were taken by the profession to put down this st unseemly persecution of medical men by medical n"? Only a few weeks ago, you justly exposed the nduct of certain medical men in Dr. Philbrick's case; d yet, in spite of their well-earned *exposé* and castiga-n, others are not wanting to come forward and repeat offence.

I believe the remedy to be in the hands of the profes-sion itself. What I suggest and have long acted upon is this: whenever I find, by the evidence given at any trial, that a medical man has come forward, either through vindictiveness or seeking *éclat*, volunteering *unnecessary* evidence against a respectable brother, I mark that man's name. I regard him as a person to whose care I would not trust my patients. I go further; I turn the subject over with medical friends, and we generally come to the same conclusion.

If the profession throughout would only act on this suggestion, we should touch such offenders in the weakest point. How sad to find three "London celebri-ties" travelling post-haste a long distance for the pur-pose of appearing against Dr. Waters; and that the great talents of a noted medico-legal luminary cannot keep him moving in his particular orbit without such a grievous perturbation; and, worst and saddest of all, that even the having tasted the bitter cup of unmerited judicial inquisition could not deter another from rushing forward to render the cup doubly bitter to a medical brother. The remembrance of professional sympathy, largely vouchsafed to him in his own hour of trial, should have taught him a lesson of tenderness towards Dr. Waters.

"Hâc urget lupus, hâc canis urget,

has been the position of Dr. Waters. Heartily may we all congratulate him on his escape.

I hope our local Branch—the Lancashire and Cheshire—will take the matter up, and give him a public dinner, to mark its appreciation of his character, its sense of his unmerited persecution, and its opinion of the medical evidence given in behalf of the prosecution.

I am, etc., THOS. R. HEYWOOD-THOMSON.

Aigburth, Liverpool, April 10th, 1863.

DR. CHAMBERS AND HIS REVIEWER.

LETTER FROM T. K. CHAMBERS, M.D.

SIR,—My attention having been called to a review of my volume of clinical lectures contained in a late number of your JOURNAL (January 3rd, 1863), I trust I may be allowed space to make a few observations arising out of it, explanatory of what might otherwise be misunder-stood, and thus create a false impression among your readers.

First, as to the title of the book (*The Renewal of Life, Clinical Lectures, etc.*), the reviewer says: "No living soul would ever guess that the volume in reality con-tained a series of capital clinical lectures delivered by Dr. Chambers to the students of St. Mary's Hospital." He then suggests that some people would think it a religious work; some a treatise on manures; etc. Now, I should be seriously annoyed if any purchasers were really deceived in this way; and if they have been, they are at liberty to exchange the volume at my publishers for any book of equal value on the subject to which they thought it referred.

I grant the bare possibility of such an error; for I possess a copy of *Van Swieten's Commentaries* given me by a barrister, who purchased it under the idea that it related to the law. But the contin-gency arises from the requirements of bookbinders, who demand what is technically termed a "half-title," consisting of a very few short words to describe the book in gilt letters at the back. I thought *The Renewal of Life* a half-title very descriptive of the intention of the volume, and with just sufficient novelty (it is not quite new) to distinguish it from other collections of clinical lectures. I believe it is contrary to your rules to redis-cuss questions of opinion and taste on which your re-viewers have pronounced, so I will not give my reasons; but merely assure you that it was selected in pure good faith, and not with any design of being ambiguous.

The rule of not allowing authors to criticise criticism also prevents my arguing with him certain points on which we differ, as to the method of testing our knowledge of therapeutics. But I trust I may be allowed to point out a few inaccuracies of quotation in his review. Merely verbal errors, indeed, they are, but still the question happens to be about words. He objects to my use of the term "allopath," and begs me to discard it. His memory must have deceived him; for I can positively state that the word, either as a nickname, or in praise or blame, or in any other way, occurs nowhere in the volume. Again, he has by a misquotation made nonsense of my proposed test of the fallacies of homœopathy. My words are, "Quinine is easily proved to stop ague; it is quite safe to take it in consecutive ten-grain doses till its pathogenetic effects are produced, and to compare those pathogenetic effects with the well-known phenomena of the malady." I merely quote the words for correctness sake; I do not defend the argument; which may be right or wrong, but at all events is not nonsense, as your printer has exhibited it.

The reviewer also introduces the word "restorateur," as if I had applied it to the practisers of restorative medicine. His readers would suppose that I had used it. I have not done so anywhere, and I do not think it would be a good term. If required by the contextual argument, "restoratist" would be better.

On all other points of fact I think your reviewer is as correct as is the rule in the BRITISH MEDICAL JOURNAL.

I am, etc., T. K. CHAMBERS.

22B, Brook Street, Grosvenor Square, W., April 9th, 1863.

[Dr. Chambers of course defends the title given by him to his volume. He assures us that it was selected in "pure good faith"; we can, therefore, only say what the whole profession has said of it, that his selection has been most unfortunate as well as unfitting. Dr. Latham and other great men in our profession have been contented to call their clinical lectures "Clinical Lectures"; and Dr. Chambers, we think, would have done well if he had followed their example. We question if the profession will accept as satisfactory the *amende* offered by Dr. Chambers to any unfortunate individual who may have purchased the volume under a misconception as to the nature of its contents. The reviewer is accused of being misled by a treacherous memory in attributing to Dr. Chambers the use of the word "allopath." Dr. Chambers says, and truly, that the word occurs nowhere in the volume. Our readers, however, will, we think, quite agree with Dr. Chambers that this objection, at all events, is "about words," when we tell them that, although the word "allopath" is not to be found, as he says, in the book, the terms "allopathy", "allopathist," "allopathic," occur at least a dozen times in as many pages. The next misquotation of which Dr. Chambers complains was a manifest slip of the reviewer's pen. In the review the word "stop" was inserted instead of "produce"; the error, we beg to inform Dr. Chambers, was immediately corrected, in the JOURNAL of January 17th (see p. 78). We certainly, and not Dr. Chambers, are answerable for the use of the term *restaurateur*. But it is not a new one. In the year 1635, one Philippe de Flesselles, a physician of the Faculty of Paris, waged a war against "renoueurs, rhabilleurs, and *restaurateurs*," and from him we got the term. If, however, we should have occasion again to employ an equivalent word, we will adopt Dr. Chambers's suggestion. As these are all the objections in the way of errors which Dr. Chambers has to point out; and as all "other points of fact" in the review are admitted by him to be correct; we think our readers will agree with us that the objections are not very strong. EDITOR.]

THE UNITED KINGDOM PROVIDENT INSTITUTION AND MEDICAL FEES.

[WE have received for publication the following copy of a letter addressed by the medical men in Middlesborough-on-Tees to Thomas Cash, Esq., Secretary to the United Kingdom Provident Institution.]

Middlesborough, April 10, 1863.

SIR,—We, the undersigned medical practitioners, beg to call your attention to the question of the remuneration given by the United Kingdom Provident Institution to its medical referees.

We consider the present scale of fees insufficient and unfair; and we are of opinion that the principle of graduating the fees so as to make them vary with the sums insured is one which, if admitted, should be carried to its legitimate conclusion, and therefore that, if the fees are diminished on the smaller insurances, they ought to be increased on the higher ones. If this is not done, we think that the system of graduation ought not to be introduced; but that a fixed permanent fee should be paid in each case without reference to the amount of the proposal.

We are willing to act as referees, provided that we receive for each report an adequate fixed sum, the same in every case, whatever the amount of the insurance; or we are willing to accept the principle of graduation, provided that it is fully and fairly carried out—that is to say, provided that the fees are made to increase in proportion with the amount of the sum to be insured, however much that may be.

The following are the precise conditions on which we are willing to act as examiners to life assurance societies in general.

1. The minimum fee for which we will make reports to those offices which adopt fixed fees, is £1 for each case.

2. In the case of those offices which adopt a fluctuating scale of fees, commencing below £1, the minimum rate of remuneration for which we will make reports is, for each case, five shillings per cent. on the sum proposed to be insured; and we will not examine or report for any such offices unless the scale is adapted and made applicable to all insurances, whether large or small, at the same rate per cent. for the higher as for the lower amounts.

3. We will not, under any circumstances whatever, make a report for a smaller fee than five shillings.

4. We require to be furnished by any society for which we may be called on to act, with a plain written or printed statement of the mode and amount of remuneration usually given to its medical referees.

5. We will not furnish reports to offices which require the candidates for insurance to pay the fees of the medical examiners.

6. We will not, on any consideration, furnish reports to offices which do not remunerate the medical examiners in compliance with the foregoing conditions.

These conditions, representing the terms which we are resolved to exact from any offices which may require us to act for them as medical examiners or referees, we pledge ourselves, individually and collectively, strictly to observe, and not to accept any lower rate of remuneration. At the same time, we reserve to ourselves individually a right to demand higher terms of remuneration for our services than those here set forth, should it seem necessary or expedient for us to do so.

Under these circumstances, we have to inform you that we can no longer fill up reports for the United Kingdom Provident Institution on its present scale of fees; and that we shall henceforward refuse to examine candidates for insurance in that office, unless the pay-

nts are raised to the extent indicated in the above tailed conditions.

We request respectfully that you will have the goodss to bring this letter under the notice of the Board Directors at your earliest convenience.

We have the honour to remain, sir,
Your obedient servants,
(Signed)

George Coates, Middlesborough.
T. W. Craster, Middlesborough.
Duncan McCuaig, Middlesborough.
Jonathan Dickinson, Middlesborough.
John McGlashan, Middlesborough.
W. A. T. Young, Middlesborough.
W. Prophit, Middlesborough.
Wm. Green, Eston, near Middlesborough.
Alex. Keith, Normanby, near Middlesborough.
G. F. Bodington, Middlesborough.

PROFESSIONAL REMUNERATION.

Letter from John A. Bolton, M.D.

Sir,—On the evening of August 13th last, I received om three different messengers, who followed each other rapid succession, instructions to go, immediately and th all haste, to the village of Evington, distant from icester about three miles, "where a gentleman's serint had poisoned herself by swallowing a large quany of laudanum."

Abruptly leaving patients unadvised and unattended, d well armed with medicines, I mounted my horse, d after a hard gallop over rough roads, within twenty inutes of receiving the first message, I was in the urtyard, where a crowd, under the direction of the lage clergyman and the master of the house, were agging a young woman about and in various ways inistering to the end of keeping her awake.

The skin was cold and clammy, the pupils contracted, d all the appearances of deepening coma were preint, showing that the quantity of laudanum swallowed d been pretty considerable. After the most copious aesis had thoroughly cleansed the stomach, the skin d become warm, the pupils sensible to light, strong ffee was ordered, and the girl taken off to bed, where, th the consent of the master, I made a minute exaination for pregnancy.

Having reported my opinion as to the state of the erus and the certainty of the girl's recovery, with my nd pinched by the master's friendly grasp, my ears ging with his reiterated expressions of gratitude, and y heart thankful to God that I had been the medium saving life, I again mounted my horse, and after an sence of two hours found myself at home again, "a tle late for tea," sorely and sadly too late for seeing my ening patients.

My horse and I were considerably lighter in substance t our return; he having lost many ounces of perspiraon—I several pennyweights of money. We consoled rselves, however, by the reflection that we "had done e state some service," and that our reward would come th the future. Alas! our hopes were blighted. He d to do the journey again, and I to work ten times rder to recover the fee than I had to earn and deserve

Now comes the pull of war.

My bill is sent in, and one guinea charged, for my sit, attendance, medicines, examination for pregnancy ter an attempt at suicide, conferring with police-officers e next morning, etc.; and for months it remains unticed. I send my servant; he is "put off." I employ y collector, subjecting myself to his commission; he insulted, and told by the master, who holds an impornt office in the local branch Bank of England, that the charge is exorbitant, that he will pay half a guinea, t he will not pay a whole one, and I may do as I like recover it."

Taking him at his word, I have authorised my collector to issue a summons for the next sitting of the county court, when I shall be called upon to sacrifice probably the greater portion of a day's work and day's pay to recover what I am disposed to think is only half my fee, without the deductions paid to toll-keeper, horseholder, collector, and post-office people.

This case, together with that of Jackson *v.* Gee tried here last year, and ably commented on by each of the medical journals and the *Daily Telegraph*, give sufficient proof that, in Leicester at least, a tariff of medical charges is really required, both to guide the judge of the county-court and to warn the never-meaning-to-pay part of the public.

I am, etc.,
John A. Bolton.

Campbell House, Leicester, April 11th, 1863.

[We cannot doubt for a moment that the county court judge will order the payment of the manifestly moderate fee demanded by Dr. Bolton. More than this, we trust that the very shabby fellow, whoever he be, who shirks the payment, will be made to pay, in addition, the expenses of those whose time he has wasted by bringing the action into court. We expect that the shabby party alluded to must have one day experienced the sweets of gratuitous medical services. Editor.]

THE LONDON AND PROVINCIAL MEDICAL PROTECTION SOCIETY.

Letter from A. B. Steele, Esq.

Sir,—In reply to the inquiry of your correspondent, Mr. Gardner, I beg to inform him that the London and Provincial Medical Protection Society is almost exclusively occupied in the collection of medical debts, a service which it performs most satisfactorily; to a great extent securing its members from the serious losses usually incurred by bad debts; while, at the same time, special care is taken to avoid any proceeding calculated to compromise the position or interests of the creditor as a professional man.

For its foundation, some fourteen years ago, the profession is indebted to our venerable and esteemed associate, Mr. Propert. That the praiseworthy efforts and the benevolent intentions of its founder have not been to the fullest possible extent realised, can only be accounted for by the inevitable and much to be lamented apathy and indifference which exists among medical men as a body on matters which concern their corporate interests, and to the want of commercial instinct and foresight which are perhaps inseparable from professional habits and feelings.

If this society were universally supported and encouraged by the whole profession, there can be no doubt that our financial position would be wonderfully improved. We should have the satisfaction of noting the disappearance of that intolerable burden of involuntary gratuitous medical services at present exacted by the unscrupulous non-paying portion of the public; and we might hope to see the profession elevated above the condition of desiring to have recourse to "sick benefit clubs," euphoniously called "Medical Health Insurance Societies," which, however well adapted to the precarious and improvident social condition of the operative classes, are, in my humble opinion, totally unsuited to the status and feelings of professional men.

If your correspondent has access to the back volumes of our Journal, in that for 1854, page 999, he will find a letter in which I have endeavoured to urge the claims of this society upon the profession, and in which the nature of its operations is given somewhat in detail.

As to my unconditional disapproval of the scheme for establishing a medical health assurance fund, I must not now trespass on your space by venturing to adduce the numerous reasons which have led me to that view of

the question; but will content myself by venturing to predict that, when that matter comes fully before the profession, it will be found that, while giving every credit to the promoters for the best possible intentions, so many practical difficulties will arise that they will scarcely succeed in obtaining such confidence and support as are essential to the success of the undertaking.

I am, etc., A. B. STEELE.

Liverpool, April 7th, 1863.

THE MEDICAL ACT.

LETTER FROM JAMES HEYGATE, M.D., F.R.S.

SIR,—I am sorry again to trouble you with any remarks of mine on the above subject, in addition to the short letter you kindly inserted in the JOURNAL of March 14th; but your editorial comments on the letter of "An Old Associate" in the JOURNAL of April 11th call for a few observations.

I will be as brief as possible, knowing that your space is valuable.

You say, "It is clearly useless to abuse the Medical Council for not exercising powers which they do not possess. Let those who thus cry out show the legal powers under which the Council can do what they desire should be done."

Now, we do not for a moment say that the Medical Council at present possess the "legal powers"; but we do say that that is the proper body to seek for them. If I understand my own letter and those of "An Old Associate", we do anything but "abuse the Medical Council, etc."; in fact, our language cannot bear that construction at all.

In your leading articles you show an independent spirit of action, a truthfulness and talent, which every one must admire; but pardon me if I say that your leading article on "Unlicensed Physic" in the JOURNAL of March 7th is wholly beside the question at issue. We do not ask "the Medical or any other Council" to put down quackery; but we do urge them to seek powers to do what the Act was intended to do, and we say that it is the only proper body to move in this matter. It is often said that when once men get into office, and the thing works well for them, they are apt to get sleepy (I won't say indifferent) over the wants of others.

I feel satisfied that this reproach does not, and will not, attach to any member of the Medical Council connected with this great Association, which has for so many years been in the foreground of all that can tend to promote the welfare and elevate the status of our common profession; but I cannot sufficiently urge upon our President and President of Council to move in this matter.

I am, etc.,

JAMES HEYGATE.

Derby, April 13th, 1863.

P.S. Perhaps I might be allowed to add (which, however, is generally known), that it is much easier to get an Act amended than to secure an original one.

[The article to which our respected correspondent alludes was, in part, copied into a French journal. The journal in question admits that, notwithstanding the great legal protection given to medicine in France, the putting down of illegal medicine is an impossibility. Every week in France do the journals report cases, and successful cases, of prosecution of quacks; and never was quackery more alive. To our remarks, the journal aforesaid added, "*Voila! qui est bien dit!*" We quite agree with our correspondent that the Medical Council should be urged to do its utmost to promote the welfare of the profession by enforcing upon the Government the propriety of all practicable measures which may further its welfare; and we have no doubt that the Council requires pressure from without in order to keep it in active working order. We have already said, that the conservative element, passivity, is too strongly present in it. We fear that the profession may ere long begin to ask, What's the use of the Council? EDITOR.]

HEREDITARY NATURE OF HARE-LIP.

LETTER FROM J. SPROULE, ESQ.

SIR,—I observe in a lecture by Mr. Thomas Bryant his opinions on hare-lip; and I may here state, that it is a disease with which I have been acquainted since my first notice of anything, for it was the only disease from which my family suffered. It has been handed or linked down from one branch to another for the last hundred years; and in some instances lately it has seemed to have gained vitality. I have a brother who has hare-lip, with complete division of the palate and alveolar process; and he has had three children, out of seven, affected with the same disease, in every case as badly as himself. One had a double hare-lip, but only one fissure through the palate. Two are girls and one a boy. They were operated on successfully by Surgeon Love of Omagh when they were seven or eight years old. Another brother of mine, who is now dead, had a daughter also affected with the malformation; Dr. Love also operated on her with success. I had also a cousin who was similarly affected; and he had a daughter affected.

In every case the breach went through the palate; and none of the children could suck, but were spoonfed; and it was remarked that each infant placed its hand in its mouth as a conductor to the food. These are facts well observed by the family.

No operation was tolerated till the child had become sufficiently strong, and past spoonfeeding at least. Indeed, the child was rarely, if ever, operated on sooner than the fourth or fifth year. There is then no danger to life.

From my own experience in our family, the females were as three to two in proportion to the males; so that Mr. Bryant's opinion that males are more subject to the malformation than females does not hold good in this instance.

I make these observations for the purpose of showing two things; first, that the male is not more subject to hare-lip than the female; and secondly, that the proper time to perform the operation for cure is between the fifth and sixth years. It may be done at any time after the third year if people wish to save appearances; but, for the benefit of the patient, the former period is the best.

I am, etc., J. SPROULE.

Arvagh, co. Cavan, April 5th, 1863.

A QUACK AND A GOOSE. At the Sheriff's Court, Red Lion Square, an action was lately tried, wherein a farmer, residing near Barnstaple, sought to recover damages against Samuel Barker, otherwise, "Dr. de Roos." Judgment was allowed to go by default, and the only question was the amount to be awarded. The plaintiff saw an advertisement in a country newspaper of wonderful cures, and on coming to London called on the defendant, and paid him one guinea for his advice and a bottle of medicine. Subsequently he applied for more medicine, and sent £1 : 5. The defendant wrote for £5, and on the plaintiff sending the money he was supplied with eleven bottles of medicine, all of which he took, and, finding he got much worse, had to consult a medical man. He was now quite well, and brought the action to recover damages. Mr. Biron, instructed by the attorney for the medical profession, said the defendant was a "quack." Mr. Under-Sheriff Burchell thought the young man was entitled to his money. The jury were of opinion that the plaintiff should only recover the money he had paid, and gave a verdict for £6 : 1.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. The following gentlemen passed the first part of the Professional Examination for the Licence of the College, on April 9th, 1863:—

Ashton, John Henry, St. Bartholomew's Hospital
Brown, Edward, St. Bartholomew's Hospital
Edgelow, George, St. George's Hospital
Edgelow, Thomas, St. George's Hospital
Kinsey, Robert Henry, St. Bartholomew's Hospital
Lynch, Jordan Roche, St. Mary's Hospital
Pearless, Charles Durrant, St. Bartholomew's Hospital
Powell, Llewellyn, St. Bartholomew's Hospital
Richards, Frederick William, St. Bartholomew's Hospital
Turner, Arthur Cromack, Sheffield

Also, on April 9th:—

Puzey, Chauncy, Guy's Hospital
Raven, Thomas Francis, St. Bartholomew's Hospital
Snook, James Walbridge, St. Bartholomew's Hospital
Thomas, James Byers, St. Bartholomew's Hospital
Waugh, Alexander, St. Bartholomew's Hospital

APOTHECARIES' HALL. On April 9th, the following licentiates were admitted:—

Cann, Thomas Martyn, Virginstowe
Carter, Thomas, Guy's Hospital
Harley, Edward, King's College
Kelly, Frederick, London
Row, William, Clapham Road
Tessier, William Henry Cecil, London

At the same Court, the following passed the first examination:—

Burdett, Francis Henry, Birmingham
Duckering, Samuel, Sheffield
Haines, Richard Wheeler, King's College
Welch, John Burges, King's College

APPOINTMENTS.

BRATTAN, Nicholas, L.R.C.P. and S.Edin., appointed Resident Apothecary to the Cork South Charitable Infirmary and County Hospital.
CLINTON, James, Esq., elected Surgeon-Aurist to Guy's Hospital.
CLAYFAIR, William S., M.D., appointed Physician to the Margaret Street Infirmary for Consumption and Diseases of the Chest.
ROBERTS, Edward Stokes, Esq., elected Honorary Surgeon to the Hull and Sculcoates Dispensary.
SMITH, W. Abbotts, M.D., elected Physician to the Finsbury Dispensary.

POOR-LAW MEDICAL SERVICE.

BOOTH, Samuel, jun., M.D., to the South Salford District of the Salford Union.
BREAVES, Thomas Ley, Esq., to the Corby District of the Kettering Union.
BODDARD, Eugene, Esq., to District No. 1 and the Workhouse of the Leominster Union.
GRIFFITH, Robert, Esq., to the Abergele District of the St. Asaph Union.
HARWOOD, Charles, M.D., to the Workhouse and the Shardlow District of the Shardlow Union, Derbyshire.
HAWKESFORD, George, Esq., to District No. 5 of the Birmingham Union.
HOARE, William, Esq., to District No. 2 of the Birmingham Union.
HOTHER, George, Esq., to District No. 1 and the Workhouse of the West Firle Union, Sussex.
KNOWLES, Edward, Esq., to District No. 5 of the Chesterton Union, Cambridgeshire.
LOGAN, James, M.D., to the Kettering No. 2 District of the Kettering Union.
MODEN, Caleb, M.D., to the Rowan Dispensary District of the Mohill Union, co Leitrim.
MUCKLING, Cornelius B., M.D., to District No. 3 of the Birmingham Union.
MUFFIELD, Charles R., L.R.C.P.Lond., to District No. 1 of the Birmingham Union.
WHITE, Edward, M.D., to District No. 4 of the Birmingham Union.
WILSON, John, M.D., to the Drumshambo Dispensary District of the Carrick-on-Shannon Union.

ARMY.

ANDERSON, Surgeon-Major R. C., M.D., 13th Hussars, to be Staff-Surgeon-Major, *vice* C. C. Rutherford.
BRADY, Staff-Surg. T. C., to be Surgeon 8th Foot, *vice* J. Irvine, M.D.
GEORGE, Assistant-Surgeon O. W., M.D., to be Surgeon 1st Life Guards, *vice* J. Cockburn.
GIBB, Surgeon-Major A., M.D., from a Depôt-Battalion, to be Staff-Surgeon-Major, *vice* T. C. Brady.
IRVINE, Surgeon J., M.D., 8th Foot, to be Staff-Surgeon, *vice* W. T. Harding.
RUTHERFORD, Staff-Surgeon C. C., to be Surgeon 13th Hussars, *vice* R. C. Anderson, M.D.

INDIAN ARMY.

TURNER, Surgeon J., Bombay Army, to be Surgeon-Major.
VAUGHAN, Surgeon J., Bombay Army, to be Surgeon-Major.

ROYAL NAVY.

BURNETT, Thomas S., Esq., Assistant-Surgeon, to the *Leander*.
GORDON, George, Esq., Surgeon, to the *Leander*.
MULCAHY, Edward, Esq., Assistant-Surgeon, to the *Leander*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BALL, A., Esq., to be Assistant-Surgeon 1st Administrative Brigade East York A.V.
BARTLEET, T. H., M.B., to be Assist.-Surg. 1st Warwickshire R.V.
CROSS, R., M.D., to be Assistant-Surgeon 1st Administrative Brigade East York A.V.
HUMPHREYS, T. B., Esq., to be Assistant-Surg. 26th Middlesex R.V.

To be Honorary Assistant-Surgeons:—

ADAMSON, R., Esq., 40th West Riding R.V.
BALL, W., Esq., 21st Cheshire R.V.
BANTOCK, G. G., M.D., 2nd Cheshire A.V.
COCKEY, E., Esq., 13th Somerset R.V.
POPE, W. H., Esq., 23rd Staffordshire R.V.
WILSON, W. H., Esq., 3rd North Riding A.V.

DEATHS.

BLACK. On April 5th, at 11, Queen Anne Street, aged 8 months, Edward, son of Patrick Black, M.D.
FOWLER, Richard, M.D., at Milford, near Salisbury, aged 97, on April 13.
FRAMPTON. On April 9th, at 28, Lower Belgrave Street, aged 7, Eliza Kennedy, daughter of D. N. Frampton, L.R.C.P.Ed.

DR. M'GOWAN, known as a Chinese and Japanese traveller, is about to proceed on a journey through the mountainous districts of China and Formosa.

MANCHESTER HOSPITAL. It appears probable that the Manchester Hospital will be enlarged, to meet the increasing wants of that town.

IMPORTATION OF QUININE. During the year 1861, 81,557 ounces of quinine were imported into this country; the value was put at £25,000. Of this quantity 47,000 ounces were exported.

ST. THOMAS'S HOSPITAL. There is a vacancy in the surgical staff of this institution occasioned by the resignation, on Saturday last, of Mr. John Flint South, after a connection of half a century as pupil and surgeon at the hospital.

THE AMERICAN MEDICAL MONTHLY is to be suspended. This is owing to the long continued absence of the editor and proprietor, Dr. J. H. Douglass, who has been an active member of the Sanitary Commission nearly from its organisation, first as an inspector and more recently as an associate secretary.

THE ROYAL SOCIETY. There are forty-five candidates for the fellowship of this learned society, including fourteen members of the medical profession; viz., Henry F. Baxter, M.R.C.S.; W. Brinton, M.D.; J. C. Bucknill, M.D.; T. S. Cobbold, M.D.; W. C. Hood, M.D.; W. Jenner, M.D.; E. C. Johnson, M.D.; H. Letheby, M.D.; Sir C. Locock, M.D.; R. McDonnell, M.D.; W. Pavy, M.D.; J. G. Perry, F.R.C.S.; C. B. Radcliffe, M.D.; and S. J. A. Salter, M.B.

PROSECUTION UNDER THE NEW MEDICAL ACT. The district coroner of Warrnambool, a Mr. John Clark, who has been practising as a surgeon, under the name of Dr. Clark, was, on the 9th inst., summoned before the local police bench, charged with using the title of a legally qualified medical man, without being duly registered by the Medical Board of Victoria. The offence was fully proved, and Dr. Clark was fined £5 : 5. He gave notice of appeal at the ensuing general sessions. (*Melbourne Herald*, Jan. 16th.)

Prize Essay. Dr. M. H. Cash left a legacy of 5,000 dollars to the Medical Society of New York. It has been determined to establish a prize with the money. The subject proposed for the essay is, "*How complete is the protection of vacination, and what are the dangers of communicating other diseases with the vaccinia?*" The competition will be confined to physicians residents of the State of New York. The decision of the committee will be announced at the meeting of the society in February 1864.

Vacancies. The following appointments are vacant: Physician to the Derbyshire General Infirmary; physician to Addenbrooke's Hospital, Cambridge; medical officer of health for St. George's-in-the-East; surgeon to the Tower Hamlets Dispensary; surgeon to the Metropolitan Dispensary; physician to the Chelsea, Brompton, and Belgrave Dispensary, and surgeon to the Western district; assistant-physician to University College Hospital; surgeon to the Royal Asylum of St. Ann's Society; house surgeon to the Morpeth Dispensary; house surgeon to the West Hertfordshire Infirmary; resident house surgeon and apothecary to the South Devon and East Cornwall Hospital; assistant house surgeon to the South Staffordshire General Hospital; junior resident surgeon to the Birmingham General Dispensary; medical officer for the parish of Tyrie, near Pitsligo; and medical officer for South Uist, by Lochmaddy.

Epidemiological Society. At the annual meeting of this Society held on April 6th, the following office-bearers were elected for the ensuing year:—*President:* B. G. Babington, M.D., F.R.S. *Vice-Presidents:* His Excellency the Earl of Carlisle, K.G.; Earl of Shaftesbury, K.G.; the Right Hon. W. Cowper, M.P.; H. W. Acland, M.D., F.R.S.; A. Bryson, M.D., F.R.S., R.N.; E. Chadwick, Esq., C.B.; J. Copland, M.D., F.R.S.; Wm. Farr, M.D., F.R.S.; J. B. Gibson, M.D., C.B.; R. D. Grainger, Esq., F.R.S.; Sir C. Hastings, M.D., D.C.L.; W. Jenner, M.D.; Sir J. Liddell, M.D., F.R.S., C.B.; Sir J. R. Martin, C.B.; A. Nisbett, M.D., R.N.; J. Simon, Esq., F.R.S.; Sir A. Smith, M.D., K.C.B.; T. Watson, M.D., F.R.S. *Treasurer:* W. Camps, M.D. *Secretaries:* G. Milroy, M.D.; J. N. Radcliffe, Esq. *Foreign and Colonial Secretaries:* Belgium and France, W. Lewis, M.D.; Germany and Russia, H. Weber, M.D., and W. E. Swaine, M.D.; Sweden, Norway, and Denmark, R. G. Latham, M.D., F.R.S.; Portugal and the Brazils, A. Bryson, M.D., R.N.; Egypt and Syria, W. Camps, M.D.; East Indies, J. Bird, M.D.; West Indies and North America, G. Milroy, M.D. *Other Members of Council:* C. J. B. Aldis, M.D.; F. G. Burge, Esq.; W. D. Chowne, M.D.; W. Dickson, M.D., R.N.; E. H. Greenhow, M.D.; Colonel Hough; E. Hart, Esq.; E. Haward, M.D.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; C. Morehead, M.D.; C. Murchison, M.D.; W. Odling, M.B.; B. W. Richardson, M.D.; J. B. Sanderson, M.D.; E. C. Seaton, M.D.

Serious Accident. On Friday and Saturday, a very painful feeling was caused in Newcastle-on-Tyne, by a deplorable accident which had befallen Mr. William Newton, surgeon of that town, and an active member of the Town Council. On Friday afternoon, between 4 and 5 o'clock, Mr. Newton had been riding out upon the Town Moor in company with a young man named Mr. James Scott, when the horse upon which the latter was riding took fright, and Mr. Newton's mare sprang after it, and the jerk threw her rider. Mr. Newton unfortunately fell with his back upon a stone lying in the ditch. Assistance was speedily rendered him, and he was removed to the herd's cottage, where he was attended by Sir John Fife, Dr. Heath, Dr. Hawthorn, and other brother professionals. His condition was so precarious, however, that he was not removed home until 10 o'clock at night, when he had to be carried with great care on a stretcher to his residence in Hood Street. Upon an examination by the medical men it was found that his spine was injured. On Saturday Mr. Newton was in a very dangerous condition indeed, and it is feared that, if he ever recover, his extremities will be paralysed.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Dr. George Johnson, "On the Laryngoscope."—Asiatic.

Tuesday. Zoological.—Statistical.—Pathological.

Wednesday. Society of Arts.—Geological.

Thursday. Royal.—Antiquarian (Anniversary).

Friday. Royal Institution.

Saturday. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—April 11, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1131 / Girls..1049	2180	1610
Average of corresponding weeks 1853-62		1975	1324

Barometer:
Highest (Sat.) 29.633; lowest (Tu.) 29.356; mean, 29.553.

Thermometer:
Highest in sun—extremes (Tu.) 93 degs.; (Wed.) 63.4 degs.
In shade—highest (Fri.) 65.3 degs.; lowest (Wed.) 34.8 degs.
Mean—49.5 degrees; difference from mean of 43 yrs.+4.2 degs.
Range—during week, 30.5 degrees; mean daily, 14.7 degrees.

Mean humidity of air (*saturation*=100), 86.

Mean direction of wind, S.W.—Rain in inches, 0.19.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

COMMUNICATIONS have been received from:—Mr. William Copney; Mr. R. S. Fowler; The Honorary Secretary of the Odontological Society; Mr. C. J. Evans; The Registrar of the Medical Society of London; Dr. Chambers; Mr. E. S. Roberts; Mr. J. N. Radcliffe; Dr. W. P. Stiff; Dr. James Heygate; Dr. Ramsbotham; Mr. G. F. Bodington; Mr. Oliver Pemberton; Dr. J. A. Bolton; Mr. J. A. Pearson; Mr. Redfern Davies; Dr. T. R. H. Thomson; Mr. C. M. Thompson; Mr. T. Bryant; Mr. Stone; Dr. H. Marshall; and Dr. W. A. Smith.

BOOKS RECEIVED.

1. Medical Evidence in the Case of Jessie McLachlan. By G. H. B. Macleod, M.D.
2. On some of the Causes of Infanticide. By G. Greaves. Manchester: 1863.
3. Law of Lunacy, etc. By J. G. Davey, L.R.C.P.
4. Deafness Practically Illustrated. By James Yearsley, M.D. London: 1863.
5. On Human Entozoa. By W. A. Smith, M.D. London: 1863.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture II.

Mr. President and Gentlemen,—In my former lecture, I briefly brought before your notice the chief points of difference between the physiological and pathological processes as witnessed in early and in adult life; and then passed on to the consideration of some of the congenital defects which are to be observed in the oral and anal regions. The abnormal developments of the nervous, genito-urinary, and osseous systems, would next claim our attention; and had time allowed, I should have been glad to have brought these subjects under your notice. In the limits of three lectures, however, it is absolutely impossible to include every point which may be worthy of attention in the surgical diseases of children; and I am, therefore, compelled to pass over these, with many others of equal interest.

I must confess that it is with much regret that I am obliged to dismiss from our consideration the interesting subject of *Maldevelopment of the Head and Spine*, as exhibited in cases of meningocele, encephalocele, and spina bifida; but, as we are able to refer to the labours of such an accurate and scientific investigator as Mr. Prescott Hewett, who so exhausted these subjects in his admirable lectures delivered at the College of Surgeons some few years since, these regrets are materially modified; for I feel that I do not possess much new material to add to our stock of knowledge, or any new views which might throw additional light upon the nature and treatment of this important class of cases.

Hermaphrodism is another subject which invites investigation; but, as it would require the three lectures to do it justice, it must be set aside, with the malformations of the penis and urethra.

I must quote, however, a singular case of arrest of development of the osseous system, which manifested itself by the absence of certain bones; and it is to be remarked that the left side of the body was the part affected.

Absence of Fibula, Os Calcis, Cuboid, and Three outer Metatarsal Bones, with the Toes. Robert F., aged 15 months, was brought to me at Guy's Hospital on Feb. 21, 1859, with the following deformity. The child was apparently quite healthy and in good general condition. The left leg and foot were, however, much wasted, and had been so from birth; but the extremity was of its normal length.

A careful examination detected the following conditions. The thigh appeared to be quite natural; but in the leg there was no evidence of the presence of any fibula; neither its head nor external malleolus could be observed, and there was little soft tissue to obscure the observation. The foot was curiously ill-formed; it had but two toes, corresponding to the great and second toes. The four outer were absent, with their metatarsal bones, the cuboid, and os calcis; the astragalus, scaphoid, and cuneiform bones, with the metatarsal and phalangeal bones belonging to the two toes, being alone present. It was difficult to make out what muscles existed. The calf of the leg was very flabby, and the tendo Achillis was apparently absent. The toes could be moved by muscles and were well developed. The anus was situated somewhat towards the left side, and the left testis had not descended, but its distinct scrotal pouch was very visible.

Orthopædic surgery is another subject which might claim a passing attention, as a large number of cases come under our care during each twelve months; but it has been so ably written upon by many specialists, that I feel it would be presumption on my part to take up your time by its consideration. I will, however, make one observation upon the treatment of these cases, which experience has taught me; and that is, that by far the larger proportion of cases may be successfully treated by mechanical means alone, and without operation—that is, without the division of the contracted tendons.

The rule which I apply to these cases is as follows: that if the foot can be restored with but little force to its normal position, a cure will, in all probability, be secured by simple means—that is, by extension; and that the operation of tenotomy may be set aside; but if much force is called for to bring about this result, the division of the contracted tendons should be performed.

The mechanical means which I have been in the habit of employing are very simple; a good firm linen strapping being all that is required by way of material. The method of its application is also very simple, and may be thus described. If the case be one of varus or equino-varus, a piece of strapping about one inch wide, broad enough to cover the body of the foot, and about nine inches long, should be selected, and fastened by at least one circular turn round the foot, leaving the end on its outer side; the foot is then to be brought to the required position, and fixed there by forcibly bringing the extremity of the plaster to the upper and outer part of the leg, using it as a side splint. This upper extremity is then to be firmly held in position by an assistant, whilst a second piece is applied round the foot and ankle as a figure of 8. By this turn, the external upright plaster splint is firmly compressed towards the leg, and, thus drawing upon the ankle, turns the deformed foot firmly outwards, and fixes it in the required position. A third or circular piece may then be applied round the leg to fix the upper portion of the vertical plaster splint, and the thing will be complete.

If these strappings be well applied, it will not be necessary to readjust them for at least three or four days; by such means a large proportion of cases will be readily and permanently cured.

The principle of its application rests in the extending force which is employed by the external or vertical portion: the second or figure-of-8 binding this vertical splint firmly to the leg, increasing its extending force and making it permanent.

I have carried out this practice extensively at Guy's Hospital with great success; and, as the material is inexpensive, and its application is easy when once learnt, I have thought it worthy of bringing before your notice.

It is hardly necessary to quote examples in which this treatment has proved of value. My note-books contain many such; but the fact of its proved usefulness amply suffices for my present purpose.

In cases of talipes equinus and valgus these plaster splints are equally applicable; the surgeon having only to modify the application of the principle to each form.

With these short observations upon as many of the special surgical affections of early life as the period allotted to these lectures will allow me to make, I must now pass on to the consideration of other portions of my subject, and to point out the differences which are found in practice between the injuries and diseases which are common to adult and infant life, and the modifications of their treatment which are consequently required. I propose to bring this subject before your notice by taking the different systems in rotation, commencing with the injuries and diseases of the nervous system.

The Difference between the Diseases of the Nervous System in the Child and in the Adult.

The marked anatomical differences which are to be observed between the crania of the adult and infant during the first few years of extrauterine life; and the equally important and palpable differences between the nervous centres of the human species at these two periods of existence; are of themselves amply sufficient to lead any reflective mind to the conclusion that there must be some important difference between the diseases of such structures at these opposite ages; and the results of experience prove the positive correctness of such an inference.

The anatomical purposes which are embodied in the development of the *adult* cranium are, without question, essentially *conservative*. They are perfected slowly, and with marvellous precision, and are adapted with admirable accuracy for the security and preservation from external injury of the all-important and wondrous structure, man's brain.

The anatomical purposes of the *child's* cranium are also conservative, but conservative only to a degree; for this high purpose is evidently completely subservient to the higher and more important conditions which appertain to the growth and development of the cerebral structure. In the adult cranium the anatomical purposes are solely adapted for the protection of the *perfect* brain. In the infant or child cranium the anatomical purposes are mainly adapted for the growth and development of the *perfecting* brain.

Respecting the structure of the brain, the firm and consistent nature of the adult organ stands also in bold contrast to the soft and pulpy nature of the child's; and the established functions which appertain to the perfect organ, form an equal contrast to the apparently uncertain and growing functions of the imperfect.

This activity in the growth and development of the child's nervous centres is associated also with an increase of sensibility, and a degree of sensitiveness to centric or eccentric impressions, which are not to be met with in the adult brain; and it is due to this fact that we are enabled to explain the differences which are to be observed between the symptoms which follow injuries to the head in childhood and in manhood.

It must not, however, be for one moment thought that this excessive irritability of the brain is manifested after every slight injury; for experience tells us that this is not the case, and that children can bear blows and falls upon the cranium with perfect impunity; the anatomical disposition of the bony centres being such that they invariably receive the first impression of the fall, and their membranous margins or fontanelles, taking up the impulse, retard and stop the force of the onward vibrations. The brain is not, therefore, as a rule, so materially shaken by a slight injury as, in surgical language, to become the subject of a concussion. But if this condition be experienced, the symptoms denoting cerebral irritation are generally severe and most marked. When once originated also, the disposition to excessive reaction or to inflammatory complications is very great; and in the following case the truth of these remarks is well illustrated.

Case. Arthur B., aged 3, was admitted into Guy's Hospital in July 1860, under the care of Mr. Birkett; but the treatment of the case fell into my hands. Shortly before admission, the child had fallen from a window eight or ten feet high, pitching upon his head. He was taken up hastily, and brought to Guy's, when he was conscious, and presented no external signs of injury; and no symptom of cerebral mischief could be detected. He was placed in bed, and ordered to be kept quiet, as a precautionary measure; and everything went on well till the third day, when fever appeared, accompanied with vomiting, unconsciousness, and the peculiar shrill scream so characteristic of cerebral irritation. The head was tilted back upon the spine, and the pupils were dilated. A spirit lotion was prescribed, for the purpose of keeping the head cool; and a mild mercurial of grey powder, in three grain doses, with half a grain of Dover's powder, given every six hours; and in three days these symptoms had subsided. From that date everything went on well, and convalescence was established.

Many cases somewhat similar to the above might be selected from my notebook, although perhaps none could be more typical of the class of injuries. The necessity of preserving absolute rest in even the slightest injury to the skull is a rule which it is hardly necessary for me now to dwell upon, although it is difficult to make the inexperienced understand this necessity when no symptoms of brain-mischief exist. In children, this rule is as absolute (if not more so) as it is in adult life, although there may be some difficulty in carrying it out. For it must be remembered that, as there is in childhood a greater activity of the vital functions in the cerebral centres for the purposes of their growth and development, so is there a greater tendency to cerebral irritation and inflammation; and in proportion as the organ is more delicate in its structure than it is in adult life, so is the result of morbid action more important, as well as more rapid and destructive. As a consequence, therefore, injuries to the cranium in young life are followed by symptoms of concussion more frequently

than they are in adult life; and, when once manifested, these are liable to become more severe. The child-brain, from its softness and want of consistence, is also more liable than the adult brain to become the subject of ecchymosis from slight causes; and it is due to this fact that cerebral symptoms from secondary inflammatory action are so frequently observed.

It can be no matter of surprise, therefore, that a fatal result is by no means uncommon after a slight cerebral injury during child-life.

The delicacy of the brain and its wonderful irritability are well shown by the fact that every symptom of severe disease of its structure may make its appearance, and death follow, yet no pathological indication may be detected upon subsequent examination.

It is hardly consistent with received opinions or our own belief to acknowledge that altered function suffices by itself to destroy life; and yet, if the absence of positive evidence of cerebral disease, in cases in which every symptom of cerebral affection not only existed, but proved fatal, tends to prove the truth of such an opinion, it must be here adduced.

For a child may, without doubt, die off-hand from simple concussion, and no evidence of organic change be subsequently seen on *post mortem* examination: and a child may also die during a convulsion produced by a local injury or some reflected excentric cause, with the same subsequent absence of local pathological conditions.

Again: as another proof of this excessive irritability of the nervous centres, so predominant in early life, the effect of injuries to the extremities or integument may be brought forward; for it is, I think, certainly true that tetanus and convulsive diseases are by no means uncommon complications of these injuries; and it is this fact, if such it may be called, which must tend to modify our practice in the treatment of these cases. It has fallen to my lot to see several fatal cases of tetanus following upon laceration of the integuments and compound fractures in young subjects, in which conservative surgery was carried out, when perhaps a more energetic practice might have saved life, although with the loss of a limb; and I have it upon my conscience that I should in some few cases have been led into such an error, and have thus lost my patients.

It is almost an impossibility to bring forward positive proof of the accuracy of these views; but it is certainly within the limits of experience when I assert that it is a rare thing for tetanus to appear in an adult after a lacerated wound or compound fracture, and these injuries are not uncommon; but in young life, although such accidents are rare, death from tetanus is by no means infrequent.

It is, therefore, with some confidence that I now venture to assert my belief that tetanus is a more frequent result of a lacerated wound, or of a compound fracture, or of any other integumental injury, when these accidents occur in young subjects, than when they take place in the adult; and that, therefore, so called conservative surgery in such cases must be more cautiously carried out in children than in adult life. As additional evidence of this opinion, it may be stated that, in Mr. Poland's able communication on Tetanus in the *Guy's Hospital Reports* for 1857, out of seventy-two cases which he brings forward, fourteen were in children under fifteen years of age; this being one-fifth of the whole number of cases.

The following two cases will perhaps tend to illustrate the truth of this record.

Case I. William E., aged 5 years, was admitted into Guy's Hospital, under my care, on September 8th, 1860, for a severe lacerated wound of the left elbow, exposing the joint, produced by the passage of a cart-wheel over the part. The vessels and nerves were, however, apparently uninjured. As the local injury was not believed to be beyond recovery, a splint was applied, and iced-water dressing employed. Everything went on well till the sixth day, when tetanus appeared, followed by death in ten hours.

Case II. Eliza W., aged 5, was admitted under my care at Guy's on April 8th, 1861, with an extensive lacerated wound of the left leg and fracture of the tibia and fibula in their upper third, from the passage of a cart-wheel over the part. On the ninth day, tetanus appeared; amputation was performed without benefit, death taking place in sixty hours.

It is perfectly unnecessary for me to enlarge upon the treatment of the injuries to the skull and its contents in early life; for the same principles which are applicable to the adult are applicable to the child; my object being to dwell upon the peculiarities or differences which are to be found in practice, and not upon the points in which they agree.

The surgical diseases of the cranium need not also occupy our attention for long, as they differ but little in their nature at the two ages. Inflammations, however, of the cranial bones in children are not common; and the following case will probably be read with interest.

Case. Martha J., aged 15 months, was brought to me at Guy's Hospital on March 7th, 1860. She had been ill two months, and, when seen, was suffering from extensive necrosis of the left half of the frontal bone, which had followed upon a wound received from a nail. There were no head-symptoms, nor any indications of a general mischief. The bone was readily removed by means of forceps; and the dura mater was exposed, covered with granulation. Everything went on well, and recovery rapidly took place.

In this case, the rapid progress of inflammatory disease of the bone was well illustrated; and its death and subsequent removal accomplished without giving rise to any cerebral symptoms. In this point of view alone the case is, therefore, worthy of record. In adult life, it is not a common thing to find necrosis of the whole thickness of a cranial bone; and when we do, it is not a common thing to find it progress without giving rise to cerebral symptoms. Syphilitic necrosis in adult life is the commonest form; and it is too true that, in these cases, epileptic seizures as a result are not infrequent; these seizures being palpably due to an extension of the inflammatory mischief to the dura mater and membranes beneath, and subsequent cerebral disease.

In childhood, these cases are unknown; the disease of the cranial bones being generally due to some accident similar to that noted in the previous case.

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

HULL GENERAL INFIRMARY.

REPORTS OF CASES.

[Reported with remarks by C. J. Evans, Esq., House-Surgeon.]

[*Concluded from page 397.*]

Case III. *Febricula; Peritonitis from Ulceration and Perforation of the Bowel when Convalescence was apparently almost established; Death; Autopsy.* Harold B., aged 22, a Danish sailor, tall and well built, was admitted under the care of Sir Henry Cooper on November 7th, 1862. He was suffering from slight feverishness, with furred tongue and hot skin, and a little cough. Sibilus and rhonchus were scantily heard in front of the chest. The only history obtained at the time, was simply that he had been ailing but a few days—a very important point, however, as will be seen hereafter. He was ordered a dose of simple saline mixture containing ipecacuanha wine every three hours, and two grains of calomel at bedtime. He was placed on milk diet.

Nov. 8th. He expectorated some white frothy mucus in moderate quantity. A blister was ordered to be applied to the front of the chest. He progressed favourably, the feverishness subsiding, and the abnormal chest-sounds being no longer heard.

Nov. 14th. He was ordered a grain of quinine three times a day, as he appeared to be convalescing very nicely.

June 15th. His bowels not having acted for two days, a dose of the ordinary senna-mixture of the house was given him. This operated in the evening once.

Nov. 16th. He complained now of a little pain in the right hypochondriac region, which was relieved by the application of a mustard plaister, followed by a linseed-meal poultice. He was also a little sick at times, throwing up small quantities of greenish fluid. This latter symptom abated under the use of small and frequently repeated doses of calomel and opium, and the common effervescing saline mixture. The quinine was at the same time omitted. In the evening, the sickness had quite subsided; but he still had some pain in the abdomen, which, however, was not so great as to attract particular attention; nor was the expression of his countenance indicative of any serious mischief within the abdomen or elsewhere. A large linseed-meal poultice was applied to the belly, and changed during the night.

He passed the night much in the same state; but the next morning (17th) a marked change for the worse was very evident. His skin was cold and clammy; face rather livid; pulse very small and feeble. The abdomen had a doughy feel, and was tender on pressure. His knees were drawn up in bed; and he kept constantly throwing up, without effort, small quantities of green fluid. Brandy was freely administered in small quantities at a time, but he was able to retain very little on his stomach.

He was seen by Sir H. Cooper at twelve o'clock. He had not been summoned to visit the man, as his condition had not created any alarm until this morning (17th), which was his usual day of attendance. Calomel and opium were ordered to be given every hour, and a large blister to be applied to the abdomen. He gradually sank during the day, and died at eleven o'clock at night.

Autopsy, next day. On opening the cavity of the abdomen, all the usual appearances of peritonitis presented themselves in an intense degree. A quantity of serum escaped; it was quite clear, and did not contain flakes of lymph. The whole of the small intestines were coated with firm lymph, their coils being adherent to each other; and, when the lymph was peeled off, their peritoneal coat presented a vivid redness. As the intestines lay *in situ*, the lower part of the ileum presented several dark patches, where the coats of the bowel seemed very thin. The ascending colon, the peritoneal surface of the liver, and the corresponding parts of the abdominal wall, were also coated with a thick and very firm layer of lymph. On withdrawing the bowel from the right lumbar region (in which act the coating of lymph was torn), fæcal matter poured forth, having evidently been confined to that part of the abdomen by the effused lymph. A small opening was now seen in the ileum near to the cæcum, through which the contents of the bowel were seen to escape. About three feet of the small intestine, together with the cæcum, were now removed *en masse;* and this portion of the bowel was laid open throughout. It was filled with a quantity of ochreous semifluid matter. When thoroughly and carefully washed, a dozen or more ulcerations of the mucous membrane were seen, all having their long axes across the axis of the intestine; those higher up in the bowel being smaller; those nearer the cæcum being larger, and coalescing with each other. In some of the ulcers, the mucous membrane merely was destroyed; in others, the muscular coat was exposed; and in one or two higher up in the gut, a healing process appeared to have commenced in them. They were more numerous as they approached the large intestine, and ceased abruptly at the ileo-cæcal valve. In one of the ulcers, about four inches from the termination of the ileum, a small perforation existed, not larger than the head of a good sized pin, perfectly round, and with smooth edges, looking as if punched out. Above the portion of bowel removed, the patches of glands appeared healthy; and the mucous membrane of the large intestine was perfectly so; but that of the ileum, as it approached the cæcum, became of an increasingly dark green, almost livid colour. The kidneys were healthy. No other organs were examined.

After the man's death, it was ascertained from the captain of the ship that he had only complained of feeling ill *four days* before admission, and had then felt a little pain in his body.

Remarks. There are several points of interest in this case. First, the almost sudden accession of alarming symptoms at a time when convalescence was apparently almost established. These symptoms were diagnosed as arising from perforation of the intestine and peritonitis, which the autopsy proved to be correct; but the previous symptoms had been so slight, and so little indicative of serious mischief within the abdomen, that one's attention had not been particularly attracted to that region until the morning of the 16th. The slight history obtained after the man's death also went to prove the mildness of the symptoms prior to his admission into the hospital. They in themselves gave no clue whatever to the cause of the perforation, which was only made clear at the *post mortem* examination.

Secondly, the mildness of the earlier symptoms compared with the extent of disease found after death is worthy of remark. The only local symptom complained of was a slight pain in the abdomen, and yet the intestine was found extensively and deeply ulcerated; and we cannot but suppose that this condition of things must have existed some time, as some of the ulcers had cicatrised. Pain would probably, however, be the symptom least to be depended on, as this would not be felt to any great extent until the disease had reached the peritoneal coat; still there was an absence of the other usual symptoms, to be presently adverted to.

It would thus appear that a person may be the subject of extensive ulceration of the small intestines without the presence of any symptoms to attract the attention of his medical attendant; or else they may be so slight as to be totally disproportionate to the extent and severity of the disease actually existing.

Through the courtesy of Mr. Craven, I once had the opportunity of examining the body of a stout man, aged 57, who, while in the act of sexual intercourse, was seized with sudden and violent pain in the abdomen. He was seen by his surgeon two hours afterwards, and he died, with all the symptoms of perforation of the bowel, at the end of twenty-eight hours from the attack. An opening was found about the middle of the ileum nearly a quarter of an inch in diameter, and almost circular in shape. From the appearances around it, it had evidently been the seat of an ulcer, which had perhaps healed, or the intestine had become agglutinated to another part at that spot, the adhesion being broken down at the time of the attack, and permitting effusion of the contents of the bowel. There were, however, no appearances of disease at any other part of the intestinal canal. This man had felt himself perfectly well before, and was quite unconscious of the disease of his intestine, which had thus been indirectly the cause of his death.

Thirdly; the *post mortem* appearances were, *par excellence*, those of enteric fever; but the symptoms during life did not correspond with them. There were no rose spots to be seen; no diarrhœa, in fact the bowels were rather constipated than otherwise; no gurgling in the iliac fossa. The abdomen was carefully examined by the eye and hand on the 16th, and had either the spots or gurgling existed, they must have been noticed.

It may be useful to compare this case with one published in the British Medical Journal for September 17th, 1859 (case of Julia Watkinson, also under the care of Sir H. Cooper), in which the reverse condition of things obtained; namely, the presence of the usual symptoms of enteric fever with the absence of the characteristic morbid appearances. It would thus appear, presuming the two cases to have been examples of enteric fever—indicated in the one case by the characteristic symptoms, and in the other by the usual morbid appearances—that we must not always expect to find both the symptoms and pathological appearances present in the same case; nor, when they are so, to be always proportionate the one to the other; for we have seen that the most serious organic lesions may exist, and yet the constitutional disturbance be so slight that the disease may be entirely overlooked. Such cases as these must surely tend in some degree to shake the faith of the medical observer in the so-called pathognomonic symptoms of enteric fever.

Another point suggests itself, though not arising out of these particular cases, but from the consideration of the subject in general. Peyer's patches of glands are considered to be simply aggregations of the solitary glands which are found in the large as well as the small intestine. If such be really the case, and if the essential nature of enteric fever exist in a specific disease of the intestinal (Peyer's) glands, how is it that the aggregated glands (Peyer's patches) are alone the seat of ulceration, and not the solitary glands as well, as we should expect would be the case if the two were alike in structure and function? How is it that we do not find numerously scattered small spots of ulceration both in the large and small intestines (especially in the cæcum and appendix vermiformis, in which parts the solitary glands are said to be the most numerous), instead of isolated large ulcers, increasing in size and number as they approach the ileo-cæcal valve, beyond which boundary none are ever seen? This latter fact—namely, the ulcers invariably extending as far as, but no further than, the ileo-cæcal valve, would in itself seem to indicate that the specific ulceration has its real seat in some structure which exists in the small but not in the large intestine. These cases were made the subject of clinical lectures at the time of their occurrence.

Original Communications.

DIRECT COMMUNICATION BETWEEN THE BLADDER AND RECTUM; PASSAGE OF FÆCES THROUGH THE BLADDER AND URETHRA FOR FOURTEEN WEEKS.

By William Price, M.D., Margate.

The subjoined case may be thought worthy of publication, as so few well authenticated cases are on record, of a communication existing between the bladder and rectum in the male adult without proving speedily destructive to life.

A gentleman, 54 years of age, of strongly marked strumous habit, and somewhat hypochondriacal, had for a series of years subjected himself to using the strongest purgatives, and employed large injections of water or gruel. His diet consisted solely of milk, eggs, beef-tea, and broths, to the exclusion of solids. The fæces seldom possessed much consistency. He suffered from bad prolapsus ani, aggravated with internal and external hæmorrhoids.

He first complained of pains in the left iliac fossa, with slight peritoneal tenderness over the whole abdomen. After the lapse of two or three weeks, the exacerbations of pain became much aggravated towards night; and the patient lost flesh perceptibly. I was called to him during the night, and found him in intense agony, unable to pass urine. A large suppository and the warm bath afforded, after a time, relief. He passed, in my presence, through the urethra, about three ounces of fluid, of a smell and character unmistakably fæcal. Two days afterwards, free purulent discharge was set up from the inflamed bladder; the irritability of which viscus was well nigh unbearable. The quantity of mixed fæcal and purulent discharge passed with the urine in the twenty-four hours varied from ten to fourteen ounces; it was voided every two or three hours; and the quantity passed each time seldom exceeded an ounce. In the liquid were frequently to be found grape-stones, orange-pulp, and other extraneous bodies.

Nothing passed *per anum* till eleven days from the first date of the attack, and the dejections occurred subsequently in small quantity at intervals varying from nine to fifteen days. By degrees the purulent discharge diminished, and the constitutional irritation subsided greatly. The patient continued from this date till within a few days of his decease, thirteen weeks later, comparatively free from pain, save at the time when he was emptying the bladder, immediately before and after the passage of the contents.

A *post mortem* examination revealed peritoneal inflammation of the lower half of the large intestine, with some purulent effusion into the cavity of the abdomen. There was rigid adhesion between the rectum and bladder throughout. Scirrhous deposit existed in the coats of the rectum, with stricture about the middle third. Immediately above the seat of stricture was an ulcerated opening of the size of a horse-bean, communicating with the bladder; the coats of which were much attenuated and chronically inflamed.

As some of the symptoms above detailed rarely occur in practice, I have thought the case sufficiently interesting to bring under notice.

FOREIGN BODY IN THE BRONCHIAL TUBE.

By Frederick Page, Esq., Perth, Western Australia.

A. F., a child, aged 3 years, was seized on November 12th, 1861, with violent and long continued cough, threatening death by suffocation. These symptoms were supposed to be caused by a piece of slate-pencil having slipped from the child's mouth through the rima of the glottis into the trachea. Next day there was active pneumonia on both sides of the chest, from which the little patient recovered after an illness of three weeks. From this time up to December 6th, 1862, the child's health was bad, owing to repeated attacks of bronchitis, diarrhœa, and irritability of stomach. On the evening of December 6th, after a violent fit of coughing, the child became black in the face, was unable to breathe, and died immediately.

A *post mortem* examination showed that both lungs were diseased. The left had formed adhesions all round the chest, and was carnified. In the left bronchial tube a piece of slate-pencil, an inch in length, was found: it had no doubt caused death, by being suddenly coughed into the rima of the glottis, whence it had re-fallen into its old position as soon as the muscular spasm went off at the time, or immediately after death.

This case is interesting on account of the size of the foreign body, the age of the child, and from the circumstance that it was found in the left bronchus instead of the right, as is most commonly the case.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

THE PRESENT TREATMENT OF DISEASE.

By Wm. Newman, M.D.Lond., St. Martin's, Stamford.

[*Read February 13th*, 1863.]

Medicine is in its very essence a science of progress; discoveries in closely allied branches of scientific inquiry have had more or less marked influence on the Medical Art; and hence have resulted changes, both in theory and practice, too numerous to classify or even refer to.

The *ars mirabilis* has been reproached with this attribute as though it were a material infirmity, and in most respects with but insufficient reason. The very conditions of an exact science are wanting; the postulates and definitions are not clearly laid down; and, though the field of inquiry be boundless, and its interest inexhaustible, the landmarks even are undetermined. It is true, that the art and science of medicine is dependent on facts; but these facts are not only few in number, and widely scattered over an extensive area of observation, but they present also only very slender links of connexion between themselves.

The observer is naturally impatient of results, draws his deductions from materials imperfectly arranged, vitiated, it may even be, by faulty lines of research, and thus forms structures of theory, brilliant in seeming, lasting for some short time, yet lacking a definite or reliable basis.

Some of the most interesting volumes that have of late issued from the medical press, direct our attention to the differences of medical treatment, past and present. The limits of this paper will allow but a hasty glance at some items of comparison between the two great schools; yet I would venture to hope that so short a notice may not be without its advantages.

To take one class of diseases to exemplify the purport of this paper—*Acute or Inflammatory Diseases*. By the older physicians, inflammation was looked upon as a something to be fought with and overcome—as a morbid something seizing on a portion of the human frame, and only to be combated with success by the employment of active treatment. The antiphlogistic plan (borrowing its title from a chemical doctrine long since passed away) was put in practice in all its vigour.

The abstraction of blood was the first and principal remedy: *general*, by opening artery or vein; *local*, by use of scarificator and cupping-glass, or by application of leeches. This procedure was resorted to in every instance where pain, fever, and impeded function coexisted, in the first place with the avowed intention of cutting short the disease, or at least of moderating the violence of its attack by diminishing both the force and the frequency of the circulation. Failing this result, the same remedy was employed in milder form to remove the consequences of the inflammatory invasion, and thus to aid in restoring the affected part to its normal condition.

The next point was the *Adoption of Low Diet*. Watery or farinaceous compounds were alone allowed; animal food in any form and alcoholic stimulants being absolutely forbidden.

In the *Administration of Depressing Remedies*, mercurials should certainly take the first place, as most varied in form, most active in character, and decisive in effect. They have been usually administered in small and frequently repeated doses, combined with opium to ensure retention in the system, and continued either until the symptoms were materially relieved, or until the constitutional effects of the mineral were manifested by salivation more or less distinct.

Antimonials have been deemed of especial value in thoracic inflammations, and employed first by Rasori, an Italian physician, in large and repeated doses, in the treatment of pneumonia. We are told that, in this particular affection, there exists on the part of the system an extreme tolerance of this form of remedial agent; and that its usual consequences, vomiting and purging, do not occur until the morbid action is yielding.

The list is by no means ended. The mineral and vegetable kingdoms were each invoked: digitalis; colchicum; neutral salts; purgatives more or less active; medicines acting specially on the skin and kidneys—all had their place as aids in the active treatment of inflammatory disease.

By the majority, however, of those who follow in the steps of the authorities of the earlier part of this century, the antiphlogistic treatment, though still practised in acute affections, is not resorted to in the same unsparing manner. Direct depletion is no longer the constant rule; yet the principles of their belief are the same, and the weapons on which they mostly rely are of depressing character.

The later men, and preeminent should be named Dr. Hughes Bennett of Edinburgh, have taken a far different course in this class of affections. The view they advocate is, that inflammation owes its origin to the presence of some agent in the system, in itself depressing; and that the attack, *per se*, is proof of deterioration of vital power, and hence to be best treated, not by means that still further reduce that power, but by careful avoidance of hurtful measures, and by the use of means which will uphold the system and favour the removal of the poison by the natural emunctories—in one word, by a supporting and eliminating treatment.

The mode of treatment suggested in conformity with these views is, briefly, the observance of extreme quietude; the administration, neither sparing nor unfrequent, of easily assimilable nutriment, such as beef tea, etc.; with the administration of such medicines as shall favour the excretion from the system of the results of morbid action.

The members of a more advanced school of modern physicians, among whom should be specially named the

late Dr. Todd of King's College, do not only adopt the plan just named as to administration of support even in the height of febrile disorders, but also combine with this the use of alcoholic stimulants, not in large, but in frequently repeated doses; not as stimulants alone, but as food.

The results, as afforded by published statistics, of the different modes of treatment, may be of service. I extract them from Dr. Bennett's *Clinical Medicine*. He gives the following.

Treatment of Pneumonia.

	MORTALITY.
In Edinburgh Infirmary, on old plan of treatment	1 in 3 cases.
Tartar emetic treatment of Rasori and Dietl	1 in 5 „
Ditto, ditto, of Laennec	1 in 10 „
Ditto, ditto, from records of army and navy (these imperfect) . . .	1 in 13 „
Later plan of treatment, under care of Dr. Bennett	1 in 26 „

It is argued by some of our profession (and eminent names have held this side of the controversy), that the present avoidance of depletion is due to "change in type"; that the inflammatory affections now met with in daily practice are asthenic in character, whereas twenty years ago the directly opposite condition marked the whole range of acute diseases.

To this statement the reply is made, on the other side, that in the earlier part of the present century the diagnosis of internal disease was imperfect. Auscultation being unknown, the exact and specific disease was not recognised; so that chest-ailments acute in character were grouped together *en masse* as "pneumonic", though their exact pathology was frequently of other stamp. Again, it is said that, as fevers change their type (and this fact is now well-nigh undisputed), so they change consentaneously their *post mortem* appearances; but it has yet to be shown that the *post mortem* conditions or the sensible progress of a pneumonia differ in any way from the disease as observed in the days of Dr. Cullen. It may not be unfair to call in the analogy of veterinary practice. The employment of venesection is now much more rare than formerly; yet one can hardly say that pneumonia has in horses altered its character, or that our studs have less stamina and endurance than their predecessors.

The abandonment of depletion by those physicians who yet follow the doctrines of the older school, believing in the propriety of making full use of depressing remedies in inflammatary attacks, should not be omitted in the consideration of the question; for, if this heroic treatment be even in such hands deemed unnecessary, it is at least a presumption that the concomitants (aplastic remedies) may also be dispensed with. Be it remarked, however, *en passant*, that though abstraction of the life-current be abandoned as a means or a necessary element in the cure of a given disease, yet it is by no means to be ignored. As a means of conveying relief to a patient whose lungs and heart are gorged with blood, by diminishing the quantity of circulating fluid, it must still hold ground.

I admitted in the spring of 1855, into the physicians' wards in the Salop Infirmary, a man aged 30. He was suffering from most intense dyspnœa; the face was almost livid; the heart was acting violently, and pulse hard and rapid; the skin burning. Not a sound could be heard in the lower half of either lung: there was a vesicular murmur above. The history was that of exposure to extreme cold, with resulting shivering and fever two days before admission, and extreme pain in lumbar region. The immediate abstraction of thirty ounces of blood relieved him immensely: the breathing became much less difficult; the lividity disappeared; and the condition of the man at once improved. It then became evident that he had double pneumonia, with partial consolidation of each base; and a tedious convalescence ensued.

If, then, there be reason to question the advantage of venesection as a remedy for acute diseases, it may be asked how far there is absolute necessity for the introduction of depressing remedies into the system under the same circumstances.

The various preparations of mercury are employed, in the first place, to reduce the violence of the inflammatory attack; in the further stage, to promote the absorption of the effused products. That this drug is possessed of great power, is granted alike by friend and foe. Is, however, its exhibition imperative? or is it not more logical to suppose that the removal of an effusion will better be attained by means that assist, rather than such as diminish, constitutional power?

That the saturation of the system with mercury is by no means a barrier to the onset of inflammatory mischief, we have only too good reason to know. Witness the cases of pericardial and endocardial inflammations coming on in the course of acute rheumatism already attacked by mercury. This being the case, then, the antagonism between the disease and the remedy, once said to exist, must be far from constant in its occurrence.

The employment of this potent class of drugs has been shown of late years to be unnecessary in several of those affections once supposed specially fitted for such treatment.

Much has been said of *iritis*, as exhibiting the beneficial results of mercurial action in a structure where change of colour and deposition of lymph coexist as distinct proofs of inflammatory process. Dr. Williams, of Boston, U. S., has published sixty cases of cure of this disease by use of other remedies. There are several cases scattered through the journals of successful result where morphia was given internally, and belladonna applied to the brow. Two cases of this kind (neither of them very slight in severity) have occurred lately under my own care.

In inflammations of serous membranes, mercurials are supposed invaluable. It would seem, however, that the disease is more amenable to opium exhibited in fair doses and frequently repeated. The same favourable ending has been found both in idiopathic and traumatic cases.

Granted even for the moment the potency of this class of remedies over the affections in question, it is manifest that we have not simply the present state of the patient during the attack, but his ultimate condition also to consider. The pæan of the French physician, "Il est mort guéri," however flattering to his self-love, could not be spoken of as satisfactory to the one more immediately interested.

It is, unfortunately, no uncommon occurrence to find that permanent disease of the lung, usually in form of tubercular deposit more or less extensive, results on acute affection of the same organ. During the last three or four years, I have seen several instances of this kind. In the majority there had been heroic treatment of the early disease; and I question if it be too much to attribute the rapid supervention of phthisis to the resulting depression of vital power.

I am disposed to attach weight to the statement of those who, either in their own persons or as attendants on inflammatory cases, have seen the opposite plans of treatment carried out. The almost uniform conclusion is, that the patients are not so much weakened by the affection on the more modern plan; that the duration of the special attack is shorter; and that there is not so much after injury to the patient's constitution. In the instance of a relative whom I have watched through more than one attack of pneumonia, the expectant medical course, with food and wine from the first

onset, has been proved far more satisfactory than the employment of depressing agents.

In what class are the subjects of acute inflammatory disease most frequently found? The lower classes furnish the vast majority of cases. They occur in those persons who are permanently below par from constitutional defect, from continued privation or misery; in those, too, who owe their defective vital energies only to some temporary cause, such as excessive labour, exposure to cold, etc.

Who are most tolerant of malarious or epidemic influences but those who have advantages of pure air, good food, and external comforts? The first to succumb to disease in a family, is almost invariably the one whose general power is defective, or that one on whose time and care the greatest demands have been made.

In other words, the greater the *vis vitæ*, the less the liability to disease, general or local. Why should physicians act in opposition to this rule when disease has fairly declared itself? There is increased waste of the tissues when disease is present (witness the emaciation from any acute affection). Can it be well to add to the impending weakness by use of lowering remedies, or to call into excessive action the natural secretions of the system?

Surely there is a fallacy lurking somewhere in the teaching that tells us, in inflammatory disease, at one period to diminish strength, while at another time, with a lapse, it may be, but of a few hours, we are counselled to uphold vital power. With one hand we destroy, with the other build up. In the earlier stages we debar the patient from more than a modicum of that support which, in later periods, we are directed to afford with no sparing hand.

The experience of any one of our body is of value as regards the treatment of isolated cases of disease, yet hardly available in the exact determination of questions such as the one before us. I have here notes of more than a dozen cases of acute uncomplicated pneumonia, that have come under my notice within the last four years. Not one of these has ended fatally: yet, on a review of the whole, I am well satisfied that the expectant and supporting treatment, followed thoroughly of late, has led to a more rapid and satisfactory convalescence than the prior employment of antiphlogistic treatment, as directed in standard works.

Dr. Todd's views as to the nutritive properties of alcohol do not agree with the accepted doctrine that the non-nitrogenous compounds are available, not as tissue-forming, but as heat-producing elements. Some recent inquiries have, however, thrown doubt on the positive truth of the chemical reasoning of our physiological works. Be this as it may, there can be little question as to the advantage of employing alcohol in certain forms of acute disease. Not that its administration is a *sine quâ non*, or that recovery may not, in the great majority of instances, occur without its aid; but it is an adjunct of no ordinary value in the progress of these affections, where waste of tissue is excessive, and where there is much restlessness and delirium.

To leave, however, the *quæstio vexata* of the treatment of acute disease, our attention may be turned to some of those more chronic maladies which come under the daily notice of the physician, as illustrations of modern medicine.

In cases of phthisis, the value of a supporting and stimulant treatment has for some years past been fairly demonstrated. Cases of undoubted pulmonary consumption recover, and permanently too; though time was when the mere statement of a cure of phthisis was enough to stamp the asserter as rash, and his detail as fanciful, while in the minds of many of the profession it was strongly questioned whether such cases were deserving of the name of phthisis at all. To keep up the reputation of a dogma current in the schools, the diagnosis was declared to be incorrect. Need this, however, be wondered at when, though the disease was duly recognised, and its seat and progress fairly known, the whole course of the affection was by the cavillers attributed to inflammatory action; and that *amari aliquid*, dreamed of in mere muscular pain of the side, and suspected in every transient flush of the pallid face, was briskly followed by the routine depressing treatment for a supposed, but non-existent, cause.

A more wise and extended pathology has shewn that the system, as a whole, is at fault; that the vital energies are at a low ebb; and that the ill-organised exudation deposited in the air-cells owes its origin to a "dyscrasia" hereditary or acquired. Hence our remedies are to be addressed to a general, not a local failure; and in proportion to the thorough carrying out of this principle will be our success in this special form of tubercular cachexia. Cases such as the following will have occurred to many of us; and I am yet tempted to quote it, as a fair illustration of these few observations.

C. D., a woman aged 35, a labourer's wife, came under my care in 1856, with all the symptoms of confirmed phthisis. She had been ill for four years, more or less, with hæmoptysis, cough, etc. There were all the physical signs of a large cavity in the apex of the right lung. She had many advantages over the majority of her class. She took tonics and oil for a considerable time; and, at the end of 1857, she believed herself nearly well. Her strength had returned; the cough was slight and infrequent. She remained in fair condition for eighteen months. There was then, after much mental and physical depression, a return of all the symptoms: repeated attacks of hæmoptysis, with moist sounds on the left side of the chest; harsh blowing breathing over the right apex, but no moist sounds.

She died suddenly at the end of 1859, from profuse hæmoptysis, due, as ascertained by *post mortem* examination, to implication and giving way of a bronchial artery almost close to the root of the left lung. The right lung presented in the upper lobe a thoroughly healed cavity, lined with tough white fibrous membrane; no trace of tubercle remaining. The left lung shewed the process of cicatrisation commencing in one small cavity near the apex, while softening and disintegration of tubercular deposit were in progress beneath and around it. But for the accidental implication of a blood-vessel, this patient would in all probability have recovered.

Instances of long standing disease of other kinds are equally available as proofs of the advantage of a supporting treatment; the principle of interference by heroic or powerful medicines having fallen into disuse. It may be questioned if any class of maladies exhibits this favourable change more than the varied forms of cardiac disease. It was once sought to eradicate the affection existing by depletion, digitalis, etc.; while now administration of support, with medicine for relief of occasional symptoms, contribute materially, not only to the present comfort, but also to the increased length of life of the sufferer. There seems little doubt that the supervention of anasarca in valvular heart-disease is, at least in the majority of cases, coincident with and dependent on some change for the worse in the character of the circulating fluid; so that its watery part transudes with readiness through the coats of the blood-vessels. Defer this deterioration in quality of the blood by employment of agents that will improve its composition, and the result will be an increased probability of life, though the morbid condition of the central organ remain unaltered.

Advances in pathology have taught the existence of degeneration of the cardiac muscular fibres, in cases where the symptoms of disturbed function were once deemed to require even the abstraction of blood to control the existing excitement. Tonics and iron, in particular, are now employed to remedy the mischief, that the opposite treatment can only have tended to per-

petuate. Valsalva's treatment of internal aneurisms by repeated blood-lettings has well nigh lost ground in the opinion of the profession; while rest, with ample nourishment, and absence of depressing influences, have tended much more certainly to the deposition of layers of fibrine within the sac, and hence to the cure of the arterial dilatation.

The diseases of the nervous centres may supply further illustrations of advance in medical practice. What the uniform testimony of the physicians in charge of our lunatic asylums, but that central debility is the cause of insanity; that this weakness may be *local*, confined to brain alone; or *general*, the cerebrum only sharing in the enfeebled condition of the whole economy. The insane are most numerous in the poorer classes; in almost direct proportion to the hardships they encounter in different counties are the numbers admitted into the central asylums.

Such causes were, if recognised, hardly acted on by our predecessors, and their views and practice set in directly the opposite direction; numberless the cases where low diet and exhausting medicaments have converted hopeful cases into thoroughly hopeless ones. Dr. Conolly has given the results of his great experience strongly on this side of the question. Maniacal fury once controlled by straitwaistcoats and tartar emetic, yields with far greater certainty to the liberal supply of aliment, nutritive and stimulating; the access of sleep often closing the paroxysm.

Delirium tremens treated as an inflammatory affection is almost certainly fatal. When opium is administered in such doses as will procure sleep, the result in far the majority of instances is favourable. Still, we have of late reached a further point, and it would appear that the natural history of the disease implies the supervention of sleep sooner or later, even without the exhibition of any narcotics whatever. Dr. Laycock, of Edinburgh, has reported cases treated successfully by the administration of food alone. The last remedy proposed has been the tincture of digitalis in large doses. In all probability our impressions about this drug have as yet been erroneous. I have personally met with two or three cases where there was a strange tolerance of its preparations in very large doses; and, only the other day, I heard incidentally of one of our profession in the west of England, who constantly treats nervous headache in his own person by half-ounce doses of the tincture; this, too, with uniform advantage.

It may be doubted if there be any form of bodily disorder more painful to the bystanders, or annoying to the practitioner, than *chorea*. In years past, the continued exhibition of purgatives was recommended; yet later teaching assures us of the far greater value of large doses of steel with nourishment.

Cases of *epilepsy* have gained much by the adoption of liberal treatment. The fits are less frequent; less severe when they do occur, and the excessive prostration, due probably more to the physician than to the disease, is much more rarely met with.

However slightingly some of the statements in this paper may have referred to the compounds of the materia medica, there can be no question of their potency, or of their advantage, in certain morbid conditions of the system. It may not be out of place at the close of these observations, to refer to some of the advances in the use of remedial agents.

The science of therapeutics has certainly failed to keep pace with many of the kindred branches of medical knowledge; partly from the intricacy of the subject concerned, more even from the varying conditions of body under which the necessary inquiries must be conducted. Chemical inquiry has done much in this direction. To it we owe:—

The discovery of proximate principles in animal and vegetable kingdoms.

The proof of existence of community of action in compounds, which must be ranged under the same chemical or natural divisions.

The proof of the elimination of remedies by natural emunctories; our more accurate acquaintance with constituents of several excretions.

The introduction of new forms of remedies: salts of metals, alkaloids; new solvents, as glycerine.

Remedies, as now administered, are less cumbrous in form, less unpleasant in character. The laboured decoctions, etc., have given place to far more simple, yet more thoroughly potent forms.

Contrast also the present and growing simplicity of prescriptions with the farrago of compounds that were formerly combined—as if the attendant sought a remedy for every symptom—heaped them together in noble disregard of the chemical combinations thereby induced, and of the probable result on the system of the patient.

The forms of introduction of compounds into the system have multiplied.

Narcotics are employed not only in form of agents introduced into the stomach and thence absorbed; they are with even greater advantage, in many cases, submitted as vapours to the pulmonary capillaries, to be by them taken up and distributed throughout the economy. We owe to Dr. Alexander Wood the improvement of introducing a sedative directly to the affected part by injection into the subcutaneous tissue, while opiates are sometimes applied to the surface of the cutis with advantage.

There are, then, it would seem, the most opposite opinions entertained, even now, on the subject of diseases and their treatment.

In one view, diseases are distinct entities; each having its own special antidotes, somewhere or other to be found; the very phraseology implies this antagonism, and the terms of opposition are used, not only as convenient figures, but as distinct statements of absolute facts.

The opposite, and possibly the more logical and philosophical view, refers the existence of disease, its onset and extent, to the want of due vital power; and hence declares that the remedy is to be sought for by increasing general tone and strength; by using drugs and medical appliances as "aids," not as "remedies *per se*"; as adjuvants of considerable value, but not as the special and material agents.

Indefinite, however, as may be the data on which our professional knowledge is based, uncertain though our grasp of the clue that may guide us through the maze of morbid manifestation, still we may fairly claim for our profession "that its object is truth—truth for the sake of doing good. The enemies we combat are error and disease. No compromise is allowed with evil; and the good we do to one fellow-creature involves no injustice or injury to another." (Dr. Barnes' Introductory Lecture, Oct. 1st, 1860.—*Lancet.*)

British Museum. In the annual report, Professor Owen repeats his complaint of the want of space for the departments of natural history. Choice rarities continue to be added to the vaults and recesses assigned for storage, each successive year increasing the difficulty of keeping the specimens in a good state and concentrating the time of the staff in mere works of preparation. Rare and acceptable additions have accrued to all the departments of natural history during the year, many of which are specified in detail by the learned professor. The whole number of additional specimens is 28,273.

The Paris Cemeteries. A sanitary commission is now sitting to consider how best to remove all the cemeteries to the greatest possible distance from Paris, and to determine on the most eligible situations for them. It is a question of the greatest importance when capitals are growing as rapidly as Paris.

Progress of Medical Science.

Trichina Spiralis. In a memoir read before the Société de Biologie in Paris, M. Davaine has given a very complete account of our present state of knowledge regarding the *trichina spiralis* of muscles.

The trichina was first described in 1835, when it was observed in the muscles by Owen, who gave it a name expressive of its small size and of the manner in which it is arranged in its containing cyst. In the course of time, its existence was confirmed by observations made in Scotland, Germany, Denmark, and America. In England and Germany especially, this entozoon was carefully studied by several distinguished *savants;* but its mode of propagation was not discovered.

In 1859, Virchow, having caused a dog to eat some portions of human muscle in which trichinæ existed, found in the animal's small intestine, three days afterwards, some worms closely resembling trichinæ, but larger, and containing distinct ova. M. Virchow believed that these worms were adult trichinæ; and concluded that the trichina of muscles was capable of reaching its full development in the intestines of carnivora.

Some months afterwards, M. Leuckart believed that he had ascertained that the trichina is the larva of the *tricocephalus dispar*. In a note communicated to the Academy of Sciences, M. Van Beneden observed that "M. Leuckart had assured himself of the fact by direct experiment. He fed a young pig with muscle containing encysted trichinæ; and, at the end of some weeks, found a host of *tricocephali*, provided with sexual organs, in the animal's intestines." It is now known, not only that the trichina is not a tricocephalus, but that it belongs to very different family.

In the beginning of 1860, a curious case, observed by M. Zenker of Dresden, led to the correct method of investigating the history of the trichina. A young woman, aged 20, was admitted into hospital, having been ill about three weeks, and confined to bed twelve days. Her symptoms commenced with a feeling of fatigue, heat, thirst, loss of appetite, and constipation; these symptoms continued, and to them were added fever, tympanitis, and abdominal pain; at last, symptoms resembling those of typhoid fever manifested themselves. She had, however, violent and constant pains in the limbs, accompanied by very frequent contractions of the elbow and knee-joints, during which all attempts at extension were extremely painful. At a later period, she had œdema of the limbs; and finally died, about a fortnight after her admission, with symptoms of typhoid pneumonia. M. Zenker, who was engaged at the time in studying the microscopic alterations of the muscular tissue in regard to typhoid fever, found a large number of trichinæ lying free among the fibres, which had undergone various kinds of change. In the abdominal organs, M. Zenker found none of the ordinary lesions of typhoid fever; but the intestinal mucus contained a great number of worms resembling trichinæ, and provided with completely developed sexual organs. He ultimately ascertained that the young woman had, with several other persons who had also experienced ill effects, eaten of the raw flesh of a pig killed some days before she was taken ill. Some salted meat taken from this pig was examined, and was found to be infected with trichinæ identical with those met with in human muscle.

Some portions of the muscles of the patient were sent to Messrs. Virchow and Leuckart for further investigation.

From some experiments on rabbits, M. Virchow derived the following results. A few hours after the ingestion of the diseased muscle, trichinæ are found free in the stomach, whence they pass into the duodenum and thence into the small intestine. From the third or fourth day, ova and spermatic cells are found. The eggs are fecundated, and young entozoa are developed in the bodies of the female trichinæ. They are expelled through the vaginal orifice, situated in the anterior half of the animal's body; and have been found (M. Virchow continues) in the form of *filariæ*, in the mesenteric glands, and in large numbers in the serous cavities, especially the peritoneum and pericardium. Continuing their migrations, they penetrate the primary muscular fasciculi; where, three weeks after the feeding of the animal, they are found in considerable number, and advanced in development. The previous non-existence of trichinæ in the rabbits was ascertained by carefully examining portions of muscle removed from their backs. M. Leuckart also made a similar series of researches, with results confirmatory of those arrived at by M. Virchow.

Before this time, however, other experiments had been made, but without leading to any definite results. In 1850, M. Herbst fed three puppies with the flesh of a badger containing trichinæ. When they were killed, some months afterwards, trichinæ were found in their muscles. M. Herbst, however, not having observed that the trichinæ attained their full development in the intestine, supposed that the ova (from what source?) were carried into the muscles by the blood-vessels.

Being desirous of repeating the experiments with trichinæ, M. Davaine obtained from M. Kühne of Berlin some human muscle containing these parasites; and therewith he fed several rabbits, of which the flesh served for further experiment. His attention was directed to certain points which had apparently not been specially noticed by previous investigators.

In all the animals examined by other observers, or by M. Davaine himself, the adult trichina inhabits the small intestine exclusively, living in the mucus which invests its inner coat. The worm is viviparous; and the embryo, from the time of its expulsion, is in contact with the mucous membrane of the intestine, into which it at once penetrates; so that, although the number of these embryos is considerable, they are very rarely found in the mucus which lodges the parent worms. Having penetrated the intestinal walls, the embryo passes to all regions of the body. This migration it is enabled to accomplish, not by a perforating stilet nor by hooklets, but by its extreme minuteness. The passage takes place through the cellular tissue, and not through the vessels. It is probable that the migration of the trichinæ is arrested as soon as they reach muscular tissue; for they always exist in greater number in the muscles of the trunk than in those of the limbs.

The trichinæ penetrate to a greater or less depth in the interior of the muscular fibres. The sarcolemma behind them appears as a hollow fibre; and is bulged out at the point where the parasite is lodged. The wall of the cavity containing the trichina is organised in a peculiar manner, and forms a cyst which, according to Virchow, becomes apparent about the fifth week. At this time it has an external wall evidently formed by the sarcolemma, and an internal wall lined with cells varying from about the 1-2500th to the 1-1250th of an inch in diameter, with an ill-defined outline, but with very distinct nucleus and nucleolus.

M. Davaine has seen these cells especially well in the rat and in the guinea-pig. In the latter animal he has found, in the course of the fibres along which the trichinæ had passed, spherical enlargements smaller than the cysts, but containing no entozoa; they were formed by an accumulation of cells altogether like those existing in the cysts. In the first weeks of formation, the external wall of the cyst is distinct from the inner wall. It—the external wall—is prolonged at one or both ends

into a fibre which may be sometimes followed for some distance; the internal wall is closed, and has the appearance of an ovoid shell. In course of time, the external coat becomes less distinct, while the internal grows thicker; finally, after some months, both ends of the sac are enclosed in a mass of fatty vesicles.

The walls of encysted tumours are generally moulded on their contents; but here the cyst is much larger than the parasite which it contains. This peculiarity M. Davaine believes to be due to the circumstance that the trichina frequently moves (which may be ascertained by examining muscles while yet warm), and hence keeps free a large space round itself.

Each cyst generally contains but one trichina. When, however, the invasion of the parasite is very considerable, it is not rare to meet with more than one. M. Davaine has found in a rat several cysts containing each two trichinæ; and in one cyst, which was about twice as long as any of the others, he found three.

The trichina is not the only nematoid worm which passes through different stages of development in different media. In reptiles, fishes, and in some invertebrata, nematoid worms, without sexual organs, are sometimes found imbedded in the tissues, evidently resting there until they can find a locality suitable for their further development.

Besides a more perfect organisation, the embryo of the trichina acquires new physiological properties in the muscles. It has long been remarked, especially by Owen and Virchow, that the worms contained in the cysts possess great tenacity of life; and M. Davaine has found them alive at the end of a month, after having been kept in pure water. Cold arrests their movements without killing them; a temperature of about 95° or 100° Fahr. is sufficient to revive them. When, however, the larva has acquired its adult state in the intestine, and when its sexual organs have become apparent, it loses this tenacity of life. M. Davaine has found that an adult trichina scarcely lives an hour when plunged in cold water; that it survives at most six hours after the death of the animal containing it; and that, when plunged into a solution of one part of potash in one hundred of water, it dies in a few minutes, although the larva from muscles has been found alive in a similar solution at the end of three hours, and might have lived there for even a longer period. The embryo, before acquiring the larval state, perishes readily under the same circumstances as the adult worm. The greater tenacity of life in the larva is, M. Davaine observes, obviously necessary from the fact that it may not be able to find the conditions requisite for its further development until after the death, and even the destruction, of the animal in which it is lodged.

The trichina, in its *adult* state, is a cylindrical worm, scarcely visible to the naked eye. The body, from about the middle, gradually diminishes anteriorly. The anterior extremity is very fine, and presents a round, unarmed, indistinct mouth; the posterior extremity is truncated, obtuse, and rounded, and presents a terminal anus. The integument and subjacent muscular layer offer no peculiarities. The intestine is straight, and is divided into three parts; the anterior, membranous, fine, and enlarged from before backwards (?), constitutes the œsophagus and stomach. A second portion, with thick walls formed of very distinct cells, fills the whole part of the body which it occupies; M. Davaine says that it corresponds to the small intestine, and that the cells on its exterior no doubt represent the liver. The third portion is much longer, and thinner; it is enlarged at its origin, and also slightly just before it terminates in the anus.

The male trichina is about 3-50ths of an inch in length and 1-635th of an inch in thickness. In shape, it differs only from the female in having at its posterior extremity two digital appendages situated laterally, between which the penis projects. This organ is formed of two (?) short membranous pieces, united in a v shaped body. M. Davaine has been unable to separate the pieces. The genital tube is simple, as in all nematoid worms; it presents a seminal vesicle and a very long vas deferens.

The female is about one-sixth of an inch in length, and 1-425th of an inch in diameter. The genital outlet is seated near the end of the first fifth of the length of the body. Through the integuments can be seen ova in various stages of development, having, when mature, a diameter of 1-1270th of an inch; their shell is extremely thin. The embryo escapes in the body of the parent.

The *embryo* is about 1-212th of an inch long, and about 1 3600ths of an inch in mean diameter. It enlarges from before backwards.

The *larva*, commonly known and described as the *trichina spiralis*, has a length of rather less than 1-25th of an inch and a diameter of 1-635th. In its general structure it resembles the adult parasite. In the posterior region is sometimes found a tube (described by Luschka, Bristowe, and Rainey) opening by a small aperture in front of this region; it is a rudimentary genital apparatus. In the change to the adult state, it is the posterior third, containing the generative apparatus, that undergoes the greatest development.

The parasite here described is considered by M. Davaine to belong to the genus *Pseudalius* of Dujardin. It is not confined to man, but may exist also in the pig, cat, guinea-pig, rabbit, rat, mouse, horse, ruminating animals, and probably in the dog and badger. M. Davaine has not been able to produce it in frogs nor in birds, by feeding them with food containing trichinæ. He believes that the trichinæ which have been hitherto found in mammalia belong to the same species; and that this property of existing in different animals is a primary condition of the perpetuation of the species. If a trichina of a given species existed in carnivora or herbivora exclusively, the opportunities of transmission from one animal to another would be very rare. Another condition necessary to their existence is, the property which the larva possesses of resisting the destructive power of external agencies. We can readily understand how the cat, which devours a mouse infested with trichinæ, becomes a prey to these parasites; but how would the mouse receive the trichinæ, if the larvæ lodged in the muscles perished like the adult trichinæ in the intestines? After the death of the animal in which they have existed, the larvæ survive a long while in putrefied flesh, even in water; and in this way the *débris* of an animal devoured by carnivora may become fatal to rodents, or a carcase near a marsh or rivulet may communicate the parasites to the ruminants which drink the water, or to pigs.

The pig is the animal most exposed, from its habits, to be infested with trichinæ; and M. Davaine believes that the parasite is most frequently received by man from this animal, especially where it is the habit of the people to eat the meat more or less raw. The trichina is more frequently met with in England and Germany than in France. The first facts relating to the parasite were furnished in England; and in Germany it appears even more common. In 1859, M. Virchow had found trichinæ six or seven times in eight months; M. Zenker of Dresden found four cases of trichinæ in 136 autopsies. Drs. Bochler and Kœnigsdœrffer observed six cases at Plauen in the spring of 1862; and in Voigtland, at the same period, there were observed at the same time thirty or forty cases, according to Dr. Freytag of Leipzig.

Trichinæ may attack several members of a family who have partaken of the meat of a diseased animal; but sometimes even a large part of the population of a locality may become infested with the parasite.

The number of trichinæ that may exist in an individual is very variable, and bears a direct relation to the

number of larvæ taken into the stomach. M. Davaine observes that it is not accurate to say that the number of these worms in animals is always considerable; according to his observations, it generally can be regulated by the experimenter. Whatever be the number of trichinæ, they are confined to the striped muscles; and they are not found in the heart (M. Virchow, however, says that he has once found them in that organ). It is only during migration that they are met with in serous cavities, in glands, and in cellular tissue.

When trichinæ exist in great numbers, their presence in the muscles or intestines produces severe and sometimes fatal symptoms. These symptoms may, in animals experimented on, present three successive more or less distinct phases.

The first phase is characterised by intestinal disorder, produced by the development of the larvæ in large numbers and their adhesion to the mucous membrane of the intestine. In this stage, M. Davaine has seen rabbits die with intense diarrhœa; one of two cats which he fed with trichinised meat had diarrhœa for at least a fortnight, but survived. Of five or six rats fed on a similar diet, one only, which was pregnant, died of diarrhœa, after abortion on the eighth day. According to M. Leuckart, the passage of the embryos of trichinæ through the intestinal walls sometimes produces peritonitis. This intestinal phase often becomes blended with the next; it may be relieved by the expulsion of the worms by means of the diarrhœa; or may cease with the natural death of the worms.

The second stage presents general symptoms—muscular pains, etc. These phenomena are dependent on the introduction of the trichinæ into the muscles; they rapidly acquire their maximum intensity, and have not a long duration. The appearance and duration of this stage are in complete relation with the development and length of sojourn of the trichinæ in the intestines; in fact, in this entozoon oviposition is not slow and of long duration as in many nematoid worms; the genital tube is rapidly formed, and the ova in its whole length are developed almost simultaneously, so that the embryos, arriving soon at maturity, are at once thrown out in large number into the intestine, and the mother trichina dies exhausted. If it be remembered that the embryos do not escape before the eighth day, that a certain number of days are required for their arrival in the muscles, and that new ones are not produced after six or seven weeks, it will be understood that the first symptoms of this stage can scarcely appear until the end of a fortnight after ingestion of the diseased food, that they must continue four or five weeks, and that after this they may disappear. This course of events is observed in animals; and in man, the symptoms of this stage have shown themselves and become aggravated from the third to the sixth week after infection. Most animals die during this stage; rabbits rarely survive; rats, on the contrary, generally resist it.

If the animals do not die of the general symptoms or local disturbances proper to these two stages, the inflammatory symptoms cease, respiration becomes natural, and order is reestablished. But, in some cases, the number of cysts formed in the muscles are sufficiently great to impede them in the proper exercise of their functions, and hence arise general debility, a kind of consumption which persists or becomes aggravated, and the animal dies of marasmus. M. Davaine has noticed this in rabbits, but especially in a rat.

Recovery from these phases of trichinal infection may be apparently perfect. A rabbit, which M. Davaine kept during five months, became large and fat, although it had a large number of trichinæ in its muscles; a rat which had had these entozoa in considerable numbers during six months was to all appearance in good health. Hence he concludes that the trichinæ produce symptoms only when they are in the intestinal canal and when they are entering the muscles. Having become lodged in their cysts among the muscular fibres, they may remain harmless for an indefinite time. In every case except one, down to 1859, trichinæ have been found in the bodies of persons who have died of disease (generally chronic) or by accident; or in the dissecting-room, in bodies regarding which the previous history could not be obtained. In most cases, the cysts contained a cretacious or fatty deposit, shewing that they had probably existed several years.

The observations which have been made on the human subject, in regard to the symptoms caused by trichinæ, show that they belong, as in animals, to the initial period of infection. They consist in intestinal and in muscular lesions; the latter coincide with the entrance of the parasite into the muscles and are truly traumatic. In Zenker's case, the intestinal symptoms were swelling and pain; in a case described by Friedrich, diarrhœa was present. In all cases, the most remarkable symptoms were violent rheumatoid pains in the muscles, not in the joints, which were considerably aggravated by attempts to extend the half-bent limbs. The other symptoms have been variable, but have had a strong resemblance to those of typhoid fever. In several cases there has been abundant sweating; and in one there was a very remarkable miliary and furuncular eruption. The animal heat was diminished in Friedrich's case; and in those observed in Voigtland by Freytag, the temperature never exceeded 102° Fahr.

The progress, duration, and severity of the disease in man are in relation to the number of trichinæ taken into the digestive canal. Of sixteen patients observed at Plauen by Drs. Bochler and Kœnigsdœrffer, eight, who were moderately affected, recovered in a month; four, more severely diseased, were ill two months; of four others, one died with ascites and colliquative diarrhœa at the end of two months, and three recovered slowly at the end of three or four months. Recovery does not imply the death of the trichinæ; it follows their enclosure in cysts.

The diagnosis of trichinal infection has several times been made in the living human subject by removing a portion of muscle. M. Davaine thinks it probable that, during the first six or eight weeks of the disease, the diagnosis may be confirmed by searching for adult trichinæ in the alvine evacuations, produced naturally or by means of a purgative.

The prophylactic treatment consists simply in the avoidance of uncooked meat. The medicinal treatment must vary with the stage of the disease. At first, attempts must be made to expel the parasites from the intestines by purgatives and anthelmintics. Which among the latter is the most energetic and certain, is not yet determined: calomel is perhaps, M. Davaine thinks, the best. After six or eight weeks, all treatment directed towards the intestines is superfluous. It is scarcely probable that any substance will act on the larvæ disseminated through the muscles. Friedrich has recommended pieronitrate of potash; but, in the case in which he used it, live trichinæ were found in the muscular tissue after the patient was considered to be cured. (*Gazette Médicale de Paris.*)

Vaginal Hernia: its Retention by an Air-Pessary. M. Testelin had under his care a case of vaginal enterocele in a woman aged 30, who had borne several children. The portion of the tumour which projected from the vulva was larger than the fist, in addition to the portion remaining in the vagina; the point where the tumour communicated with the abdomen was at the superior and posterior part of the vagina, on the right side, in the utero-rectal *cul-de-sac*. The hernia was very easily reduced, with characteristic gurgling, even when the patient was erect. The hernia did not descend when the woman was in the erect posture; she was, therefore,

able to walk to consult M. Testelin. On examination, it could not be ascertained whether the hernia had descended; the woman, therefore, was placed on her back on a couch, and, on her making an effort, it came down, so as to enable M. Testelin to ascertain the capability of reducing it. One of Gariel's vulcanised India-rubber air-pessaries was applied, with the effect of keeping up the bowel. At night, the pessary was replaced by a sponge slightly moistened with a solution of tannin. This lesion is very rare. (*Compte rendu de la Soc. de Méd. du Nord;* and *Bull. Génér. de Thér.*, 28 Février, 1863.)

Inequality in the Length of Limbs. Inequality in the development of limbs, arising from certain occupations, has hitherto been most generally noticed as it affects the upper compared with the lower limbs, as in bakers and dancers; but it also occurs between similar limbs, especially the arms, in cases where one of these limbs is actively employed while the other remains in a more or less complete state of inaction. This inequality, Dr. Duparcque observes, affects the length as well as the volume of the arms, and arises from two sources; viz., the predominant development of the exercised limb; and a kind of arrest of development in that which is condemned to inactivity. In some cases, as in jewellers, cutlers, and smiths, the right arm is lengthened; while the size of the left arm is increased in painters on porcelain. This abnormal development can only occur in subjects who have followed their occupation from an early age—before puberty or at its commencement, when the body is not yet fully developed. This inequality between similar and parallel limbs is regarded by Dr. Duparcque as of some surgical importance. The neglect or ignorance of its occurrence may produce mischievous results in diagnosis, in prognosis, and in operative procedures in those cases of injury, such as dislocation in fracture, in which an alteration in length forms an important feature. As a general rule, Dr. Duparcque says, in all cases of injury of the upper limbs from direct or indirect violence capable of producing fracture or dislocation, the occupation of the patient, and its influence on the development of the limbs, should be inquired into. (*Gaz. des Hôp.*, 7 Mars, 1863.)

Reviews and Notices.

On Effusions of Blood in the Neighbourhood of the Uterus; or, the so-called Periuterine Hæmatocele. A Thesis for the M.D. Degree. By Henry Tuckwell, M.A., M.B.Oxon. Pp. 41. Oxford and London: 1863.

Researches and Observations on Pelvic Hæmatocele. By J. Byrne, M.D., M.R.C.S.E. Pp. 44. New York: 1862.

That a subject like pelvic hæmatocele, being comparatively new, and at the same time of practical importance, should furnish material for writers of monographs, is no more than may be expected; and, seeing that there is not yet, in English literature at least, an overflow of concise expositions of the nature and treatment of the disease, it must be conceded that the pamphlets whose titles stand at the head of this article cannot fairly be regarded as superfluities—provided that the authors have done their work well.

The two works appear under different circumstances.

Dr. Tuckwell's essay, as the title-page informs us, is a thesis presented to the University of Oxford in accordance with the regulations to be observed by candidates for the degree of Doctor of Medicine. In it he considers the history, pathology, causes, symptoms, diagnosis, prognosis, and treatment; and adds a well-arranged table of ninety-eight cases, collected with evident industry from numerous sources.

Dr. Byrne's memoir is intended as supplementary to a paper read before the New York Academy of Medicine, and which was chiefly occupied with a description of a case of pelvic hæmatocele. He here notices the history of pelvic hæmatocele; the definition of the term; the period of life at which the disease occurs; its causes, symptoms, diagnosis, and treatment.

Both authors have performed their task in a very satisfactory manner. Those practitioners who wish to have a complete though succinct *resumé* of the present state of knowledge regarding "effusions of blood in the neighbourhood of the uterus", collected with judgment and interspersed with remarks indicating a practical as well as a literary study of the subject, will find in Dr. Tuckwell's thesis all they can desire. Dr. Byrne's pamphlet is, too, well calculated to effect its object—that of communicating to his professional brethren in America the knowledge which has been attained regarding the disease in question, together with such further observations as he has been enabled to make in his own practice.

Illustrations of the Surgery of the Female Pelvic Organs. In a Series of Plates taken from Nature; with Physiological and Pathological References. By Henry Savage, M.D.Lond., F.R.C.S., Physician to the Samaritan Hospital for Women. London: 1863.

Dr. Savage has been led, we learn from his preface, to the publication of this work by finding a vast amount of discrepancy (and therefore in some quarters of imperfection) among authorities who have treated of the anatomy of the female pelvic organs. "In this dilemma," he says, "there seemed but one course to take without presumption; and that was, to bring candidly and fairly the various authorities to the test of the dissecting-table." The result of the author's investigations has been the production of the twelve plates comprised, with the comments thereon, in the works before us. We are informed that "all the illustrations, with only two exceptions, are taken from original preparations"; and the author acknowledges his obligations to Mr. Jas. Traer, an "anatomist of acknowledged skill and experience", for the preparations from which the first eight plates have been copied.

The first Plate represents the Vulva, and the Muscles, Arteries, and Nerves of the Perinæum.

The second Plate contains four figures; viz.: 1, the Superficial Veins of the Perinæum and Perinæal Portion of the Erectile Venous System in the Female; 2, the Bulb of the Vagina; 3, the same, with so much of the Vulva as is necessary to show the immediate relations of the Bulb; 4, Side View of the Erectile Venous System in the Female.

In the third Plate are shown the Arteries of the Female Pelvic Organs.

In the fourth Plate are two figures, representing, 1, a Median Section of the Pelvis and Inferior Half of the Abdomen; and 2, the Bulb of the Ovary.

Plate fifth also contains two figures, in which are shown, 1, the Superficial Fascia of the Female Perinæum and the Vulvo-Scrotal or Pudendal Sac; and 2, the Deep Perinæal Fascia, etc.

In the sixth Plate, one figure gives a View from above of the Female Pelvic Organs in their Natural Relations; and a second, the Antero-posterior Relations of the Viscera.

In the seventh Plate are four figures: 1, a Perpendicular Section of the Pelvis in the Median Line; 2, a Horizontal Section of the Pelvis through the Body of the Os Pubis, Acetabulum, and Sacro-iliac Joint; 3, Perpendicular Section passing upwards through the Middle of both Tubera Ischii; 4, Perpendicular Section from below upwards through the Perinæum, about an inch to the left of the Pubic Symphysis.

The eighth Plate contains six figures, of which two represent the Nerves of the Unimpregnated Uterus; and the others, a Median Section of the Uterus through the Fallopian Tubes; the Pubic Termination of the Round Ligaments; the Contents of the Alar Mesentery; and a Virgin Ovary divided longitudinally through its Middle.

In the ninth Plate are two figures representing the Mechanism of the Structures supporting the Uterus and opposing its Displacements; a third figure represents the State of Parts in Uterine Retroversion; and a fourth gives the Vulva in Outline, to show the Situation of the Vulvar Muciparous Follicles.

In the tenth Plate, the author has delineated the chief varieties of Perinæal Plastic Surgery for the Radical Cure of Complete Prolapsus Uteri and Lacerated Perinæum.

The eleventh Plate is reduced from the plates of Mascagni, Cruickshank, and Hunter; and contains, in two figures, the Superficial Pubic and Inguinal Lymphatics and Glands; and the Lumbo-iliac Lymphatics and Glands, with the Lymphatics of the Gravid Uterus and Appendages.

The twelfth Plate "is a set of schematic outlines, referring chiefly to Uterine Displacements".

In the comments on the eighth Plate, Dr. Savage gives the name "alar mesentery" to the process of peritoneum usually denominated the broad ligament of the uterus. It contains the ovary, and its appendages—the Fallopian tube, and the organ of Rosenmüller or female epididymis. The contents of this part, the author observes, "are exactly homologous with the contents of the scrotum".

"In the male, the organ of Rosenmüller becomes the epididymis; the upper set of cæcal tubes" (of the Wolffian body) "are reduced to hydatidiform swellings; the lower set appear as the vasa aberrantia; the middle set become the coni vasculosi; the Wolffian duct is now developed into the vas deferens; and the duct of Müller is seen as an atrophical remnant, presenting sometimes minute cystic swellings in its course, lying along the anterior border of the epididymis; its cæcal end projecting from its head is now the 'hydatid of Morgagni'."

Dr. Savage's plates and comments are worthy of being carefully studied by anatomists and surgeons.

Royal Infirmary, Edinburgh. Dr. John Struthers has resigned his appointment as one of the surgeons to the Edinburgh Royal Infirmary, on account of the occupation of his time with his anatomical duties.

British Medical Journal.

SATURDAY, APRIL 25th, 1863.

WHEN SHOULD THE WINTER LONDON MEDICAL SESSION COMMENCE?

The winter medical session commences at the beginning of November in Edinburgh and Dublin: why does it commence in London in October? We suppose it would be difficult to give any answer to the question, beyond that of its having been so arranged by custom. We are not aware that there is any particular advantage gained thereby to the medical student who commences in October over him who commences his studies in November; but we believe it may readily be shown that it would be in several ways a great gain both to the student and the professor if business were begun in London at the same time that it is begun in Dublin and Edinburgh.

Mr. Charles Hawkins on one occasion called the especial attention of the Medical Council to this subject, and has, in a letter to that body, shown how very much this change of month would be to the benefit of the student of anatomy; but the Medical Council, true to its character of interfering with none of those things which everybody thought were the special objects of its care and surveillance, cannot, of course, do anything in the matter. "*The subject does not lie within the province of the Council,*" is their answer to Mr. Hawkins. We imagined that the Council certainly had something to do with superintending medical education; and, as this proposal of Mr. Hawkins is certainly one affecting medical education, we should have naturally thought the matter might well have been considered by them. But *dîs aliter visum.* Our readers, nevertheless, shall see whether or not the proposal is reasonable. We think it is one which addresses itself strongly to the interests of the parents and guardians of students, as well as to the interests of the students themselves.

Mr. Hawkins is the inspector of anatomy; and he informs us that, "since he has held the office, he has found it impossible to procure a sufficient supply of subjects for the 1st of October." The consequence of this is, that the students, fresh from the country and anxious to work, become disappointed, and contract idle ways at the very commencement of their studies; so that, later on in the session, when the supplies become more abundant, they are apt to lose the inclination for the work, and have not unfrequently also got rid of the money which was to have been spent in the purchase of "parts".

We learn from the Registrar-General's Reports that the number of deaths in London workhouses during one past session was as follows:

In 1859.	October	439
„	November	407
„	December	678
In 1860.	January	460
„	February	518
„	March	669

From this it appears that two hundred more persons died in March than in October; but at the middle of March the students, as we well know, begin to grow weary of work; the schools, which in October are crying out for subjects, now decline to receive them; "the teachers informing me", says Mr. Hawkins, "that the pupils have ceased to dissect, or are preparing for examination." This shows the supply is most abundant when the demand is least. When the bodies are wanted, the supply runs short; and when the supply is abundant, the demands are very small.

Mr. Charles Hawkins says, truly enough, that if the session commenced in November, he should then have a much better supply of subjects to offer the students than he has now in October; that is, at the time when it is most desirable that the student should not have an excuse for not working—viz., at the very beginning of the session. We have to rely for a supply for the commencement of the session upon the latter end of September, at which time the mortality among those whence the supply comes is very small.

Teachers, we are informed, are generally quite agreeable to the proposed change; and, considering that it would be of much advantage to the student, why then should not the change be made? We believe, as we have said before, that the dead weight of custom and practice is the sole reason which can be suggested for the retention of the present system; and, as the Medical Council decline to interfere in the business, it becomes everybody's affair—that is, nobody's—to take the initiative; and, consequently, nobody moves in it. We, however, venture to bring the matter before the notice of *paterfamilias;* for, after all, the matter is one which is of most essential interest to him; and we think we have clearly shown that the change would be every way of advantage to his student son. No doubt a strong expression of opinion on his part would effect the change, if no more valid reason than any which has yet been offered can be raised against it.

If the session were to commence on the 1st of November, as in Ireland and Scotland, the period devoted to dissection would not, in fact, be curtailed. At present, the winter session is not, practically, of more than five months duration. The first fortnight in October is, as we have shown, usually wasted for want of subjects; and then again at Christmas we have a ten-days holiday, which, as far as dissection is concerned, may be called a three-weeks holiday, inasmuch as that the schools decline to take bodies for a week before the Christmas holiday commences; and, as we well know, active operations in the dissecting way cease towards the middle of March.

Now if, as has long been the wish of many teachers, the anatomical season commenced in November, the Christmas holiday were curtailed to two or three days, and dissection were steadily pursued from the very beginning of November up to the end of March, we should have five months during which this most important part of the student's business could be continuously and effectively prosecuted; and we will venture to say that a five-months session, well employed, is amply long enough for the useful imbibition by the student of instruction from lecture-teaching.

The *British and Foreign Medico-Chirurgical Review* has in its last number some pertinent remarks on this subject. Indeed, it makes there one statement which indicates a rather deplorable state of things, and which is well worthy of the serious consideration of our examining medical boards. We there learn that, when Mr. Charles Hawkins was appointed inspector of anatomy, the lecturers of the different schools informed him that the supply of subjects requisite for the proper teaching of pupils was half a subject to each pupil during the winter session. Now we learn that, in the session just concluded, the extent of the supply which the inspector has been able, not to afford, but to induce the schools to receive, falls short of that required number by upwards of a hundred and fifty bodies! This is a very serious affair, for it demonstrates conclusively that this most basic portion of the student's business is defectively performed—that the students, in a word, are not properly educated in anatomy; and, strange to say, that the supply of subjects far exceeds the demand for them.

We cannot for a moment believe that such a state of things results from any want of desire to learn on the part of the student; but we believe and trust that it may be very fairly traced, in great part at least, to the fact of the winter session commencing in October instead of in November. Of course, any innovation of the nature here proposed will be resolutely opposed by a certain class of minds, which cannot bear the shock of the slightest deviation from the routine in which they have long lived and flourished. We have, however, a firm belief that, amongst teachers in general, there is considerable unanimity as to the propriety of adopting the proposed change; and we must add, that if, as it would really appear, we are turning out our students defective anatomists, a heavy responsibility will rest on the heads

of those whose business it is to provide for the student's education, if they do not at once take steps to remedy the deficiency. Are we to conclude, after all the efforts made by Colleges of Surgeons to render dissection a great fact—a *sine quâ non*—in the student's life in London, that the grinder is really the great anatomical preparer of our youths for examination?

WHAT IS A MEDICAL, AND WHAT A SURGICAL DISEASE?

It is reported that a great surgical authority, when asked what, in his idea, was the distinction between medical and surgical diseases, replied: "Every patient who comes to me with a fee in his hand I regard as a surgical case. All patients who come for gratuitous advice, I consider, belong to the physicians." One is reminded of this amusing way of stating the case by the definition of surgical disease which is given by Mr. Lawrence in his recently published *Lectures on Surgery*. Mr. Lawrence there tells us:

"The boundaries of surgery have not hitherto been, and perhaps cannot be, very clearly defined; and the line of demarcation between it and physic is by no means easily traced. Considering the distinction between them to be a mere matter of arbitrary usage, I employ the word surgery in its common acceptation; understanding it to include 1st, injuries of all kinds; 2ndly, the greater part of external and local complaints; 3rdly, such internal affections as produce changes recognisable externally—for example, alterations of figure, colour, or consistence; 4thly, all cases requiring external topical treatment, operations, or manual proceedings of any sort."

Now we apprehend that, without any great exaggeration, or, in fact, without any stretching at all of Mr. Lawrence's idea, the definition here given may be made to embrace every disease under the sun that flesh is heir to. The distinction between medical and surgical diseases, as Mr. Lawrence admits, is in truth as difficult of being defined as the limits, for example, of the animal and vegetable kingdoms. Regarding, therefore, the subject from a surgical point of view, no doubt the surgeon does well to make his idea of what surgery embraces sufficiently comprehensive. Mr. Lawrence has, however, we are bound in justice to say, been logical in accepting the conclusion which necessarily or naturally flows from his premises. He admits that the attempt to make a distinction between the medical and surgical nature of diseases is vain and artificial. Nothing of this modern distinction occurred in ancient days. Greek, Roman, and Arabian writers give no trace of such a thing. Hippocrates, Galen, and Celsus treat indifferently of fevers and injuries and operations.

Then came that night of darkness which followed on the extinction of the Roman Empire, and continued until the revival of letters in the West of Europe. During that period, medicine and surgery were taken in hand chiefly by the only educated men of the time—the ecclesiastics; but in 1163, at the Council of Tours, the Church declared its abhorrence of the shedding of blood—that is, by its own ecclesiastical hands; and, therefore, priests and monks were obliged to forego all operative surgery in which the flow of blood was concerned. The consequence of this was, that barbers and mountebanks then appeared upon the stage, and took up the operative department of medicine; and this tribe gradually grew and became important in its generation, and at length obtained acts of incorporation in this and other countries. And so was established the race of barber-surgeons.

This unnatural division between medicine and surgery, and its association with the barber's art, Mr. Lawrence goes on to tell us, long outlived the reasons which produced it. In this country, the union of barber-surgeons came to an end about the middle of the last century. In some parts of Europe the union still to this day holds good. But though the separation of the barber's from the surgeon's art was then effected, it does not appear clear to us that the establishment of the College of Surgeons in any way tended to further the union of that "medical knowledge which is the indispensable guide to the time and mode of the application of surgery". In fact, it may perhaps be not unfairly suggested that the highly ("pure") surgical character which that institution has always endeavoured to maintain has tended in no slight degree to foster the unnatural division between medicine and surgery which, Mr. Lawrence tells us, sprung up or out of the "dark ages", and which has firmly held its ground up to this very day, despite of its "dark" origin.

Mr. Lawrence, in his most invaluable Introductory Lecture, then goes into the body of the argument, and shows how quite impossible it is to make any such division—how purely artificial and thoroughly unreasonable it is. He demonstrates how unnatural such distinction is—how completely opposed it is to that unity of design, and coordination, and conjunction, and sympathy, under which every item of the human frame is associated with the rest of it.

It is impossible to read these brilliant reasonings of Mr. Lawrence without recalling to mind the fact that it is some thirty-three years ago since he first uttered them. Perhaps no greater proof of his high genius could be given than the fact that he could in those days, when surgery was so pure; when pure surgeons, indeed, affected to divide the practice of the physician; and when, in fact, medicine was a thing utterly disregarded by the Royal College of Surgeons—so clearly and boldly state the argument, which, with all our modern enlightenment,

could not be more felicitously and effectually put at this day than as we find recorded by him.

We would call especial attention to the unanswerable statements made by Mr. Lawrence in this Introductory Lecture of his. The facts in it are becoming of daily more importance, because the logical deductions resulting from them are being reduced to actual facts. Colleges of Surgeons and Physicians have already combined together to insure the production of a class of practitioners who shall be versed in medical as well as surgical, and surgical as well as medical knowledge. The College of Physicians of London, too, acknowledging the excellence of Mr. Lawrence's views, some time since did its best, but, unfortunately, in vain, to reduce them to practice, by bringing about, in connexion with the London College of Surgeons, the natural union of medicine and surgery, so powerfully illustrated by Mr. Lawrence. The College of Surgeons is still too "pure" for such an union. But the College of Physicians was not to be stopped in its course, and has, therefore, established its own examination in surgery. The College of Physicians has determined thus to announce that, in its view, a knowledge of surgery is requisite in the accomplished physician; although the College of Surgeons will not assert by its examination the still more important conclusion of Mr. Lawrence, that a knowledge of medicine is requisite to the accomplished surgeon.

BROMWICH *v.* WATERS.

Dr. Ramsbotham accuses us of having misrepresented him. We should be very sorry if we thought we had done so. We stated that Dr. Ramsbotham had pronounced the treatment practised by Dr. Waters to be "improper," and in doing so we simply used the very words of the judge himself to the jury. Dr. Ramsbotham says the judge was not "warranted in putting it in that way to the jury." But surely Dr. Ramsbotham will not deny that, whatever his words were, the impression left by them on the mind of the judge was to the effect that the treatment was "improper." So the judge charged the jury; and so doubtless the jury received the evidence. There can, therefore, be no doubt, at all events, as to the effects produced against Dr. Waters by the evidence. As regards another point in which Dr. Ramsbotham says he has been misrepresented by us, we beg to state, that the words we used, which were given in inverted commas, were taken *verbatim* from the *Chester Courant*. We admit, and gladly do so, that the report of Dr. Lee's evidence in the *Chester Record* gives a different version of the point referred to; and does not associate Dr. Ramsbotham with Dr. Lee in the opinion that "no ulceration had ever existed at all, and that the speculum had been grossly abused." We, therefore, willingly withdraw any remarks prejudicial to Dr. Ramsbotham which were deduced from the erroneous statement made in the *Chester Courant*. But really we cannot see how we have done Dr. Ramsbotham any "grievous wrong". We judge of his evidence by its fruits, by the effect it produced on the mind of the judge and the jury, and we find that, whatever Dr. Ramsbotham's intention might have been, the effect was, in so far as it went in the judge's opinion to condemn Dr. Waters's treatment, to aid in the attempt of bringing home, against a most innocent man and brother physician, one of the most infamous and false of accusations. It seems to us that it is Dr. Waters who has suffered a "grievous wrong." Surely Dr. Ramsbotham does not think Sergeant Shee would have put him into the witness-box if his evidence had been of no use to the prosecution! Does Dr. Ramsbotham not see that, but for the medical evidence, the case could never have gone into court—that it had not a leg to stand upon? But what can be more conclusive as to the effects of the medical evidence, than the words of the judge himself in his summing up?

"Now, if you come to that conclusion, namely, that the treatment was improper, and was directed to that end—it is no doubt an enormous corroboration of the young woman's statement. If you once conclude that Dr. Waters's treatment of her was of so improper a character, that he must have known he was doing wrong, and that he must have had some bad motive in view, that could be the only one which she imputes to him. First of all, let us see, is that made out, that the treatment was so improper? You have had called before you members of the medical profession of the greatest eminence. I make no observation on the evidence of Dr. Robert Lee; he is a gentleman of experience, beyond doubt, but not a very satisfactory witness. He seemed to be in a state of great excitement, and the effect of his evidence was, that the treatment was improper. You have had Dr. Ramsbotham, who, I think, gave his evidence in a very satisfactory manner, who also stated that the treatment, in his opinion, was improper.....Undoubtedly, if you are satisfied, upon the evidence of Dr. Ramsbotham and Dr. Lee, that the four gentlemen called for the defendant are so wrong that Dr. Waters could not have treated the case in the way he did under a fair mistake, you must come to the conclusion that he was treating it foully and wrong for some improper purpose."

It will be time enough for Dr. Ramsbotham to complain of a "grievous wrong," when he has satisfied the profession and the public that Mr. Justice Bramwell knows so little of his business as to charge the jury that a witness gave evidence diametrically opposed to what he really did give. The above remarks of the judge show clearly enough what was the impression made upon his mind by Dr. Ramsbotham's evidence; and we think that in such a matter most people will be slow to suspect the fallibility of the judicial mind. Indeed, it would appear that the judge relied on Dr. Ramsbotham's as the chief evidence condemnatory of Dr. Waters's practice, because Dr. Taylor gave no opinion on the me-

dical question, and because Dr. Lee's evidence was "unsatisfactory."

We shall take a future opportunity of showing how distinctly the evidence given by Drs. Lee, Ramsbotham, Taylor, and Gully, was evidence for the prosecution.

THE WEEK.

Our London members will see, by an advertisement in this day's columns, that a special general meeting of the Metropolitan Counties Branch is summoned for Tuesday, May 5th, "to consider the subject of medical evidence in courts of law". We believe that the kind of evidence given in the recent case of Bromwich *v.* Waters will be specially commented on; and we trust that the members of the Branch will make it their duty to attend, in order to express an opinion on the important questions which will be brought forward.

We are glad to find that the suggestion made by Mr. Charles Hawkins, and referred to in the Journal a short time back—viz., "that a collection of engravings of medical men should be commenced at the Royal Medical and Chirurgical Society"—has been promptly acted upon. Mr. Soden of Bath has most liberally presented to the Society the very interesting collection of portraits formed by his late lamented father—a collection, we believe, quite equal to those either of the late Mr. Wadd or Mr. Squibb. We trust that so laudable an example will be quickly responded to by the Fellows generally, so that the Society may soon be in possession of an unrivalled collection of portraits of medical men.

We are informed that it is the intention of Professor Czermak to visit London again early in May, for the purpose of shewing the use of the laryngoscope; and that he intends having classes for instruction in it.

Mr. T. M. Kendall, F.R.C.S., has been appointed medical attendant on their Royal Highnesses the Prince and Princess of Wales, when residing at Sandringham Hall.

The sudden death of Professor Moquin-Tandon is announced. His death resulted from disease of the heart. He had for some time past suffered from symptoms of cardiac disease; but he shunned auscultation, and would not even allow his pulse to be felt. "On the Monday he was, as usual, in his place at the Institute; and on Tuesday, after presenting a paper at the Academy of Medicine, passed the evening with an illustrious and *savant* general, and returned home in his usual health. He had scarcely fallen asleep when he was awakened by a pain in the region of the heart, and then suddenly expired." M. Moquin-Tandon was fifty-nine years of age. He succeeded Achille Richard in the Chair of Botany and Natural History at the Faculty of Medicine of Paris, and was member of the Institute and of the Academy of Medicine. At the time of his death, he was engaged in finishing a work on which he had bestowed much pains—*The Natural History of the Sea*—which will be shortly published. M. Moquin-Tandon was not alone a man of science; he was distinguished for his literary abilities, and by his affability; and the charm of his wit had gained for himself the hearts of very many friends. Consequently, as we read, an immense assembly attended his funeral. The Academy of Medicine, the Faculty of Medicine, the Zoological Society, the Society for the Protection of Animals, and many other charitable societies, were represented by deputation. He left a distinct order that no oration should be given over his grave. "The eloquent voice of M. Coquerel, minister of the reformed religion, was alone heard in the cemetery." "M. Coquerel dwelt especially on the eminently religious character of the deceased; and showed that, amidst all his scientific labours, M. Moquin-Tandon had found time to write in defence of his religion—the reformed."

In his annual report, Dr. Stiff, Superintendent of the Nottinghamshire Lunatic Asylum, makes the following interesting remarks in reference to the causes of insanity:—

"The number of admissions, 91, is 30 below that of the year 1861. The decline has been general throughout Nottinghamshire, though not equally distributed. There have been 13 fewer received from the county; 14 from the borough of Nottingham; and 3 from Newark. This is contrary to general expectation, especially as the passing of an Act of Parliament, whereby the charge for the maintenance of lunatics was transferred from the parishes to the common fund of the union, led to the supposition that certain patients then detained out of the asylum might be sent in, in consequence of individual parishes being no longer liable for the payments. It might also have been expected that the depression in the various branches of the cotton manufactures carried on in this county, would have raised the number of admissions into the asylum, directly, by the resulting poverty acting as a cause of disease; and indirectly, by rendering persons of limited means unable to provide for their insane relatives, otherwise than as paupers. These fears have proved groundless; and, without entering into any lengthened discussion upon the question, it will be sufficient to remark, that more extended experience tends to lessen the importance of moral causes, such as reverse of fortune, pride, ambition, etc., as agents in the production of insanity; and it seems highly probable, that the healthy condition of the population generally during the last year—the diminished risk of physical injuries—and the lessening of the means for indulging in habits of intemperance, have more than compensated for the depressing effects arising out of a partial stoppage of employment. In reference to this subject, it is worthy of note, that the distress which existed in Coventry and its neighbourhood in 1860 and 1861, was not accompanied by any corresponding increase in mental disorders."

The Academy of Medicine has been for many weeks past engaged in a most elaborate discussion of drinkable water. The wind-up of the debate seems to lead to the conclusion, of which we should suppose every living soul, not living out of the regions of civilisation, is already well aware :—That by the term good drinkable water is meant water "which is clear, limpid, well-aerated, cool in summer, and moderately cold in winter, containing a small amount of calcareous salts, which will cook vegetables without rendering them hard, and will readily dissolve soap." This is what M. Poggiale tells us is the conclusion of all this grand talk. The Academy has not itself produced any resolution on the subject.

M. Mattei tells us that disease of the suprarenal capsules is not so rare as people generally imagine. He has found these organs affected twenty times in 310 autopsies. According to him, Addison's disease does not consist in an alteration of the suprarenal capsules, but in a neurosis of the great sympathetic.

The Chair of Clinical Medicine at Genoa is vacant, and likely to remain so. There are plenty of candidates, but no one candidate can obtain the number of votes necessary for his election. Each member of the jury has, it appears, his special favourite, and, on each occasion of voting, backed his own man ; so that at last the *concours* ended in a blank.

M. Ehrmann has been elected corresponding member of the French Academy, in the section of medicine and surgery, in the place of M. Bretonneau.

M. Chapelain informs his Academy that he has established a "School for Brewers". Schools of this kind have, we believe, been long established in Germany, where beer is so extensively fabricated.

Water being taken as unity, the mean density of the earth has, M. Faye says, been estimated at 4.39 by MM. Carigni and Plana ; at 4.71 and 5.32 by Scotch observers ; at 5.45 by Cavendish ; and at 5.65 by Davy ; and at 6.57 by Airy, by means of the pendulum.

The practice of medicine in Turkey has just been put under legal protection. Heretofore any person could practise medicine or surgery in that country, and sell drugs. In future, no one can take the title of Doctor who does not possess a diploma, or a special permission to practise physic. Foreign doctors are allowed free liberty of practice in all parts of the empire. All that is required of them is, that they register their diplomas, and submit to an examination, or, at all events, a scientific conversation —*colloquium*. Moreover, they must pay for the favour 500 *piastres* (650 *francs*). Having obeyed these injunctions, they will be registered, and possess all due rights. The *pharmaciens* are supplied with a list of registered doctors, and are forbidden to make up a prescription of any other person. One curious clause in this law is, that *sages-femmes* are expressly forbidden to administer ergot of rye.

MM. Trousseau and Dumontpallier give us a new test to show the presence of sugar in the urine. It is iodine, which, we are told, is decolorised by diabetic urine. These gentlemen were engaged in observing the effect of tincture of iodine on urine containing biliary matters ; and, on March 25th, put a few drops of the tincture into a test-glass containing diabetic urine of specific gravity 1037. "The diabetic urine, which was nearly colourless, on the addition of the tincture at first took the colour of barley-sugar ; but, to our great astonishment, the colour gradually disappeared, and, in the course of a few seconds, the urine again became perfectly colourless." If this fact were constant, the authors concluded that they had discovered a new and convenient test for diabetic sugar. They, therefore, repeated the experiment with the same urine, and with the urine of other diabetic patients ; and invariably with the same results. The decolorising effect of the diabetic urine over the tincture of iodine, they find, is greater in proportion to the greater density of the urine ; and they also note that diabetic urine alone has the property of rapidly decolorising the tincture of iodine. They consider, moreover, that by means of a standard solution of tincture of iodine, the quantity of glucose in the urine may be estimated.

M. Bousquet has read a paper at the Academy of Medicine on the subject of vaccine, and the following are the conclusions arrived at by him :—1. If Jenner did not actually demonstate experimentally that vaccine may be originated from the horse, he at all events had a presentiment of the fact, and put his successors on the road to the discovery. 2. Vaccine may and does arise indifferently both in the cow and in the horse. 3. There are still doubts as to the nature of the disease in horses which produces vaccine. 4. Although vaccine does not proceed from the small-pox, it is a very analogous disease ; and it is through this analogy that the two eruptions have the power of supplementing and of taking the place the one of the other.

Mr. Cayley has been elected Corresponding Member of the French Academy, in the Section of Astrology.

M. Desmarres, the son of the oculist of that name, was lately summoned before the tribunal to answer for the loss of sight of two patients who had been treated for purulent ophthalmia. M. Jules Favre appeared for the blind, but his eloquence failed to obtain for them a verdict. We do not read that any of M. Desmarres' *confreres* appeared in the witness-box to give evidence that through his negligence the eyes were lost !

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary.]	York House, Bath.	Thursday, April 30, 7.15 P.M.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, May 5, 4 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Rose Hotel, Canterbury, on Thursday, May 7th, at 3 P.M.

Dinner will be ordered at 5 P.M.

Thomas Boycott, M.D., *Hon. Secretary.*

Canterbury, April 20th, 1863.

MIDLAND BRANCH: QUARTERLY MEETING.

A quarterly meeting of this Branch was held in the Board-room of the Lincoln County Hospital on March 27th; T. Sympson, Esq., President, in the chair. Eight members and visitors were also present.

Chopart's Operation. The President, after referring to various matters of interest, said he wished particularly to dwell on the subject of a paper entitled, On the Superiority of Chopart's Operation and Excision of the Ankle in all cases admitting of their Performance, read by Mr. Hancock before the Medical Society of London, on January 5th last, as being at the present time of great importance to all practical surgeons, and of special interest to the members of the Branch from two of the operations therein considered (amputation of the foot after Syme's and after Pirogoff's methods) having recently been performed with success in the hospital, in the Board-room of which they were then assembled. The President gave a summary both of the contents of Mr. Hancock's paper, and of the discussion following the reading of it; and then proceeded to remark on the energetic manner in which Mr. Syme, in his *Observations on Clinical Surgery*, deprecates the so-called "improvements" in his mode of amputating the foot. Having met his objections, he showed that Pirogoff's was not the useless operation Mr. Syme appeared to consider it, read brief notes of a successful case lately under his own care, and concluded by calling the attention of his hearers, as showing the importance attached to the consideration of the subject, to a recent discussion at the Pathological Society on the relative merits of the different operations alluded to.

Papers. The following papers were read and discussed:—

1. Dislocation of the Knee-joint. By C. Brook, Esq.
2. Puerperal Convulsions. By S. Lowe, Esq.
3. Case of Inflammation of Left Femoral Vein, followed by the formation of an Abscess round the Right Shoulder joint; Symptoms of Pyæmia; Recovery. By G. Mitchinson, L.K. & Q.P.I.

New Medical Society. A proposition was made by Mr. Sympson, that a medical society be formed for Lincoln and the neighbourhood, and some rules were adopted.

The members were afterwards entertained by Mr. Broadbent at his residence.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 14th, 1863.

Richard Partridge, Esq., F.R.S., President, in the Chair.

THE SUCCESSFUL TREATMENT OF SEVERE STRICTURE OF THE URETHRA BY GRADUAL DISTENSION AT A SINGLE SITTING. BY HENRY THOMPSON, ESQ.

It was the author's object to illustrate and explain a new method of treating severe or obstinate strictures of the urethra; *i.e.*, those which are little benefited by dilatation. Its novelty did not consist in the mere production of some alteration or improvement in existing mechanical contrivances, but in the adoption of a mode of action on the stricture itself, different from those which characterised any of the other systems of treatment pursued at the present day. The author showed in what it differed from dilatation, simple and continuous; from rupture or "instantaneous treatment;" from cauterisation; and from incisions. He illustrated the proceeding, which he distinguished by the term "gradual distension," and described the instrument employed to accomplish it.

By the process in question the strictured part of the urethra only was acted upon, and this not to a degree short of, but up to or even beyond the natural calibre of the canal, wherever the stricture might be situated. All this was accomplished at one sitting, but with gentleness and slowness, so as to avoid unnecessary rupture; the degree of distension being regulated with absolute certainty, and its extent indicated with accuracy, by apparatus in the handle of the instrument employed.

The object of the operator was not to rupture, but to over-distend the fibrous tissue constituting the stricture, so as to destroy, or at all events to impair, its natural tendency to contract. He aimed at attaining that result which occurs from the practice of over-distending vital tissues elsewhere—viz., to impair or destroy their contractility.

The class of patients for which this proceeding appeared to be best adapted was described, and illustrative cases were appended.

The instrument consists of two long and narrow steel rods, accurately applied throughout their entire length by the single plane surface which each possesses. The external surface of the rod is convex, so that together they form a nearly cylindrical instrument, but tapering towards the lower extremity, where they are closely united. At the opposite or upper end they are also united, and are surmounted by a handle resembling that of an ordinary sound. This handle is attached to a screw with a very fine thread, which being turned, causes the two rods to diverge very slowly and very gradually from each other at a given spot, about six inches from the handle. When the separation of the blades is effected, an index, placed near the upper end and connected with some numerals on a disc, shows the exact degree of extension made, by pointing out that number of the catheter-scale to which the distension existing at that moment is equivalent. The general form and contour of the instrument is that of a slightly curved catheter. When the screw handle is turned, the two rods separate, so as to form a long oval or spindle-shaped figure, the

long diameter being about three inches and a half or four inches in length, and the short diameter corresponding to the number of turns given to the screw, and varying between the slightest possible separation of the rods and an interval of about three-eighths of an inch, or even more.

The stem of the instrument has marked on it a graduation in inches, which commences one quarter of an inch below the point of maximum distension or centre of the spindle-shaped figure produced by the separated rods. It is that point which will correspond with the stricture when the instrument is placed in the urethra, so that the contracted portion of the canal undergoes the greatest amount of distension which it can be desired to produce, while the rest remains wholly unaffected.

The mode of applying the instrument is as follows. A medium or full sized bougie or catheter is first passed as far as the stricture, and the distance from it in inches to the external meatus carefully noted. Suppose it to be five inches, the operator, taking the distending instrument, places the little blue steel collar which slides on its shaft opposite to the figure 5, and passes the instrument through the stricture until the collar arrives at the meatus of the urethra, and prevents the instrument from entering further. The maximum point of distending power must, therefore, correspond with the narrowest part of the stricture. The act of distension is now commenced by making two or three turns of the screw-handle, and is continued by slowly turning it once every half minute, taking care at the same time to prevent the instrument from shifting its position by observing that the collar remains opposite the external meatus.

In a short time the index, gradually rising, shows that the calibre is reaching Nos. 10, 11, 12, and so on, until in a few minutes No. 14 or 16 has been reached, which latter limit is usually quite sufficient. The screw-handle is now slowly turned backwards, not the whole way, but until the index has retreated to about No. 8 or 9, when the instrument is withdrawn. The operator next passes a full-sized gum catheter into the bladder, and fastens it there, leaving it in place for about twenty-four hours. It is then removed altogether. All that remains to be done is to pass a full-sized metallic instrument every second day for a week, and after that at increasing intervals for a week or two longer.

MANCHESTER ROYAL INSTITUTION: MEDICAL SECTION.

Wednesday, April 1st, 1863.

Mr. Lund in the Chair.

Irido-choroiditis. Mr. Thomas Windsor exhibited three cases of this disease for the purpose of showing the beneficial effect of Graafe's treatment by iridectomy. One of the cases, in a girl aged twelve years, had been for two years under various treatment, without even the effect of stopping further deterioration. There was phthisis bulbi on the one side; on the other, the iris was uniformly ash-coloured; and in contact with the cornea, there were synechia posterior totalis, and opaque lens; the eye was softened, and there was only moderate perception of light. Iridectomy was performed, and a week later, linear extraction of the lens. She can now easily find her way about, and make out with glasses words of No. 18.

Chronic Glaucoma. The same gentleman exhibited a case of this affection, on which he had, a few days previously, performed iridectomy.

Fatal Intestinal Obstruction. Dr. W. Roberts reported on the case of Dr. Murphy shown at last meeting. He considered that the obstruction was due to a diverticulum (diverticulum virum of Mickel), which had become inverted and so protruded into the bowel; the effect of this was to cause a gradually increasing stricture of the gut above and an undue development of circular muscular fibre. The chief points which led him to form this opinion of the case were the seat of the lesion, and the presence of peritoneum within the concavity of the supposed inverted diverticulum.

Exophthalmic Goitre. Dr. J. O. Fletcher read a long and elaborate paper on the subject of this disease, detailing six cases which had occurred to himself, and several others communicated to him by friends. The paper is too lengthy for condensation in this report, but will be published *in extenso*. The chief point of the author was to show that these cases are generally due to causes that depress the nervous system, such as over-anxiety, fatigue, and the like, that they are, therefore, to be looked upon as necroses, and may be treated accordingly with every hope of success. The sympathetic nervous supply to the coats of the vessels is the point immediately involving the disease, producing atomy by its disordered condition. He also endeavoured to point out the probable or possible connexion between this state of things and that which has been described by Dr. Flint as cholesteræmia.

A long and interesting conversation followed the reading of the paper, in which several members took part, confirming, in the main, the views advocated by the author.

African Drugs: Erratum. In the report of last meeting reference was made to one of these drugs, which was stated to be used by the natives as an internal remedy for itch, and Dr. J. O. Fletcher was accidentally stated to have tried it with apparent success. The disease in which he made a trial of it was not itch but prurigo.

ODONTOLOGICAL SOCIETY.

April 6th, 1863.

ON THE TREATMENT OF INFLAMED DENTAL PULP. BY SPENCE BATE, ESQ.

The author advocated that for all practical purposes the conversion of the internal pulp into bone was very doubtful, after once an inflammatory action had been set up, and as a curative treatment most unsatisfactory. The treatment that he advocated was extirpation of the pulp by instrumental manipulation, if possible; if not, then by means of an escharotic. In order to do this, he differed from the plan which practitioners advocated; and exchanged a minimum for a maximum dose of arsenious acid, which he introduced into the cavity on a pledget of cotton-wool that had been previously dipped into creasote, and hermetically sealed it in with a temporary gutta-percha stopping. Mr. Bate stated that if this were properly effected, the operation was changed from a painful into an almost painless one; and that his experience for the last nine months had been that the fear of alveolar abscess so much complained of was *nil*.

The paper excited considerable discussion, in which Mr. Coleman, Mr. Tomes, Mr. Keene, and others, took part.

The Medical History of the American War. We are glad to learn that the materials for the *Medical and Surgical History of the Rebellion*, now being collected by Drs. Woodward and Brinton, under the supervision of the Surgeon-General, are very abundant and valuable. The illustrations of the work, some of which are already completed as coloured lithographs, are in the highest style of American Art. The preparation of these volumes will involve a vast amount of labour; but in no way can labour be more usefully expended. We cannot over estimate the value of this great enterprise to military, medical, and surgical science. (*American Med. Times.*)

Correspondence.

DR. RAMSBOTHAM'S EVIDENCE IN DR. WATERS' CASE.

LETTER FROM FRANCIS H. RAMSBOTHAM, M.D.

SIR,—In justice to myself, I must request you will afford me a short space more, to vindicate myself in the eyes of my professional brethren; because you have quite mistaken, and in your last number have again misrepresented, the evidence I gave at the late trial at Chester; and because I am very desirous not to lose the respect and good opinion of my contemporaries in the profession.

You say the judge told the jury I considered Dr. Waters' treatment "improper". This, I grant, he did; but, with all deference, I must say he was not warranted in putting it in that way to them, as the following *verbatim* report of all that was material, taken from the *Chester Record* of April 11th, will show.

After telling the court I had examined Mary Whalley with the speculum, in Dr. Lee's presence, on February 6th, I was asked:

"Serjeant Shee: Did you find any trace of disease about her womb and mouth of the womb?

"Dr. Ramsbotham: The womb and mouth of the womb were as healthy as I ever saw the organ in my life.

"Serjeant Shee: If there had been an actual ulcer there, would it have left a trace?

"Dr. Ramsbotham: If there had been a deep ulceration on the substance of the womb, there would have been a cicatrix—a scar.

"Serjeant Shee: If there had been mere excoriation, there would not?

"Dr. Ramsbotham: Most likely not;—the mucous membrane is so reparatory that it soon loses all trace.

"Serjeant Shee: It is a fact within your knowledge, that the speculum has been very extensively used?

"Dr. Ramsbotham: Very largely used in London.

"Serjeant Shee: In your judgment, is it right to use it for an unmarried woman?

"Dr. Ramsbotham: I never used it myself in an unmarried woman [of good character], unless it had been previously used by some practitioner before I saw the patient. I have a great objection to its being used in unmarried women, and I would not use it unless I was driven to it. If there were great distress in the system, which appeared referable to uterine disease, and disease at the mouth of the womb, and I thought I could obtain relief by the use of the speculum, even in the case of an unmarried woman, I might use it; but such a case I have never met with." (So reported. I think I merely said: "Such a case does not occur to my recollection just now.")

"Serjeant Shee: Supposing there should be nothing but excoriation, would it be advisable to use it for any length of time?

"Dr. Ramsbotham: I should say, generally speaking, that superficial ulceration gives way to six or seven applications of caustic, applied once or twice a week. I do not think I ever used it more than six or seven times [in any case] for ulceration of the kind I am speaking of.

"Serjeant Shee: Supposing it were found that a person ——

"Dr. Ramsbotham: Will you permit me to make an addition to my last answer? namely, that the complaint of superficial ulceration has a great tendency to recur; and it is possible that within a month [or two] there may be another ulcer, which may require further treatment.

"Serjeant Shee: In what way do you find it necessary to apply the caustic?

"Dr. Ramsbotham: It cannot be applied except by means of the speculum."

I then go on to say that, if fits such as Whalley had, which I characterised from the symptoms as cataleptic hysteria, appeared while the caustic treatment was being carried on, and I could trace their onset to the caustic, I should discontinue the use of it. I said also I thought, from what I had heard in evidence, that "the probability was the speculum or caustic had produced the hysteria here". I gave my opinion that women might conceive while totally unconscious. I said that medical treatment was very valuable in many cases of enlarged liver; that, in the early stage of pregnancy, rapid movement, such as riding on horseback or walking sharply up steep hills, might produce miscarriage, though not necessarily so; and that I should not recommend marriage as a cure for an ulcerated womb.

In cross-examination, I said that in cases of irritable uterus producing hysteria, where there was no ulceration, marriage would be desirable; that if hysteria persisted after an ulcer had healed, it might be useful, and might perhaps prevent a recurrence; that I did not think, under hysteria, there was always such "duplicity and cunning that the whole energies of the patient's mind were bent on deception"; because I knew many hysterical women who were as truthful and single-hearted as any women in the world, with no duplicity about them. I did not think that was the general feeling of the profession. But if it was Dr. Prout's opinion, as the passage had been read from his book, he was a very good man to follow. And my examination ended by my declaring my opinion that it is not necessary the woman should experience any feelings of sexual gratification in order that impregnation should take place.

Now, sir, I contend that there is nothing in the foregoing evidence impugning either Dr. Waters' judgment or treatment; and, therefore, to charge me with saying I considered his treatment "improper" is not correct. The only difference between his treatment and mine consisted in my saying I would have discontinued the caustic when I knew of the cataleptic hysteria; because it must be recollected he swore he used the caustic not ten times at the farthest; and that she was not a virgin when she first came under his care. Indeed, when I interrupted Mr. Serjeant Shee, and added that superficial ulceration had a great tendency to recur, I did that for the purpose of explaining why Dr. Waters might have found it necessary to continue to apply caustic for many months.

Notwithstanding all this, you have hurled some grave accusations at me, which you must bear with me while I refute.

You say Dr. Lee stated in his evidence that he had made an examination of Whalley in conjunction with me; and that we had both arrived at the same conclusion,—"that no ulceration had ever existed at all, and that the speculum had been grossly abused." A glance at my evidence, as given above, will prove that I did not utter such expressions; and Dr. Lee never said he and I had arrived at the same conclusion. What he did say is thus reported in the *Chester Record*. After stating that he had examined her, and found the uterus in the most healthy condition, there being no trace of any former disease having existed there, he is asked by Serjeant Shee:

"Did you afterwards examine her in the same way in consultation with Dr. Ramsbotham?

"Dr. Lee: I did.

"Serjeant Shee: Did you then form the same opinion?

"Dr. Lee: Precisely.

"Serjeant Shee: When was that?

"Dr. Lee: The 6th of February. It was about the end of January when the first examination was made with Mr. Dunn, of Norfolk Street, Strand.

"Serjeant Shee: Do you consider that the application

of caustic would have been necessary in the case of Mary Whalley?

"Dr. Lee: Not when I saw her.

"Serjeant Shee: Should you say so from what you saw of the absence of any trace of disease?

"Dr. Lee: My opinion was that no ulcer had ever existed at all, and that the speculum had been most grossly abused?"

Dr. Lee mentions only his own opinion; he says nothing about mine in any part of his evidence. How is it possible then to twist his words into the declaration "that he and I arrived at the same conclusion that no ulcer had ever existed at all, and that the speculum had been most grossly abused.' It was his own opinion solely which Dr. Lee uttered, not mine.

Again, you say, "Dr. Ramsbotham did not repudiate any of Dr. Lee's statements." How was I to do that? I never heard of one witness repudiating the statements of another in the witness-box unless questioned on the subject, which I was not. I apprehend if I had taken upon myself to declare that I differed from what Dr. Lee had said I should have received a well-merited rebuke from the judge.

You ask what hindered them (*i.e.*, Dr. Lee and myself) making themselves acquainted with Dr. Waters's version of the story before going into court? and say that Dr. Waters's solicitor told him the medical evidence was that on which his opponents chiefly relied. His solicitor may have said so; his opponent's solicitor did not tell me so. Indeed, they were aware that my evidence would be of no use to them, because I had told them so. But I would like to know how Dr. Lee or I could make ourselves acquainted with Dr. Waters's version of the story before going into court; when it was only by his evidence on oath at the trial that we could become possessed of it?

You say I confess to have tried to stop the action, because I believed the charge would fall to the ground. This is not exactly the case. I said I advised the lawyers to abandon the action because I was sure they would lose it. I used this argument to them, as being the most likely one to influence their proceedings. My real reasons were a consideration for Dr. Waters; the scandal which such an action must bring upon the profession; and because I thought it most unseemly that the use and abuse of the uterine speculum should be canvassed in open court. This would of course have no weight with them. They would not care about scandalising the medical profession, nor object to any discussion about the speculum, even in a court of justice.

But, sir, to show you how wrong are the inferences you have drawn, I will just detail, as briefly as I can, how I came to be a witness in the case; and you may thus form a judgment as to whether I was a willing witness, and whether I could help appearing.

A gentleman, whose face I fancied I had some recollection of, and whom I at first took for a medical man, called on me and asked me three or four medical questions. Some time afterwards, I was requested to make an appointment to meet a certain physician in a street in the Strand. On keeping my appointment, I found, not the physician named to me, who I was told could not attend at that hour, but Dr. Lee. The patient was Mary Whalley. Dr. Lee told me he had seen her a few days before. There were present also the same gentleman, I believe, who had called on me, and an elderly lady. I was told the patient was in the bed-room, and I examined her in Dr. Lee's presence. On my expressing my surprise to him that we should have been called on to see a patient apparently in good health, he told me, I think, that there was a trial pending, but he did not enter into particulars. My examination of her person took but a very few minutes; and on our returning to the sitting-room, the gentleman asked me if there was any disease of the womb existing, or evidence of there having been any. I replied, none whatever. I was then told the nature of the trial; and I recommended it should be abandoned, and said my evidence would be of no service to them. To which the gentleman present, whom I then knew to be one of the solicitors engaged, replied they must have me to speak as to the state of the womb on that day. This I considered peremptory. After that the case in full was laid before me; and Dr. Lee and I met the counsel (with the exception of Serjeant Shee) and solicitors. On that occasion also, I told the counsel my advice would not serve them, and with Dr. Lee again urged the abandonment of the case.

Now, sir, when you compare my evidence, as taken down in short hand, with what you have reported I said, and my statement with your surmises, I think you will feel that you have done me a grievous wrong, which I am persuaded you will be ready to repair.

I am, etc., FRANCIS H. RAMSBOTHAM.

Edinburgh, April 20th, 1863.

DR. SWAYNE ON BLEEDING IN PUERPERAL CONVULSIONS.

LETTER FROM R. PROSSER, ESQ.

SIR,—After carefully reading Dr. Swayne's eleven cases of puerperal convulsions, in all of which bleeding had been performed, it appears to me that he does not establish the value of bleeding at all, either in diminishing the frequency and violence of the fits, or in stopping them altogether. It is recorded of all the eleven cases, that they were bled from twelve to thirty ounces; but the fits continued at intervals with more or less frequency and violence. Now, if bleeding does good at all, it certainly does so immediately; as its effect upon the system is direct, and consequently immediate. Therefore, if Dr. Swayne could record that the fits were mitigated, or ceased immediately after bleeding, and not at a period of a day or two after, I should be disposed to believe that bleeding did good; or again, could Dr. Swayne or any one else bring forward cases in which bleeding was not resorted to, and the fits continued for a longer period and with greater violence than usual, or proved fatal, then I should consider that bleeding might have been of use. But the record of cases in which depletion was resorted to, counterirritation and cold applied, purgatives and antispasmodics administered, and delivery effected, with one death in eleven cases, shows not the value of bleeding, but the ordinary success of the practitioner. It appears to me that the ten successful cases related did not recover in consequence of being bled, but that they got well notwithstanding they were bled. The delivery seems in all these cases—as is generally observed—to have had the greatest share in tending towards the relief of the fits.

Offering this criticism in a candid spirit, I will very shortly offer for your publication cases which will tend to show, if not to prove, to every unprejudiced mind, the inutility, if not the perniciousness, of blood-letting in puerperal convulsions. I am, etc.,

R. PROSSER, M.R.C.S.Eng.

Bromsgrove, April 8th, 1863.

TWIN-CASES.

LETTER FROM WILLIAM COOPER, M.D.

SIR,—In animadverting on the unfortunate case of Dr. Philbrick, in the number of the JOURNAL for March 7th, you express the desirability of having on record the opinions of those experienced in midwifery, as to the course to be pursued in cases of twins, where the second child is retained beyond the ordinary period. In answer to this suggestion, I venture on the following remarks.

The commonly accepted axiom, that meddlesome

midwifery is always bad, applies with as much certainty to the management of twin-cases as to any other occurrence, normal or abnormal, which may present itself during the process of parturition. Forty-two cases of twins and one of triplets, occurring in a practice of over one thousand nine hundred cases of midwifery,* have enabled me to test the value of the application of this doctrine to the cases in question. I have on record instances where eight, ten, twelve, sixteen, and twenty-four hours intervened between the birth of the first and second child, and the labour terminating with safety, both to the mother and children. In the case of triplets, a period of eight hours elapsed after the rupture of the second bag of membranes and the birth of the second fœtus; version was required for the third, it being an arm presentation; the mother did well.

The period assigned as the period of inaction by writers on midwifery, is too various and indefinite to be acted upon with any degree of confidence, and the requirement would be better met by the proposition,—that no manual interference is necessary or justifiable until warranted by some deviation from the natural course of labour, which to the experienced accoucheur would at once declare the necessity of its adoption—such as abnormal presentation of the second child, hæmorrhage, convulsions, threatened exhaustion, etc.

In conclusion, I may mention that the utility of the ergot of rye is never more strikingly exemplified than in its administration in full and repeated doses in these cases; but I have not found its action to be in proportion to the nausea and vomiting it produces, as lately suggested by Dr. Graily Hewitt.

I am, etc., WILLIAM COOPER.

Bury St. Edmunds, March 31st, 1863.

THE DIETARY OF THE AGRICULTURAL POPULATION.

LETTER FROM EDWARD SMITH, M.D., F.R.S.

SIR,—Will you permit me to ask my professional brethren living in agricultural districts to favour me privately with a statement as to any locality with which they may be acquainted, where the dietary is very *poor*, and also that of any other class of persons who habitually live upon a very low dietary?

I am, etc., EDWARD SMITH.

16, Queen Anne Street, W., April 1863.

* The large proportion of twin-cases—about 1 in 45—in our correspondent's practice, is remarkable. Dr. F. Churchill gives 1 in 75 as the average frequency. EDITOR.

THE RELATIONS OF HEIGHT AND WEIGHT IN THE HUMAN BODY. In the *Statistical Society's Journal*, of March last, a very interesting table is given, showing the growth of the human body from 18 up to 30 years of age, indicated by weight and height. The averages were taken from upwards of 4,800 observations at all ages. Thus, a lad of 18, if he be 5ft. 4in. in height, speaking in round numbers, ought also to weigh somewhere about 8st. 10lbs. Given the age of 21, and the height 5ft. 5in., he should weigh 9st. 5lbs. Ascending still further, and assuming the age to be 25, and the height 5ft. 6in., the weight would be 10st. 5lbs.; and at 30 years of age, with a height of 5ft. 6in., we ought to have the result 10st. 11lb. In fact, so clear and demonstrable is this "law of increase in the growth of man," as determined by very extensive measurements taken at different times by scientific gentlemen, that we can almost work, as it were, in a rule of three sum, any one condition we like. Taking the converse of what we have already exhibited, we may say that if a lad of 19 weighs 9st. 4lbs., he ought to measure in height 5ft. 4in. and a little more; if at 22, 9st. 12lbs. he should be 5ft. 6in. in height, and so on. (*London Med. Rev.*)

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Monday, April 20th, the following gentleman, having undergone the necessary examination, was duly admitted a member of the College:—

Anthonisz, Peter Daniel, M.D., St. Andrew's, Ceylon

At the same meeting,

Nolloth, Edward,

previously an extra Licentiate of the College, was also admitted a member.

Also, at this meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Adams, Thomas Rutherford, Kilmoganny, co. Kilkenny
Barber, Henry, M.D.St. Andrew's, Ulverstone, Lancashire
Bisshopp, James, 1, Lawn Place, South Lambeth
Blunt, Thomas, Wigston Magna, Leicester
Boulland, Alfred Brocard, Merthyr Tidfil, South Wales
Campbell, Hugh, St. Paul's Grove, Canonbury
Carter, Thomas, Richmond, Yorkshire
Ellerton, John, M.D.St. Andrew's, Wakefield, Yorkshire
Forshall, Francis Hyde, Woburn Place, Russell Square
Harley, Edward, King's College
Ilott, Edward, Bromley, Kent
Lyle, Thomas, Stratton, Cornwall
Mackintosh, Hugh R. D., The College, St. Bartholomew's Hosp.
Rawlins, William Peter, M.D.St. Andrew's, 2, Francis Terrace, Kentish Town
Reynalds, John, Truro, Cornwall
Roberts, John, Kidwelly, Carmarthenshire
Steward, Joseph Septimus, Eusemere Hill, Cumberland
Wiltshire, Alfred, M.D.St. Andrew's, Malvern, Worcestershire

APOTHECARIES' HALL. On April 16th, the following Licentiates were admitted:—

Beviss, Charles, Sydling, Dorset
Fisher, Stephen Winter, Cotham Park, Bristol
Greaves, Charles Augustus, Wardwick, Derby
Kepple, Thomas, Newcastle-on-Tyne
Lewis, David, Bronayron, Llangatho
Mahony, Edward, Richmond Road, Dalston

At the same Court, the following passed the first examination:—

Rayner, Henry, St. Thomas's Hospital
Snook, James Walbridge, St. Bartholomew's Hospital
Warburton, Joseph Wilkinson, Royal Infirmary, Liverpool

APPOINTMENTS.

BENNETT, Robert, M.D., appointed Coroner for the High Peak Division of Derbyshire.
LODGE, Robert T., M.D., appointed Surgeon to the Liverpool Pilots' Benevolent Society.
*MITCHINSON, George, L.K. & Q.C.P.I., appointed one of the Physicians to the Lincoln Lunatic Hospital.
WALKER, William, L.R.C.P.Ed., appointed Paid Medical Officer to the Metropolitan Benefit Societies' Asylum.

ROYAL NAVY.

GRAHAM, William, Esq., Assistant-Surgeon, to the *Orontes*.
MESSER, A. B., M.D., Assistant-Surgeon, to the *Curaçoa*.
PICKEN, Richard, M.D., Surgeon, to the *Curaçoa*.
SABBEN, John C., Esq., Surgeon, to the *Orontes*.

BIRTH.

MACKIE. At Insch, N.B., on April 10th, 1863, the wife of *George Mackie, M.B., of a daughter.

DEATHS.

BAINBRIDGE, John N., M.D., at 86, St. Martin's Lane, aged 63, on April 16.
BIRTWHISTLE, John, Esq., Surgeon, at Old Ford, Bow, aged 63, on April 11.
CHALK. On April 17th, at 3, Nottingham Terrace, Regent's Park, Emily, wife of W. O. Chalk, Esq., Surgeon.
OKE. On April 17th, at Southampton, aged 79, Anne, wife of *W. S. Oke, M.D.
WELLS, Richard F., Esq., Surgeon, at the Isle of Portland, on April 9.

THE CASE OF DR. WATERS OF CHESTER.

MEETING OF MEMBERS OF THE LIVERPOOL MEDICAL INSTITUTION.

A special general meeting of the members of this institution was held on Monday evening, April 20th, "to take into consideration the best mode of expressing sympathy with Dr. Edward Waters of Chester, in reference to a late trial which has taken place in that city." Dr. Vose presided.

Dr. McNaught moved the first resolution:—

"That this meeting desire to express their hearty congratulations to Dr. Edward Waters of Chester on the result of a recent trial in that city, which leaves his character unsullied after sustaining attacks which have seldom been equalled for persevering malignity."

He said it was scarcely necessary to express an opinion as to the malignancy of that prosecution, or rather persecution. That any one, and especially a man of Dr. Waters's high social and professional position, should be exposed to such base calumny in the exercise of pure Samaritan-like benevolence, and upon such wicked and worthless testimony, was truly deplorable. But what was Dr. Waters's case yesterday might be that of his (Dr. Macnaught's) hearers to-morrow; and some, perhaps, might not possess either the moral courage or the pecuniary resources necessary for the establishment of an insulted character, as he fought for and effected. Dr. Waters, therefore, richly deserved the congratulations of the whole profession for his energetic and manly conduct in resisting all attempts at a compromise. In fighting his own battle, gentlemen, he had also been fighting that of the profession; and after such an *exposé*, and such a triumphant verdict, it was to be hoped that credulous elderly vestals would not be so ready to place implicit faith in the cunningly devised tales of hysterical lascivious girls. If lawyers were better acquainted with the deception practised and the ingenuity often exhibited on points of immorality in some cases of that Protean malady, they would be less disposed to undertake such cases as that of Bromwich *v.* Waters.

Mr. Bickersteth seconded the resolution. Long before the trial took place, offers of compromise were made to Dr. Waters, and urgently pressed upon him. Few men could have resisted the desire to avoid such a trial; but Dr. Waters, conscious of his moral rectitude, declined to submit to any compromise after the aspersions that had been made upon his character. Any medical man might any day find himself in a similar position, if, unfortunately, he should happen to have been consulted by some designing woman. In private practice, medical men are frequently called upon to make private examinations when entirely alone with their patients. The presence of a third party on such occasions is often offensive to the feelings of a woman. It might be politic to propose that a friend should attend; yet he thought it was generally unnecessary. It would often not only be cruel to the patient, but derogatory to our position as confidential advisers to insist upon the presence of a third party. Our position is, indeed, dangerous; but it is rendered doubly dangerous when, as in the late trial, members of our profession (one of whom does not hesitate to state that he felt convinced the case against the Doctor must fail, as there was no evidence to support the charge) did not hesitate to undertake a journey to propound opinions peculiarly their own, and upon the correctness of which alone it was possible to convict Dr. Waters.

The resolution was then put and carried unanimously.

Mr. Steele moved the second resolution:—

"That this meeting feel called upon, in the interest of the profession, to record a solemn and energetic protest against medical witnesses, to the great injury of their brethren, assuming the functions of advocates, and volunteering opinions when they are only required to testify to facts; a practice deplorably frequent, and which has reached its culminating point of impropriety at the hands of Drs. Lee and Ramsbotham in the case of Bromwich *v.* Waters."

The resolution was not directed so much against the gentlemen named personally, as against the objectionable practice of medical witnesses assuming the functions of advocates, and volunteering evidence when they were only required to testify to facts. That the practice was deplorably frequent must be evident to most of those who were acquainted with the numerous cases which had lately occurred in the law courts, where charges had been brought against members of the medical profession, which had proved to be unfounded, but in which there appeared to be no difficulty in inducing medical men to come forward on the part of the prosecution, and give evidence in such a way as to produce a prejudiced and unjust impression upon the judge and the jury. Notwithstanding the triumphant result of Dr. Waters's trial, there was a time during which his case was placed in the most imminent peril. And how? By the medical evidence that was offered on the part of the prosecution. Had not Dr. Simpson been able to counteract the evidence of Drs. Lee and Ramsbotham, the result would have filled the rest of their lives with self-accusation and remorse, from the consciousness of their having been the main instruments in consigning an innocent and an honourable man to infamy and ruin. Mr. Steele pointed out that, when the propriety or impropriety of medical treatment was canvassed by medical men, it had been hitherto deemed contrary to medical etiquette, and injurious to the interests both of medical men and patients, to give an opinion upon a case which had been under the care of another medical man without the presence of that medical man himself. This was the straightforward line of conduct which, from time immemorial, had guided all right-minded men in their dealings with their patients. If, therefore, this was an incumbent duty in a matter of mere medical etiquette, what should they say when the consequences ensuing upon the violation of this rule were absolute social death to the party implicated? It was by mere accident that Dr. Waters became aware that medical experts were to be called to give evidence against him. Shortly before the trial, the prosecution desired to have a commission to take the evidence of a medical man on the continent, who had had Mary Whalley under his treatment at Malvern; and in consequence of this, the solicitor for Dr. Waters obtained information that it was probable that other medical men would be called. When the evidence taken by commission was shown to Dr. Waters by his solicitor, he said, and very properly, "Why, this is the most arrant nonsense ever put upon paper." His solicitor replied, "Never mind; it is the opinion of a medical man—an opinion which is thought of great value by some persons—and, therefore, it must be answered." Then it was that Dr. Waters considered it necessary to submit this evidence to Professor Simpson of Edinburgh; and Professor Simpson gave him a hint that some eminent medical men in London would be called against him; though Dr. Waters was very hard to convince that it would be so. It was not too much to say that improprieties of the kind mentioned in the resolution had "culminated at the hands of Drs. Lee and Ramsbotham." Dr. Ramsbotham had made a sort of explanation and apology in the public journals, and had said that if he had heard Dr. Waters's version of the story before he gave his evidence, there would have been very little difference of opinion between them. Did not this show how completely Dr. Ramsbotham had forgotten that excellent rule to which he (Mr. Steele) had alluded? Had he adopted that rule, he would never have placed himself in that highly reprehensible light in which he

now stood. In conclusion, Mr. Steele pointed out the importance of adopting a resolution which, while asserting the entire innocence of Dr. Waters, would, at the same time, afford protection to younger members of the profession in the event of their being assailed in a similar manner.

Dr. DICKINSON seconded the resolution, observing that Drs. Lee and Ramsbotham had shown great want of judgment and proper professional feeling. With regard to Dr. Taylor, though his name had not yet been mentioned, it would be unfair to pass him by. He was not called upon to give evidence in a question of this kind, and he had no business to come down to give evidence upon a subject which was a matter of doubt. To see a man of the high standing of Dr. Taylor giving his sanction to a procedure of this description was woeful.

Mr. PARKER, while concurring in the observations which had been made by previous speakers, suggested that the time had arrived when the medical profession might very seriously take into consideration the propriety of forming a Medical Defence Association, in order that the expenses of such proceedings might be met without harass and ruin to individuals.

Mr. STEELE was afraid that the establishment of such an association would give the public the idea that the profession feared and expected these actions, and that it would also have the effect of inducing juries, if the verdict happened to be against the medical man, to give heavy damages, because payment would fall upon the society and not upon the individual. He would rather take his stand upon the dignity and honour of the profession, and fight the battle single handed, as Dr. Waters had done, throwing himself upon the sympathy and consideration of the profession if necessary.

The resolution was then put and carried unanimously.

Mr. FLETCHER moved the third resolution—

"That this meeting recommend that a subscription be opened with a view of indemnifying Dr. Waters for any pecuniary loss he may have incurred in conducting his defence, and for the further purpose of presenting him with some lasting memorial of the high approbation with which they have regarded the dignified fortitude of his bearing under the prolonged persecution to which he has been subjected."

Mr. Fletcher had known Dr. Waters for thirteen or fourteen years, and had known no man in whose character he had greater confidence, who was more thoroughly a gentleman and a Christian, and whose mind was more accomplished and delicate. As far as he (Mr. Fletcher) had had an opportunity of judging, Dr. Waters was about the last man of all his acquaintance against whom he should ever have imagined such a foul accusation would have been launched. Coming to the £. *s. d.* part of the resolution, Mr. Fletcher believed that they would do a great deal of good by subscribing to pay whatever expenses Dr. Waters might have incurred. He would not accept anything more than the amount he was out of pocket by the proceeding; but it would be gratifying to his own feelings and the feelings of his friends to have something as a memorial, not only that they considered him innocent, but that he had acted in a way which they regarded as meritorious, and had resisted temptations under which many men would have fallen. With regard to the costs incurred, he (Mr. Fletcher) knew that £500 had been paid by Dr. Waters before he went into court, but he did not know how much of this sum would go under the head of "taxed costs". From all he had heard, however, on the subject, he believed that the taxed costs paid to the victor in a case such as this bore but a small proportion to the real costs or actual amount which a person was out of pocket, even where he came off victorious. With regard to the subscription itself, Mr. Fletcher would rather see a large number of small subscriptions than a few large ones, for the sake of the effect to be produced in the minds of the public. Some people were stupid enough, and others base enough, to believe any accusation, however absurd; and it was, therefore, no mere sentimentalism, but was a point of practical value, that the medical profession should come forward not only with their resolutions, but also with what money might be wanted to make up Dr. Waters's pecuniary loss, and to present him with something which he would leave to his children as a practical proof that not only his professional brethren in Chester and elsewhere, but those who knew his character and standing, not only believed him to be thoroughly innocent of the charges brought against him, but were convinced that his conduct through the whole matter had been marked by high merit. Whatever they did, they could never make up for the agony through which he had passed; but they could do something to replace a sense of wrong by the expression of their cordial sympathy. To say that the injury to Dr. Waters was due to a few gossiping old women or tittle-tattling dowagers of Chester was not true. The real venom had come from the medical profession itself. A weak and dirty weapon had been chosen; but a very little poison placed upon it by Drs. Lee and Ramsbotham might have made it effective for the work of destruction. What would Mary Whalley have been without Drs. Lee, Taylor, and Ramsbotham? Who gave the instructions to Serjeant Shee? They must have been given by a medical man. The *animus* of the instructions as to the charge relative to the speculum could have come only from Dr. Lee, aided by Dr. Ramsbotham; and the suggestion as to the drug-giving must have been known to Dr. Taylor. It must be remembered that these gentlemen had been for months in consultation with the lawyers; and that, whatever they might have *said*, actions spoke louder than words. Though Dr. Ramsbotham might have advised in so many *words* that they should not bring the action, be advised in *deed* that they should. It was most important, in regard to the future, that Dr. Waters should not only be clearly exonerated by the verdict of the jury, but that his professional brethren should declare that this foul accusation had been thoroughly rebutted, and that there was no man who more completely carried with him the sympathy and best wishes of his friends in the profession.

Dr. A. T. H. WATERS, who seconded the resolution, expressed his most cordial concurrence with the preceding resolutions. It was, he thought, very desirable, considering the mental anguish and trying circumstances through which Dr. Waters must have passed, that they should express their sympathy with him, and their congratulations at the successful issue of the trial. It was also desirable to express their reprobation of the conduct of those members of the profession who on this and similar occasions had been willing to lend themselves to those who were attempting to injure the character or ruin the reputation of a professional brother. [*Applause.*] Though not in any way related to his namesake of Chester, he (the speaker) had known Dr. Waters for several years, chiefly in connexion with the meetings of the British Medical Association. He had known him as President of the Lancashire and Cheshire Branch of that Society, and as the reader of the address at the annual meeting of the Association in 1859. He mentioned these circumstances, because they might not be known to every one present, and because they would show the high estimation in which Dr. Edward Waters was held by his professional brethren in the counties of Lancashire and Cheshire. It was very desirable (the speaker thought) to raise a subscription, in the terms of this resolution, for the purpose of indemnifying Dr. Waters from pecuniary loss incurred in conducting his defence; but they should not be satisfied with doing this merely, but subscribe to present him (as the resolution expressed it) with some lasting memorial of the high approbation with which they regarded the dignified

fortitude of his bearing under the painful circumstances in which he had been placed. [*Applause.*] When they looked at the report of the trial, and read the searching cross-examination to which Dr. Waters was subjected, they must feel that only a feeling of strict moral and professional rectitude could have carried him unscathed through such an ordeal. The speaker alluded to the mode in which the medical profession and the public at Chester, including the highest dignitary of the church and almost every member of the profession, had come forward in order practically to show their sympathy with Dr. Waters, and their high estimation of his character.

The CHAIRMAN mentioned that the sum which the solicitor of Dr. Waters had already disbursed was considerably beyond that incidentally mentioned by Mr. Fletcher; and further, that the actual amount of the expenses incurred could not be known until Dr. Waters' bill had been taxed—a form which could not be gone through until next term.

The resolution was put, and carried unanimously.

After some further discussion, the details as to subscriptions were referred to a subcommittee.

Mr. DESMOND moved—

"That the proceedings of the meeting be forwarded to the London medical journals for publication."

Dr. CALLON seconded the motion, which was carried. It was further determined to advertise the resolutions agreed to in the local newspapers.

On the motion of Mr. HAKES, seconded by Dr. MACNAUGHT, a vote of thanks was passed to the Chairman, and the proceedings closed.

ARMY MEDICAL SCHOOL.

THE Royal Victoria Hospital at Netley, about which there has been so much discussion, is now opened as the great invaliding establishment, whither sick soldiers from all foreign stations are sent. As the study of the diseases producing disability is very important, indeed essential for the young army surgeon, it has been found necessary to transfer the Army Medical School from Fort Pitt to Netley; and on April 15th, the sixth session was opened by Deputy Inspector-General Longmore, Professor of Surgery. The lecturer narrated the circumstances which had led to the removal of the school, and gave an account of the new arrangements at Netley, which he considered highly satisfactory. He reviewed the work which had been done at Fort Pitt, and stated that one-eighth of the whole medical department had already gone through the school. The lecture, which was very interesting and extremely well delivered, was attended by the governor, Colonel Wilbraham, C.B.; by the principal medical officer, Dr. Anderson; by Major Ravenhill, R.E.; by the professors, and by all the staff of the hospital, and by some of their private friends. It was a matter of regret that the incomplete state of the rooms prevented any invitations from being sent to the practitioners in the neighbourhood, to attend the lecture and inspect the school and hospital; but it was found that it would be better to defer this until the opening of the next session, when the libraries and museums will be finished and arranged.

MELBOURNE MEDICAL SCHOOL. The establishment of a medical school in connection with the Melbourne University, may, by the arrival of Professor Halford, be said to be consummated. Henceforward we take as a profession, a position which hitherto has been wanting to us. We have a recognised centre, around which our movements may take place with certainty and without intermission. We exist no longer as an assemblage of antagonistic elements. The principle of cohesion is supplied, and we have but to allow it to exercise its own proper influence, and the result cannot be otherwise than for our advantage. (*Austral. Med. Jour.*)

A HOMŒOPATHIC FETE. The homœopathic doctors of Paris held a great meeting at Véfours last week, to celebrate the birthday of Hahnemann. It is described as having been *une fête de famille*, simple and cordial, but we are not told if their own "minimum" system was applied by these worthy professors to the good things of Véfours.

ROYAL VISIT TO THE WINDSOR INFIRMARY. On the 21st instant, the Queen, accompanied by Her Royal Highness the Princess of Wales, drove to the Windsor Royal Infirmary, to which institution her Majesty is a liberal subscriber. The Royal party was met at the Infirmary by Major-General Seymour, the Rev. H. J. Ellison, Vicar of Windsor, and Mr. Blair, the house surgeon, who conducted her Majesty and the Princess of Wales through the different wards; Mr. Blair explaining many of the cases, which were minutely inquired into by her Majesty, who seemed deeply to feel the position of the unfortunate sufferers, several of whom the Queen spoke to in the kindest manner.

SANITARY STATE OF THE FEDERAL ARMY. Major-General Grant, in a letter to Surgeon-General Hammond, dated Headquarters, Department of Tennessee, before Vicksburg, says as to Surgeon J. R. Smith's inquiry into the sanitary condition of his army for its improvement:—"I know a great deal has been said to impress the public generally and all officials particularly with the idea that this army was in a suffering condition, and mostly from neglect. This is most erroneous. The health of this command will compare favourably with that of any army in the field, I venture to say; and every preparation is made for the sick that could be desired. I venture the assertion that no army ever went into the field with better arranged preparations for receiving sick and wounded soldiers than this. We have hospital boats expressly fitted up, and with the government and voluntary supplies it is a great question whether one person in ten could be so well taken care of at home as in the army here."

ANTIQUATED TOADS IN THE HOLE. Sir A. P. Gordon Cumming writes to the *Elgin Courier*:—"In cutting the Inverness and Perth Railway through the Lochnavandah Park on Altyre, we have unceremoniously trespassed on the privacy and retirement of a numerous colony of ancient toads. The cutting is here from 20 to 25 feet deep, the lower part being through from 10 to 16 feet of freestone and red conglomerate. The interesting old residenters are found in the red freestone about 15 to 20 feet below the surface, where they certainly must have seen several 19 years' leases out on the land above them. They are sometimes turned out by the heavy handpick or the great iron crowbar; but a blast of powder, of which a vast amount is here expanded, seems to cause the greatest upset in the establishment, as a shot is sometimes the means of exposing as many as a dozen of the sleepy old fellows. They seem none the worse for their long repose, but after giving a few winks at the 'new light' thus suddenly let in upon them, and taking several gasps of the unwonted air, they leisurely and deliberately proceeded to hop and crawl down the line along the small watercourse towards the lower fields. I have seen them in numbers, and some of the men have counted above forty at once." (*Scotsman.*)

ST. THOMAS'S HOSPITAL. The following resolution has been passed by the governors of St. Thomas's Hospital: "That the grand committee be empowered to continue the negotiations with the governors of Bethlehem Hospital for obtaining the site of that hospital, and to submit proposals to that body either to build for them a new one, in conformity with the plans and estimates prepared by Mr. Currie, the surveyor of St. Thomas's Hospital, or to pay for the site and buildings of Bethlehem the sum of £150,000, subject to the approval of the Court of

Chancery, the sanction of Parliament, and of this Court." And we gather from the following explanation of Mr. Tite, that there is a probability of the offer being accepted by Bethlehem Hospital. "The president of Bethlehem Hospital had written to the president of St. Thomas's saying that, in the event of a new hospital being built for them in the country, suitable to all purposes, they had no objection to enter into negotiations for their present building for the purposes of St. Thomas's Hospital, but upon no other terms. Mr. Currie had taken the matter in hand, and his estimate had just been read. The authorities of Bethlehem refused all negotiations on any other terms, and for £130,000 the governors could most likely obtain the site. As the governors could not legally build an hospital for any other body but St. Thomas's, he thought if they offered the plans of Mr. Currie, which were now on the table, and the £150,000 in money, to Bethlehem, they would accept the offer, because there would be no difficulty as to procuring a site in the country. The erection of the new St. Thomas's Hospital would cost £200,000; so that if it were placed in the site of Bethlehem Hospital, the total ultimate cost would be £330,000.

Village Hospitals. A house is taken which has room for six beds at least, which is in a healthy situation, and in wholesome condition, and near the doctor's abode. A woman is put into the house to keep it clean, and do the work of it. A trained nurse—one of Miss Nightingale's band, if possible—has the charge of the patients; and, when there are none, she attends the women of the village in their lying-in, or in illness, on the payment of a certain fee. The hospital patient pays a weekly sum, fixed, according to his circumstances, by his employer and the managers; and it does not appear that any difficulty is made about this. Probably it is, on the whole, an evident saving to the poor man to have his home relieved of the burden, and to have the cure so much accelerated as it is by the advantages of the hospital. The doctors are well pleased to have their most anxious patients close at hand, and under the most favourable conditions. It is a great change to the humane surgeon from having to ride far and wide, only to give orders which cannot or will not be obeyed, and to see the patients suffering from the noise of children, the intrusions of neighbours, the heat of the living-room, or the closeness of the bedroom, and from the miserable cookery of the cottage where the whole family has to live on 9*s* or 10*s* a week. Instead of this, the kind-hearted doctor finds his patient lying in quiet and comfort, duly physicked and daintily fed, under the charge of a qualified nurse, and of trustees, of whom the clergyman is always one. There is wine in the cellar, there are good things in the larder, bundles of old linen come in, and comforts for the bedridden; and the beds and easy-chairs are adapted for the treatment of broken limbs and the ease of the feeble frame. Wife or child may come in for a gossip at fixed times, and the only restraint is that they may not bring in food or drink without the doctor's leave. Kind ladies, with well-known faces, often look in; and all the news of the village, and some from London, and foreign parts, finds its way into the hospital. The place is far more cheerful and familiar than the great County Infirmary, and far more comfortable than the home which has no accommodation for sickness. Is it not natural that such an institution should succeed? And will it not be strange if it does not spring up all over the country? (*Once a Week.*)

BOOKS RECEIVED.

1. Clinical Report on Cancer of the Female Sexual Organs. By Thomas H. Tanner, M.D. London: 1863.
2. Waste. A Lecture. By J. A. Symonds, M.D.
3. The Urine in Health and Disease. By Arthur Hill Hassall, M.D. Second edition. London: 1863.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London. Special General Meeting, 8 P.M.; Clinical Discussion, 8.30 P.M.—Geographical.

Tuesday. Royal Medical and Chirurgical, 8.30 P.M. Dr. A. T. H. Waters (of Liverpool), "On a Remarkable Case of Injury of the Head"; Dr. T. K. Chambers, "On the Therapeutics of Continued Fever"; Dr. H. Weber, "Pathology of Crura Cerebri."

Wednesday. Zoological (Anniversary).—Society of Arts.

Thursday. Royal.—Antiquarian.

Friday. Royal Institution (Anniversary).—Archæological Institute.—Western Medical and Surgical, 8 P.M. (Anniversary).

POPULATION STATISTICS AND METEOROLOGY OF LONDON—April 18, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1052 / Girls..1028	2080	1437
Average of corresponding weeks 1853-62		1977	1283

Barometer:
Highest (Sat.) 30.092; lowest (Tu.) 29.778; mean, 29.887.

Thermometer:
Highest in sun—extremes (Wed.) 109 degs.; (Tu.) 83.7 degs.
In shade—highest (Th.) 67.7 degs.; lowest (Tu. & Wed.) 36.8 degs.
Mean—50.6 degrees; difference from mean of 43 yrs.+4.9 degs.
Range—during week, 30.9 degrees; mean daily, 21.4 degrees.

Mean humidity of air (*saturation*=100), 81.

Mean direction of wind, N.E.—Rain in inches, 0.02.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

J. C.—The individual to whom our correspondent alludes, though as yet of short career, is a very notorious offender. He is a scion of a well-known ignoble house of rascally quacks; and obtained his college credentials by falsely pretending that he would lead a decent life; *i.e.*, one exactly the reverse of that which he now pursues, and which has long been successfully prosecuted by his progenitors. We need hardly add, that the open and unblushing infamy of his and their practice, is not to be touched by anything we could say. Nothing less than whips of scorpions would produce an impression on the brazen-faced harpies who indulge in the lucrative and infamous traffic referred to. We quite agree with our correspondent, that the Medical Council is simply a farce, as a body presiding over the welfare and education of the profession, if it have not the power to expel from its *Register* scoundrels of so notorious a dye. In fact, we might say that in such case the Council is worse than a mockery—it is a positive delusion; for by its admission into, and insertion of the names of these people in, its legal *Register*, openly declares to the world that they are good and worthy men, worthy of a place in the *Medical Register* of the United Kingdom of Great Britain and Ireland, and

therefore worthy of public confidence. In this sense, the Council actually gives them a status which they would not otherwise possess! They are registered practitioners.

A SURGEON KEPT BY A DRUGGIST.—A correspondent says: "I know of many instances where a surgeon stands for an hour or more daily at a druggist's shop for the purpose of giving advice."

B. C.—It is only fair to the gentleman lately referred to in the JOURNAL, to say: that he at once ceased attending at the druggist's shop, when the impropriety of the proceeding was pointed out to him.

A SICK HOMŒOPATH.—A correspondent asks how he should act if requested by a homœopathic practitioner to attend him in his sickness. There can be no doubt or difficulty whatever about the matter. Our correspondent must, of course, at once obey the summons; take his fee; and rejoice over the homage which charlatanry pays to science. We believe that, as a rule, homœopathists, when sick, do not employ their homœopathic colleagues. They practically show their belief and confidence in the thing they palm off on the credulous, by calling in the services of medical men. We have heard of many examples of this kind.

THE following excerpts from stanzas on the marriage of the Prince of Wales with the Princess Alexandra of Denmark, are from the pen of our accomplished associate, Dr. Evanson of Torquay.

After the darkest night comes glorious morning,
When sunbreak bursts from out the golden sky,
With every beauty the fresh earth adorning,
The glittering sea, and glowing clouds on high.
A night of sorrow on our land has rested,
But now the coming day is seen to dawn;
The heart is not of its regrets divested,
Although a veil o'er its regrets be drawn.

* * * *

May England's star, still glorious and ascendant,
In freedom's frontlet ever foremost shine,
Showing to all who would be independent,
How law with liberty man must combine:
A nation, as one brotherhood, united,
Who guard a regal right even as their own;
A land where wrong is still by justice righted,—
A people bound by freedom to the throne.

MR. ADAMS AND MR. PROPERT.

SIR,—I beg to forward to you a correspondence which has recently taken place between myself and Mr. Propert, and upon which it is unnecessary for me to make any comment. I am, etc.,

WM. ADAMS.

5, Henrietta Street, Cavendish Square, April 22, 1863.

5, Henrietta Street, Cavendish Square, W., April 15, 1863.

SIR,—The following quotation is from a letter received from a gentleman occupying a high position in our profession:—

"The sting of the matter is, that, spite of the late trial, and notwithstanding the evidence since afforded by Dr. Cottew, Mr. Maitland, Dr. Webb, Mr. Toynbee, and others, as to the antecedents of the prosecutor, there are some persons who still adhere to Mr. Prout, who justify him in his apparently harsh treatment of you at the beginning of the affair, when he condemned you unheard, and refused to listen to the explanations you offered him; and who not merely condemn you by implication, but affirm positively as follows: —, that were Mr. Propert's version of his proceedings made public, would be said to be entirely justified, and that he is displaying great forbearance towards you in not noticing the attacks made upon him, and that his holding his tongue is safety to you. These latter expressions I have heard this week, from the mouth of a personal friend of mine, a man of sense, and one whose opinion I value. He is a friend of Mr. Propert's, and as such believes that Mr. P.'s statement would crush you."

I wish to know whether the statement made in the above quotation be true or false? Is it, or is not, true that you are dealing out to me such insinuations, or any insinuation whatever, against my character? I must demand a plain and simple answer to this question, and without delay. I am, sir, yours, etc.,

John Propert, Esq. WM. ADAMS.

6, New Cavendish Street, W., April 17, 1863.

SIR,—In reply to your letter of the 15th inst, I beg to state that I never heard of the statements alleged to have been made by friends of mine, with reference to yourself, in your letter referred to; neither do I consider myself in any way responsible for the opinions which they may entertain respecting you. I have, however, always much regret that a gentleman of your position in our profession would not have availed himself of the proposal by Mr. Johnson, the attorney acting for Miss Russell in the action brought by that person against you, contained in a letter addressed to your attorney, dated March 22nd, 1862; namely, "that both the plaintiff and defendant should be examined as witnesses on the trial of that action, and that the proposal should have been declined by your attorneys in their letter to Mr. Johnson, in reply, of the 11th of April, 1862."

I remain, sir, yours, etc., JOHN PROPERT.

William Adams, Esq., etc.

5, Henrietta Street, Cavendish Square, W., April 18, 1863.

SIR,—In my letter of the 15th instant, I asked you a plain question to this effect:—

"Is it, or is it not, true, (1) that you have said you were forbearing towards me by not replying to explanations which have been demanded from you for your conduct towards me; (2) that holding your tongue is safety to me; (3) have you implied that you are aware of allegations injurious to my character, which you withhold out of forbearance to me."

In your reply of the 17th April you do not answer this question; I must, therefore, repeat my demand for an answer. You have introduced in your letter a subject totally irrelevant to my question; but I will remind you that, however desirous I was to be examined as a witness (and it would undoubtedly have been much to my advantage), the laws of evidence did not permit of it. You will learn this from any solicitor; and if you will refer to the published charge of the Chief Baron, of which I send you a copy, at page 30, you may see that the judge said, "Miss Russell cannot be examined, nor can Mr. Adams." Mr. Lush, in his opening address, explained this peculiarity in the law of evidence; and Mr. Serjeant Shee did not suggest that any other course could have been adopted. This, however, is a mere matter of legal procedure that has nothing whatever to do with the question to which, as a member of the same profession, I require a plain and truthful answer. I am, sir, yours, etc.,

John Propert, Esq. WM. ADAMS.

6, New Cavendish Street, W., 22nd April, 1863.

SIR.—Having in my letter of the 17th inst. answered the questions contained in your letter to me of the 15th inst., I have no reply to make to your letter of the 18th; and I must decline any further correspondence on the subject of your letters.

I beg to remain, sir, your obedient servant,

W. Adams, Esq., etc. JOHN PROPERT.

[It is no business or intention of ours to defend Mr. Propert; but we must suggest that it is hardly probable that Mr. Propert would make himself responsible for words which an anonymous friend of Mr. Adams says were told to him by anonymous friends of Mr. Propert, as having been uttered by Mr. Propert; and more especially so when the admission would, as we apprehend, be the admission of the publication of a libel by Mr. Propert. Why should not this matter in dispute be settled by the mutual offices of friends of Mr. Propert and friends of Mr. Adams? No one can for a moment believe that Mr. Propert has at most done more than act injudiciously in this affair; and if friends, after hearing the case, consider that he has done so and to the prejudice of Mr. Adams, what should prevent Mr. Propert at once saying so, and making any amends which his friends propose? Let him put himself in the hands of a court of his own and of Mr. Adams's friends, and abide their decision. It is evident, on the face of it, supposing Mr. Propert has acted injudiciously and to Mr. Adams's hurt, that the motives which led him into the error were alone motives of kindness and compassion, though bestowed on a very false and miserable woman. Mr. Propert has Fluellen's blood in him, no doubt, and may fairly object to the bullying tone which has been applied to him by a part of the medical press; but we cannot doubt that he would give satisfaction to Mr. Adams in a *Court of Honour*, as here suggested. We are convinced that a *Court* of this kind would give full satisfaction to both parties; and would also be the means of putting an end to the further publication of all gossip and scandal in the matter. EDITOR.]

COMMUNICATIONS have been received from:—Mr. THOMAS BRYANT; Dr. F. J. BROWN; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; M.B.; Dr. WILLIAM NEWMAN; Mr. T. SYMPSON; Dr. D. NELSON; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. CAMPS; Mr. WILLIAM COPNEY; Mr. LOWNDES; Dr. J. EDMUNDS; Dr. P. H. WILLIAMS; Mr. A. G. OSBORN; Dr. J. STRUTHERS; THE HON. SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. T. WHARTON JONES; Dr. E. A. PARKES; Dr. J. CANDY; Mr. STONE; Mr. JAMES BIRD; Mr. T. T. GRIFFITH; Dr. G. MITCHINSON; Dr. FLEMING; Dr. BOYCOTT; Dr. HARLEY; Mr. SIMON; Dr. GIMSON; Dr. EDWARD SMITH; Dr. BOLTON; Mr. W. ADAMS; Mr. J. SPROULE; Mr. H. HAILEY; HONORARY SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; and Dr. H. DICK.

ADVERTISEMENTS.

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CHLORODYNE

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(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

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From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

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The proportion of Morphia—⅔ gr. in f. ʒi. Dose—Five to twenty Drops.

The Profession is respectfully referred to the various Letters that have appeared in the Medical Journals against the use of "SECRET" REMEDIES.

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From J. E. ERICHSEN, Esq.

6, Cavendish Place, Cavendish Square, October 1st, 1861.

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JOHN ERICHSEN,
Professor of Surgery at University College, and Surgeon to the Hospital.

From W. FERGUSSON, Esq.

Professor of Surgery at King's College and Surgeon to the Hospital.

16, George Street, Hanover Square, Oct. 14th, 1861.

SIR,—I have seen and made use of your Double Action Syringe and think very highly of it. Yours faithfully,

Mr. Twinberrow, Edwards Street. WM. FERGUSSON.

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Remarks
ON
THE PRESENT PREVALENCE OF SMALL-POX.

BY
GEORGE BUDD, M.D., F.R.C.P.

The prevalence of small-pox, which is exciting so much attention at present, has been publicly attributed, in no small degree, to negligence on the part of the medical practitioners by whom vaccination is performed.

It is implied that the medical men to whom the practice of vaccination is officially entrusted, often perform their duties negligently; and that consequently a great number of persons supposed to have been vaccinated, have not really had cow-pox.

Considering that most medical men in general practice undertake to vaccinate, the charge is one of wide application; and, if it be admitted to be generally true, persons who contract small-pox subsequently to vaccination will naturally be led to ascribe their disease to the negligence of the medical man by whom the vaccination was performed.

It is, therefore, more than ever important that we should carefully consider all that observation has taught regarding the wonderful protection which small-pox and other members of that remarkable group of diseases, which, as a general rule, occur but once in life, give, each against its own recurrence.

All evidence goes to show that this protection is perfect for about seven years. There are few, if any, authenticated instances of small-pox, when taken in the natural way, or any other well marked disease of the group, occurring a second time within seven years, whatever may have been the degree of exposure to infection. As life wears on, the protection lessens; in other words, the body has a tendency to revert to its original condition, as far as the modification induced by this particular disease is concerned.

For the vast majority of persons, if the disease be taken in the natural way, the protection is practically perfect for life. No second attack ever occurs.

Willan, a most careful observer, who made eruptive diseases a special study, could state that in twenty years he had not met with a single individual who had twice had measles with the eruption and the concomitant fever both well marked.

Dr. Gregory, for many years Physician to the Small-pox Hospital, remarked in 1843, when his lectures on *Eruptive Diseases* were published, that no patient had ever been admitted into the hospital with small-pox occurring a second time.

Each of the diseases of this peculiar group does, however, as is now well known, occasionally occur a second time in the same person; and even when there is no evidence of a previous attack, some other circumstances not unfrequently lead to the same inference—namely, that the exhausted susceptibility to infection may be renewed by time.

Some years ago, I saw an old lady, near ninety, with a tribe of descendants of the third and fourth degree, suffering from well marked hooping-cough, in common with the children of the house in which she was staying; and I have witnessed the disease in a very severe form in a medical man of sixty, several of whose children had years before had it severely, and who during his professional life must have been repeatedly exposed to infection, not in his own house only, but in his general practice.

The only satisfactory explanation of such cases is that the protection inherited or given by an attack early in life had, in the course of years, worn out.

The disease, whichever of the group it be, appears, as might have been expected, more apt to recur when the first attack was imperfect. Willan made the observation, often since repeated, that measles is much more apt to occur a second time when the disease in the first attack was imperfectly developed—when the eruption appeared without fever, and without the catarrhal symptoms that usually attend it.

The most conclusive evidence on the effect of time in renewing the exhausted susceptibility to infection is, however, furnished by the practice of vaccination, which may be regarded as inoculation with the matter of small-pox somewhat changed in its properties, and rendered less virulent, by its passage through the cow.

It is found that the protection against subsequent small-pox given by cow-pox is much less complete than that given by small-pox itself: that the proportion of cases in which small-pox occurs after vaccination, however perfectly developed the vaccine vesicle may have been, is very much greater than that in which small-pox occurs twice.

The protection given by cow-pox is, however, practically effectual for about seven years. Within this time small-pox seldom, if ever, occurs after vaccination, provided the vaccine vesicle was properly developed. After the lapse of seven years, cases of small-pox begin to appear among the vaccinated, or, if the same persons be then vaccinated a second time, the operation takes effect in a certain proportion of cases. The statistics of the Prussian and Belgian armies, in which revaccination has been systematically practised for some years, show conclusively that, by the second successful vaccination, the susceptibility to infection is again exhausted.

These facts prove clearly that the protection given by vaccination has a tendency to wear out in time. There is every reason to believe that it wears out more quickly in early life, when the body is undergoing rapid change, and when the protective influence may be supposed to become diluted, if such a term may be used, by the mere growth of the body, than when the more stationary period of manhood is reached.

When cases of small-pox after vaccination began to appear, it was soon observed that the disease thus occurring is generally mild, and is somewhat modified in its symptoms or course. The fever that attends it is, as a general rule, less severe than in persons unprotected by previous vaccination, or the pustules do not attain their full development, but shrivel and scab prematurely. These facts show that the protective influence we have been considering is not something indivisible, that must be present or absent, but something that admits of every

possible degree, and that when it has waned so as not to be able any longer to prevent infection, it mitigates or dwarfs the subsequent disease.

This circumstance, and what observation teaches regarding other induced constitutional peculiarities, would warrant the inference, that a certain degree of the protective influence imparted by small-pox and other cognate diseases may be transmitted, by the law of succession, from parent to child: and consequently that the disease would be generally more severe when first introduced into a country unused to it than in countries where it has existed for several generations, and where the mass of the people have acquired by inheritance a certain degree of protection.

This inference is borne out, as much as could have been expected, by the observation of travellers. Darwin, in his *Journal* (p. 520), speaks of the ravages caused by measles among the aborigines of New South Wales; and some of our missionaries in Africa have spoken of its severity and destructiveness among the natives of that country.

All writers agree as to the enormous loss of life occasioned by small-pox, when it was first carried by the white man to the North American Indians and to the islands of the South Pacific.

As uncivilised nations keep no accurate register of deaths, such evidence is necessarily vague, and, no doubt is, like the slaughter in their battles, generally exaggerated: but in this particular case, the evidence is cumulative, and is confirmed by facts of which we have positive knowledge. About forty years ago, the king and queen of the Sandwich Islands, while on a visit to this country, both died of measles. They brought with them seven native attendants, and all were attacked with measles soon after their arrival in London. Dr. (now Sir Henry) Holland and Sir H. Halford were their medical advisers; and we have the testimony of the former that "the disease in all showed a malignant violence of which the examples are rare in this country." (*Medical Notes and Reflexions*, 1st ed., p. 390.)

Dr. McWilliam, in his *Medical History of the Expedition to the Niger*, thus describes the effects of vaccination in different classes of the population in the Island of Ascension:—

"The white children experienced the usual slight fever attending vaccinia, which in all cases yielded to a mild medicine. The white adults complained only of itching round the vesicle while it was in the stage of decline. But among the whole of the blacks the disease assumed a more decided form, and ran a regular course. The eruption was preceded by severe headache, pain of back and loins, and general fever, which did not disappear for several days. The eruption in several cases was dispersed over the neck, chest, and abdomen, and the bases of the vesicles were, in general, much inflamed. All of them were confined to bed for some days, and several required rather active treatment." (*Medical History of the Expedition to the Niger during the years* 1841-2. By J. O. McWilliam, M.D., p. 250.)

All these circumstances warrant the conclusion that, when one of the infectious diseases which occur, as a general rule, but once in life, has existed in a country during several generations, the mass of the people have acquired, by inheritance, a certain degree of protection against it—not enough to prevent the occurrence of the disease in them, but sufficient in some degree to lessen its virulence.* And if this be so, an inference, very important to the question before us, seems to follow. We have conclusive evidence that the protection against future small-pox given by vaccination is much less *durable* than that given by an attack of small-pox itself; and, if the protective influence be transmissible by descent, it follows that in the children of persons who have had cow-pox the inherited protection will generally be less, and the susceptibility to small-pox will consequently be greater, than in the children of persons who have had small-pox; that the practice of vaccination—at least, when the operation is performed, as is the general custom in this country, only in childhood—may have the effect, after a generation or two, of increasing the susceptibility to small-pox among the mass of the people, and may thus, in persons not protected by vaccination, render the disease even more virulent than it was when unmitigated small-pox alone existed among us.

These considerations render it sufficiently evident that, to give to the individual and to the race all the protection against small-pox which cow-pox is capable of giving, it is necessary, not only that vaccination should be performed on all persons with the utmost care, and with every precaution that can tend to secure its success, but that, if first performed in infancy, as, to give protection to the infant, it must be, it should *systematically* be repeated when a more stationary period of life is reached.

* The degree to which protection is capable of being transmitted by descent, might readily be ascertained in the disease of sheep; which, from its close resemblance to small-pox, has been termed "variola ovina", or small-pox of sheep. This disease, like human small-pox, is not only communicated through the air, but may be propagated by inoculation, and can thus be given at will; and a peculiar facility for such an inquiry is afforded by the rapidity with which, in sheep, the generations succeed each other.

Small-pox in London. In the House of Commons, on Friday week last, Lord Naas asked the Secretary of State for the Home Department whether the attention of the government had been drawn to the increase of small-pox in the metropolis, and whether it was his intention to propose during the present session any measure for the promotion of vaccination. Mr. Lowe said that unfortunately when small-pox was not prevalent no trouble was taken by the proper authorities with regard to vaccination, but when the disease appeared in all its horrors then applications were made to the government for legislation, which, if ever so good, must be very tardy and insufficient for the moment. The subject had already engrossed the attention of the government, but much of the evil complained of was attributable to the neglect of the local authorities in not putting the provisions of the act in force. There was not, he was sorry to say, an act such as the one in England applicable to Scotland, but that subject was under consideration, and no decision had yet been come to upon it.

A Female Bachelier in Sciences. A young lady presented herself at the Sorbonne a few days since to pass her examination for the degree of Bachelor in Science. The rector of the Academy of Lyons established the principle two years since of admitting women to take the degrees of bachelor of letters and of sciences. Mademoiselle Emma Chenu passed a brilliant examination. Her agitation was extreme, but she was supported and encouraged by the demeanour of the collegians present. The announcement of her admission among the new bachelors was hailed by a burst of applause from the entire assembly. M. Milne-Edwards personally congratulated Mademoiselle Chenu on her success.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture II. (*Continued.*)

Differences between the Surgical Affections of the Respiratory System in the Child and Adult.

We will now pass on to consider in what way the surgical affections of the respiratory organs in children differ from those which are to be found in the adult; and, if there are not any which may be described as special to this early period of life, there are many which require surgical assistance, and which are, as a rule, observed only in young subjects.

Amongst the most important of these affections is the *œdema of the larynx* which follows upon the swallowing of boiling liquid; and the symptoms which immediately result from such an accident are mostly severe and dangerous to life. The pathological condition which is the result of the contact of the fluid is of a simple character, a severe blistering of the part being the prominent point; the œdema and vesication of the irritated mucous membrane readily closing the narrow rima.

The principles of treatment in such cases are not complicated, and they are the same as would be carried out under any other condition. But delay in their application is not to be allowed; for suffocation, either from the mechanical obstruction occasioned by the enlargement of the parts, or from spasm of the glottis, is most likely to ensue. If the symptoms, however, are not severe, and if, on careful watching, they do not rapidly increase, there is strong hope that the mischief is but partial, and that they will soon subside; for this blistering of a delicate membrane is a rapid process; and, if it do not take place within a few hours after the accident, it will rarely appear. Nevertheless, the child must be watched with care, so that the evils of a sudden spasm of the glottis may be averted, and the earliest indications of obstruction be successfully treated.

Dr. Bevan and others have spoken in high terms of the benefits of antimony in this affection; and the weight of evidence which they adduce in its favour must be considered strong, and therefore highly recommendatory. It is to be given in small and frequently repeated doses. I have given it in cases of the milder description with some success, when no immediate danger to life manifested itself, and when delay was, therefore, not so dangerous; but I have never yet been induced to trust to it when there was an evident fear of a momentary suffocation, and therefore an imminent danger to life. In such severe instances, some immediate means to prevent suffocation are loudly called for; and of these, tracheotomy has been the most favoured.

I possess the records of nine instances in which this practice was carried out, and in five recovery took place; in the remaining four, death followed from bronchopneumonia. I am aware that this success is greater than that usually recorded; for out of twenty-five cases recorded by Dr. Jameson in the *Medical Times and Gazette* for October 1859, and the *Dublin Quarterly Journal of Medical Science* for February 1860, but six cases recovered.

It is not an easy question to decide how much of this pneumonia is to be attributed to tracheotomy, or to the accident; but the operation is almost a necessity to prolong life, and must therefore be performed. I must confess, however, that I have derived much satisfaction from a suggestion which has been made within the last few years, but which, I believe, has not been carried into practice; and that is, to puncture or scarify the œdematous mucous membrane. If the pathology of the affection be such as I have indicated—merely a blistering of the mucous surface—there are great hopes that this practice may prove of value; and I shall certainly be disposed to give it a trial on a befitting occasion. It has this advantage, that on principle it is likely to succeed; and, if the practice fail, no possible harm can accrue, as other means can be at once employed.

The subject of *foreign bodies in the air-passages* is the next to which I propose to draw your attention; for, although cases illustrating the evil effects of such an accident are occasionally met with in adults, by far the larger proportion of these instances are undoubtedly found during early life.

It is scarcely necessary to dwell upon the symptoms by which this accident is to be diagnosed. The fact that obstruction to the respiratory process exists, that it came on suddenly, and is so aggravated at intervals as to endanger life, are sufficiently characteristic symptoms by which the nature of the case can be made out. The history will also, as a rule, prove of material assistance. But any one who has witnessed such an accident will find no difficulty in readily recognising a second.

There is but one principle of treatment which demands attention, and that is to procure, as speedily as possible, the expulsion of the foreign body. Without some surgical measure, it is an extremely rare thing to witness this event, if the foreign body have passed the rima, and entered the trachea; and, although I may have read of such cases, it has never fallen to my lot to witness one.

An operation, therefore, is almost always called for; and that of tracheotomy is the only feasible one. I possess the records of eight examples in which this operation was performed. In five of these, the foreign body was immediately ejected upon opening the trachea; and four of these recovered, death occurring in the fatal case from bronchopneumonia. In the remaining three cases, the foreign body was immoveable, and produced death. In two, it was subsequently found to be firmly impacted within the rima; and in the third, it was impacted in the right bronchus.

It thus appears that, in a large proportion of the cases in which a foreign body has passed into the trachea, its removal can be successfully obtained by the operation of tracheotomy. Indeed, as long as any evidence exists that it is still free and moveable

and is not impacted either in the bronchi or larynx, a successful result to operative interference may with some confidence be predicated.

If the foreign body be impacted within the bronchus, there is little hope of its extraction. The use of forceps, and other instruments which have from time to time been suggested by surgeons for this end, cannot be recommended; for it is almost an impossibility to seize the foreign body when impacted within the tube, and any attempt will only tend to fix it more securely in its position. If air can pass into the lung, there must always exist a strong expulsive force, which powerfully tends to procure the removal of the body; and, if it be fixed in too firmly to allow of such a result taking place, any attempts from without will be obviously futile. In exceptional cases, however, this practice may be of use. In all cases, therefore, of foreign body in the air-passages, tracheotomy should be performed. Delay in its execution must be unhesitatingly condemned, as no possible good can follow such a line of practice; for the surgeon must not look for the natural expulsion of the foreign body through the rima, as the perfect closure of the laryngeal orifice is with tolerable certainty guaranteed by its presence, although recorded experience favours us with instances in which the foreign body was spontaneously expelled from the trachea without an operation. Chloroform should be administered preparatory to the operation, as it may be given with perfect safety; for it not only tends considerably to prevent the spasm of the laryngeal muscles by allaying their irritability, but it enables the surgeon to perform his difficult duties with calmness and precision.

A free section of the trachea is always to be made, in order to allow of a free passage for the expulsion of the foreign body; and, in the majority of cases, this foreign body will be expelled as soon as the opening in the trachea has been accomplished. If any difficulty be experienced in obtaining this result, the child's body may be tilted upwards and the head downwards, to favour the gravitation of the substance; and a good shake or pat upon the back will at times dislodge it from its position, and consequently assist in securing its expulsion. If these means fail in carrying out the object for which they were undertaken, the child must be left alone; the opening in the trachea should, however, be made large, or even valvular, and means adopted to preserve its patency; so that, should the foreign body by any chance be subsequently dislodged from its position, its expulsion may be secured.

The larynx itself should be always most carefully examined, not only before, but after the operation; for it is not an uncommon thing to find the foreign body firmly impacted within the rima, and consequently in a position from which its removal cannot be looked upon as being very difficult. In two of the cases which I have recorded, out of the three which proved fatal, after a futile attempt at the removal of the foreign body by tracheotomy had been made, I have already shown that the foreign body was subsequently found to be firmly impacted within the rima; and it is fair to believe that, if the foreign body had been previously removed from this position, a very different success would in both cases have been recorded.

This laryngeal exploration must, however, be conducted with considerable care. The passage of a probe or fine catheter, or any other small body, through the rima from below upwards, is positively useless, as experience has proved that these means may be carefully employed, and yet the surgeon will fail in finding any obstruction; but the exploratory instrument must be a large one; indeed, it should be nearly as large as can be admitted through the rima; so that, if the foreign body lodge at this spot, it will necessarily be pushed upwards into the pharynx by its forcible passage. A large elastic catheter is unquestionably the best instrument for this purpose; and, if this be employed in such cases, it may be unhesitatingly asserted that a more uniformly good success will in future have to be recorded. This practice would probably have added two more successful cases to the five which I have already mentioned, making seven successful instances of the removal of the body, out of the eight in which it had taken place.

Within the last few months, I was present at the examination of a child who had died from the impaction of a bone within the rima, which had not been detected after the operation of tracheotomy, although a careful examination of the larynx was made with a fine instrument. It was impossible to see the specimen without a painful feeling of regret that a larger instrument had not been employed in the exploration, as the body was at once dislodged after death by the introduction of a catheter up the passage.

In all cases, therefore, of foreign body in the air-passages, in which an expulsion cannot be obtained by the operation of tracheotomy, let the larynx be carefully examined by means of a large catheter, and its extremity passed from below upwards through the rima; the finger at the same time making a careful examination from above; for by these means, and these only, will a foreign body be removed from the rima glottidis.

When the body is removed, convalescence may fairly be anticipated. An attack of bronchopneumonia will at times interfere with recovery, or even produce death; and, although this complication is one to which the attention and fears of the surgeon may be directed, it is not one which frequently follows, or which should produce other feelings than those of fear.

Foreign Bodies in the Nostril are common occurrences in children. It is a subject, however, which need not occupy our attention. They may readily be removed by means of a bent probe or forceps; and, if of a soft nature, a good syringing answers every purpose.

I have known a plum-stone to remain within the nostril for eight months, and to give rise to the symptoms of ozæna, for which the child was brought under my observation. A careful examination of the nostril in such cases will, however, invariably reveal its true nature.

The surgical affections of the upper part of the respiratory organs having received as much of our attention as we can afford to give, I propose now briefly to consider if there be any points of difference to be noted between the surgical affections of the adult and child; and I am disposed to believe that the most important difference is shown by the fact that in young life an injury to the thorax may be followed by laceration of the lung-tissue, with-

out any associated fracture or displacement of the ribs. This fact is, unquestionably, to be explained by the greater elasticity of the thoracic wall in the child than in the adult, and the greater tendency to laceration of the lung-structure. The following case will, perhaps, best illustrate its truth.

Case. A boy, aged 7 years, when playing in the road, was knocked down by the shaft of a cart; the wheel caught him by the left side of the lower part of his abdomen, and turned him round, stopping when just about to pass over the thorax. Intense dyspnœa and severe hæmoptysis immediately resulted, and he was brought to Guy's. He was admitted under the care of Mr. Birkett; and, as I happened to be at the hospital at that time, I saw him, and noted the following facts. He was in bed, lying on his right side, half turned over on to his abdomen, with his hips drawn up and flexed. There was intense dyspnœa and cough, accompanied with hæmoptysis. He was quite collapsed, and nearly unconscious; and no indication of fractured ribs could be detected. He never rallied, but died two hours after the accident.

At the *post mortem* examination, the only external sign of injury was a bruise on the left side of the back. There was no fracture of the ribs, or any external indication of injury to the thorax. The right chest was filled with air and some ounces of blood, which had evidently proceeded from a laceration, about three inches long, of the lower edge of the middle lobe of the right lung. The lung was partially collapsed. In the abdominal cavity were a few ounces of blood, from a laceration of the upper edge of the liver. There was also effused blood about the left kidney, from laceration of the suprarenal capsules.

Remarks. In this case, I think, there can be little doubt that the laceration of the lung was due to the injury; and, as it was not complicated with any fracture of the ribs, it must have been produced by a yielding of the bony and cartilaginous coverings, and a dragging of the lung from its fixed attachments. This is a point of considerable interest, and, not being common, is worthy of record. It is mentioned in this place as a principal point of difference between the thoracic injuries of young and adult life, and is the only one to which I will now draw attention.

Fractures of the ribs in children, like the same injury in adult life, are to be treated by strapping, and not by bandages; bands from one to one-and-a-half inch wide being fixed from the spine to the sternum round the injured side, including three ribs above and three below the seat of fracture. It must be remarked, however, that fractured ribs in young people are very rare; their natural elasticity, doubtless, being quite sufficient to explain the fact.

[*To be continued.*]

Chemical Society. Arrangements have been made for the delivery of the following lectures respectively at the next three meetings of the Chemical Society:—May 7, Dr. Lyon Playfair, C.B., F.R.S., "On the Constitution of Salts;" May 21, W. R. Grove, Esq., Q.C., F.R.S., "On Certain effects of Intense Heat on Fluids;" June 4, M. Marcellin Berthelot, "On Synthetic Methods in Organic Chemistry."

Original Communications.

ON CONGENITAL PHIMOSIS: WITH A SIMPLE OPERATION FOR ITS RELIEF.

By Furneaux Jordan, Professor of Descriptive and Surgical Anatomy, Queen's College; Assistant-Surgeon to Queen's Hospital; and Senior Surgeon to the Eye and Ear Hospital, Birmingham.

Cases of phimosis are conveniently classified under two heads—the *congenital* and the *contingent*.

The congenital variety is the more important; because, being permanent, it produces a greater abundance of evil consequences. Contingent phimosis is not only temporary, but is itself merely a symptom of other prior disease; and the clearly recognised principles of its treatment belong to the remedial surgery of the diseases of which it is a secondary phenomenon.

The effects of congenital phimosis are local and general. Locally, there may be inflammation—pain, tenderness, swelling, suppuration, ulceration, or sloughing, or adhesions; impeded urinary flow, or retention of urine (I have found retention of urine in phimosis, and also in urethral disease, without complete physical obstruction—is this due to so-called reflex action?); retained sebaceous secretion, which itself frequently causes much irritation and inflammation. Preputial calculus is occasionally met with. In cases of tight phimosis which remains unrelieved, I am convinced, from a lengthened series of observations, that atrophy of the penis is an undoubted result. It is commonly supposed also that phimotic stricture favours the accession of epithelioma in the penis. The presence of phimosis in acquired disease constitutes a very unfavourable complication. The treatment, however, when an operation is required, is simple; an incision through the whole length of the prepuce (or its complete removal when in a sloughing state) is the only measure capable of relieving phimosis when the skin and lining membrane of the prepuce are unable to glide over each other, from the presence of inflammatory products between them.

Very frequently the effects of phimosis are not local merely, but affect other organs, or even impair the general health. In these cases, the flow of urine is impeded. A tight phimosis may produce all the symptoms which follow stricture of the urethra. Indeed, I have seen, more than once, the act of micturition performed with more difficulty in congenital phimosis than is seen in ordinary cases of stricture—the prepuce being distended into a large globe at the end of the penis. Not only may there be lesion of the bladder, ureters, and kidneys, but obscure pains in distant parts may perplex the patient and his medical attendant. I was requested by a physician of great eminence in his profession to operate for a congenital phimosis in the son of a clergyman, where there were cystitis and extreme vesical irritability, and also severe inflammation of the tonsils and pharynx, with quite disproportionate pain in the throat. All the symptoms, which had caused distress for a considerable period, quickly disappeared with the removal of the phimosis. I have seen, in the large number of cases of urethral stricture which have been placed under my care, inexplicable pains in the throat vanish with dilatation of the stricture. But the anomalous symptoms of stricture may on another occasion fitly form the subject of a lengthened paper.

The seat of constriction in phimosis lies *chiefly* in the lining of the prepuce, and *partly* in the skin, and in both tissues near the preputial orifice; the skin at this

spot probably participating in the characters of the lining membrane.

The operation for congenital phimosis, which I described very briefly seven years ago in the *Medical Times and Gazette*, has been performed frequently since then by myself, and by several other surgeons, with unvarying success. It is a significant circumstance, that neither I nor any surgeon with whom I have communicated have ever found a prepuce that was too long after the efficient removal of the phimosis by the operation which I am about to describe.

The *principle* of the operation which I practise is this. An incision is made in the long axis of the penis, on each side of the preputial orifice, which divides a small portion of skin and a larger portion of lining membrane. The incisions, when the prepuce is retracted, assume a linear form at right angles to the direction in which they were made.

The *details* of the operation are these. One blade of a pair of small round-pointed scissors (Critchett's scissors for the subconjunctival operation for strabismus answer admirably) having been passed through the preputial orifice, both skin and lining membrane are divided to the extent of a quarter of an inch. The incision is made first on one side, and then precisely in the same manner on the other. The prepuce is now retracted as far as the incisions will permit. This proceeding brings more lining membrane into view between the lips of the wound. As much of the lining membrane as is thus exposed is divided by a second incision on each side. The operation is now complete, and the prepuce may be easily retracted. The incisions, which were made in the long axis of the penis, after retraction of the prepuce become linear in a vertical direction, and almost imperceptible in the circular folds of the retracted foreskin. In the after treatment, the prepuce should be kept back or frequently retracted. In children, an able medical friend considers occasional retraction (say once daily for a week or ten days, until the wounds have perfectly healed) to be sufficient.

The extent of the incisions may be a little less in children and in slight cases, and a little greater in adults and in severe cases. The scissors *must* be small. I have several times, where there has been retention of urine, found the introduction of a small probe a proceeding of some difficulty.

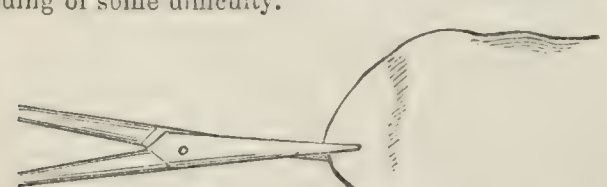


Fig. 1.—First incision. (In this and the next cut the flat side of the scissors is too clearly represented.)

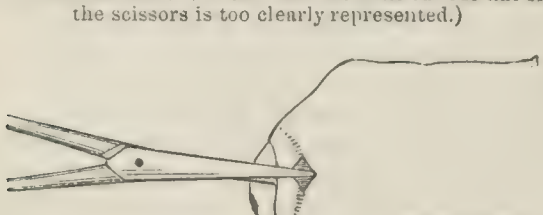


Fig. 2.—Second and last incision. (The wound made by the first incision is not sufficiently large in the figure.)

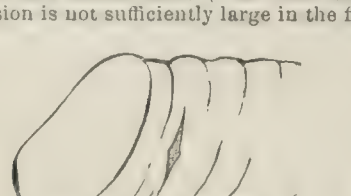


Fig. 3.—Direction of the wound after retraction.

The operation just described possesses the double merit of dividing the constricted parts completely, and the constricted parts only. Considerable experience justifies me in claiming for the operation the following advantages. The wounds, being small, heal rapidly. No ligatures are required, and no sutures; no assistants, and no instruments, save the small scissors. Not an hour's confinement to bed or home is required. This great advantage was well seen in the case of a naval officer who had acquainted himself with the nature of all the operations for phimosis, mine included, in the library of the assistant-surgeon of Her Majesty's ship *H*——. He travelled from Plymouth to put himself under my care. I operated on his first visit to my rooms. He immediately walked to his hotel with ease, and walked out several times during a stay of two days in Birmingham. On the third day, he travelled to Plymouth with perfect comfort.

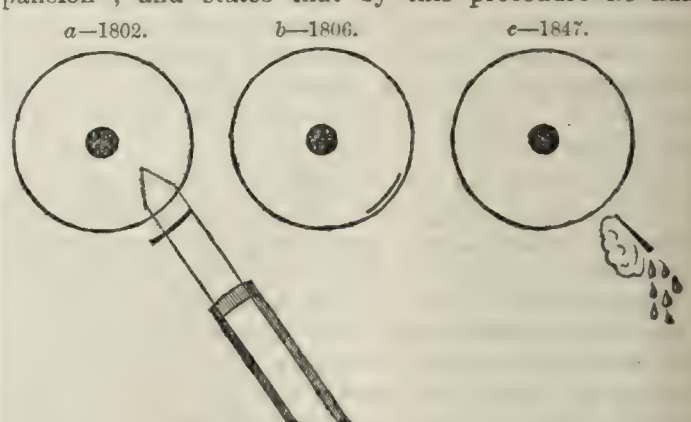
Lastly, the relief is complete and permanent. There is no deformity; and the cicatrices are found with difficulty, and only by means of a good light.

SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, ETC.

By J. Vose Solomon, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[*Read before the Midland Medical Society, February 3rd*, 1863.]

The earliest notice of section of the ciliary structures* for the relief of intraocular tension is found in the *London Medical and Physical Journal* for the year 1802 (vol. vii, p. 209). Dr. Whyte there states, in a most interesting and ably written paper, that in cases of enlargement of the anterior hemispheres of the eye, occurring in Europeans, in consequence of incautious exposure of the eye to a tropical sun, whether complicated by congestion of the choroid veins ("dilated veins of the albuginea") or not, he had derived great advantage by puncturing the eyeball with a couching-needle. His incision was made through the sclerotica into the posterior aqueous chamber, the instrument being carried "behind and parallel to the iris". He directs, "the outlet" (incision) should be "proportioned to the existent expansion"; and states that by this procedure he had



extracted cataracts, ever without accident, and often with success. From this statement, I conclude the instrument used by Whyte was a broad cutting-needle. (*Vide* Diagram *a*.) The following parts would be divided by such an incision: the conjunctiva, sclerotica, radial fibres of the ciliary muscle and ciliary processes. The accidents which I should apprehend from this operation are, traumatic cataract, prolapse of the iris, and a trouble-

* The terms ciliary structures, section or division of the ciliary structures, are used throughout this paper for convenience of expression, and not because they are found in the papers or works under review.

some inflammation of the sclerotica and ciliary processes.

Six years after the publication of the volume containing this paper, which shows Whyte to have been a surgeon of great boldness and originality, we meet with a short article from the pen of Mr. Wardrop in the *Edinburgh Medical and Surgical Journal* (vol. iii, 1807), on the Relief of Inflammation of the Eye by Opening the Cornea and Evacuating the Aqueous Humour. (Diagram *b*) Mr. Wardrop followed up his investigations, and in 1813 presented a valuable memoir to the Medico-Chirurgical Society of London, *On the Effects of Evacuating the Aqueous Humour in Inflammation of the Eyes and some Diseases of the Cornea.* In the same year, publicity was given to this paper in the *Transactions* of the Society (vol. iv, p. 142).

Mr. Wardrop, omitting all mention of the observations of Whyte, states that he was led to enter on his special plan of treatment from an acquaintance with the curious phenomena noticed by Dr. Barclay in the dead eye; viz., that if the organ was moderately squeezed in the hand, or had its veins filled with quicksilver or water, the cornea became turbid, and, on relaxation of the pressure, gained its natural transparency.

Mr. Wardrop refers the great and immediate relief which his patients experienced to the sudden "*removal of tension*". This "tension" he considered might be referable in some cases to an increased quantity of blood in the eye, the aqueous humour being of normal quantity; while in others, he states, it was manifestly increased. Wardrop believed that the operation had a marked antiphlogistic effect; but he did not recommend the treatment as "the sole remedy, but only as a powerful auxiliary in some cases, and in others *as a sure and perhaps only means of preventing the total destruction of the organ.** In an instance of progressive staphyloma attended with inflammation of the tunics, he observed that the latter was arrested by the paracentesis, and did not recur *until the globe resumed its previous state of tension.*

Carl Wedl has investigated the physiological effects of paracentesis of the cornea and sclerotica upon the circulation of the iris and choroid. In his *Pathological Histology* (Sydenham Society's Edition, p. 19), he states, "If the *cornea* of a white rabbit be punctured with a straight cataract needle, the transparent vessels of the *iris*, and the anterior ciliary vessels with the fine branches, visible only under a lens, become apparent after the escape of the aqueous humour. A reddish border is formed around the cornea. After death the vascular ramifications in the ciliary body and the iris are most beautifully displayed. If a puncture be made through the sclerotic into the vitreous humour, no stasis is observed in the ciliary vessels (processes?) until a portion of the vitreous humour has escaped. The quantity of vitreous humour that should be allowed to escape must be limited within certain bounds, otherwise minute *extravasation of blood* would appear to occur in the ciliary processes. Wedl refers these phenomena (congestion and extravasation) to a disturbance of the equable pressure which the humours of the eye exert on its internal circulation. After iridectomy performed for glaucoma, Gräfe has noticed "retinal ecchymoses"; they consist of extremely regular, round spots, which seem to be seated exclusively on the veins, and for the most part where the large trunks unite." (*Memoirs*, New Sydenham Society's Edition, p. 300.)

Continental surgeons appear to have appreciated more fully the value of Mr. Wardrop's practice in cases of ocular inflammation and congestion than his own countrymen. The French and Germans have not only boldly opened the cornea, but repeated the operation at short intervals, occasionally several times in the twenty-four hours. Their results are reported as having been very satisfactory.

Some seventeen years after the publication of Wardrop's paper, Dr. Mackenzie suggested the propriety of practising paracentesis of the sclerotica for the relief of the tension of glaucoma. (*Glasgow Medical Journal*, Aug. 1830, p. 265.) Since then the several editions of his national work on *The Diseases of the Eye*, have contained similar advice.

Mr. Middlemore remarks, in his Jacksonian prize-essay, that he had noticed, after drawing off the turbid vitreous humour, it was replaced by a more transparent fluid, and the vision of the patient was improved. Mr. Middlemore must, I think, have abandoned the method almost immediately after the publication of his *Treatise on the Diseases of the Eye* (1835), or I should not have failed to have seen or heard of some of his cases.

Desmarres, in his *Traité des Maladies des Yeux* (1847), at page 773, gives an interesting and most instructive chapter on paracentesis of the eye. In acute glaucoma (*une violente ophthalmie interne*) supervening upon the depression of a cataract,* he plunges a Wenzel's cataract-knife (*couteau lanceolaire assez large*, pp. 586 and 597) into the outer and lower part of the globe, and at three *millimètres*† from the rim of the cornea. (Diagram *c*) Such an incision would divide the ciliary muscle at its choroid end, the ciliary processes, and the anterior of the retina. The length of the incision which he makes is about one-sixth of an inch, and the depth to which the knife penetrates about one-fourth. I have arrived at these figures by the measurement of a drawing which Dr. Desmarres has given of an instrument (Wilde's needle?) for the performance of sclerotic paracentesis (p. 774). If the inflammation do not yield to a single operation, Desmarres reopens the wound even to a fourth time, or, if need be, as often as active inflammatory symptoms reappear.

The effect is to give immediate relief to local pain, and to subdue an ophthalmia which had proved rebellious to the usual antiphlogistic treatment. These results Desmarres refers to the drawing off of the aqueous humour when highly saturated with lens-molecules, and its replacement by a normal secretion (p. 597). It is in this class of cases that we get a glaucomatous tension; and I have in my own practice witnessed the most satisfactory results from such a proceeding, after paracentesis of the cornea had failed to give relief. Dr. Hillier Blount, who formerly practised in this town, was a student in 1846 in Dr. Desmarres' clinic. On his return to England, he informed me what marvellous recoveries he had witnessed from plunging a cataract-knife into the eyeball behind the rim of the cornea, in the case of acute internal ophthalmia (acute glaucoma?), when supervening upon the operation of cataract reclination. In glaucoma, as defined by the older writers, Desmarres advises the same plan of relief which, he states, produces "beneficial arrests" in the progress of the disease. In a letter which I received from Mr. Hancock of London on May 17th, 1860, he mentions that the Parisian oculist continued to divide the ciliary structures, commencing his incision rather nearer to the transparent cornea ("division of the ciliary muscle"). He appears, however, to have since abandoned the plan for iridectomy. (See BRITISH MEDICAL JOURNAL, vol. 1862, p. 377.)

We have now arrived at the Iridectomy epoch. In 1855, Von Gräfe announced paracentesis of the cornea as a new remedy for glaucoma; and in 1857, the application of iridectomy‡ for the same purpose. He was

* I have italicised this last opinion, as it embodies even *ipsissimis verbis* the views of the Iridectomy School in 1860, *quoad* the beneficial effects derivable from either operation.

* The occurrence of glaucomatous pressure after needle operations for cataract, has been specially pointed out by Gräfe (*Memoirs*, Sydenham Society edition, p. 371.)

† A *millimètre* is about one twenty-fifth of an inch.

‡ Iridectomy is performed by making an incision half an inch

led to a trial of the latter from observing an improved circulation in the choroid, after its performance in cases where the pupil had been partially obstructed from the effects of an irido-choroiditis.

Mr. Dixon's experience has led him to the conclusion that some instances of acute glaucoma recover after a paracentesis of the cornea (Wardrop's operation)—a fact admitted by Gräfe; while others require, for permanent reduction of tension, a more compound operation, namely, the removal of a small bit of iris. (Holmes's *Surgery*, vol. ii, p. 855.)

Unhappily, a very large proportion of persons affected with glaucoma present the chronic or subacute variety of the disease. In such, let who may operate, the benefit in the greater number of cases is limited to a reduction of the intraocular pressure, and an extension of the lateral field of vision. The patient "does not see better, but in a different manner". As a rule, the sight endures during a longer period; but it is rare for the defining power to become more acute. In this class, the recurrence of an excess of tension, which may be quite independent of inflammation, is not infrequent, and may generally be completely overcome without a resort to a second or third iridectomy, as advised by Dr. Gräfe. Of the truth of this my own practice has afforded several examples. In some cases, in consequence of the advanced stage to which atrophy of the optic nerve has attained *before* surgical treatment was employed, or the increase *afterwards* of an effusion between the choroid and retina—states which may occur singly or combined—blindness creeps on, notwithstanding the intraocular pressure may be reduced to the normal standard.

I have seen the progress of idiopathic senile cataract complicated by a subacute glaucoma—a fact of the highest importance in regard to prognosis and treatment.

[*To be continued.*]

PRACTICAL OBSERVATIONS ON THE TREATMENT OF THE PURULENT OPHTHALMIA OF INFANTS.

By J. C. Wordsworth, F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital; lately Assistant-Surgeon to the London Hospital; etc.

So many sad instances of the destructive tendency of purulent ophthalmia in the infant have lately come under my notice at the Royal London Ophthalmic Hospital, that I am induced to offer a few practical remarks on the treatment usually adopted in this disease.

My own experience leads me to the conclusion that no disease is more amenable to treatment than this form of purulent ophthalmia; and I hope that consequently some good is likely to be produced by calling the attention of the profession to this subject.

At this time, I have under treatment at the hospital several cases that aptly illustrate and enforce the importance of the plan traditionally adopted by us, from the days of Saunders, Travers, Lawrence, Tyrrell, etc. It is recorded by them that, in their hands, a disastrous result was almost unknown, if cases came early under their care; and I believe the present staff of the hospital would unhesitatingly endorse this dictum, and bear testimony to the efficiency of the plan of treatment almost always adopted there.

It, therefore, follows that the cases to which I referred were either very inefficiently treated, or that the remedies used were not applied in time. One, now attending the hospital, is an example of that very uncommon condition technically termed xeroma—"dry conjunctiva" or "cuticular conjunctiva"; and so far as I can learn, seems to have been a case of purulent ophthalmia, in which a very caustic solution of nitrate of silver was frequently applied, and has produced such a a change in the condition of the conjunctiva, and apparently also in that of the lacrymal gland, that no fluid is poured on its surface.

In some others, the cornea has been perforated by ulceration or sloughing, and closure of the pupil, or a worse condition, has followed. Here, again, I believe, the error has been on the side of too vigorous use of stimulants during the active condition of the disease. There can be no doubt that, when the affection is early recognised, and before the ocular conjunctiva is much involved, it may be cut short by the use of stimulating and astringent applications, as in analogous cases of disease of the mucous surfaces in other parts; but that, as soon as the case has made some progress and an acute condition of inflammation is established, which has produced some symptomatic fever, it is irrational to attempt its cure by the irritant plan, while the febrile condition continues. It seems probable that the case is considered of no importance very frequently, till it has passed its incipient stage, and the opportunity for ectrotic treatment is gone.

It cannot, therefore, be too much impressed how important is an early recognition of this dangerous malady—a disease that has been computed to produce at least half the cases of hopeless blindness that exist in this country.

The surgeon would do well always to give a guarded opinion when he is consulted about "a slight cold in the eye" of a newly-born infant, remembering that the disease often commences very slowly; and that, so long as it is confined to the palpebral conjunctiva and the caruncle, it may be safely and efficiently treated with almost infallible success; but that, if neglected, it will probably soon pass into a very dangerous and tedious affection.

It is absolutely impossible to say of a given case that has proceeded to destruction of the eye, that it had a stage when the abortive plan of treatment might have been put into practice; for sometimes the disease makes such rapid progress that there is reason to doubt that this opportunity ever occurred, or if so, it was of so short duration that it was impossible to take advantage of it. I have seen cases in which the lids were swollen and tense to such a degree, within a few hours after birth, that it was practically impossible to gain an accurate view of the condition of the cornea. Here it is manifestly idle to suppose that the adoption of any treatment would have stopped the disease at once. On the other hand, it is also impossible to declare that all cases, if neglected, will pass into the second stage.

For myself, I may state that I believe that the disease is often of so mild a character, that only injudicious treatment can make it dangerous, and that little is required to be done; that the disease would subside if left alone even, and is aggravated by officious and unnecessary interference. However this may be, it is the safest and the only proper course to adopt the mild preventive measures which so ample experience has ratified.

Suppose, then, a case of the disease, in which it is confined to redness of the conjunctiva, especially of the lower lid, the mucous membrane being somewhat villous and prominent, and attended by some discharge of mucus or pus, and tears. This is the first stage. How may such be best treated? I should be content to have the eyes bathed frequently with warm water, by means of a small piece of linen cloth, to wash away the dis-

long just behind the corneo-sclerotic union, and then removing one-sixth of the iris close to its ciliary attachment. By this proceeding, the pupil is made to extend to the ciliary ring, the zonula and the lens alone (it is presumed) intervening between the vitreous and aqueous chambers.

charge; and afterwards, with an astringent lotion, containing four grains of alum in an ounce of water, and then wiped dry, and a little spermaceti-ointment smeared on the edge of the lower lid, and the child put back to bed. A teaspoonful of castor-oil may be given, if it have not already taken some aperient. If in a few days this does not terminate the treatment, I usually drop a solution of two grains of nitrate of silver in an ounce of distilled water on the conjunctiva twice a day. This rarely fails to produce a marked improvement in a few hours, especially if the discharge have become thin; the child opens its eyes and bears the light without inconvenience.

If the case have passed into the second stage—the lids being *red*, swollen, tense, and *shining;* the conjunctiva of the globe swollen, and raised round the cornea; the discharge profuse; and the child being hot, fretful, and restless—I apply a leech to each upper lid, and administer a grain of calomel at once. By means of the leech, the swelling is soon reduced, so that the cornea may be examined; and, independently of the antiphlogistic effect of loss of blood which is thus gained, the application of remedies to the conjunctiva can be more easily effected.

Fomentation of the lid is continued for some time, to encourage bleeding and soothe the inflamed structures. The child will usually be considerably reduced by the bleeding; and, being also relieved of pain, soon falls asleep. If the calomel do not soon open the bowels, a small dose of castor oil may be given. The fomentation is renewed at short intervals; and, as soon as the case approaches the conditions of the first stage, the weak alum-lotion is substituted for the warm water; and this again supplemented by the nitrate of silver drop, as this ceases to effect a cure.

I constantly find that the subjects of this affection are immature children of seven or eight months; and that the mothers are feeble and delicate women, incapable of providing a full supply of good milk. Under these circumstances, I prescribe quinine and iron for the mother, and thus indirectly influence the child.

The late Mr. Tyrrell introduced the practice of dividing the chemotic swelling by a series of radiating incisions round the cornea—a practice that since his time has, I believe, fallen into disuse. It is long since I have known it employed; but in his practice it seems to have been so satisfactory, that one could scarcely reconcile the disuse of it with one's duty, if a suitable case were presented. Yet I have no reason to think the practice of his successors at the hospital is less successful than that adopted by this excellent surgeon.

From considerable opportunities, I am persuaded that the plan above sketched is most satisfactory and efficient for the treatment of this important disease. I do not doubt that, if more generally employed, it would conduce to diminish materially, if not to entirely check, the sad and irremediable consequences of purulent ophthalmia. It also has, to my mind, a great advantage over the cruel and unnecessary practice of applying stimulants to the tender and acutely sensitive little patients; and assuredly, in the cause of humanity, we should endeavour to avoid the infliction of an unnecessary pang, especially when we remember how acutely a sympathising mother suffers in witnessing these painful cases; and how heroic she must be, or neglect to apply the painful remedy that has been prescribed, when she sees the agony that its employment causes to her babe. Who can wonder, then, that such painful treatment is not fully carried into effect; and that, consequently, much risk is incurred by the attendants for the sake of saving the child's sufferings? Nor should we forget that the mother's health materially reacts on the child's; and, consequently, how necessary it is that she should be spared these painful emotions.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

PROTRUSION OF THE EYEBALL, WITH BLINDNESS: DISEASE OF THE KIDNEYS, WITH HÆMORRHAGIC DIATHESIS.

By T. Wharton Jones, F.R.S., Professor of Ophthalmic Medicine and Surgery in University College, London.

[*Read February 13th*, 1863.]

In the following case of disease of the kidneys, with hæmorrhagic diathesis, the patient died with symptoms of pectoral disturbance; but the most striking phenomena at first were protrusion of the left eyeball from extravasation of blood into the ocular capsule, and amaurosis from intraocular extravasation and serous effusion.

M. A. C., aged 19, a sempstress, was admitted into University College Hospital, under Mr. Wharton Jones, on January 8th, 1863. There was great protrusion of the left eyeball, over which the upper lid, livid from ecchymosis, was tensely stretched. The ocular conjunctiva was raised up in the form of chemosis by extravasated blood and protruded between the eyelids. The sight was totally lost. The protrusion of the eyeball and loss of sight came on two days before admission. The right eye was not affected. The patient was very pale looking.

Past History of the Case, drawn up by Mr. Ringrose, Ophthalmic Surgeon's Assistant. About two months ago, both eyes became bloodshot. The left was the first affected; but whilst it got well, the vision of the right remained dim. For this the patient was treated at a public institution, but without benefit.

She had been subject to bleeding from the nose since childhood, and about a month ago lost a great deal of blood in this manner. The menstrual discharge first appeared when she was between 16 and 17 years old and was very profuse; but latterly it had not been nearly so much. She had suffered from headaches for the last three or four years, chiefly over the brow; but lately the pain had extended to the back of the head. She had been subject to cold feet, and has sometimes fainted at her occupation. Has complained of pain across the loins. The urine had been very high coloured with a thick sediment at the bottom of the utensil. Her parents were both healthy.

January 9th. The left eye continued in about the same condition. The right eye seemed slightly affected. She felt pain over the brow. Mr. Wharton Jones incised the chemosed and protruding ocular conjunctiva, and likewise slit up the tensely stretched upper eyelid, to relieve the eyeball from the pressure to which it was subjected. This immediately gave the patient considerable relief. Water-dressing was applied over the eye.

January 10th. The patient did not suffer so much pain. She now complained of dimness of sight in the right eye.

January 11th. Last night she was seized with a feeling of suffocation, which still continued. Pulse 146, and very weak. Respiration 34. She had slight cough. She brought up a rather large amount of frothy fluid like saliva—not muco-purulent nor tenacious. The chest on percussion was extra-resonant. At the apex of the right lung was an abundance of fine crepitation, limited to inspiration, and most abundant at the termination. Slight crepitation, but coarser, was heard at the base. The left lung, just above the heart and by the side of the sternum, was also the seat of crepitation, but coarser than at the apex of the right lung. The patient was now quite blind on both sides.

10 P.M. The patient lay on her back moaning, but

quite conscious. There was slight lividity of the face, and great difficulty of breathing.

She died at half-past ten P.M.

Post Mortem Examination, conducted by Dr. Sidney Ringer, and reported by Mr. Ringrose.

Skin. Small petechial spots were present on the arms and legs.

Brain. A clot was found in the longitudinal sinus, non-adherent, and apparently quite recent; likewise a clot in the lateral sinus, also recent. The brain and membranes were quite healthy. In the right middle fossa of the base of the skull, just below the sphenoidal fissure, there was, in the dura mater, a small spot of ecchymosis of about the diameter of a split pea. The arteries of the brain, on being slit open, were found to contain none but recent clots.

The *trachea* was full of frothy fluid of a bright red colour, but otherwise healthy. The *bronchial tubes* contained fluid similar to that in the trachea.

Lungs. On the anterior surface towards the apex were seen red lines and spots of bright red colour, not altered by pressure. The lines were between the lobules, and the spots in the lobules themselves. In some cases, an entire lobule was coloured; but the redness was sharply defined, not extending into the next lobule. Few spots were seen at the base and posterior surface. On section, the redness was seen to extend into the substance of the lung, and a few similar spots were observed in its very centre. The redness, except in a few cases, was external to the pulmonary vesicles. The lungs were by no means gorged with blood, and were slightly emphysematous.

The *pulmonary artery and vein* were cut open, but found to contain none but recent clots.

Heart. The right side contained a firm clot very closely mixed up with the columnæ carneæ and chordæ tendineæ, and extending into the pulmonary artery. This clot consisted of fibrine with the red corpuscles aggregated on one side. The left side of the heart was empty. Beneath the tricuspid valve was a large spot of ecchymosis. On the anterior surface of the heart, on each side of the longitudinal furrow, were seen several small spots of probable ecchymosis. The veins of the heart were rather emptier looking than usual.

The *pericardium* contained the usual quantity of fluid tinged with red. The fluid in the *pleural cavity* was likewise tinged.

Aorta. Here, close to its attachment to the heart, was a small spot of ecchymosis of about the diameter of a split pea. The vessel itself, down to the diaphragm, was healthy, but coated with a thin film that could be stripped off in very small pieces. This membrane possessed scarcely any tenacity, was very translucent, and of a bright red colour. It was probably exfoliated epithelium.

The *liver* was apparently healthy. The *spleen* was rather large, soft, and presented numerous minute circumscribed dark red spots—possibly of ecchymosis. The *intestines* were healthy.

The *kidneys* were natural in size, but of lighter colour than usual. The capsule peeled off much too easily. On section, the cortical substance was found much atrophied. Under the microscope, fatty degeneration, atrophy of the Malpighian bodies, and an increased amount of fibrous tissue, were observed.

The *urine*, drawn from the bladder after death, showed a considerable quantity of albumen. The mucous membrane of the bladder was pale. It presented no ecchymosis.

Dissection of Eyes, by Mr. Wharton Jones. *Left Eye.* There was extravasation of blood in the cellular tissue between the ocular capsule and sclerotica, and between the sclerotica and conjunctiva. There was also ecchymosis in the substance of the upper eyelid next the tarsus. On examination of the exterior of the eyeball, points of extravasation were seen at the exit of the venæ vorticosæ. Extravasated blood was found between the sclerotic and choroid; and there was serous effusion between the choroid and retina, in consequence of which the retina was pressed together into a string of folds, whilst the vitreous humour had become absorbed. The inside of the retina presented spots of extravasated blood, both at the fundus and anteriorly. The lens, iris, and cornea, were not much altered. There was no extravasation in the optic nerve.

Right Eye. The sight of this eye, it is above mentioned, was quite lost before death. There was no protrusion, and no extravasation within the ocular capsule; but there were spots of extravasation at the points of exit of the trunks of venæ vorticosæ, as in the left eye. As in the left eye, also, there was extravasation between the sclerotic and choroid, but in a less degree. There was also serous effusion between the choroid and retina, but so slight that the retina was not pressed together as in the left eye. The inner surface of the retina at its fundus presented small spots of extravasation. The vitreous humour was yellowish, from a slight permeation with extravasated blood.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

A SECOND CASE OF ASCITES AND ANASARCA IN THE FŒTUS, OCCURRING IN THE SAME INDIVIDUAL.

By John M. Burton, Esq., Blackheath.

[*Read March 27th*, 1863.]

[The previous history of Mrs. L., the subject of the subjoined case, was published in the British Medical Journal for November 16th, 1861. The delivery took place on July 19th of that year; and it is stated that

"The whole body was anasarcous. The loose tissue of the penis and scrotum was much infiltrated and quite transparent. The scalp was rendered excessively tense by effusion beneath it; so that, upon pressing my fingers deeply into it, I could not feel the sutures even after the child's birth. The abdomen was very tense; its superficial veins being very prominent and full, just as one sees in an old case of ascites in an adult. Upon cutting into the peritoneal sac, at least a pint of clear straw-coloured serum escaped. The liver was large, soft, and friable; the spleen was in the same condition. The stomach and bowels small and contracted. I was only permitted to make a very cursory examination of the fœtus."]

Mrs. L., the subject of the preceding history, became again pregnant, and during the latter months suffered from the great size and consequent weight of the abdomen. The motions of the fœtus were feeble; and she had a strong presentiment that all was not right with her.

On December 8th, 1862, she was taken in labour; and after some hours of pretty severe pain and the discharge of a very large quantity of liquor amnii, a male child was born, in exactly the same condition as in the former case. The abdomen was immensely distended by ascitic effusion; and the whole body was anasarcous. Finding this to be the case, and that the diaphragm was not able to contract in consequence, and that the child only made a few feeble gasps, I did not divide the umbilical cord; and, the placenta being immediately expelled, I was enabled to keep the fœtus and placenta entire for examination. This was made by my friend, Dr. Wilks, the lecturer on Pathological Anatomy at Guy's Hospital, who kindly sent me the subjoined report:—

"11, St. Thomas Street, Southwark, Dec. 15, 1862.

"Dear Mr. Burton,—I have examined the fœtus carefully, and cannot discover the cause of the dropsy. There

was not only fluid in the abdomen, but all parts of the body were anasarcous, including the integument itself, just as is seen in renal disease. I could, however, find nothing amiss with any of the viscera. I think it possible that some obstruction might have existed in the arteries of the cord to have accounted for it; but I could not find any, nor do I know that any one has made any observation connecting the two in any way.

"The placenta was healthy; the white masses scattered through it were merely decolorised fibrine of the blood.....

"I am, yours very truly, "SAMUEL WILKS."

The patient recovered without any drawback. She is, as far as I can ascertain, in perfect health; and is the mother of several fine and healthy children.

The pathology of the case I cannot pretend to explain, and I shall be very glad to have the opinion of the members upon it.

Reviews and Notices.

ON HUMAN ENTOZOA; comprising the Description of the Different Species of Worms found in the Intestines and other Parts of the Human Body, and the Pathology and Treatment of the Various Affections produced by their Presence. To which is added, a Glossary of the Principal Terms employed. By WILLIAM ABBOTTS SMITH, M.D., M.R.C.P.Lond., Senior Assistant-Physician to the Metropolitan Free Hospital, etc. Pp. 251. London: 1863.

THIS book is divided into three parts. The first is a Synopsis of the Entozoa which are found in Man; arranged under the heads of protozoa or infusoria, cestoidea, trematoda, nematoidea, and acanthotheca. The second part is on the Pathology and Treatment of Human Entozoa; here the author treats of the entozoa found in the respiratory passages, in the intestinal canal, in the biliary and urinary passages, in the sanguineous system, in serous cavities; of hydatids in various parts; and of entozoa in the nervous and muscular systems, in the areolar tissue, and n the eye and its appendages. In the third part—Special Therapeutics—he notices various medicines used in the treatment of entozoa.

A book of this kind, containing a well arranged outline of whatever is known concerning the parasites of the human body, has been wanted in our literature; and we should be disposed to give great praise to Dr. SMITH for writing it, if it were not that its title-page is calculated to convey an erroneous impression of his real share in its production. We express only the results of a careful examination, in asserting that nearly every sentence of the first and second parts is translated from M. Davaine's *Traité des Entozoaires et des Maladies Vermineux de l'Homme et des Animaux Domestiques*, published at Paris in 1860. The third part, which contains twenty-three pages, certainly displays more independence on the part of Dr. Smith. It is quite true that Dr. Smith, in his preface, acknowledges having made a liberal use of M. Davaine's book.

"I feel that I cannot permit its issue" (*i.e.*, of his work) "without recording my deep sense of obligation to Dr. Davaine of Paris, the author of one of the best modern treatises upon entozoa, for the disinterested and unconditional manner in which he gave me permission to make use of any portions of his work; and to Messrs. Baillière and Son, the proprietors of the copyright, as well as the publishers, of Dr. Davaine's treatise, for a similar privilege, of which I have, as will be seen upon a perusal of the following pages, largely availed myself."

Dr. Smith has indeed, as has been already observed, *very* largely availed himself of the privilege granted him; so that, nearly throughout the book, it is Davaine, and not Smith, who speaks. But the acknowledgment in his preface, although at first sight candid, does not sufficiently show this; and his title-page misleads still more. Any one reading these parts of the book would imagine that Dr. Smith had a more or less profound scientific and practical knowledge of entozoa, which he was desirous of laying before the profession; and that he had used the work of Dr. Davaine, as the most complete which could be met with, merely to remove doubts or to supplement deficiencies in his information.

It is impossible, under the circumstances which we have noticed, to say that Dr. Smith has done more than translate a number of judiciously selected paragraphs from Dr. Davaine's book. If he had but added to his title "Abridged from the *Traité des Entozoaires* of M. Davaine," and had distinguished his own few additions by brackets or in any way that he pleased, he would have had the credit of having performed a very honourable and useful duty. If he will take our advice—which we give him, as a young author, in all kindness—he will, in his next edition, supply the omissions which we have pointed out.

Since the above was written, we have received from Dr. Smith a letter, in which he refers to certain statements made in a review of his book in one of our contemporaries, which appear to imply that he has used M. Davaine's book without permission; and he denies the truth of any charge of literary dishonesty. He has also, we learn, directed the words "Partly translated from the *Traité des Entozoaires* of M. Davaine", to be inserted in future advertisements of his work.

Dr. Smith will see that, in our review, which has been written, as before stated, after a careful examination of his book and of M. Davaine's, we have made no charge against him of having wilfully appropriated without acknowledgment the labours of another man. All that we have accused him of, is an error of judgment, which might act prejudicially to his own reputation. We are glad to find that he is now doing nearly the same thing as has been suggested by us; but it would have been better, if he had done it at first, *proprio motu*. But, "better late than never."

STAMMERING AND STUTTERING: THEIR NATURE AND TREATMENT. By JAMES HUNT, Ph. D., F.S.A., F.R.S.L.; Foreign Associate of the Anthropological Society of Paris, etc. Fifth Edition. Pp. 256. London: 1863.

THE father of Dr. HUNT acquired considerable reputation for a number of years by his successful treatment of stammering and stuttering; and the present author has devoted considerable attention to these distressing defects, with credit to himself and relief to those who have placed themselves under his care.

This fifth edition of his work will bear a favourable comparison with some of the editions which have preceded it. The author enters more fully on an examination of the question of the real nature of the affection under consideration. In common with his late father, he denies that stammering is a disease, but holds that it "is an imperfection occasioned by organic, physical, or accidental causes—the want of some proper regulation in use." He, therefore, condemns all surgical interference, and recognises medical treatment only so far as it may be calculated to improve the general health when impaired. His treatment consists apparently in a proper education of the movements of the organs of speech; and is based on common-sense principles. His remarks on the management of stammering and stuttering children (pp. 195-209) are especially worthy of consideration.

We observe with satisfaction that Dr. Hunt has omitted from this edition a string of letters testimonial from various of his patients, by the publication of which former editions of his book were marred. We will further suggest to him, that the exclamations against charlatans in which he occasionally indulges are scarcely compatible with the dignity of a man of science, and are, in our opinion, unnecessary. He can well afford, while gaining a merited reputation by the success of his treatment, to leave pretenders to be condemned by their failures. One of the most curious conspicuous signs of quackery is the constant abuse which its followers heap on each other.

We can cordially recommend this fifth edition of Dr. Hunt's book to the study of those who are afflicted with the impediments of speech of which he treats, or who have patients or friends so afflicted.

Natural History According to Law. The Imperial Court of Montpellier has recently been called on to hear an appeal, in which the point in dispute was the *vexata quæstio* whether a frog is a fish. The judgment was affirmative, and those persons who have hitherto thought that they might catch frogs at all seasons, in private or public waters, will now see that they have been mistaken.

The Australian Flora. Dr. Murray, who accompanied Mr. Howitt's exploration party as medical officer, has brought back with him an interesting collection of specimens of the flora of the Cooper's Creek district, of the indigenous woods, and of articles illustrative of native life. The timber specimens represent seventeen varieties of trees, the most peculiar of which are the cork tree, so named on account of the peculiarity of its bark, and the orange tree, which bears the singular fruit mentioned by M'Kinlay. In outward appearance, it is not unlike a small orange, but it has a pungent flavour, which renders it disagreeable to Europeans. The taste of the fruit, Dr. Murray says, is something between that of a water melon and cayenne pepper. The collection of the timber specimens was a work of great labour, Dr. Murray having to saw the wood with his own hands. They are to be sent to Dr. Mueller for that gentleman to classify. A sample of *pitcheree*, a strong narcotic, the use of which enables the natives to chew tobacco and swallow the juice with impunity, is to be sent to Dr. Macadam for analysis. The observations offered by these gentlemen, together with the particulars of the many other interesting articles included in the collection, will probably appear in a volume Dr. Murray proposes to publish, descriptive of the country traversed, and of the expedition. (*Melbourne Argus.*)

British Medical Journal.

SATURDAY, MAY 2nd, 1863.

MEDICAL EVIDENCE IN COURTS OF LAW.

Medical evidence delivered in our courts of law has of late often become a public scandal and a professional dishonour. The bar delights to sneer at and ridicule it; the judge on the bench solemnly rebukes it; the public stand by in amazement; and honourable minded members of our profession are ashamed of it. To such a pass has medical evidence been brought by the exhibitions too frequently made of late by its expounders in courts of law!

If the injury and the disgrace attaching to the proceeding were discharged and fell solely upon the heads of those who offend in this wise, we might be well contented to let justice be so dealt out. But it is not so. The whole profession, unfortunately, suffers in character, both as an honourable and a scientific calling, from the disrepute thence arising. How could it be otherwise? What respect can the public have for a profession—what faith or confidence in medical practitioners—when they see members of high position in it enter the witness-box, and flatly contradict, and in the most positive terms, the opinions given by other equally eminent members of the profession? What is the public to think when, for example, they see three doctors on one side swearing, on behalf of a railway company, that the plaintiff is not suffering from any injury at all; and three on the other swearing that he is not only suffering from an injury, but is seriously damaged, and probably for life? What is the public to think, when one set of witnesses swear that a professional brother's practice is altogether improper, and another set of witnesses of equal repute swear that it is most proper, and the very practice which they themselves would pursue? Why, the evident result of all this is, that the whole profession sinks in public estimation, and that the practice of medicine is thrown into general disrepute, and public confidence in our art and in our honesty is seriously damaged.

This kind of advocate's medical evidence, therefore, is a thing which concerns the whole profession. The whole profession suffers through it, and consequently has a right to demand an account of his words from him who thus publicly drags its credit through the mire. And it is, indeed, time that the profession took the matter into hand; for the proceeding has come to an unbearable pass. It was bad enough, indeed, that men should be found for high fees to swear, opinion against opinion, in cases where mere pecuniary compensation was at stake;

but when as of late we find, month after month, medical men entering the witness-box, and in the most reckless and unjustifiable manner swearing away the very reputation of their medical brother—brother, indeed !—it is assuredly time that the profession as a body should step forward and publicly express its condemnation of so great a disgrace. Are we speaking without book ? Let those who think so turn to the back pages of this JOURNAL. Let them read through the cases there recorded even during the past year—examples of the condition of things we are now describing. They will find abundant evidence of the correctness of our statement. Again and again has it been our duty to rebuke the actors in such scenes ; but it would appear as though something more powerful than the warnings and castigations of the press were required to check the evil.

One learned judge, in a late railway case, said, in his remarks to the jury : " Here, unfortunately, the medical evidence was utterly contradictory ; and it was certainly sad to see gentlemen of the medical profession giving evidence so entirely contradictory." Then, again, on another late occasion, we have Chief Justice Erle remarking : " It was a pity that one medical man should be ready to come forward and condemn the treatment of a brother in the profession, and say that *he* would have done this or that, when probably, had he been in a position to judge of the case from the first, he would have done no better."

When words like these fall from the bench, we may be sure that there must be something very wrong in the proceeding which draws them forth. Indeed, the indignation of the whole profession has been lately excited into action through the evidence recently given by medical men in the now famous cause of Bromwich *v.* Waters. The Metropolitan Counties Branch of the British Medical Association has determined to take the question in hand, and, if possible, to lay down rules which should guide the medical man in the witness-box when he is forced to enter there and give evidence upon which hang the honour and reputation of a brother medical practitioner.

If men would only follow the Christian precept of doing to others as they would be done by, we should certainly have no need of the force of professional opinion to guide and direct us in the matter ; but facts too plainly show that something stronger than conscience is required to force certain members of our profession to act justly towards their brethren. It therefore becomes the duty of a great Association such as ours to step forward and enact the part of monitor towards the persecutor, and of guardian towards the persecuted, in cases of this kind. It will be the business of the Metropolitan Counties Branch, if possible, to express in resolutions what it considers should be the rules to guide a medical man when summoned in a court of law to give evidence upon the professional conduct or practice of a medical brother.

In framing resolutions of this kind, we need hardly say that no word must enter into them which could be in any way interpreted as a pressure upon medical men such as would, in the slightest degree, tend to interfere with or obstruct the ends of justice. This is absolutely essential. A medical witness, for example, cannot refuse to depose to facts ; and no one can object to him that he does so, whatever may be the injurious effects which thence result to the medical brother who is on his trial. He is bound in conscience to deliver himself of those facts, even to the prejudice of his medical brother. And, happily, it is not, in this sense, that we have any difficulty in dealing with the question. It is not in swearing to matters of fact that we have to call medical men to account for swearing away the reputation of their brethren ; but it is in their swearing to matters of opinion.

Let us see how this is. A well-known medical man of high repute—Dr. Lee, for example—enters the box, and swears that in his opinion the treatment adopted by the defendant is highly improper. Now, let it be clearly understood, Dr. Lee is talking to a jury who know nothing of the nature of the medical question before them beyond what they are told by the doctors. They are of themselves quite incapable of judging of the treatment, whether it is right or whether it is wrong ; and, naturally and of necessity, therefore, they are entirely guided in their judgment by what they are told by authority. The higher the authority who instructs them, the more implicit is their faith in his assertions ; and when they have full confidence in the authority or oracle who stands before them, it comes to this, that they receive his delivered *opinion* as something equal in value to a positive *fact*. Thus, for example, it is certain that the jury at Chester the other day, would have accepted, *not as an opinion*, but as a *positive fact*, that Dr. Waters's treatment was grossly improper, had not Dr. Waters happily placed in the witness-box for the defence men whose reputation was equal to that of the prosecution-doctors, and who swore to an exactly opposite opinion on the treatment.

Is there, then, any difficulty in laying down the rule of practice which should be followed in such a case, in accordance with the dictates of professional honesty and an honourable professional sentiment ? We apprehend that there is none whatever. Let medical witnesses only have the modesty and the honesty, when they deliver their opinions, to abstain from all *suppressio veri* and from all *suggestio falsi* —in fact, from playing the advocate's part in the witness-box ; and no one could then quarrel with their evidence.

Let the medical witness, for example, state the honest truth, and say, "That is my opinion on the point; but it is only an opinion, and I feel bound to add that men of as high a position as myself in the profession hold a very different opinion about it." Medical men in a medical debating society may boldly and uncompromisingly lay down their opinions as if they were facts, because their hearers know all about the matter, and understand very well what medical convictions and opinions are worth; but it is totally different with a jury in a law court. A jury may and will swallow the most hypothetical statement, if it be only roundly sworn to by a man of authority in the profession, and if they hear no contradiction to his swearing.

There can be no excuse for a medical witness when he swears away a professional brother's reputation by sustaining his own personal convictions. He knows that men just as good as himself hold perfectly opposite convictions. However firmly, therefore, he may stick to his own convictions, he has no right, according to the plainest rules of reason, to tell a jury that his convictions are facts, or impress them as such on the jury's minds. If he do so, and above all in a case where a medical brother's reputation is at stake, he is manifestly committing an act of gross immorality. To sustain as a positive fact what he knows is not an accepted fact with the profession, is clearly committing an act of deception upon the jury. To produce that impression on the jury's mind which shall lead them to condemn as improper the treatment of a medical brother in a case such as here supposed, and so to destroy the medical brother's reputation is manifestly nothing less than an act of gross injustice and professional immorality—one which deserves to be stigmatised by the profession as such.

We apprehend that there can be no doubt as to the correctness of the view sustained; and that there can be no difficulty in framing resolutions to express the view of medical evidence here laid down.

But other points arise for consideration, and especially the question how far a medical man is bound to attend to the subpœna served upon him—whether he is morally obliged or not, or should be tempted by a fee of two, ten, fifty, or a hundred guineas, to obey the summons served on him to act as a witness on behalf of any side that applies for his services. Ought a medical man, for the sake of a large fee, for example, to appear in the case of a prosecution against a medical brother when he has nothing whatever to say in the matter, and only supports the case by lending, or rather hiring-out, his well-known name to appear on the list of the prosecutor's witnesses?

Now, on this point, it is right that we should know the legal liability of a witness; and this, we think, is very clearly stated in the following words:—

"In the case of Webb *v.* Page,—*Carrington and Kirwan's Reports*, p. 23,—the late Mr. Justice Maule ruled as follows: 'There is a distinction,' said his lordship, 'between the case of a man who sees a fact, and is called to prove it in a court of justice, and that of a man who is selected by a party to give his opinion on a matter with which he is peculiarly conversant from the nature of his employment in life. The former is bound, as a matter of public duty, to speak to a fact which happens to have fallen within his own knowledge. Without such testimony the course of justice must be stopped. *The latter is under no such obligation.* There is no such necessity for his evidence, and the party who selects him must pay him.' In the case referred to by Mr. Justice Maule, a skilled witness had been subpœnaed; but refused to give evidence unless first paid for his services and loss of time."……

"There is one reason why I should not advise any person in the position of a skilled witness totally to disregard a subpœna. It is quite clear that should such a person fail to attend a trial, no attachment could issue, even if he were called, as is usual, upon the subpœna, because the party subpœnaing him could not make the requisite affidavit that he was damnified by the witness's absence, and in what respect. But such party might bring an action for damages; and although he would recover none, he might not only worry, but might even put the defendant to a considerable expense, as taxed costs by no means include the entire costs in such cases. Although, therefore, I could not advise a total neglect of the subpœna, the safest course would be to obey it, and demand expenses before giving evidence. Such expenses would be only those allowed for a professional witness; but if the person so subpœnaed were willing to run the risk of an action, he might safely absent himself without any fear of an attachment from the court for contempt."

The law on this point seems clear and explicit. No medical man is morally bound to attend and give evidence on a matter of mere opinion; and it is evident that the legal obligation is merely nominal. It is, therefore, certain that medical men who appear in court and give evidence on matters of opinion are volunteers, and attend there either for conscience sake or for love of a large fee. We may add, it is equally clear that any medical man who goes into the witness-box does so, under such circumstances, because he wishes to do so. Moreover, it is manifest that no man of law would subpœna a recalcitrant "skilled" witness, or one who threatened, if he were summoned, that he would speak the whole truth, and so rather damage than support the man of law's case.

The practical conclusion of all this plainly is, that the medical man who enters the witness-box as an advocate's witness, to speak, not the whole truth, but only so much of it as shall damage his opponent, (*suggestio falsi*); and who carefully suppresses whatever might tell in favour of his opponent, (*suppressio veri*)—commits a highly immoral act, for which he is accountable at the bar of professional opinion.

The medical man cannot honourably and honestly adopt the practice of the prosecuting counsel, for example, whose business is simply and solely, *per fas et nefas*, by suppressing truth and suggesting the false, to gain a verdict against the defendant.

THE WEEK.

It is with much regret we announce the death of Mr. H. Charles Johnson, Surgeon to St. George's Hospital. Mr. Johnson, whose life had been despaired of for the last two or three months, died at his house in Savile Row on Tuesday, the 28th ult., at the age of 55. Mr. Johnson was appointed Lecturer on Anatomy at St. George's Hospital upon the opening of the School in Kinnerton Street; and in 1843 he was appointed assistant-surgeon, and in 1853 surgeon, to St. George's Hospital. We are not aware that Mr. Johnson made any contributions to medical literature. He was most successful as a practitioner; and few men in the profession were more esteemed, and we may say beloved, by his friends and patients. Mr. Henry Lee, who resigned the office of surgeon to King's College to accept that of assistant-surgeon to St. George's, is a candidate for the office vacated by Mr. Johnson's death.

As very erroneous statements have been made concerning the giving of their verdict by the jury in the case of Bromwich *v.* Waters, it is fair to Dr. Waters to state the real facts. One juryman alone, out of the twelve, dissented from the verdict given. "Eleven of us", said the foreman of the jury to the judge, "were almost agreed five minutes after we left the jury-box." That the dissentient juror was a person quite incapable of giving a calm judgment in the matter is evident from another remark of the foreman:

"We have done all we can to persuade the dissentient juror, but without success; and I really think he will be seriously ill unless we decide soon, as he has worked himself up to a state of great excitement. A Juryman: He says he will hold out for a week."

It is positive, therefore, that *the jury*—the eleven—never had the slightest doubt or hesitation in the giving of the verdict.

The Postmaster General has sanctioned the proposal of Dr. Waller Lewis to revaccinate all the officers of the Post Office who have not been recently vaccinated.

The annual meeting of the Society for the Promotion of Social Science is to take place in Edinburgh, in the second week in October. We are glad to be able to state that Professor Christison will be President of the Public Health Department, and that the Presidents of the Scotch Colleges of Physicians and Surgeons will act as Vice-Presidents. If, however, the medical session commences in London in October, of course the London professors will be unable to attend it.

Official documents show that the present number of lunatics in France is 60,000.

Alluding to some remarks made in the British Medical Journal, the *American Medical Times* says:

"Prosecutions for alleged malpractice were once very frequent in this country, and the English journals assumed that they were evidence of the low state of the profession. Now, however, such prosecutions have become very frequent in England, and we but rarely hear of them in the United States."

According to the Registrar-General's Report, there were sixty-five deaths from small-pox during the week ending April 25th. There appears to be no question that the increased prevalence of this disease is due to the neglect or the inefficient performance of vaccination.

The Medical Council meets on the 25th inst.; and we sincerely trust that we shall have the pleasure, before it closes its sittings this year, to report that it has done some work of real and marked service to the medical profession.

The meeting of the Association of Medical Officers of Lunatic Asylums will this year take place on July 9th. The Association has again obtained permission to meet in the Royal College of Physicians.

The London College of Physicians has passed the following additions to its by-laws:—

"Every candidate for the membership will be required to translate into English a passage from a Latin author, and he will have the opportunity of showing his knowledge of Greek, or of one or more of the modern European languages.

"The *testamur* of having passed the examination in arts at Codrington College, Barbadoes, shall be accepted in lieu of the examination on the subjects of general education conducted by the Examiners at this College.

"The certificate of the second class in literature and science of the Cape of Good Hope shall be accepted in lieu of the examination conducted at the College before the admission of students to professional studies."

The *American Medical Times* does not take a high view of the morality of American society nor of the medical profession, in the particular of abortion at least. It tells us that the ratio of premature births in New York is rapidly increasing.

"Not only are produced abortions frequent in this community, but they are rapidly increasing. In seven years, from 1850 to 1857, the still-births doubled. The registration returns of the State of Massachusetts show that the comparative frequency of abortions in that state is thirteen times as great as in New York city. Whoever examines the advertising columns of country papers, and marks the large number of nostrums which in various and cunning phrases are recommended as certain to effect abortion, cannot doubt the wide and almost universal prevalence of this crime. It is painful to believe that the public conscience is not alive to the moral turpitude of abortion. It cannot be denied that in every grade of society lax opinions of the criminality of procured abortion exist. It is not alone the ignorant and vicious that consider it no crime; the religious equally entertain the belief that abortions may be practised

without a shadow of guilt. Every physician must have been approached by persons of upright motives with solicitations to prescribe remedies or employ means which would terminate an early pregnancy. Who is responsible for the tone of the public sentiment on the question of the criminality of abortion? We believe it rests entirely with the medical profession. There is a class of physicians who treat this subject with so much indifference that they sanction rather than discountenance the crime. In mild terms they object to employing means to produce abortion, and yet suggest the remedies by which it may be accomplished. The effect is pernicious, as the crime is generally perpetrated. There is still another class of medical men, standing on the boundary between legitimate medicine and quackery, who both advocate and practise abortion. They assume a sanctimonious air and a clerical dress, and under this specious guise practise the black art of abortionists. They are found in the most respectable medical circles, and make their professional associations subserve their base purposes. In this city the Academy of Medicine, and in the country the medical societies, should inquire 'Have we not abortionists among us?' We do not doubt that they will be found, and that too in startling numbers, especially in large cities."

On the 29th ult., the following addresses were presented to the Prince of Wales on the occasion of his marriage:—From the Royal College of Physicians of London, by Dr. Watson (Physician Extraordinary to the Queen), President, Dr. Budd (Senior Censor), Dr. Alderson (Treasurer), and Dr. Pitman (Registrar); from the Royal College of Surgeons of Edinburgh, by Patrick Newbigging, M.D., F.R.S.E. (President); and from the President and Council of the Royal College of Surgeons in Ireland, by Dr. Mackesy (President), Dr. Adams (Surgeon-in-Ordinary to Her Majesty in Ireland), and Dr. Hutton (secretary).

The citizens of Glasgow give £6000 as a testimonial to Dr. Strong, the City Chamberlain.

On the 29th ult., the Medical Benevolent College held its annual festival at Willis's Rooms. The dinner was, as usual, a great succes. The President, Earl Manvers, presided, and was supported by Lord Chelmsford and a numerous body of leading members of the different professions—law, physic, and divinity. The announcement by Mr. Propert of receipts of money on the occasion was highly satisfactory and gratifying to the supporters of this favoured institution. The receipt of upwards of £1000 was announced during the evening.

The profession will be pleased to hear that the suggestion made in the last number of the British Medical Journal, in reference to the matter in dispute between Mr. Propert and Mr. Adams, has been accepted by both these gentlemen. They are both willing to abide absolutely by the decision of a medical court. That this is the proper mode of settling the difficulty is clearly proved, by the numerous proofs which we have received of approbation of our suggestion from respected members of the profession.

M. Moquin-Tandon, had he not died, would have read a report to the Academy of Medicine on the subject of vivisections. "A society in London," we read, "analogous to our Society for the Protection of Animals, was much shocked at the numerous sacrifices of animals, and the cruel tortures inflicted upon them, for experimental purposes. This society had influence enough in France to obtain from the minister a promise that he would bring the subject under the notice of the Academy of Medicine." Hereupon the Academy appointed a committee, whose reporter was M. Moquin-Tandon. Doubtless this important report will soon be read before the Academy. *L'Union Médicale* says of vivisection: "Vivisection is often useful, and sometimes necessary, and therefore not to be absolutely proscribed; but I would gladly petition the Senate to forbid its performance on every animal which is useful to and a friend of man. The mutilations and the tortures inflicted on dogs are horrible. The King of Dahomey is less barbarous than these merciless vivisectors. He cuts his victims' throats, but without torturing them; whilst they tear and cut to pieces these wretched dogs in their most sensitive parts. Let them operate on rats, foxes, owls, sharks, vipers, reptiles, etc. But, no; our vivisectors object to the teeth, the claws, the beaks, of these repulsive animals; they must have gentle animals; and so they, like cowards—I say like cowards—seize upon the dog, that caressing animal, which licks their hands armed with the scalpel."

M. Filhol has recently investigated the toxical properties of the *Lolium Temulentum*. Numerous experiments have been at different times made on animals with this plant; but they have not hitherto led to anything certain concerning the nature of the poison contained in it. The effects of the poison, in fact, have appeared paradoxical, as it occasioned phenomena of an opposite character. It excited, and it caused prostration; it produced convulsions and coma. M. Filhol and his colleague have explained the mystery. The lolium contains a double poison—a poison of the strychnine class, and a poison of the narcotic sort. The two poisons have been isolated by them, and experiments on animals have shown their special actions. M. Filhol adds, that the presence of the lolium in corn may be shown by the shape of its starchy particles, which are different from those of wheat.

M. Schönbein has been nominated correspondent in the Chemical Section of the French Academy, in place of M. Liebig, who has been promoted to the position of foreign associate. In the section of Astronomy, Mr. Maclean, of the Cape of Good Hope, has been elected correspondent.

SMALL-POX IN LONDON.

The Privy Council have, through their medical officer, addressed a circular letter of advice on the subject of small-pox to the Board of Guardians of the thirty-six metropolitan unions and parishes, and are also employing a medical inspector for the purpose of personally communicating with the guardians of affected districts on the arrangements best suited for the emergency. The Guardians are urged by the Privy Council to do whatever is in their power to promote vaccination in their respective districts. The measures which the Privy Council particularly advise Guardians to adopt are these :—1. By comparing in detail the register of successful vaccinations with the register of births, and, by making inquiry at elementary schools and other establishments having many young inmates, to ascertain as far as possible what children are not yet duly vaccinated. 2. To give notice to the parents or guardians of such unvaccinated children warning them of the present danger of small-pox, and reminding them of the provisions of the law. 3. To see that in the local arrangements for vaccination every possible facility is given to the public, and that revaccination is freely afforded to persons who properly require it. 4. Wherever there appears to be much general neglect of vaccination to cause public notices on the subject to be extensively distributed and placarded throughout the district. 5. Under the provisions of the Act 24th and 25th Victoria, c. 59, to cause proceedings to be taken for the recovery of penalties from those parents or guardians who, after notice, omit to have their children vaccinated, as the laws require.

The letter of the medical officer of the Privy Council concludes by adverting as follows to the subject of hospital accommodation :—

"My Lords also direct me to request that you will bring under the particular notice of your Board that at the present time, when cases of small-pox among the poorer classes of society are arising in London at the rate of many hundreds per week, the Small-pox Hospital, even with the assistance of other hospitals, cannot give more than a tenth part of the accommodation required for the sick, and that consequently patients capable of spreading the disease are now either being detained in their own, often crowded and unwholesome, dwellings, or are received into parish infirmaries, where for the most part they can be but imperfectly separated from other inmates. And I am to say that in their Lordships' opinion it is in the highest degree desirable for the purpose of arresting the present epidemic of small-pox, Boards of Guardians in those districts where the disease is prevailing should, either separately or conjointly, take measures for establishing, under proper medical advice, temporary hospitals for the exclusive reception of cases of small-pox."

At a special meeting, held recently, at Whitehall, of the Metropolitan Association of Medical Officers of Health, Dr. R. D. Thomson, of Marylebone, in the chair, it was unanimously resolved—"That, in consequence of the increase of mortality from small-pox, the association deem it their duty to call the attention of guardians of the poor and other local authorities of the metropolis thereto. The association recognising the total neglect or inefficient performance of vaccination as the great cause of the mortality in question, they yet consider it not the less apparent that the prolonged residence of infected persons in rooms occupied by others, the exposure of such persons in the streets, in public conveyances, or in the waiting-rooms of hospitals, and the absence of adequate means of isolation, have been the immediate agents in bringing about the recent rapid diffusion of small-pox to a degree unexampled in the epidemic of 1859-60." Persons were daily applying to the general hospitals in consequence of refusal at the Small-pox Hospital ; all such applications were necessarily rejected, the sufferers sent back to their homes, and thus became the means of aggravating the evil. It was therefore necessary that, during the epidemic, temporary buildings should be erected or opened in such situations as were best suited for the purpose on the double ground of distance from inhabited houses and facility of approach. Also that public attention be called to the importance of vaccination and the law thereon empowering guardians to take proceedings under the Vaccination Amendment Act of 1861, in case of neglect of vaccination.

PARISIAN PRIVATE LUNATIC ASYLUMS.

Of these establishments Dr. Lee of Philadelphia writes as follows :—

"There are numerous private lunatic asylums in the neighbourhood of Paris, the most celebrated being that founded by Esquirol, at Ivry, Dr. Marcet, of the Bicêtre, being resident physician ; the *Maison de Santé du Chateau Sainte-James, près Paris*, and the *Maison de Santé* of Dr. Blanche, at Passy. The establishment of *Sainte-James* is near the Bois de Boulogne, and is carried on by Dr. Casimer Pinel, the nephew of the celebrated Pinel. It is a very extensive old chateau, built in the reign of Louis XV, and in the style of that age, and was occupied during the reign of Louis Philippe by M. Thiers, his minister, the distinguished historian. The grounds, which occupy several acres, are handsomely ornamented with flowers, shrubs, and trees, artificial lawns, grottoes, and bodies of water, etc. There is a large and productive kitchen-garden, and a variety of fruit trees. The walks are pleasant and well shaded, and there is a commodious billiard-room excavated from a solid rock. There are several buildings appropriated to the patients who belong to the wealthier classes, and pay from seven to twelve hundred dollars annually. Nearly all have their own servants. The two sexes occupy distinct premises. The attendant sometimes occupies the same room with the patient, but more frequently an adjoining one, separated by lattice-work. The fire and lights are also placed in the servant's room, and are inaccessible. The main building seemed to me very poorly adapted to the purpose of an insane asylum, many of the rooms being small, and not being well lighted or ventilated. The doctor is a member of the Legion of Honour, and an author of distinction. He very politely gave me several of his works on insanity. He is a great advocate for the use of prolonged baths, and long continued dripping of cold water on the head in certain cases of insanity, and has written a treatise on the subject. He has also written a work on the 'Isolation of the Insane,' which he deems advisable in a large majority of cases ; not at home, but in a public or private asylum, and indispensable for the poorer classes. He insists on the great importance of resorting to it at as early a period as possible, and believes that the incurable cases originate from a neglect of isolation in the beginning of the disease.

"The doctor resorts to the usual modes of physical restraint in all violent cases, and where the patients are inclined to injure themselves or others. He is about sixty, of affable and agreeable manners, and enthusiastic in his specialty. He numbers about forty patients. The private institution of Dr. Blanche, at Passy, is also located in an old chateau of the age of Louis XV, built by Prince Carignan, and occupied by his descendants for many generations. During the French Revolution it was occupied by the Princess Lamballe, who was seized in this very house and dragged before the Revolutionary Tribunal, to be brutally murdered by the mob before she could reach the guillotine. Extensive additions

have, however, been made by Dr. Blanche, so that it is now tolerably well adapted to the purposes of such an establishment. The premises occupy several acres, which are well laid out in walks, pastures, lawns, etc., and planted with ornamental trees and shrubbery. Each patient has his own attendant and a separate apartment. Each patient pays, on an average, about one thousand dollars annually, some more, some less. Physical restraints are freely used, as preferable to padded rooms. Dr. Blanche does not believe in isolation, nor in prolonged baths, nor water drippings on the head. There may, possibly, exist some rivalry between him and Dr. Pinel, for they are rather antagonistic on many points. The doctor spoke highly of Arnott's water-bed for paralysed cases. To the question, why general palsy was more frequent than formerly, Dr. Blanche replied that people lived faster than they used to, used up their nervous agency sooner than they formerly did, which I conceive is the true explanation. He said that domestic unhappiness was a very frequent cause of insanity; that there were few happy marriages in France; that those in Paris could easily be counted; that most of those who lived together were not man and wife, etc. I hope he is mistaken.

"Dr. Blanche showed Dr. Brown and myself every part of his establishment, and explained fully his views in regard to the management of the insane. He has about eighty patients, and his terms, as will be seen, are about the same as those of Dr. Pinel. This must suffice for the public and private lunatic asylums in France. The subject is far too vast to be treated satisfactorily within the limits I have allotted myself; but there are other topics, at least as interesting, which demand our notice, and which will receive attention in future communications."

SURGEONS AFTER A BATTLE.

Dr. Hamilton, in a lecture lately delivered at the Medical College, New York, says:—

"*After* a battle, also, whether the army has been victorious or has suffered a defeat, the duties of the medical officers continue without interruption. In either case they have usually been compelled to labour incessantly for two, three, or more successive days and nights, without sleep, without rest, and sometimes without food even. It is well known that both Drs. Milnor and Sutton, exhausted by their labours with the wounded at Savage's Station, finally perished, while in the hands of the enemy, from actual starvation. On such occasions, also, the surgeons have usually been left alone to do their work. Their nurses, cooks, servants, and orderlies are gone. Their wounded men are in deserted houses, in barns, under sheds or hayricks, or under the shade of a tree upon the open field. They have often no candles, no seats, tables, or beds; no cooking utensils; no food, perhaps, or stimulants. Everything, almost, has to be improvised. It has often been to us a matter of surprise how much the inventive genius of a surgeon, sharpened by the appeals of those who are suffering, has been able to supply. A bivouac fire furnishes at night both light and heat; a log is a seat; a fragment of a board is a table; a few tough saplings, laid upon four crotchets, with some leaves, or a blanket, constitute a bed; cold water and words of encouragement are excellent stimulants. Remember, gentlemen, that to the wounded and fainting soldier, *Hope* is a better cordial than brandy. And that you ought never to omit to offer words of encouragement, when it is in your power to do so. As for food, it is well enough to know that commissaries are seldom found upon the field, either immediately before, immediately after, or during the battle. We do not in this remark intend to imply a censure upon these officers. Their duties are laborious and perplexing in the extreme; and in order to answer all the demands which press upon them at such a time they must be ubiquitous. We only intend to state a fact; and to advise you that you will be obliged generally, after a great battle, to feed your own wounded men. Surgeons have many times during the present war performed such miracles. After the battle of Seven Pines, with 4,000 wounded men on our hands, and with comparatively nothing to feed them, some of the surgeons, by consent of General Sumner, killed several of the horses belonging to his orderlies, and made of them a most palatable and nourishing soup. Others followed the example of Miss Nightingale at Scutari; finding supplies of crackers and of coffee with no commissary to give the required permission to use them, they asked permission of God, and in His name broke open the boxes, and distributed the contents."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, May 5, 4 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Rose Hotel, Canterbury, on Thursday, May 7th, at 3 P.M.

Dinner will be ordered at 5 P.M.

Thomas Boycott, M.D., *Hon. Secretary.*

Canterbury, April 20th, 1863.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

The fourth meeting for the session 1852-3 was held at Dartford, on April 24th, 1863; T. Heckstall Smith, Esq., President of the Branch, in the Chair. There were present seventeen members and visitors.

New Members. Two new members were elected (subject to approval at the annual meeting of the Association); viz., Peter Martin Duncan, M.B., of Belmont, Lee, Kent; and Thomas Churton, Esq., M.R.C.S., of Erith.

Communications. The following papers were read.

1. On the Necessity of Comparative Observation in the Investigation of Injuries. By John Grantham, Esq., F.R.C.S.

2. On a Case of Renal Calculus. By John Dan Brown, M.D. The morbid specimen was exhibited.

Presentation of Patients. Mr. E. Moore presented a lad, aged 8 years, who showed unequal development of the lateral portions of the tongue, with deviation to one side on the protrusion of the organ; also unequal development of the limbs. The child was of scrofulous constitution.

Mr. KEDDELL presented a lad, aged 8 years, who had recovered from traumatic tetanus following upon a scalp-wound. The disease commenced on the eleventh day, and endured about forty days. The abdominal muscles were principally affected: there was no opisthotonos. Morphia treatment was employed.

Conversation. A conversation was induced by Mr. T. HECKSTALL SMITH, on intermittent fever. He said: I am anxious to obtain the experience of the assembled members upon a point on which I am much interested. Some seven years ago I mentioned, at a meeting of the South-Eastern Branch, that it seemed to me we had entered upon an "intermittent cycle" as the type of disease. I practise over a large district, singularly favoured in its geological formation; chalk, flint-drift, sand, washed pebbles, being almost the universal character, with here and there a little overlying clay; the whole naturally and fully drained. During twenty-five years' practice, up to that time, I had not seen one case of ague contracted in the locality, though I had seen many imported cases. At that time, numerous cases of ague occurred, scattered over the whole district. They increased both in number and intensity during three or four years, and then gradually subsided. It has now disappeared. During the same period, intermittent neuralgia has prevailed, and has not as yet entirely ceased. Other diseases were attended with an intermittent and remittent character. Some of the ague cases were of a very aggravated type; one presented the symptoms of yellow fever; in another, congestive or simple apoplexy occurred at every cold stage; others presented alarming lung-congestion. I wish to inquire if this "cycle" of the intermittent form of disease has been observed in other localities, more especially where it was previously unknown. I also wish to mention one or two practical points in the *treatment.* Thirty-five years ago I brought before the profession the plan of cutting short the attack, and frequently of arresting the disease at once, by giving one large dose of bark immediately before the expected cold stage. This practice is eminently successful with quinine, especially if the tongue is tolerably clean; if not, an emetic given at the same period must be prescribed, and with the best results. Quinine is certainly our best antiperiodic; but I am aware that arsenic has long been used with success for the same purpose. I prefer quinine to arrest the intermittent attack. But I now wish finally and especially to direct attention to an important practical point in the treatment of ague, of the truth of which I have no doubt. Ague has a tendency to recur again and again after it has been "cured"—that is, arrested by bark; but if we follow up from this point with a course of arsenic, relapses are very rare. Given in the way recommended by Mr. Hunt, with which all are familiar, arsenic is perfectly safe, and is apparently less objectionable than many drugs which are described as less formidable. Let me ask of those who have the opportunity, to test this plan. I think we should arrive at the results I have indicated.

Mr. FRY stated that the arsenic treatment was introduced into the West Kent General Hospital at Maidstone by Dr. Woodfall, and that the result was satisfactory.

An Expression of Opinion by the members was given in the matter of Dr. E. Waters of Chester. The disposition evinced by the public to bring false accusations against medical practitioners was considered to be an evil on the increase, and one that must be met by steady resistance on the part of the profession. It was recommended to subscribe towards the expenses of such law-suits in each case as it may arise; and the conduct of medical practitioners who appear as witnesses against their brethren was denounced.

After the usual thanks, the members and visitors adjourned to dinner.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

APRIL 2ND, 1863.

JAMES HAKES, ESQ., Vice-President, in the Chair.

Temporary Molar Teeth removed by Suppuration. Mr. STEELE shewed two temporary molar teeth expelled by suppuration, from an infant five months old. There had been some purulent discharge for some time from the left nostril, and within the mouth from the centre of the gums of the upper jaw. The palate and the first upper molar tooth came out together with some small spicula of bone, and in a fortnight after, a second was removed. The teeth had made their way laterally through the side of the alveolar arch.

Acute Inflammation of the Larynx, complicating Fever. Dr. VOSE shewed a specimen. The disease had not caused symptoms sufficiently urgent to seem to demand tracheotomy. There was a little globular appearance of pus on the right arytenoid cartilage and some thickening. Dr. Vose said this complication was new to him, but had been spoken of by Dr. Murchison.

Dr. GEE observed that Rokitansky alludes to this complication under the head of laryngotyphus. On examining this specimen, however, it seemed to him that there must have been some previous morbid action, and that the appearances were not entirely due to a recent inflammation.

Compound Fracture of the Tibia and Fibula. Mr. LOWNDES shewed a specimen, from a patient at the Northern Hospital, on whom amputation had been performed eleven weeks after the accident. The original injury to the soft parts had been considerable, and had been further aggravated by a severe attack of traumatic delirium. Several pieces of the tibia, which was broken about three inches above the ankle, were removed at first, and other portions had exfoliated. Only a very slight fibrous union was found between the ends of the tibia, and hardly any appearance of new bone. The ends of the fibula, which overlapped one another for an inch and a half, were in close apposition and firmly bound together by a strong interlacement of fibrous tissue.

Dipsomania. By F. D. FLETCHER, Esq. Mr. Fletcher wished to lay before the Society some observations as to this condition; in reference, first, to its characteristic features; secondly, to the manner in which it is produced: thirdly, the course which it runs; and fourthly, the treatment by which we may attempt its cure.

The special symptom of this disease is the maniacal tendency to drink, which Mr. Fletcher thought as evident in the dipsomaniac as is the maniacal tendency to kill, to burn, or to steal, in the homicidal monomaniac, in the pyromaniac, or in the kleptomaniac. He held that tendency to be maniacal in its character that has acquired such power over an individual, as to completely subjugate his will, so that in obedience to its impulse he will act in direct opposition to the combined forces of his judgment, his instincts, his interests, and his own desires. He thought that facts bore him out in asserting that there is such a psychological condition as that which Coleridge, from his own experience, described as paralysis of the will, and in further asserting that the place and influence of the paralysed will are usurped by other powers that act upon the mind and soul. Drunkards he would divide into two classes: those who drink because they like to do so; and those who drink because they cannot help it. How is this condition of dipsomania induced? Sometimes we get clear proof of the hereditary transmission of this tendency from parent to child, but this is only in a minority of cases. More frequently we can trace the course of the patient's drunkenness up to its source, and see how the tendency has been acquired.

We may find three distinct stages in the drunkard's history: the first, in which the will had its full power, and kept the passion in check; a second, in which the power of the will was impaired but not lost; and a third, in which the will had surrendered at discretion, all self-control had been lost, and in the full development of dipsomania, he had become less amenable to reason and conscience, and more thoroughly a slave to mere appetite than a brute. There is, further, a difference noticeable in the secondary effects of prolonged excess, which results in some cases in delirium tremens, in others in fixed hallucinations without the sleeplessness, tremor, and depression of delirium tremens. What can we do to prevent and to cure these miserable cases? Their prevention can be only accomplished by the gradual spread of sounder ideas than seem now to prevail as to the use and abuse of stimulants. As to the cure, we must attempt to relieve that physical depression which originates in some the craving for stimulants, and to rouse the will *via* the conscience to assert its rightful supremacy; but if we fail in this, and the patient cannot restrain himself, we must perform the necessary function of restraint for him. After alluding to the practical difficulties in the way, Mr. Fletcher said that if we are convinced that dipsomania is as real a morbid condition as melancholia, if we believe that, like other forms of mania, it is most likely to be cured by keeping the patient from scenes and circumstances which favour the growth of the ideas whose morbid development determines the specific form of his mania, we shall claim for the victims of monomania the same advantage which we accord to other mischievous monomaniacs. He suggested that it should be ascertained if this disease exists to such an extent as would justify the establishment of special regulations for its victims; that the proof of an uncontrollable tendency to drink should be held by itself to legalise the confinement of the individual; that the necessity for restraint for some time after apparent recovery should be recognised by the Commissioners of Lunacy, and its enforcement authorised; that in cases of relapse this period of probation should be at least doubled every time the patient is readmitted. He thought that were reformatories, on the voluntary system even, established in this country, many a dipsomaniac might be snatched from the doom, towards which he is irresistibly tending.

Mr. Steele said one of the great difficulties with regard to madness was that it was only a question of degree. When a man became so far mad as to make it seem necessary, society confines him. He mentioned one or two well marked cases of uncontrollable impulse to drink, and said he had met with many very distressing cases of drinking among respectable married women, and would just allude to one peculiar effect to which the habit seemed to lead, viz., the death of the fœtus.

Mr. Lowndes did not quite understand whether it was those who had an uncontrollable desire for drink, or those who when drunk acted in a mad way, that were dipsomaniacs. The northern nations had thriven; and if the excessive use of stimulants had been so injurious, how beneficial the moderate use must have been! As to the antiquity of the convivial customs of these northern nations, he referred to Tacitus, who said the ancient Germans were as difficult to overcome with wine as with the sword.

Dr. Skinner spoke of the way in which these things are managed in Scotland. There they have institutions to which those who are willing may go, and may be taken care of. He had had dipsomaniacs residing with him, and had seen the benefit of moral influence.

The Chairman asked if we cannot lock up patients suffering from delirium tremens.

Dr. Waters said these cases used to be very frequently received into the Lunatic Asylum in Ashton Street.

Mr. Bailey said it was most desirable that we should have some control over these cases of dipsomania; but to be effectual it must be very long continued.

Dr. Vose said that, at the lunatic asylum in Liverpool both male and female patients were admitted with delirium tremens. As to drunkenness, the law treats it with a fine; and if a man when drunk commit a crime, he may be punished for it. If from drink he lose his senses, he may be locked up like any other maniac. He would be disposed to put habitual drunkards under surveillance for a time, and mentioned that one of the advantages of the sanatorium in the Isle of Arran, was that it was twelve miles from any whiskey shop. If this dipsomania be a special disease, to which the human mind is subject, how is it that we do not hear of it in other countries? It is not of itself an indication of insanity to be given up to other vices, such as extravagance, sensual indulgence of other sorts, miserly habits, etc. It is only too true that we are perpetually attending cases of habitual intemperance both among males and females, and the scenes we see are often very awful. Dr. Vose related one or two cases he had seen as illustrating the difficulty in which the medical attendant is often placed.

Mr. Fletcher replied, and referred to some localities in the town as shewing what a curse these drinking customs are. With regard to the remark that when a man from drink loses his senses, he may be locked up, would it not be better to try to save the brain before it gets so far affected as to bring the person into the condition of a lunatic. He thought this a disease as certainly recognisable as kleptomania, pyromania, etc.

HARVEIAN SOCIETY OF LONDON.

April 2nd, 1863.

Henry W. Fuller, M.D., President, in the Chair.

PNEUMOTHORAX, AND THE OCCASIONAL RECOVERIES FROM THAT ACCIDENT. BY J. E. POLLOCK, M.D.

The object of this paper was to maintain that pneumothorax is not so uniformly fatal as has been represented, and that, in certain instances, the rupture of the lung and escape of air into the pleura has even a curative tendency as regards the lung. The author began by stating the results recorded by various authors of repute. The rupture of a tubercular cavity into the pleura is the only accident to be considered here. Of which Laennec says:—"The effusion of air cannot exist for any length of time without giving rise to severe symptoms and even to death. I have never seen pneumothorax in any person who was not confined to his bed."

From the details of twenty cases of this accident which occurred in the Hospital for Consumption, the duration of life after the accident was as follows:—All but one died under one month; this patient lived four months, and had enormous but gradually increasing effusion. In thirteen cases, the pneumothorax occurred on the right side; in seven, on the left. In eight, the perforation was at or above the level of the second rib; in one, there were two perforations; in another, several. The seat of rupture was not ascertained in the remaining nine cases. Effusion occurred in twelve cases; none in eight. Death occurred from sudden collapse, or more gradual collapse, in all.

The phenomena of metallic voice and respiration are due to the resonance of these sounds in a large space bounded by elastic walls. The occasional tinkle is caused by the bursting of a small bubble. The compression of the lung gives rise to a crepitant sound, as in pleurisy with effusion.

There is a class of cases in which recovery undoubtedly takes place. Thus, the cavity in the tubercular lung may be of small size, as in a case seen by the author, where it did not exceed half an inch in diameter.

By a provision of nature, the investing membrane is almost invariably thickened around that portion of the lung, the seat of the affection, otherwise pneumothorax would be of daily occurrence. Dry pleurisy is, therefore, a conservative agency in phthisis.

After the accident, the cavity in the lung collapses, and thus the organ is more favourably situated in some cases by the occurrence of pneumothorax.

Dr. Pollock held, that the entrance of air into the pleura is not, *per se*, a dangerous accident. The fatal cases of pleurisy so frequently supervening on the accident are due to the condition of the pleura, which are diseased or the seat of tubercle. Thus Dr. Meadows, in 1860, read a paper on a case of sloughing of the thoracic walls, when no dangerous inflammation followed. In a case under the author's care, Mr. Fergusson punctured for empyema, and the air freely entered and retreated from the chest without evil consequences. The patient made a good recovery.

Two cases were then given, in which pneumothorax had been a curative agent. One occurred in a young lady, aged 28, with cavity in the left apex. Pneumothorax supervened. After collapse of the lung, she rallied again, and in two months was much better. She is now, one year after the accident, better than before it. Physical signs of cavity have disappeared, and there is moist crepitation. The air has been absorbed.

Dr. Pollock deprecated the use of operative proceedings in pneumothorax.

The President proposed a vote of thanks to the author for his valuable paper.

Dr. Drysdale remarked, that he believed the usual seat of perforation was in the left lung. The author's cases, however, gave 13.7 in favour of the right. He was glad to hear, that the author considered the introduction of air into the pleural cavity so exempt from danger; as the operation of puncture in cases of pleurisy with large effusion would thus be often indicated.

The President observed that, according to his experience, the seat of perforation is usually in the lowest part of the lung. Admission of air into the pleural cavity is not dangerous. He adverted to the cases treated by Dr. Goodfellow of the Middlesex Hospital, when drainage tubes were inserted into the thorax, and yet no dangerous inflammation ensued. He, therefore, considered the operation of puncture, in pleurisy with effusion, without much danger.

Dr. Ballard had seen the chest punctured in pneumothorax, with fatal result.

Mr. Sedgwick related a case of empyema which he had treated by puncture of the thorax. The case did very well.

Dr. Greenhow believed the usual seat of perforation to lie far down in the lung posteriorly. He had seen serious consequences follow the admission of air, after perforation in pleurisy; but had no hesitation in performing the operation, taking care to prevent the admission of air. Metallic tinkling is caused by the bursting of a small bubble in the cavity.

Dr. Stone remarked that, out of 5000 cases of death in the Hospital for Consumption, pneumothorax had been diagnosed only in twenty. That the admission of air into the pleural cavity is not, *per se*, dangerous, he proved by cases occurring in healthy individuals.

Dr. Camps observed that the presence of a small quantity of fluid, however small, was requisite to produce metallic tinkle.

Mr. Weeden Cooke asked whether puncture of the thorax had never been employed by the author in pneumothorax?

Dr. Pollock replied in the negative.

The Medical Profession in Vienna. According to recent statistics, there are in Vienna 560 physicians, 179 surgeons, and 912 sages-femmes.

Correspondence.

MEDICAL ADVOCATES.

Letter from James Edmunds, M.D.

Sir,—The performances of medical experts are becoming a libel upon the profession; and it behoves the Association to organise some means of attaching a proper penalty to this kind of misconduct.

Bromwich *v.* Waters is, however, a far less serious case than the late one of Gattie *v.* Halford. An action for seduction, under circumstances which call for medical evidence to bring the charge home to an individual, needs a most rare concatenation of circumstances; whereas, in Gattie *v.* Halford, a gentleman of seventeen years standing, and of the highest qualifications, was most unjustly assailed for malapraxis in the use of the forceps, and for misconduct in not having applied the instruments without calling in further assistance. The Journal did its duty at the time in denouncing the medical men who appeared for the prosecution; yet the case escaped that amount of professional condemnation which it deserved, as this important subject had then aroused but little attention.

I have to-day referred to the full reports; but the Journal of June 29th, 1861, contains an accurate account of the trial. I believe that Dr. Barnes affirmed that the conformation of the pelvis was perfectly normal, in order the more completely to exclude the possibility of unavoidable injury to the nerve during the passage of the head. Dr. Halford's treatment and management of the case was, however, vindicated in every point by Sir C. Locock, Dr. Ramsbotham, and Mr. Baker Brown; and, in fact, Sir C. Locock and Co. rode so completely rough-shod over all that Dr. Barnes and Co. had advanced, that the defendant received a verdict in his favour on all points.

Reverting to Bromwich *v.* Waters, Dr. Ramsbotham seems to have merely drifted into a mistake; and, while he said little that could be well excepted to, he has since shown that he regrets that little.

The cure of this sore place is in our hands. Let us carefully scrutinise the conduct of those who appear in the witness-box; and, when we see a man presumptuously condemning those who have a right to think differently, or prostituting his science for a one-sided advocacy, in place of an humble exposition of simple truth, or apeing omniscience with his own narrow dogmatism, then note that man, and, quite apart from any spirit of trades-unionism, let the Association meet for the purpose of marking their sense of such conduct; and, whether the fault be presumption, ignorance, carelessness in the performance of so important a duty, or anything even less venial, let us act out the fair inference that such an one is unfit for our noble profession, and avoid meeting him in practice.

I am, etc., James Edmunds.

35, Finsbury Circus.

Sir,—We are all indebted to you for your courageous and powerful defence of one who has suffered most unjustly from the inexcusable conduct of some eminent men in our profession. For my own part, I consider your strictures on Dr. Ramsbotham and the others only too mild. I see in Dr. Ramsbotham's letter only a lame excuse. It would have been more dignified in him to have at once confessed his error, and apologised for it. And why are the other two gentlemen silent? Surely the whole profession must demand from them an explanation. Why did not they consult with Dr. Waters at first, and hear his statement? That they did not do so, is their condemnation. Men in their position ought

to be particularly careful how they lend their names to the injury of a brother practitioner. They seem to think that an obscure country practitioner is not worthy usual fair treatment. Men who act unscrupulously towards a brother practitioner can scarcely be considered safe hands to entrust patients to; and I should recommend country practitioners to bear this in mind. If we do not show to the world that we respect one another, we cannot expect the world to respect us as a body.

That you may long continue to support the cause of truth and justice and mutual courtesy, is the wish of yours, etc., J. E. S.

April 22nd, 1863.

Sir,—Every member of the medical profession owes you a deep debt of gratitude for the bold and able manner in which you have treated the conduct of the medical men called by the plaintiff in the late trial Bromwich *v.* Waters. As, in the language you have used, truth has neither been suppressed nor justice reprobated, I am at a loss to understand how Dr. Ramsbotham can complain of being badly used. The profession as a whole certainly takes a very different view from Dr. Ramsbotham of his and Dr. Lee's conduct; and, so far from considering your criticisms unmerited and uncalled for, look upon them not only as just, but as requisite. The proceedings at the late trial have opened the eyes of the profession to a danger to which it has almost hitherto been unexposed. They have shown that medical men, occupying what is commonly considered a high position, may be found ready to enter the witness-box and use that position and their authority against professional brethren of equally high position and repute. It is of no use for Dr. Ramsbotham now to tell us that he went into the witness-box reluctantly, and that he considered his evidence in favour of the defendant; for the judge himself has decided against the latter opinion, and the profession has unanimously endorsed his judgment.

As neither arguments nor apologies can now undo the injury that has been inflicted upon Dr. Waters, let us cease to talk of them, and at once turn our attention to the best method of effectually preventing medical men, who are unable to prevent themselves, from lending their support to the prostitution of medical science or the hoodwinking of justice. It is, we believe, the unanimous opinion of the profession that, without medical support, no trial such as those alluded to could ever have been brought before the eyes of the public. It therefore behoves us take into consideration the most effectual means of preventing their repetition. I therefore take the liberty of requesting you, Mr. Editor, to ventilate the question in the pages of the Journal, and to invite the cooperation of our members for this purpose. The sooner, too, that this is done, the better; or we may ere long have some other less scrupulous and more needy member of the profession bartering the good name and sacrificing the reputation of another professional brother. I am, etc., H.

April 1863.

ON THE LOCAL ACTION OF ATROPIA ON THE EYE.

Letter from Alexander Fleming, M.D.

Sir,—In the last number of your Journal you have given insertion to a paper by Dr. Lawson, which professes to controvert my views on the local action of atropia on the eye in the *Edinburgh Medical Journal* for March of this year. I will now prove that Dr. Lawson has not understood my paper, and has not stated my views correctly. Dr. Lawson observes:—

"The conclusions at which Dr. Fleming has arrived may thus briefly be summed up.

"1. Adaptation of the eye to distinct vision at different distances is effected in great part by the *iris*.

"2. The iris is an erectile structure.

"3. The ciliary muscle, in contracting, presses on the veins returning from the iris, and so causes turgescence of the latter, decrease in the size of the pupil, and power of examining near objects.

"4. Dilatation of the pupil is due to the contraction of the capillaries, diminution of the quantity of blood, and hence an absence of the necessary erectile fluid.

"5. Contraction of the capillaries may be due to a stimulation of the sympathetic nerve."

Let us now examine separately these so-called conclusions, and compare them with my paper.

Conclusion 1. "Adaptation of the eye to distinct vision at different distances is effected in great part by the *iris*."

This statement is not true. On the contrary, my opinion is that "the normal accommodation of the eye to near and distant vision depends essentially on a change in the position of the lens." (*Edinburgh Medical Journal*, March 1863, p. 780.)

Conclusion 2. "The iris is an erectile structure."

It is here implied that I consider the iris to be composed simply of erectile tissue. On the contrary, I believe the iris to be a mixed muscular and erectile tissue; as plainly indicated in the following paragraph of my paper:—

"The ciliary processes have a mixed erectile and muscular structure, not unlike that of the iris." (P. 779.)

Dr. Lawson adds:—"In proof of conclusion 2, the writer (Dr. Fleming) asserts that the softness of the iris is evidence of its being erectile."

This statement is a misrepresentation. The following is the paragraph of my paper to which he refers:—

"The erectile structure of the iris has been of late too much overlooked in discussing its movements—the singular softness of which appears to imply something more than muscular contraction." (P. 779.)

The word "softness" refers plainly to the movements and not to the structure of the iris.

Conclusion 3. "The ciliary muscle, in contracting, presses on the veins returning from the iris, and so causes turgescence of the latter, decrease in the size of the pupil, and power of examining near objects."

Dr. Lawson implies in this statement that I refer the adaptation of the eye to near vision to contraction of the pupil. The following paragraphs of my paper show plainly that I do not:—

"For near vision in normal accommodation I believe that the *pupil contracts and the lens advances*. The veins of the iris and ciliary body are, I believe—as formerly suggested by Wallace, Cooper, and Smee—at the same time compressed by the ciliary muscle causing turgescence of their erectile parts. The turgescence of the iris cooperates with the contraction of its circular fibres to close the pupil. The turgescence of the ciliary body must exert pressure on the vitreous humour, which, diffused equally through that fluid, takes effect on the only yielding point—the lens—and pushes it forward, just as a patient is raised by pressure on the side of a water bed." (P. 779.)

Conclusion 4. "Dilatation of the pupil is due to the contraction of the capillaries, diminution in the quantity of blood, and hence an absence of the necessary erectile fluid."

The following paragraphs of my paper show plainly that this statement is not correct:—

"The sympathetic nerve supplies at the same time contractile power to the arteries and to the radiating fibres of the iris; and it seems most probable that in ordinary dilatation of the pupil the same reflex influence stimulates conjointly the contractile arteries entering the iris and the radiating fibres. These being always asso-

ciated in action, we can understand that an agent like atropia, directly contracting the arteries entering the iris, will draw into movement by sympathy its radiating fibres, the contraction of which is already made easy by the emptiness of the erectile tissue.....When atropia is applied to the eye, I believe that it reaches by imbibition, first, the arteries entering the iris—constricts them—impedes the flow of blood to, and relaxes its tissue. The constriction of the arteries of the iris, with its consequent relaxation, draws into action, *by functional sympathy* (and without the intervention, by reflex action, of the brain or cord), the radiating fibres, and dilates the pupil. Sinking deeper into the eye, the alkaloid reaches, secondly, the ciliary processes, and relaxes their erectile structure and causes distant vision. The relaxation of the ciliary body must cause the advance and expansion of the vitreous humour around the lens; while the lens itself recedes to occupy the place of the displaced fluid." (P. 779.)

I feel that I need add no more.

I am, etc., ALEX. FLEMING.

Birmingham, April 20th, 1863.

MEDICAL PROVIDENT ASSOCIATION.

LETTER FROM R. B. CARTER, ESQ.

SIR,—Will you kindly allow me space to say that the letters I have received leave no doubt on my mind that the Association will be sufficiently supported; while they seem to prove also that it can be very inexpensively maintained. A week in three years and a half seems to be about the average of sickness among practitioners.

The gentlemen who have favoured me with letters will receive private communications by and bye; and I shall be glad to hear from any of those who have not yet written. I am, etc., ROBERT B. CARTER.

Stroud, Gloucestershire, April 28th, 1863.

TREATMENT OF PUERPERAL CONVULSIONS.

LETTER FROM J. G. SWAYNE, M.D.

SIR,—In the JOURNAL for April 25th there is a letter from Mr. Prosser of Bromsgrove, at the beginning and end of which are the following passages:

"After carefully reading Dr. Swayne's eleven cases of puerperal convulsions, in all of which bleeding had been performed, it appears to me that he does not establish the value of bleeding at all, either in diminishing the frequency and violence of the fits, or in stopping them altogether."

"It appears to me that the ten successful cases reated did not recover in consequence of being bled, but hat they got well notwithstanding they were bled. The lelivery seems in all these cases, as is generally observed, to have had the greatest share in tending owards the relief of the fits."

How any one, after "carefully" reading my cases, can ome to the conclusion that in all of them the delivery vas the chief cause of the recovery, is to my mind uite incomprehensible. In one of them particularly No. 11), it could not have been so, for the simple eason that there were no convulsions at all until fourteen hours after the birth of the child. In three others Nos. 2, 7, and 10), the fits increased in severity and requency after delivery, until the patients lay completely insensible, with stertorous breathing. They were then bled, and from that time their condition steadily improved. In most of my other cases, bleeding was ollowed by a marked diminution in the frequency and iolence of the fits, before delivery was had recourse to. Ir. Prosser expects too much when he says that the onvulsions ought to cease immediately after bleeding. s I observed in my paper, one of the chief results of bleeding is a rapid diminution in the quantity of albumen in the urine; but yet a state of toxæmia is one that cannot be suddenly removed.

When Mr. Prosser publishes his cases, I shall be glad to see what is to be said on his side of the question; but I hope, for the sake of medical science, that he will be more accurate in recording his own experience than he has been in criticising mine.

I am, etc., J. G. SWAYNE.

Clifton, April 28th, 1863.

Medical News.

UNIVERSITY OF OXFORD. In a Congregation holden on April 23rd, the Degree of Doctor in Medicine was conferred on

Tuckwell, Henry Mathews, Lincoln College

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 21st:—

Atkinson, Charles Stephen Abbott, Norwich
Barrett, John, Bath
Carter, William, Newbury, Berkshire
Collins, Denis, Liverpool
Etheridge, Charles
Evans, Thomas, Llandyssil, Cardiganshire
Everett, Herbert, Norwich
Evershed, Arthur, Arundel
Ferris, John Spencer, Bradford-on-Avon, Wilts
Freeman, Samuel George, Stoney Stratford
Hall, Samuel, Belper, Derbyshire
Hobbs, Henry Addison, L.S.A., Croydon
Jeaffreson, Christopher, Leamington
King, George, Leckford, Hants
Moore, Harry Gage, Lymington, Hants
Newman, Anthony John, L.S.A., Newport, Monmouthshire
Quarrell, William, Weston-super-Mare
Reynalds, John, L.R.C.P., L.S.A., Truro, Cornwall
Simpson, John Henry, Marksbury, Somerset
Spencer, Herbert Morris, Ackworth, Yorkshire
Thomas, David Howell, Swansea
Tucker, Frederick John, Milton Street, Dorset Square
Weaving, Albert, Oxford
Wigg, Thomas Carter, East Dereham, Norfolk

At the same meeting of the Court—

Edwardes, Robert; and
Hadlow, Henry, of the Royal Marine Infirmary, Woolwich, passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively May 4th, 1857, and June 24th, 1859.

Admitted on April 22nd:—

Beviss, Charles, M.D.St. And., Sydling, Dorset
Bowie, Robert, Hull
Carter, Thomas, L.R.C.P. & L.S.A., Richmond, Yorkshire
Eddowes, Arthur Benjamin Jackson, Loughborough
Fagg, Frederick Thomas, Hythe, Kent
Frankish, John David, Christchurch, New Zealand
Gill, William, Truro, Cornwall
Good, Joseph, Watford, Herts
Grewcock, John Baily, Folkingham, Lincolnshire
Henson, Sidney Rossell, Hull
Mackintosh, Hugh Richard Duncan, L.R.C.P., Cheltenham
Martindale, John Walker, Windermere
Mason, Thomas Edward, M.D.St. And., Deal, Kent
Medwin, Aaron George, M.D.St. And. & L.S.A., Blackheath Road
Milner, James Forman, Hull
Moore, John New, Moreton in the Marsh
Nash, Walter Llewellyn, Cheltenham
Ringrose, Basil, Potters Bar, Middlesex
Rumboll, Walter, L.S.A., Ramsbury, Wilts
Thurston, Edward Whitfeld, Ashford, Kent
Whitehead, John, M.D.St. And. & L.S.A., Preston, Lancashire
Wood, John Hurd, Notting Hill
Woodman, Samuel, Finchley Road

Admitted on April 24th:—

Blunt, Thomas, L.R.C.P., Weston Magna, Leicestershire
Brewer, Thomas, Halifax
Britton, Thomas, M.D.St. And. and L.S.A., Driffield, Yorkshire
Dear, William Donald, Demerara
Dermott, Fitzherbert
Fox, Edward Lloyd Harries, Broughton, Hants
Grattan, Edward Shaw, Belfast

GreatRex, Adolphus Burnell, M.D.St. And. & L.S.A., Eccleshall
Harley, Edward, L.R.C.P. & L.S.A., Ludlow, Shropshire
Heckford, Nathaniel, Forest Gate, Essex
Jeffery, Joseph, Northampton
King, Thomas, Monks Risborough, Bucks
Lavin, Michael Drury, Bushey, Herts
Lyle, Thomas, L.R.C.P., Stratton, Cornwall
Miller, John Nicholas, L.S.A., Hampstead
Morton, John, Holbeach, Lincolnshire
Oliver, John Brown, High Wycombe
Picard, Peter Kirkpatrick, M.D.Edin., Edinburgh
Pilkington, Thomas, Enfield, near Accrington, Lancashire
Spence, James Atkinson West, L.R.C.P. & L.R.C.S.Edin, Bedale
Thompson, George Septimus, Newcastle

APOTHECARIES' HALL. On April 23rd, the following Licentiates were admitted:—

Hosking, William Henry, Guildford Street, Russell Square
Macintosh, Hugh Richard Duncan, Cheltenham
Swyer, Septimus, Brick Lane, Whitechapel
Wigg, Thomas Carter, East Dereham, Norfolk

At the same Court, the following passed the first examination:—

Powdrell, John, St. Bartholomew's Hospital

APPOINTMENTS.

BONE, William, M.D., appointed Assistant Medical Officer for the Female Department of the Middlesex County Lunatic Asylum, Colney Hatch.
GIBSON, John Haydock, M.D., appointed Physician to the York Dispensary.
MORRISSY, Tobias J., M.D., elected Coroner for Tipperary.

UNIVERSITY OF LONDON. The following appointments were made by the Senate on April 29th:—

ELLIS, George V., Esq., Examiner in Anatomy, *vice* W. Sharpey, M.D., F.R.S.
FARRE, Frederick, M.D., Examiner in Materia Medica, *vice* G. O. Rees, M.D.
HILTON, John, Esq., F.R.S., Examiner in Surgery, *vice* W. Fergusson, Esq., F.R.S.
PARKES, E. A., M.D., SIBSON, F., M.D., F.R.S., } Examiners in Medicine, *vice* Dr. Tweedie and Dr. Jenner.
SAVORY, William S., Esq., F.R.S., Examiner in Physiology, *vice* T. H. Huxley, Esq., F.R.S.

POOR-LAW MEDICAL SERVICE.

BULLOCK, Charles J., M.D., to the Congleton District of the Congleton Union.
LIDDERDALE, John, Esq., to the Kintbury District of the Hungerford Union.
RUSSELL, John, L.K. & Q.C.P.I., to the Thurles Dispensary District of the Thurles Union.

ARMY.

BROWNE, Surgeon R., 83rd Foot, to be Surgeon 25th Foot, *vice* C. R. Robinson.
GRANT, Staff-Assistant-Surgeon M., M.B., to be Assistant-Surgeon 2nd Life Guards, *vice* F. T. Buckland.
ROBINSON, Surgeon C. R., 25th Foot, to be Surgeon 83rd Foot, *vice* R. Browne.
WELCH, Staff-Assistant-Surgeon F. H., to be Assistant-Surgeon 22nd Foot, *vice* J. Adcock, M.D.

To be Staff-Assistant-Surgeons:—

ADCOCK, Assistant-Surgeon J., M.D., 22nd Foot.
STANLEY, St. John, from half-pay.

INDIAN ARMY.

BOUSFIELD, Assist.-Surgeon S. G., Bengal Army, to be Surgeon.
CHEVERS, Assistant-Surgeon N., M.D., Bengal Army, to be Surgeon.

ROYAL NAVY.

HAINS, F. A. P., M.D., Acting-Assistant-Surgeon, to the *Liverpool*.
JACK, John, Esq., Surgeon, to the *Royal Oak*.
REELAN, Patrick, Esq., Assistant-Surgeon, to the *Royal Oak*.
NEGUS, Fysher, Esq., Surgeon, to the *Implacable*.
SHEPARD, E. J., M.D., Assistant-Surgeon, to the *Royal Oak*.
SPEER, Henry M., Esq., Surgeon, to the *Liverpool*.
TRIMBLE, James, Esq., Assistant-Surgeon, to the *Liverpool*.

MILITIA.

ADAM, A. M., jun., Esq., to be Surg. 2nd Lanarkshire Royal Militia.
GERMAN, J., Esq., to be Assistant-Surgeon 1st Derbyshire Militia.
MARRIOTT, C. W., Esq., to be Assistant-Surgeon 2nd Warwickshire Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BREES, H., Esq., to be Surgeon 1st Administrative Battalion Tower Hamlets R.V.
NORTON, A. T., Esq., to be Assistant-Surgeon Civil Service R.V.
RAMS, J., Esq., to be Assistant-Surgeon 1st Manchester R.V.

To be Honorary Assistant-Surgeons:—

FREEMAN, R. G., M.D., 25th Kent R.V.
PARKER, J., Esq., 88th Lancashire R.V.

BIRTH.

CROMPTON. On April 14th, at Upper Walmer, the wife of Samuel Crompton, M.D., of Manchester, of a daughter.

MARRIAGE.

*BIRD, W. Valentine, M.D., of Egremont, Birkenhead, to Ann Amelia, youngest daughter of Richard Braginton, Esq., of Torrington, Devon, at Seacombe, on April 22.

DEATHS.

ELLIS, James, Esq., Surgeon R.N., at 7, Belgrave Street South, on April 17.
JOHNSON, Henry Charles, Esq., surgeon, at 6, Savile Row, aged 54, on April 28.
LARGE. On April 16th, at Helpstone, Northamptonshire, Mary, widow of John H. Large, Esq., Surgeon, of Donington.
STREETER. On April 23rd, at 20, Harpur Street, aged 57, Charlotte, wife of John S. Streeter, Esq., Surgeon.
STUBBS. On April 24th, at Hammersmith, aged 80, Mary, widow of Richmond R. Stubbs, Esq., late Surgeon H.E.I.C.S.
VERLANDER. On April 25, at 26, Danes Street, aged 90, Alice, widow of Jacob A. Verlander, M.D.

Mr. H. BIGG has been appointed anatomical mechanician to the Prince of Wales.

THE COLLEGE OF SURGEONS. The Council of the College of Surgeons has just removed from its list of members the name of Robert Jacob Jordan, who, in the *Medical Directory*, appears as of 29, George Street, Hanover Square, L.R.C.P.Edin., M.R.C.S.Eng., etc.

THE ACADEMY OF MEDICINE. The Academy of Medicine has just been called upon to elect a foreign associate; the choice was as happy for the body as it was flattering to England. Out of 53 votes, 52 were registered in favour of Professor Faraday, who was at once proclaimed "Foreign Associate of the Academy of Medicine."

MR. PROPERT AND MR. ADAMS. The BRITISH MEDICAL JOURNAL suggests that the whole affair be placed before a court medical, composed of equal numbers of the friends of both parties, which would no doubt give satisfaction, and be the means of putting an end to the further publication of all gossip and scandal in the matter. (*Dub. Med. Press.*)

MEDICAL OFFICERS OF THE INDIAN ARMY. In the House of Commons, Mr. Basley asked the Secretary of State for India when the medical officers of her Majesty's Indian army would be placed upon a perfect footing of equality with the medical officers of her Majesty's British army. Sir C. Wood said that the whole question of the status of the medical officers of the Indian army was under consideration.

CRIMINAL LUNATICS. In the House of Commons, on Monday, General Buckley asked whether the building intended for criminal lunatics was ready; and whether those criminal lunatics now confined at the private asylum at Fisherton, near Salisbury, amounting to the number of 284, were likely shortly to be removed to the new asylum. Sir G. Grey was informed that a large portion of the asylum was very nearly ready, so that very shortly about 100 patients would be removed to it. He did not know what number might ultimately be placed there, but the first patients received would be female patients.

VACCINATION. The Vaccination (Ireland) Bill was read a second time in the House of Commons on Thursday week. In the debate, Sir R. Peel said the object of the Bill was to extend to Ireland that system of compulsory vaccination which prevailed in almost every country in Europe except Scotland. He had received communications from numerous Boards of Guardians in Ireland in favour of the Bill, and among others from

the nine most populous unions. The cost of the measure —1-20th part of a farthing on the total valuation of Ireland, would be an infinitesimal price to pay for what would be a great boon to the country. At present the births amounted to about 200,000 a year, while, on the other hand, the number of vaccinations, which was 107,000 in 1860, had fallen to 87,000 in 1862.

HOSPITAL FOR WOMEN AND CHILDREN, LEEDS. On April 22nd, the committee of the hospital met Mr. Ikin the hon. sec. at the house of the Vicar (the President of the hospital), when a silver tea service and salver, epergne, four corner dishes, and timepiece were presented to him. On the salver, teapot, and epergne was inscribed: "Presented to J. I. Ikin, Esq., Hon. Sec. of the Hospital for Women and Children, Leeds, by a few friends of the Institution, as a slight recognition of his unwearied exertions in its behalf since its foundation, and especially in promoting the erection and completion of the New Hospital. April, 1863."

THE CASE OF DR. WATERS OF CHESTER. MEETING OF THE PROFESSION AT BIRKENHEAD. A meeting of the medical profession of Birkenhead was held at the Borough Hospital, on Monday evening, April 27th, to consider the propriety of assisting to defray the expenses incurred by Dr. Waters, of Chester, in resisting the unjust charge brought against him at the late Chester Assizes. Dr. Vale presided; and Mr. Godelen officiated as Secretary. The following resolutions were passed: "That this meeting desire to express their sympathy with Dr. E. Waters for the position in which he was placed by the unjust and abominable charges which were brought against him at the late trial of Bromwich *v.* Waters, and to offer him their hearty congratulation on the result of that trial." "That this meeting recommend that a subscription be set on foot to assist in defraying the expenses incurred by Dr. Waters." A committee was appointed to carry out the last resolution.

THE LATE DR. FOWLER, OF SALISBURY. This gentleman, who for many years practised in that place, has just died at the advanced age of ninety-eight years. He had for twenty years retired from the more active duties of the profession; he, however, honourably passed through a long and arduous practice. He obtained his degree of M.D. at the University of Edinburgh in 1793, was admitted a licentiate of the Royal College of Physicians in 1796, and then settled at Salisbury. Dr. Fowler was at once elected Physician to the Infirmary in that city, and continued to discharge the duties of that office with great zeal and ability up to 1847, when advancing years induced him to resign. He was the oldest Fellow of the Royal Society, and was also member of various other learned bodies. His remains were interred at Salisbury on Saturday week, the pall being supported by four members of the profession—John Winzar, John Andrews, G. R. Tatum, and J. A. Lush, Esqrs., the two former being pupils at the Infirmary during the time when Dr. Fowler was physician.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—APRIL 25, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys .. 958 Girls..1005	1963	1408
Average of corresponding weeks 1853-62		1933	1286

Barometer:
Highest (Fri.) 30.214; lowest (Wed.) 29.604; mean, 29.895.
Thermometer:
Highest in sun—extremes (Sun.) 106.4 degs.; (Tu.) 91 degs.
In shade—highest (Mon.) 69.3 degs.; lowest (Sun.) 33.6 degs.
Mean—50.2 degrees; difference from mean of 43 yrs.+3.0 degs.
Range—during week, 35.7 degrees; mean daily, 24.6 degrees.
Mean humidity of air (*saturation*=100), 77.
Mean direction of wind, N.W.—Rain in inches, 0.01.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Entomological.—Asiatic.—Epidemiological.

TUESDAY. Pathological.—Photographical.—Ethnological.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Kidd, "Further Observations on the Use of Anæsthetics in Midwifery"; Mr. Cooke, "Case of Simultaneous Uterine and extra-Uterine Pregnancy"; Mr. Marshall and Dr. Graily Hewitt, "Case of Tubal Pregnancy."—Society of Arts.—Geological.

THURSDAY. Harveian Society of London. Dr. Camps, "Some Remarks on Certain Diseases attended with Impaired and Perverted Motion."—Royal.—Antiquarian.—Linnæan.—Chemical.

FRIDAY. Astronomical.—Royal Institution.

SATURDAY. Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. BOLTON.—We are glad to hear from Dr. Bolton that the individual who refused to pay his fee has at last done so—not having courage to face the County Court. The thanks of the profession are due to Dr. Bolton for his moral courage in thus maintaining the rights of the profession. Dr. Bolton suggests:

"Since the question of titles is asleep for a time, now is a favourable opportunity for raising another, that of professional remuneration, and how to recover it, when far beyond the due point. This, I trust, you will ventilate, so as to benefit us all, whether we work as generals, act as specialists, or take our ease like men of title, only."

COMMUNICATIONS have been received from:—Mr. FURNEAUX JORDAN; Dr. F. J. BROWN; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. BURTON; Mr. J. VOSE SOLOMON; THE HON. SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Dr. J. G. SWAYNE; Mr. S. H. SWAYNE; Mr. THOMAS BRYANT; Mr. S. WOOD; Dr. O. B. SHORE; Mr. STONE; Dr. OGIER WARD; Mr. R. B. CARTER; Dr. H. WEBER; Mr. J. SPROULE; Mr. J. C. WORDSWORTH; Dr. S. CROMPTON; and Mr. J. GODDEN.

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Middlesex Hospital Medical

COLLEGE.

SUMMER SESSION, 1863, COMMENCING FRIDAY, MAY 1.

LECTURERS.

Dr. Hall Davis—Midwifery and Diseases of Women and Children.
Dr. H. Thompson—Materia Medica.
Dr. E. Headlam Greenhow—Forensic Medicine.
Mr. Soelberg Wells—Ophthalmic Surgery.
Mr. Taylor and Mr. Heisch—Practical Chemistry.
Dr. W. Woodham Webb—Histology and Minute Anatomy.
Dr. T. Spencer Cobbold, F.L.S.—Botany and Comparative Anatomy.
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Dr. A. P. Stewart, Dr. Goodfellow, Dr. H. Thompson—Physicians.
Dr. Hall Davis—Physician Accoucheur.
Dr. Murchison, Dr. E. H. Greenhow, Dr. B. Sanderson—Assistant Physicians.
Mr. Shaw, Mr. De Morgan, Mr. Moore, Mr. Nunn—Surgeons.
Mr. Hulke, Mr. Lawson—Assistant Surgeons.
Mr. Soelberg Wells—Ophthalmic Surgeon.
Mr. Tomes—Dental Surgeon.

Further particulars may be obtained from the Dean; or from Mr. De Morgan, Treasurer to the College.

THOMAS WILLIAM NUNN, Dean.

St. George's Hospital Medical

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LECTURES.

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Materia Medica—Dr. Barclay.
Practical Chemistry—Dr. Noad, F.R.S.
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A Prize of Twenty Guineas, for Physicians' Pupils in their second year.

Further information may be obtained from Mr. George D. Pollock, the Treasurer of the School, from any of the Lecturers, or from Mr. Hammerton, at the Hospital.

Remarks
ON
THE PRESENT PREVALENCE OF SMALL-POX.

BY
GEORGE BUDD, M.D., F.R.C.P.

II.

It is impossible to consider the wonderful protection against their own recurrence given by small-pox and other members of that peculiar group of diseases which, as a rule, occur but once in life, without having attention arrested by the *general* mitigation of small-pox that results when the infection, instead of being received through the air by casual exposure, is given by *inoculation*—in other words, by direct implantation of the infectious matter on the skin.

Before Jenner's memorable discovery of the power of cow-pox to protect from small-pox, when the practice of inoculation with small-pox matter prevailed in this country, it was estimated that, if the subjects for inoculation were well-selected, small-pox communicated by inoculation was something like a hundred times less fatal than small-pox taken in the natural way.

Notwithstanding the remarkable mitigation of the disease by inoculation, the benefits resulting from the practice to society in the aggregate were not, as is well known, so great as might have been expected. The mortality among those actually inoculated was indeed diminished in about the proportion just stated; but many persons neglected to be inoculated, or to have their children inoculated; many others entertained a prejudice against the practice; and these were worse off than they would have been if the practice of inoculation had not been introduced, because this practice, by multiplying sources of infection, greatly increased their chance of taking the disease. It is seen, indeed, by reference to the bills of mortality, that, after the practice of inoculation had become general, the number of deaths from small-pox increased rather than diminished.

The effect of inoculation on the individuals inoculated, and on the race, which, through Jenner's discovery, had almost come to be a subject of mere historical curiosity, was again made of great practical interest by the outbreak in Dorsetshire, last summer, of the pustular disease in sheep, which from its striking resemblance to human small-pox, has been termed *variola ovina*, or the small-pox of sheep. This disease resembles small-pox in the character of the pustules, in its severity, and in its communicability through the air and also by inoculation with matter taken from a pustule; but there is reason to believe that it is specifically different from human small-pox. The disease is not prevented by a previous vaccination with the matter of cow-pox, as small-pox in man is: it is not communicated to the shepherd; and all attempts to give it by inoculation to other domestic animals, even those most allied to the sheep, have failed. But, although apparently specifically different from human small-pox, it has been found, like human small-pox, to be very much less fatal when communicated by inoculation than when taken in the natural way; and many of the flock-masters of Dorsetshire, at the risk of multiplying sources of infection, had recourse to inoculation to save their flocks.

The circumstance that inoculation mitigates this disease in sheep, as it does small-pox in man, warrants the inference that the mitigation by inoculation is not peculiar to this or that disease, but comes under some general law.

Now, when inoculation for small-pox is practised on a person susceptible of the disease, this is what happens. The development of a small-pox pustule immediately begins at the inoculated spot. On the third or fourth day after inoculation, there may be seen at this spot, on an inflamed base, a small vesicle, which can already be recognised as a small-pox vesicle by the peculiar depression or cup-shape of the summit, that characterises the vesicles of small-pox and cow-pox. Without much general illness, this vesicle becomes pustular and ripens, just like any individual vesicle of ordinary small-pox. On the evening of the seventh, or early on the eighth day, when the pustule at the inoculated spot is fully developed, fever occurs like the eruptive fever of natural small-pox, and issuing, as this does, on the second day, in an eruption of small-pox over the body. The disease runs its subsequent course exactly as natural small-pox does, except that, in the great majority of cases, it is much milder.

There is, then, in small-pox resulting from inoculation a twofold development of the small-pox pustule. First, in point of time, there is the development of a single pustule at the inoculated spot; and when this pustule is ripe, or nearly ripe, a general eruption of small-pox makes its appearance, to run its appointed course. In natural small-pox, on the contrary, small-pox pustules are developed once only. The virus has no visible effect for seven or eight days after infection; fever then sets in, issuing on the second day in a general eruption of small-pox.

We may conceive, then, that in inoculated small-pox there is a double infection: one simply local, resulting from the *engrafting* of the small-pox at the inoculated spot, which takes effect immediately; the other a general infection, which, as in natural small-pox, produces a crop of small-pox pustules after eight or nine days; and as small-pox, when it has once run its course, modifies the system in such a way that the disease cannot occur in that individual again, so the development of the single pustule at the inoculated spot has the effect of gradually exhausting, as it proceeds, the original susceptibility to the disease, and thus mitigates the effect of the general infection.

If this reasoning be just, the remarkable mitigation of small-pox effected by inoculation depends on the agency by which the disease prevents its own recurrence, and an important inference may be drawn. As cow-pox prevents future small-pox, at least for some years, as effectually as small-pox itself does, it may be inferred that, if vaccination be practised soon after the infection of small-pox is received through casual exposure, the development of the vaccine vesicle (which does not sensibly differ in

rate of growth or appearance from the small-pox vesicle resulting from inoculation) will get the start of the small-pox infection, and thus have the same effect in mitigating the disease as inoculation with the matter of small-pox generally has.

When, therefore, small-pox occurs in a house, immediate vaccination may be recommended to all the inmates who can be supposed to be susceptible of small-pox infection, not only to prevent future infection from small-pox, but also with a reasonable expectation of mitigating the disease, should infection have already taken place.

By parity of reasoning, the mitigation known to be effected by inoculation in the small-pox, *so-called*, of sheep, would imply, what has not that I know been put to proof, that the disease in these animals cannot occur in the same individual twice.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture II. (*Continued.*)

Differences between the Surgical Affections of the Circulatory System in the Child and Adult.

The differences between the surgical affections of the circulatory system of the child and adult are the next to which our attention must be directed; and the subject of *nævus* perhaps claims our first notice. That it is an affection of young life every one will admit; and I imagine that few will deny that it is a disease of the vascular system. Whether it be a new growth altogether, allied to the erectile tumours, or a simple increase or multiplication of normal capillary tissue, may be open to dispute; but I am disposed to explain the appearance of nævi by this last suggestion, and to suppose them produced by a multiplication or growth of capillary tissues; the formative and developmental forces, which are so active in young life, taking a wrong path, and directing their power simply to the repetition and growth of capillary tissue, instead of the healthy development of the natural body. This misdirected force may also continue its action for some months; but it has always a tendency to cease, for it is only during the first few months of life that nævi show any rapid signs of increase.

The subsequent life of nævi tend also to bear out the truth of this suggestion. In many cases, they continue to grow for months with varied degrees of rapidity, and then suddenly cease; remaining either in a stationary condition, or, as is more frequently the case, undergoing a degenerating process. In some instances, this degeneration of the growth commences *in utero;* when, at birth, decaying or so-called ulcerating nævi will be observed; one and all of these nævi, at different times of their existence, ceasing to increase; and one and all, at different epochs of their life, beginning to degenerate; the growing power after a time ceasing to manifest itself, as the developmental power had previously done. Obedient also to the physiological law which is in force during all ages—more particularly during young life—and which shows itself by the tendency that all parts of the body possess to return to their normal and healthy condition, so these nævi degenerate and waste, and cease to trouble except by their deformity.

Nævus is, therefore, essentially a disease, or rather a growth, of young life; it makes its appearance either at birth or a few weeks subsequently, and is found only when growth and development are the most active; and it is to be explained by an excess in the growth of capillary tissue, and a want of natural development. The treatment of these cases will next claim our attention.

Treatment of Nævi. It may with some truth be stated that, unless a nævus be so situated as to be an eye-sore or an inconvenience, and unless it show positive evidence of its tendency to rapid increase, there is no necessity for any operative interference; it will to a certainty, after a time, cease to grow, and will also to a certainty begin to degenerate or waste; and under such circumstances, in a large proportion of cases, it is hardly necessary to interfere. Should, however, the nævus be so situated that it is or will be either an inconvenience or a deformity; or should it grow so rapidly as to threaten to become either, something must be done; and this something is to be determined by the nature of the nævus and of the tissue in which it is placed.

It may involve either the skin alone, or the cellular tissue alone; or it may involve both.

In the first class, in which the skin alone is involved, the nævus may readily be destroyed by means of external applications, such as caustics, nitric or sulphuric acids, potassa fusa, chloride of zinc, tartarised antimony, etc. The caustic must be applied freely, and without fear; and one application should be amply sufficient. In this *simple cutaneous* form, external applications are to be employed, and in it alone; in all other forms they are absolutely useless.

In the purely *subcutaneous* form, removal by the subcutaneous ligature is doubtless the best practice. The whole nævus must be freely surrounded, and completely strangulated; any surgical knot which will carry out this object answering the purpose.

In the *mixed* variety, excision of the growth, when it can be performed, is to be recommended; but if this plan be inapplicable, the application of a strong ligature, including the nævus and integument, is to be followed. Excision is the best practice when the nævus is pendulous, or when it can be previously isolated from the parts beneath; a clamp having been applied along the line of section, to prevent hæmorrhage. In several instances, I have excised the nævus; having previously inserted some pins beneath the growth, and cut upon them, keeping the pins as points round which a ligature might be applied, and by which the edges might be subsequently brought together. The operation of excision is doubtless one of risk, and much care must be taken that the nævus itself be not touched; for this purpose, the line of incision should be far from its margin. It is only in select cases, however, that excision is to be per-

formed. If the thickness of the lips be the part involved, such a practice is the best; and in two cases, one of the upper and one of the lower lip, I have carried out this practice with perfect success; the edges of the V incision having been brought together after its removal by a fine suture. In the majority of cases, however, of the mixed variety, the ligature should be preferred.

It occasionally happens that in some instances none of these plans of treatment appear applicable. The nævus may be too diffused, or too close to some important part; and, under such circumstances, some other plan of treatment is to be employed.

In the subcutaneous or in the mixed variety, the treatment by injection of the perchloride of iron is a good one, although it is by no means generally successful. When it answers, however, it succeeds well; and it is, therefore, worthy of a fair trial.

The treatment of a diffused nævus by means of setons is another plan of treatment, and it is one to which I must confess to be very partial. It has proved of great value in my hands; and I give, therefore, a preference to it over injection. I could, if it were necessary, quote numerous instances in which success has followed the practice; but the fact of its success is all that requires to be established.

If the nævus be large, several thick setons, passed through the centre of the growth, may be inserted; but, as a rule, one or two amply suffice. By these means sufficient inflammatory action is produced to close temporarily the capillary tissues, and, by subsequent contraction, permanently to effect a cure.

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

WEST LONDON HOSPITAL.

CASES OF DISEASE OF THE THYRO-HYOID ARTICULATION AND LIGAMENT; WITH CLINICAL REMARKS.

Under the care of G. D. GIBB, M.D.

CASE I. *Secondary Syphilitic Eruption, with Sore Throat and Inflammation of the Right Thyro-hyoid Ligament.* Caroline B., aged 31, married, no children, was admitted Sept. 4th, 1862, with a well marked papular eruption over the body, face, neck, and four extremities. There were dark purple redness and scattered ulceration of the fauces, with dysphagia and thick speech. The history of syphilitic inoculation was clearly made out; but the patient had no knowledge of what her complaint was until told. Chancrous ulcers were present on the labia. Under the use of the bromide of ammonium the eruption gradually faded away; the labial ulcers healed by the application of black wash; and the throat much improved with a gargle of bichloride of mercury.

On October 16th, a lump formed on the right side of the neck, which increased in size until it was as large as an elongated Barcelona nut; it was hard, painful, and tender to the touch; and, on examination, proved to be inflammation of the thyro-hyoid ligament. A couple of leeches were applied, and afterwards a small blister; and small doses of iodide of potassium, tincture of iodine, and bichloride of mercury, were given internally. Dysphagia was a marked symptom for a few days, with a pricking sensation running up to the ear; but the swelling gradually subsided, and a short cord was left, about one-third of the usual length of the ligament, between the cornua of the hyoid bone and the thyroid cartilage.

By November 20th, the induration was almost quite gone, the eruption had died away, the throat was well, and she left the hospital.

CASE II. *Tuberculous Ulceration of the Larynx in a Case of Advanced Phthisis; Threatened Rupture of the Right Thyro-hyoid Ligament.* Charlotte L., aged 38, mother of a family, was admitted on July 14th, 1862, for chest-disease of eighteen months duration. Cavities were present in the upper part of the left lung, and tuberculosis of the right lung in the first and second stages. All the symptoms of the disease in its advanced form were present. Hoarseness, dysphonia, and partial aphonia had been present for seven months. These latter depended upon minute ulcers of the mucous membrane of the interior of the larynx, and on the destruction of a portion of the right vocal cord, as seen by the laryngoscope.

Under treatment, the general health improved, and the laryngeal symptoms mainly subsided—so much so that the voice was stronger and louder, and not painful. Glycerine was given twice a-day, and in her pectoral mixture half-drachm doses of tincture of sanguinaria afforded great relief.

At the latter end of October, she suddenly became worse; pain was present on the right side of the neck in swallowing, the result of inflammation of the thyro-hyoid articulation; the ligament had become shortened, so that the cartilage and bone were nearly in contact. Pain and soreness were prominent symptoms for some weeks, necessitating a second swallow to get down food.

She got better, and remained so until some weeks ago, when the pain was so severe and the dysphagia so extreme, that fears were entertained of rupture of the ligament from ulceration. But, although she was a great sufferer, her misery was not increased by this occurring before death, which finally took place.

CASE III. *Bronchocele, dislocating the Thyroid Cartilage to the Left Side; Formation of a Thyro-hyoid Joint on that Side.* Mary Q., aged 54, was admitted on August 14th, 1862. She had had bronchocele ten years, following an injury to the neck. There was now a firm and tense globular swelling occupying the right side and middle of the neck, which had pushed the thyroid cartilage to the left side. The throat was healthy; but in swallowing there was little motion of the parts, and no pain.

Soreness was complained of on the left side, at the junction of the cornua of the thyroid cartilage and hyoid bone. Here they were found to be in contact; and a distinct capsular joint had formed, with obliteration of the ligament. Dyspnœa was present at times. Her health was bad. The tumour was not increasing.

CASE IV. *Diphtheria supervening on Syphilitic Angina, with Acute Inflammation of the Left Thyro-hyoid Ligament.* Michael M., aged 20, was admitted on Sept. 15th, 1862. He had been suffering from syphilitic sore throat, with enlarged tonsils and parotid glands, when diphtheria supervened, and the pharynx was coated with a white membranous exudation. He had a dark copper-coloured papular eruption in different parts of the body. He slowly improved under treatment; but at the end of October he complained of acute pain and swelling in the left side of the neck in the situation of the thyro-hyoid ligament, where a tumour could be felt as large as a large bean. This continued sore for many weeks, but finally disappeared; yet the general health was much prostrated from the combination of the two forms of sore throat.

[*To be continued.*]

Original Communications.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

If it be permissible to write on a symptom which is common to many forms of disease, surely the disunion of the link which associates the conscious mind with the external world, or which transmits the power to execute the actions directed by the internal will, is of sufficient importance to claim an interest commensurate with these obscure and complex processes of organic life.

It is not my intention to enter into any historical account of the successive steps which have been made in the progress of the physiology and pathology of the nervous system, but it would be unseemly to forget the homage which is due to two great men who conceived the plan, and laid the foundations of those sciences.

Up to the end of the first decade of the present century, it was universally believed that every individual nerve, to whatever part of the body it might be distributed, proceeded from the brain as from a common centre, of which all parts were supposed to possess the same complex properties, and to endow the nerves with the same attributes.

To Sir Charles Bell is due the honour of having first demonstrated the fact that there are nerves of sensation distinct from nerves of motion, and that each set has a special origin in or connexion with the brain and spinal cord. He underrated, however, the important function of this latter part of the nervous centre, and regarded it simply as a main channel to convey the nervous currents to and from the brain; the conductors of sensation passing, as he thought, through the posterior and lateral columns, the conductors of volition through the anterior columns of the cord; and it was impossible, without the experiments which have since been made, that he could arrive at a correct notion on these important points. But his theory immediately suggested the obvious means of tracing back to particular parts of the brain the causes of paralysis and of many nervous diseases. It did not, however, account for those strange and mysterious sympathies by virtue of which the different parts of the body are maintained in a state of mutual dependance, and by means of which a disturbed condition of one organ produces impressions on the other, and, it may be, distant parts of the system. What, for instance, but this kind of affinity can occasion the contracted brow in severe headache, the dilated nostrils in painful affections of the chest, or the raised upper lip stretched over the gums in great suffering of the abdomen? These, and other far more important phenomena, were interpreted by the thoughtful experiments of Dr. Marshall Hall, who first taught us that they are dependent on diffusion of excitement, not by the nerve primarily affected, which acts only as a conductor of sensation to the nervous centre, but by the nervous centre itself, on which the primary impression impinges, and from which it is reflected. Thus a worm in the intestine sets up irritation, which, when transmitted to the spinal cord by the special conductors of sensation, may produce paralysis as a reflex action.

This theory, second only to that of Sir Charles Bell for its practical importance, has been followed by much philosophical research concerning the structure and function of nervous tissue; but in no respect have the labours of Dr. Marshall Hall been of greater service than in the elucidation and treatment of reflex paralysis.

We have, chiefly by the discoveries of these two men, established on a physiological basis the separation of paralysis into a direct and a reflex form, and pathological cases have verified the principle on which the distinction is founded.

One great impediment to the investigations of pathologists has been in some degree removed by the recent researches of anatomists into the structure and relationship of the several parts of the nervous centres; and, throughout the whole domain of pathology, I know of no field which still promises a richer harvest of facts immediately applicable to practice, than that in which a knowledge of the healthy and morbid structure of the brain and spinal cord is cultivated. It is not too much to say that every new fact which has been revealed to us concerning the distribution of nervous fibres, has elucidated some previous unrevealed phenomenon observed in disease, and still there is an insufficiency of anatomical evidence for the interpretation of many morbid phenomena. I shall therefore begin with a concise account of the structure of the nervous centres; and first, of

The Spinal Cord.

This is divided by an anterior(α) and a posterior(β) fissure into two lateral halves; each half being intersected by the posterior or sensory nerve-roots into an anterior(γ) and a posterior(δ) column. The two posterior are regarded as the conductors of impressions of sensation to the brain; the two anterior are the conductors of the orders of the will to the motor nerves. Each lateral portion of the entire cord consists internally of grey matter, which spreads out before and behind into two horns or cornua, an anterior(ζ) and a posterior(η). These cornua vary in form in different regions of the spinal cord; but the disposition of their constituent parts is well nigh the same in all. The two halves are perfectly symmetrical, and they are connected together by two commissures(ϵ, ι), between which a central canal(θ) extends from one extremity of the cord to the other.

In both the anterior and posterior cornua there are many multipolar ganglionic cells(κ) united to one another by a network of nerve-filaments.

These nerve-cells are by far the most interesting anatomical elements in the animal body. They are the origin or the terminus of every nerve-fibre, and impart to all such fibres their peculiar endowment. Yet in structure nerve-cells are very simple, being made up of a cell-wall, with two or more caudate prolongations, a nucleus and nucleolus, and containing a few granular molecules.

The nerve-fibres consist of an external membrane, of the white nerve-marrow, and of the simple axis or cylinder. The existence of this latter character is denied by Funke, who attributes the appearance to a change which takes place after death—a contraction of the nerve-marrow; but the nerve-matter itself is composed of a material similar to, and continuous with, the contents of the nerve-cell.

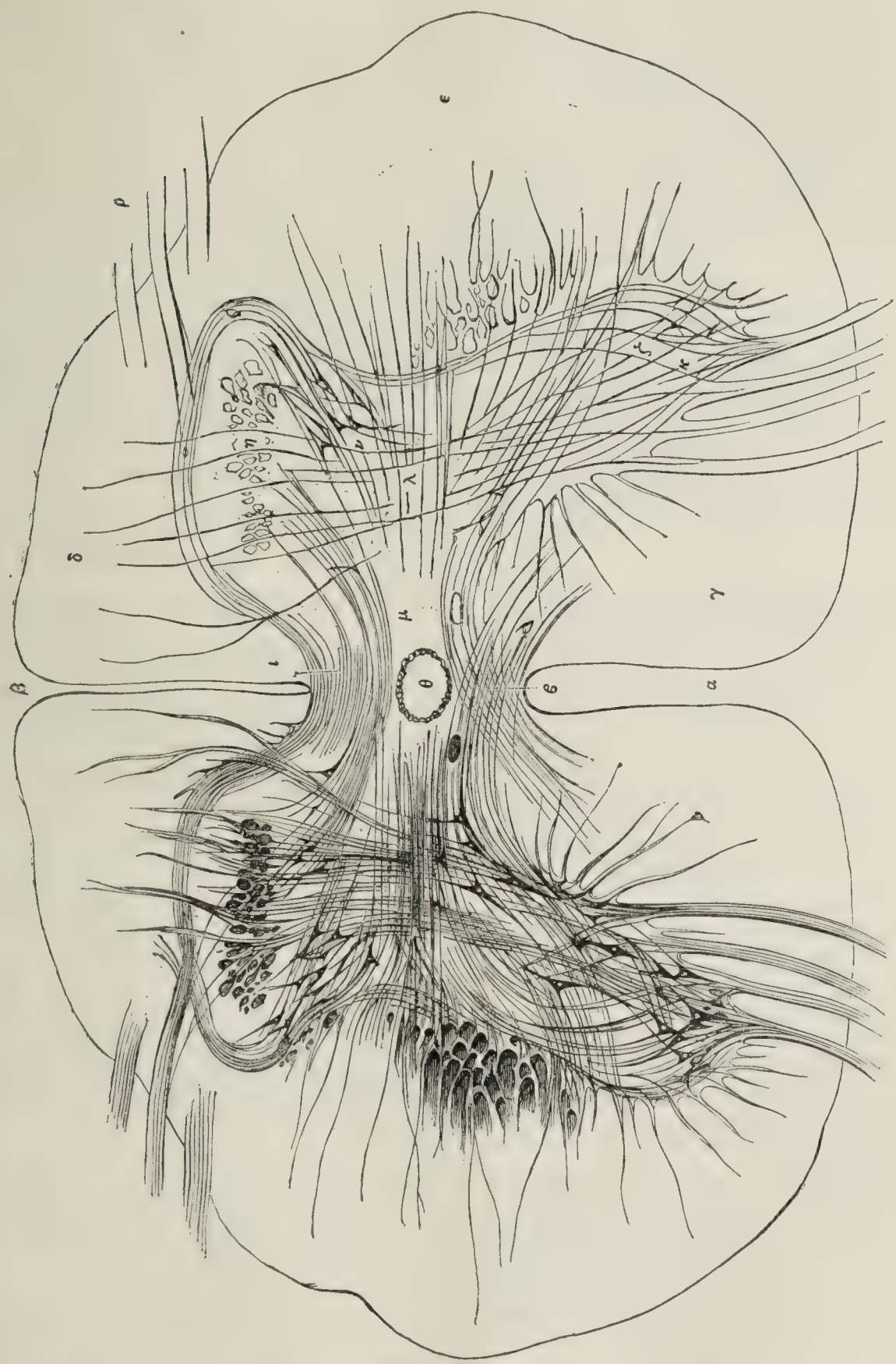
From the cells, the number of which is in direct ratio to the number and thickness of the nerves with which they are connected, fibres may be traced into the anterior and posterior roots of the spinal nerves, as we shall presently see.

There are other nerve-fibres in the grey substance, which have been described by Mr. Lockhart Clarke in transverse and longitudinal orders. (*Philosophical Transactions* for 1851, vol. cxli, pp. 607-621.)

The *transverse* are disposed in an antero-posterior(λ) and latero-transverse(μ) directions. The antero-posterior, proceeding from behind forward, may be traced through the posterior white columns partly into the posterior roots of nerves on the same vertical plane, partly into other nerve-roots above and below. Others pass into the anterior cornua, where they interlace and form a network, in the meshes of which the multipolar

cells are contained. Some extend outwards to the lateral white columns, whilst many others appear to be continuous with the anterior roots of nerves. Others cross obliquely in front of the spinal canal, where they decussate with similar fibres from the opposite side, and penetrate into the anterior columns.

These antero-posterior nerve-fibres, therefore, connect together several posterior roots of sensitive nerves; the posterior with the anterior cornua; the posterior columns with the lateral and anterior; one-half of the spinal cord with the other; and, finally, the posterior nerve-roots with the anterior.



Transverse Section of the Spinal Cord. The outlines only are given on the right side of the figure, for the convenience of inserting letters of reference, which are explained in the text.

The latero-transverse fibres (μ) are arranged in loose bands, disposed more horizontally, and pass from one side of the grey substance to the other. Those behind the spinal canal diverge on each side into the anterior and posterior cornua, and from them into the lateral and posterior columns. Some pass from one posterior nerve-root to its fellow on the opposite side; whilst others, in front of the spinal canal, connect the anterior

nerve-roots in a similar manner. A few may be traced from the anterior roots into the lateral columns of the opposite side.

These latero-transverse fibres, therefore, constitute the transverse commissure, and establish a communication between the opposite sides of the spinal cord on the same vertical plane.

The experiments of Dr. Brown-Séquard have proved that the decussation of the nerves of sensation takes place in the spinal cord; hence it is probable that these latero-transverse fibres are the conductors of the impressions of sensation from one side of the body to the opposite side of the spinal cord.

There are besides, in the grey substance, numerous *longitudinal fibres*, which are chiefly collected together in the so called substantia gelatinosa(η). These longitudinal fibres are intimately connected with the posterior nerve-roots and with the latero-transverse fibres —*marginal fibres* of Van der Kolk(o)—which surround the posterior cornua.

The bundles of these longitudinal fibres are thicker at the lumbar and cervical dilatations of the cord; therefore, it is very probable that they are not continued individually as far as the brain; but, as Van der Kolk has suggested, that they may contain fibres which connect groups of ganglionic cells at different heights in the anterior cornua, and so perhaps serve for the coordination of muscular motion. If this be so, we have nerves of sensation becoming excitors of motion; but in losing their character as sensitive nerves, the change is dependent on their combinations with multipolar cells, from which they transfer their reflex power of innervation.

Stilling fancied that he had made out some longitudinal fibres in the anterior cornua; and in many careful examinations which I have made during the last six years, I am satisfied that I have seen such tubular fibres.

The *white longitudinal columns* surround and inclose the grey matter; and, by the intersections of the anterior and posterior roots of nerves, each side is divided into an anterior, a lateral, and a posterior column.

The *anterior columns* consist of longitudinal tubular nerve-fibres, and of transverse fibres, by which they are penetrated. They have no proper commissure, although they are united in the centre, at the bottom of the anterior fissure, by decussating nerve-fibres, which pass from the grey substance on one side through the raphe into the anterior column of the opposite side(δ).

The *lateral columns* are contained between the anterior and posterior roots of the spinal nerves; and, in addition to the longitudinal fibres of which they are chiefly composed, they are penetrated by filaments from the transverse commissure, and by others from both anterior and posterior nerve-roots(ϵ).

Now, the *anterior nerve-roots*(π) traverse the antero-lateral columns in distinct bundles, until they reach the grey substance, and there the ultimate filaments diverge in every direction; each one, if carefully followed, being traceable to a multipolar ganglionic cell; and these cells increase in number at every point where the roots of the nerves enter the spinal cord.

The decussating fibres of the anterior commissure, having communicated with the ganglionic cells, penetrate deeply into the anterior columns; and Van der Kolk has figured a multipolar cell, which he observed to connect the langitudinal tubular fibres with the penetrating transverse filaments. He has also observed the innermost longitudinal fibres of the anterior columns to curve towards the grey substance, and pass into ganglionic cells of the anterior cornua.

On these anatomical grounds, he inferred that each longitudinal fibre of the anterior columns is the conductor of the orders of the will to a group of reciprocally connected multipolar ganglionic cells, from which the motor nerves derive their origin; and that the influence of each fibre may be communicated directly to the cells by the fibre itself, or transmitted indirectly by the penetrating commissural filaments which communicate with both.

The *posterior columns*(δ), which are contained between the posterior nerve-roots, are comparatively small, and, like the anterior, possess no proper commissure of their own; for the posterior fissure(β) which separates the posterior columns, reaches down to the posterior border of the transverse commissure of the grey substance. They are chiefly constituted of longitudinal tubular fibres, derived from the nerve-roots, and of transverse filaments from the posterior border of the transverse commissure.

The *posterior nerve-roots*(ρ) do not traverse the posterior columns in distinct bundles, like the anterior roots; but, on entering the cord, they split up into three kinds of fibres, which have been minutely described by Mr. Lockhart Clarke. (*Philosophical Transactions*, 1853.) The first kind enter the cord transversely, and pursue a transverse course through the posterior columns into the grey substance, where they bend on themselves at right angles, and pass, in a longitudinal direction, some upwards, others downwards, joining corresponding fibres from other roots above and below, and thus form a continuous longitudinal band in the *substantia gelatinosa*(η). From this band are derived many, if not all, of the antero-posterior nerve-fibres in the grey substance, which have been described.

A second kind of fibres traverse the posterior columns transversely, and expand themselves in the grey substance as the latero-transverse fibres, which have also been described.

The third kind of fibres enter the cord obliquely, and immediately spread out in different directions. Some fibres passing into the posterior cornua, whilst others diverge and take a longitudinal course, either downwards or upwards within the posterior white columns; but whether any of these latter are continued as far as the brain, is a question which has not yet been determined. Wagner regards them as purely sensitive fibres, which, without being connected with ganglionic cells in the spinal cord, pass directly upwards to the brain, and there excite sensation.

But experimental observations and pathological cases are not wanting to show that the anterior columns are not the exclusive conductors of the influence of the will to the anterior nerves, and that the posterior white columns are not the sole channels of communication between the posterior nerves and the brain.

With respect to the anterior columns, an explanation is afforded by the connecting links which have been described between the anterior roots and the longitudinal fibres in the anterior cornua; and a more obvious clue is given to account for the transmission of sensation—at least, as far as the spinal cord is concerned—by the course and distribution of the posterior roots, and by the longitudinal nerve-fibres contained in the grey substance.

Dr. Brown-Séquard has been led, by his experiments, to the conclusion, that the transmission of sensitive impressions to the sensorium takes place by both cells and nerve-fibres united together. (*Lectures on the Physiology and Pathology of the Central Nervous System*, delivered at the Royal College of Surgeons of England in May 1858, p. 23.) But the very objection which he admitted in opposition to Longet, who supposed that the sensorium received sensitive impressions only from the posterior columns, exists to a greater degree in respect of the notion that cells transmit such impressions.

The objection to the views of Longet was first propounded by Dr. R. B. Todd, who contended that the posterior columns are not, as they should be, according

to the theory, larger, the higher they are examined in the spinal cord; but Mr. Lockhart Clarke has shown that the longitudinal fibres of the lateral columns, which contain sensitive fibres, *do* gradually increase as they ascend in the cervical region, and that the posterior cornua gradually become narrower. (*Philosophical Transactions* for 1851.)

On these anatomical considerations, therefore, together with others which have been stated, there is reason to infer that the ganglionic cells and their intermediate filaments transmit their influence across the cord, and that the longitudinal nerve-fibres are the conductors of impressions to and from the encephalon.

In the immediate neighbourhood of the origin of the fourth pair of cervical nerves (the phrenic), Mr. Lockhart Clarke traced the commencement of the spinal accessory nerves, some filaments of which proceed from cells in a network of minute blood-vessels on the outer part of the posterior cornua. After traversing the grey substance, they unite with others which originate from caudate cells in the anterior cornua, through which they pass upwards, in company with the roots of the anterior nerves, to the medulla oblongata. (*Philosophical Transactions*, 1851.) At about the same part the central canal begins to incline backwards. (See fig. 396 of the *Cyclopædia of Anatomy and Physiology*, vol. iii, p. 708; also, Schrœder van der Kolk, *On the Medulla Oblongata*, plate II, fig. 2A.)

Medulla Oblongata and Mesocephale.

At the junction of the spinal cord with the medulla oblongata, the relative position of the elementary parts of the cord is changed.

The anterior columns thrust themselves backwards and upwards, pushing, as it were, the lateral and posterior columns aside, and become continuous with the corpora pyramidalia.

The transverse commissural band behind the central canal, connecting the posterior cornua of the cord, disappears, and thus it is that the posterior columns divaricate, and the canal terminates in the fourth ventricle.

The anterior cornua, following the backward direction of the columns, are eventually found immediately below the floor of the fourth ventricle, where, according to Stilling, the nuclei of the hypoglossal, the sixth, seventh, fourth, and third pairs of nerves are located, close to the middle line, and from which nuclei these several nerves derive their origin.

The two lateral and posterior columns, being thus pushed aside, pursue a forward and upward direction, and become continuous with the corpora restiformia which are situated on the sides of the medulla oblongata; but, turning from the higher parts of the medulla in a forward direction, they pass into the lower part of the pons Varolii. Here they diverge again, each restiform body passing through the middle of the crus cerebelli into the hemisphere of the cerebellum of the corresponding side, from whence other fibres pass into the processus cerebelli ad testem, overlying the fibres from the restiform body, and therefore composing the superior layer of fibres of the crus cerebelli.

The inferior layer is formed by fibres which pass from each hemisphere of the cerebellum transversely across the inferior surface of the mesocephale or pons, where they occupy the same relative position with respect to the fibres of the corpora restiformia, as they do in the crura cerebelli. These transverse fibres are the commissures of the cerebellum.

Together with the corpora restiformia there are two bundles of longitudinal fibres—the posterior pyramidal columns—which descend from the cerebellum on the inner borders of the restiform bodies, and form between them the fissure of the calamus scriptorius. These fibres resolve themselves into transverse or commissural fibres in the medulla oblongata.

The *Corpora Restiformia*, in their course through the medulla oblongata and mesocephale, contain the nuclei of the nerves of sensation, namely, of the vagus, the glosso-pharyngeus, the auditory, the sensitive roots of the trigeminus, and, as Van der Kolk has said, "We might even add the optic nerve from the corpora quadrigemina, and the olfactory, both of which arise more to the side of the middle line." (Schrœder van der Kolk, *op. cit.*, p. 92.)

That the nerve-current of the corpora restiformia is an ascending one in the medulla oblongata, has been proved by the experiments of Dr. Brown Séquard, who, on cutting through one-half of the medulla, found that the portion of the corpus restiforme above the incision was deprived of sensation; and that there is an opposite direction of the molecular influence above the pons varolii appears equally well established by the experiments of Szokalski, who, on removing the cerebral and cerebellar connections from the pons, found that he had not destroyed the sense of feeling. Hence it is highly probable, as Schrœder van der Kolk has suggested, that the seat of sensation is in or about the medulla oblongata.

The *Corpora Olivaria* consist externally of longitudinal fibres derived from the optic thalami and corpora quadrigemina, whence they may be traced backward through the mesocephale, on a plane superior to that of the corpora pyramidalia, to the grey vesicular matter of the corpora olivaria.

From the corpora ciliaria or dentata numerous fibres pass inwards to the nuclei of the hypoglossal nerves; and from these nuclei, as well as from every portion of the grey matter, transverse fibres pass through the raphe* to corresponding parts of each side. Thus the corpora olivaria are united in the middle between the corpora restiformia and the corpora pyramidalia.

The corpora olivaria are more highly developed in man than in any of the lower animals; and although the medulla oblongata bears some relation, as to its size, with the bulk of the entire body, yet is that size determined by the corpora restiformia and the corpora pyramidalia.

The nuclei of the hypoglossal nerves, however, and the corpora ciliaria, obtain their maximum of development in man; and Schrœder van der Kolk argues that the delicate combinations of motion in the human tongue in articulation and speech, afford an explanation of the great size of the olivary bodies, and of their intimate connection with the nuclei of the hypoglossal nerves.

He has adduced some illustrative instances of atrophy of the corpora olivaria, and of structural diseases of those organs, to prove that they are subservient to the articulation of sounds. (*Op. cit.*, p. 149-169.)

Corpora Pyramidalia. From the corpora striata chiefly, and also from the optic thalami, numerous tubular fibres pass backward through the crura cerebri into the pons Varolii and medulla oblongata, where they constitute the corpora pyramidalia. In the pons or mesocephale these fibres immediately overlie the transverse fibres which have been described as passing from each hemisphere of the cerebellum. With the deeper seated of these latter, a curious interlacement occurs by the longitudinal fibres passing alternately above and below them; and in the meshes of this interlacement numerous patches of grey vesicular matter exist, but these latter are nowhere seen where there is no interlacement, as in the lowest and most superficial layer of fibres, which are exclusively transverse.

In their outward course, the fibres from the nuclei of the abducent and hypoglossal nerves, communicate

* The raphe is the seat of a very complicated decussation between the posterior halves of the medulla on the one hand, and between each of these and the corpora olivaria of opposite sides on the other.

by means of ganglionic cells with the fibres of the corpora pyramidalia.*

Towards the inferior extremity of the medulla oblongata, the fibres of the corpora pyramidalia are divisible into three distinct kinds. 1. The decussating fibres, which pass downward and backward into the antero-lateral columns of the spinal cord on the opposite side, so that the right pyramid sends fibres into the left side of the cord, and the left pyramid into the right side of the cord. These decussating bundles of fibres are doubtless the channels through which the mandates of the will are conveyed to the four extremities; and that they are so, is proved by the experiments of Dr. Brown-Séquard, who, on dividing the whole of these decussating fibres, produced entire paralysis of all the limbs. 2. A few fibres which are continued from the pyramids directly down to the anterior surface of the cord on the same side. These latter are continuous with the antero-lateral columns, and appear to serve the purpose of establishing a direct communication between each half of the medulla oblongata and the corresponding half of the spinal cord. 3. The arciform fibres, which curve round the corpora olivaria, and appear to incorporate themselves with the corpora pyramidalia in front, and with the corpora restiformia behind, and are thus the superficial connecting fibres between the anterior and posterior parts of the medulla.

In man, quadrumana, and carnivora, the corpora pyramidalia are larger in proportion to the size of the body than in hoofed animals, probably in consequence of the more varied motions of the fingers and toes.

[*To be continued.*]

NOTE ON THE LARYNGOSCOPE.

By James Russell, M.D., Birmingham.

My principal object in this communication is to bear my testimony to the value of the suggestions made by my friend Dr. George Johnson in the *Medical Times and Gazette* for February 14th, in relation to the use of the laryngoscope. Having myself tested the utility of these suggestions, I feel assured that they are calculated materially to facilitate the employment of the instrument, and to bring it into more general use. They will, I think, attain this end by enabling any one who is interested in the matter to obtain for himself, with very little trouble, that practical acquaintance with its manipulation which is absolutely necessary in order to obtain admission for it into the throat of his patients.

The position of the frontal mirror on the forehead is, unquestionably, a great improvement over the position hitherto directed by Czermak. Not only does it avoid the difficulty created by endeavouring to look through the central aperture in the mirror, but the adjustment of the mirror itself is far more readily effected, and the direction of the light is altered, according to the requirements of the particular case, with far greater facility when no obligation exists for maintaining a particular portion of the mirror opposite to the eye. Nor are these advantages gained at the cost of illuminating power.

But the most important part of Dr. Johnson's suggestion is that which presents so ready and effective a method for performing autolaryngoscopy, as that which is attained by the aid of the ordinary toilet looking-glass. By this method, a means of conducting the operation, which is always at hand, is substituted for the more costly apparatus of Czermak; and, what is of no small importance, the process of inspecting one's own throat is closely assimilated to that which we employ in examining the throat of our patients. By following his directions, I have been able, not only to exhibit to others my own vocal apparatus, but also to introduce them readily to the use of the instrument. In more than one instance, persons who have witnessed its employment for the first time, succeeded at once in using it upon myself.

I cannot yet boast of much experience; but, from the observations I have made, it has appeared to me that the practice of autolaryngoscopy affords the most effectual means of acquiring that facility in the use of the instrument which is requisite, not only to enable the operator to view the interior of the larynx, but also to obtain tolerance of the faucial speculum. So far as I have seen, the difficulty experienced by the patient depends to a very large extent upon the delicacy of manipulation possessed by the operator, and particularly on his success in avoiding contact between the throat-mirror and the posterior wall of the pharynx. Unless I mistake, it will be found that, by mastering the greater difficulty of autolaryngoscopy, our further progress will be materially advanced.

It need not be remarked, that some perseverance will be needed before a beginner can assure himself of success on his own person; and, no doubt, the difficulty will be greater in some persons than in others, from variations in the conformation of the parts concerned in the examination, and particularly from differences in the degree to which the epiglottis naturally conceals the parts below it; but a little experience will suffice to overcome the difficulty; and I think it will then be found that, as in morals, careful self-examination will advantageously precede the examination of other persons.

Two cases of laryngeal affection, which have lately presented themselves to me in the General Hospital, afford an interesting illustration of the gain in forming diagnosis which is offered to us by the laryngoscope. The subjects of these cases entered about the same time; each presented the ordinary symptoms of subacute laryngitis. In one, the symptoms were of a fortnight's duration; in the other, they had been present for a month, but with a brief interval of relief. Each patient had been exposed to the ordinary exciting causes of laryngitis. The last mentioned patient, however, was affected with advanced disease of the heart, and presented the rare phenomenon of a double *mitral* bellows-murmur. In this man, certain symptoms suggested a suspicion that the laryngeal affection might possibly depend rather upon some defect of innervation, than upon an inflammatory affection, but the evidence was too incomplete to warrant of itself the neglect of the ordinary treatment for laryngitis.

When the interior of the larynx was illuminated in these two men, a most striking contrast appeared in the condition of their respective vocal apparatus. In the patient last mentioned, the condition of the parts closely corresponded to that exhibited in Figs. 1 and 2, taken from my own throat. The glottis was widely open (Fig. 1) during tranquil respiration, so that the upper rings of the trachea were brought into view; the mucous membrane of the larynx and the vocal cords were perfectly healthy; and the cartilages of Santorini, indicating the situation of the apex of the arytenoid (*a a*) cartilages, were distinct. From time to time alternate movements of

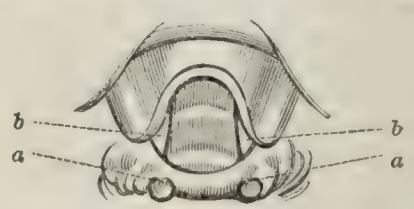


Fig. 1.—*a a.* Apices of Arytenoid Cartilages. *b b.* Vocal Cords.

* The nucleus of the hypoglossus and the passage of the fibres through the fibres of the corpora pyramidalia, are beautifully shewn by Stilling, in his illustrations of the Pons Varolii, plate III, h. u. P.

approximation (Fig. 2) and of separation were performed by the arytenoid cartilages during the respiratory process, followed by the vocal cords; and similar



Fig. 2.

movements were excited by any trifling sensation created in the throat or larynx. In the case first mentioned, on the other hand, the interior of the larynx presented all the characters of a low form of inflammation (Fig. 3). The epiglottis was erect, and in part

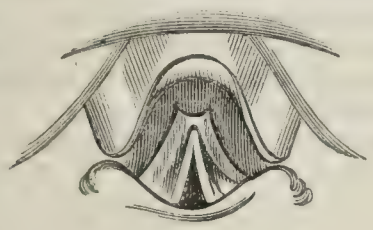


Fig. 3.

everted; strings of adhesive mucus sometimes stretched across the upper orifice of the larynx; the mucous membrane was thickened, and projected into the cavity of the larynx as prominent cushions; the interior of the organ resembled a broad funnel, at the bottom of which appeared the glottis, the lips of which were nearly approximated; and during tranquil breathing, the movements of the arytenoid cartilages, and the alternate closing and opening of the glottis, which formed so beautiful a phenomenon in the preceding case, were performed to a very limited extent; a white superficial ulcer occupied the edge of the left vocal cord.

I may just mention, that this is the second case in which I have met with functional derangement in the larynx, connected with mitral disease, carried to such an extent as to call to my mind the symptoms which accompany aneurism of the aorta, and are produced by pressure upon the vagus or its branches.

P.S.—Since the preceding remarks were written, a patient has entered the hospital, who illustrates the advantage obtained by the practice of laryngoscopy even more clearly than those whose cases have been referred to. He presented considerable aphonia, with symptoms suggesting the existence of chronic laryngitis, yet with certain peculiarities. A considerable polypus was found attached by a broad base, to the front of the larynx, and in part to the right false vocal cord.

Derby Infirmary. A special meeting of the governors of this Infirmary, was held last week to consider: Firstly, whether in future there should be one physician instead of two; and secondly, whether there should be four surgeons instead of three. The result of the meeting was that the existing rules are to remain *in statu quo*. Dr. Ogle stated that it was quite impossible for one physician to do the work of the hospital; whilst, on the other hand, Mr. Gisborne incidentally mentioned that the present staff of three surgeons was amply sufficient. The Weekly Board had suggested the alterations which were proposed at the meeting in consequence of the frequent changes which had recently taken place in the office of physician; it being stated that young men had accepted the appointment, and, not meeting with the public encouragement they expected, had resigned in disgust, either to try their fortunes elsewhere, or to take to general practice.

Reviews and Notices.

A Clinical Memoir on Certain Diseases of the Eye and Ear, consequent on Inherited Syphilis; with an Appended Chapter of Commentaries on the Transmission of Syphilis from Parent to Offspring, and its more Remote Consequences. By Jonathan Hutchinson, F.R.C.S., Senior Assistant-Surgeon and Lecturer on Surgery at the London Hospital, etc. Pp. 259. London: 1863.

It must be well known to the profession, that Mr. Hutchinson has for several years assiduously applied himself to the investigation of the signs of hereditary syphilis; and that on this subject he has made some valuable contributions to medical science, inasmuch as he has pointed out means by which, as he believes, we may distinguish between the appearances produced by hereditary syphilis and those arising from other constitutional disease. It must not be supposed, that he entertains and wishes to induce in others a too wide belief in the prevalence and injurious effects of the syphilitic taint. Such an accusation, he tells us, has been made against him; but he asserts it to be unjust, and says that

"The result of my inquiries, upon my own mind, has been to limit my belief in its extent" (*i. e.*, of inherited taint), "whilst there are peculiar forms of disease which I believe to be its special results, I feel confident regarding the great majority of the chronic diathetic diseases of early life, that they have nothing whatever to do with it. As with acquired syphilis, so with the hereditary, it produces only its own special and peculiar results; and to the trained observer these are, for the most part, easily distinguishable from all others."

The first chapter contains the record of twenty-three cases of Acute Iritis dependent upon Hereditary Syphilis, partly collected from works, and partly occurring in Mr. Hutchinson's practice. This affection is one of the rarest symptoms of hereditary syphilis; it occurs most frequently in female children, about the fifth month. It affects one or both eyes in about an equal number of cases; and is generally uncomplicated. The phenomena of acute inflammation are obscure; but

"Irregularity of the pupil, the presence of white, yellow, or red lymph, tumidity, loss of lustre, and alteration of colour in the iris itself, are the symptoms upon which the diagnosis is to be based. Generally also there will be seen on minute inspection a faint pink zone in the sclerotic. There is very rarely much congestion of the conjunctiva; and the cornea is almost always clear." (P. 24.)

The treatment mainly consists in the daily application of atropine drops to dilate the pupil; and the administration of mercury, for which purpose Mr. Hutchinson generally uses mild mercurial ointment.

In the second chapter are described the histories of one hundred and two cases of Chronic Interstitial Keratitis; this being the name given by the author to the Scrofulous Corneitis of Mackenzie. Without absolutely asserting that *typical* interstitial inflammation of the cornea is always of syphilitic origin, Mr. Hutchinson at present believes such to be the

case. His reasons for this belief are: that some of the patients he has known by observation to be subjects of inherited syphilis, while in other cases he has obtained a history pointing in the same direction; that almost all the patients present a peculiar physiognomy, with various striking characters, among which are the notched central upper incisors, held by Mr. Hutchinson to specially denote syphilitic taint; that, in many cases, ulcerative lupus, nodes, psoriasis of the face, otorrhœa, and other suspicious symptoms, have also been present; that the effect of specific treatment on the disease is sometimes well marked; that the keratitis is often accompanied or preceded by iritis; and that it is often followed by certain changes in the choroid, frequently seen in heredito-syphilitic patients.

In the third chapter, Mr. Hutchinson describes fourteen cases of Inflammations of the Choroid and Retina; in the fourth, he notices Cataract and Inflammation of the Vitreous Body in Connection with Inherited Syphilis; and in the fifth, he brings forward arguments to show that a large number of the affections hitherto classed as Aquo-capsulitis, or slight inflammation of both iris and cornea, are due to hereditary syphilis.

In the sixth chapter, he notices Amaurosis with white Atrophy of the Optic Nerves as being possibly sometimes connected with inherited syphilitic taint.

The seventh chapter contains the author's views on Deafness; regarding which, Mr. Hutchinson believes it to be peculiar to syphilitic subjects that the function of hearing sometimes fails without any apparent disease of the ear—the deafness being usually symmetrical and dependent probably, as in white atrophy of the optic nerves, on some disease of the nerves or of their distribution.

In the eighth chapter, he describes some Diseases of the Ocular Appendages dependent upon Hereditary Syphilis; and in the ninth, collects several Miscellaneous Cases and Observations.

In the tenth chapter, Mr. Hutchinson makes some remarks on the Means of Recognition of the Subjects of Heredito-Syphilis during the Tertiary Stage. This, he very justly observes, is a matter "involving great and peculiar responsibility"; and, in many cases, the surgeon is precluded by moral obligation or by motives of kindness from putting the necessary questions to the parents of the child; that is, at periods remote from infancy, when the detection of syphilitic taint is often a matter of great difficulty, whereas in infancy and during the occurrence of secondary symptoms the diagnosis is comparatively easy.

The importance of determining, if possible, certain signs of hereditary syphilis is, then, very great, when we remember how imperative is the duty of "abstaining from needlessly exciting in the minds of our patients suspicions as to conjugal purity." Such signs and their value Mr. Hutchinson has endeavoured to investigate—not, as he confesses, without in the commencement of his inquiries having put more questions to the parents than he frequently now does. He here describes the principal of these signs, presuming that he does not wish to "stereotype his conclusions" as to their absolute or relative importance. These objective symptoms—presented to the inspection of the surgeon—are to be well observed before inquiries are made as to the history of the case; and they require to be well studied and accurately observed in order to avoid an unnecessary and probably painful course of questioning founded on an incorrect diagnosis.

The most reliable of these symptoms is, according to Mr. Hutchinson, the peculiar appearance presented by the permanent teeth—especially the upper incisors.

"In syphilitic patients, these teeth are usually short and narrow, with a broad vertical notch in their edges, and their corners rounded off. Horizontal notches or furrows are often seen; but they, as a rule, have nothing to do with syphilis."

Mr. Hutchinson believes teeth of this type, when well characterised, to be pathognomonic of hereditary taint; and he appends a plate containing eight figures representing the appearances presented by the teeth in subjects of inherited syphilis.

Other signs, inferior in value but still important, are thus described:—

"The skin is almost always thick, pasty, and opaque. It often shows little pits or scars, the relics of a former eruption; and at the angles of the mouth are radiating linear scars running out into the cheeks. The bridge of the nose is almost always broader than usual, and low; often it is remarkably sunk and expanded. The forehead is usually large and protuberant in the regions of the frontal eminences; often there is a well marked broad depression a little above the eyebrows. The hair is usually dry and thin, and now and then (but only rarely) the nails are broken and splitting into layers. If the eyes have already suffered, a hazy state of the corneæ, and a peculiar, leaden, lustreless condition of the irides, with or without synechiæ, may be expected. If, however, the eyes have not yet been attacked by syphilitic inflammation, they will present no deviation from the state of perfect health and brilliancy. The occurrence of well characterised interstitial keratitis is now considered by several high authorities as pathognomonic of inherited taint. It is almost invariably coincident with the syphilitic type of teeth; and, when the two conditions are found together in the same individual, I should certainly feel that the diagnosis was beyond doubt." (Pp. 205-6.)

We must, Mr. Hutchinson points out, consider the various physiognomical conditions and symptoms together; and he impresses the necessity of special caution in arriving at a conclusion, on "those who have not previously made the deformities of the teeth the subject of special study."

A series of seventy-three Aphorisms and Commentaries respecting Constitutional Syphilis and its Transmission from Parent to Offspring is next given. These appear to be founded chiefly on the author's experience, inasmuch as many of them contain opinions at variance with those commonly received. We have not space to notice them in detail, but would recommend them to the attention of our readers.

An Appendix on Inflammation of the Deeper Structures of the Eye in Connexion with Acquired Syphilis closes the book. We would advise surgeons to study Mr. Hutchinson's views in his own words, and to note carefully both his instructions and his cautions. With imperfect knowledge, they may commit grievous errors; and it is naturally his desire, and a mere matter of justice to him, that all should avoid such, as they may lead to painful consequences, and diminish the credit which he deserves.

THE URINE IN HEALTH AND DISEASE; being an Exposition of the Composition of the Urine, and of the Pathology and Treatment of Urinary and Renal Disorders. By ARTHUR HILL HASSALL, M.D., Senior Physician to the Royal Free Hospital, etc. Illustrated by numerous Engravings. Second Edition. Pp. 416. London: 1863.

DR. HASSALL is quite justified in calling, in his preface, this edition of his book on urine "a distinct work" from that which he published a few years ago. The small treatise which then appeared was, he says, "necessarily imperfect". We cannot allow that all the imperfections therein manifested were a matter of necessity on the part of a professedly well informed chemist and physician; but we most willingly recognise, on perusal of the present volume, the diligence with which Dr. Hassall has since studied the several works on the urine which have recently appeared, and the general ability and judgment with which he has selected his materials and put them forth in the present form. At the same time, it must not be forgetten that he has for himself made some investigations on the urine, and that therefore he must not be regarded as a compiler *pur et simple*.

The chapters into which the book is divided are headed as follows: Function and Structure of the Kidneys—Physical Properties and Composition of the Urine—Origin of its Principal Constituents: Urea: Creatine and Creatinine: Uric Acid and the Urates: Hippuric Acid: Oxalic Acid: Diabetic Sugar and Diabetes: Various Organic Acids: Diabetes Insipidus: Sulphuric Acid: Phosphoric Acid: Chlorine: Acidity and Alkalinity of the Urine: Extractives: Colouring Matters: Xanthine and Hypoxanthine: Allantoine: Leucine and Tyrosine: Cystine: Albumen, Albuminuria, and Bright's Disease, etc.: Blood, Mucus, and Pus: Spermatorrhœa and Impotence: Medical Origin of Stone and Stricture: Analysis of the Urine.

Regarding each of the substances described, Dr. Hassall gives a concise and well arranged account of what is at present known as to their chemical and physical characters and their occurrence in the urine, and the circumstances under which their quantity is modified. He has borrowed largely from other writers on urine, especially Dr. Parkes; with whom, indeed, he appears to have been in correspondence during the production of this work—and he could scarcely have placed himself under more able guidance and advice.

There is, then, much in common between the works of Dr. Parkes and Dr. Hassall, as regards statement of facts. But the two authors differ in the manner of arranging their materials. Both shew the modifications which the constituents of the urine undergo under various conditions of health and disease; but, while Dr. Parkes describes the changes in the urine under each modifying circumstance—such as age, diet, fever, rheumatism, etc.—Dr. Hassall arranges under each constituent of the urine the circumstances, healthy or morbid, which modify its appearance. Each of these methods has its advantages, according to the requirements of those who may use the books. For the observation of special forms of disease, Dr. Parkes's plan is most convenient; while Dr. Hassall's arrangement will be useful to those who are making researches in detail on the component parts of the urine.

At the end of the book, there is a chapter on Analysis of the Urine, in which Dr. Hassall points out the applications of the volumetrical method.

There are a few matters which, before concluding, we would point out to Dr. Hassall for correction. The chief of these is, the introduction of an elaborate chapter on so-called "Spermatorrhœa and Impotence". Whether the author has not magnified spermatorrhœa to an importance which few well informed medical men will be disposed to grant to it, we will not here discuss; but we cannot see why he should introduce a chapter of nearly ten pages about it into a work on urine. It would have been enough, as other writers on urine have found, to refer to the occasional presence of spermatozoa in that fluid—to show in a few words what they indicate, and to give the proper directions for their detection. Nor can we understand why "disease of the suprarenal capsules" should have nearly six pages devoted to it, merely because the capsules lie near the kidneys, and are called suprarenal. It would have been at least as reasonable on Dr. Hassall's part to give, when he was writing on bile in the urine, a description of various diseased states of the liver.

We would also suggest to Dr. Hassall, that he is not always accurate as to the names of persons and things. Thus, at p. 319 and elsewhere, he refers to the researches made on renal disease by one "Johnston", by whom is evidently meant Dr. G. Johnson. Again, at p. 257, he speaks of the parasites occasionally found in urine as belonging "chiefly to the Anthelmineæ". We were not aware that this term had been substituted for Helminthoida or Helminthozoa. Is it proposed on the same principle as that on which the Furies of old mythology were called Ευμενιδες?

These defects may be readily remedied in subsequent editions, and do not destroy the general utility of the book. Practitioners who have not leisure for the perusal of more elaborate works may consult it, with a great probability of finding an accurate expression of modern opinion on any subject *in re urinariâ* regarding which they desire information.

PROLAPSUS, FISTULA IN ANO, AND HÆMORRHOIDAL AFFECTIONS: THEIR PATHOLOGY AND TREATMENT. By T. J. ASHTON, formerly Surgeon to the Blenheim Dispensary, etc. Pp. 182. London: 1863.

MR. ASHTON is known as the author of a work on the *Diseases, Injuries, and Malformations of the Rectum*, which has passed through several editions. The volume before us is intended as an expression of his views on the nature and treatment of the diseases to which the lower bowel is most frequently liable. It contains evidence that the author has studied his subject both in books and on the bodies of patients. Two-thirds of the book are devoted to hæmorrhoidal affections; and we observe that Mr. Ashton gives a preference to the ligature over other methods of surgical treatment. Although all surgeons may not agree with every one of the author's doctrines, the book is well worthy of a favourable reception.

British Medical Journal.

SATURDAY, MAY 9TH, 1863.

MEDICAL WITNESSES FOR THE PROSECUTION.

IT is much to be hoped that the case of Bromwich *v.* Waters will be long remembered in the profession as a warning to medical gentlemen who are eager to enter the witness-box, *per fas aut nefas*, in order to give evidence against those who are nominally called their medical brethren; and therefore it is that we once again recur to this melancholy instance of a too common offence.

It has been objected to us, that we have no right to assume, when a medical man is called in evidence on behalf of the prosecution in a case where a medical man is the defendant, that his evidence will be of a prosecuting nature. To this we answer, that practically we find that such evidence is of an unqualified and prosecuting nature. The counsel puts those questions only which will damage his adversary's case or strengthen his own; and, more than this, he would not put a medical witness in the box, whose *qualified* evidence would go rather to the support of the case of the defendant. We will venture to say, for example, that Dr. Ramsbotham would never have been called in the case referred to, had he discovered before he entered the box what he afterwards found out; viz., that there was in reality no difference of opinion between him and Dr. Waters respecting the treatment of the hysterical female.

Let us, however, see what actually was the character of the evidence given in this very case. We think it may be easily shown that the evidence given by Messrs. Lee, Ramsbotham, Taylor, and Gully was as much evidence for the prosecution as was Serjeant Shee's speech a speech for the prosecution—was, in its purport, just as one-sided. It is no intention of ours here to discuss the morality of the advocate's business. Serjeant Shee and his legal brethren, when they strain all their acute legal faculties in order to bring home guilt to an innocent man, must settle the affair with their own consciences. How that conscience could have been appeased if, in this case, the rhetorical trick, the *suppressio veri*, the *suggestio falsi*, and the skilled art of the advocate, had so muddled the jury's brain as to make them see guilt in Dr. Waters, it is difficult to understand. Difficult, indeed, is it to comprehend the honesty of the ethics of the bar, which admits a man, although convinced of the innocence of his opponent's client (and how could so acute a man as Serjeant Shee be otherwise than convinced?), to strain every nerve to ruin and degrade him. But there is certainly this salvo which he may lay to his conscience: the bench comes between his eloquence and the jury; the unimpassioned mind of the judge knocks down all the trickery and flimsy scaffolding with which he has built up his side of the question. We do not doubt for a moment that in this case Serjeant Shee knew perfectly well—no man better—that the judge would fully expose to the jury the iniquitous nature of the charge which he so eloquently and strongly promoted on behalf of his lying client.

The barrister has certainly this excuse; but the medical man who plays the advocate in the witness-box has no such salve for his conscience. He goes there as a skilled witness; and what he says the judge gives to the jury as the opinion of a man of science. The judge cannot interfere with it; it can only be rebutted by opposite skilled evidence. The medical advocate, therefore, who lays down before the court an *unqualified* opinion on medical treatment, which opinion he knows is not received as correct by others in the profession as good as himself, is without excuse. His opinion goes straight to the jury; and if he be a man of position, and his opinion be delivered without hesitation, it is received by the jury as being of somewhat the same value as a positive fact. The profession can appreciate the real value of such an opinion or personal conviction; but the judge and jury cannot. The opinion may be utterly wrong, purely hypothetical, and opposed to the general sense of the profession; and yet, in fact, be accepted by the jury, simply because of the high position held by the medical witness who delivers it! What excuse is there, then, for those medical men who go into the box and swear out roundly their own private opinions as if they were generally admitted facts; and, above all, when the honour of a medical brother hangs upon their oath?

But let us see the nature of the medical evidence given in this case of Bromwich *v.* Waters. Let us see if it was candid and impartial, or purely *advocate's* evidence.

First comes Dr. Robert Lee. He examined the patient; and, when asked how he found the parts, he does not simply answer "Healthy", but he must say: "In the most healthy condition. I never yet saw any in a more healthy condition. There was no trace of any former disease having existed there. My opinion is, that no ulcer had ever existed at all, and that the speculum has been most grossly abused." Then, when he is cross-examined, Dr. Lee does not know what is inflammation of the womb, nor what is irritation of the neck of the womb; and ignores what he wrote about superficial ulceration ten years ago. He believes superficial ulceration of the *os uteri* to be a very rare disease. Is not this advocate's evidence?

Dr. Ramsbotham also indulges in unnecessarily

strong terms. "The womb and the mouth of the womb were as healthy as I ever saw the organ in my life, bearing no trace of disease about it." He is then asked about the hysteria, and says:

"If it could be traced to the use of the speculum, it should be discontinued; and I should suppose under such circumstances as I have heard detailed; at least, I should say the probability is that the speculum produced that hysteria, and therefore I should myself have discontinued it as soon as I knew of its existence."

And next proceeds to speak of cataleptic hysteria and hysterical coma.

"The more cataleptic element there was in the disease, the more insensible would the person be; and the more hysteria, the less insensible.

"And might there be a case of partial consciousness, and consciousness lasting for some time, and then being lost?—Decidedly; or a state of entire consciousness and insensibility.

"According to your experience of cases of hysterical coma or cataleptic hysteria, does the patient recollect anything of what passed, after recovery from the fit?—They are very rare. I cannot call to mind any cases from which to form an opinion."

Here the doctor speaks decidedly upon subjects about which he admits he has had no experience. But, having admitted the state of insensibility, he is then asked about the possibility of impregnation during that state.

"As a matter of medical science, is impregnation believed by eminent members of your profession to be possible while the patient is in a state of insensibility?—Decidedly so. Almost every author who has treated upon the subject, both English, French, and German, have expressed their conviction to that effect; that under even complete insensibility, even coma from epilepsy, or insensibility from spirituous liquors, impregnation might take place.

"In your practice and experience, you see no reason to differ from that opinion?—Certainly not."

Now we put it to Dr. Ramsbotham: Did he ever meet with, hear of, or read of, a single such case worthy of a moment's consideration, in the whole course of his life? If he did not, we ask him: Is it then warranted by your experience? Was it fair to let the jury and the judge draw, as they must have done, the conclusion that the thing was not only possible, but probable? What, on the other hand, would have been the impression left on the jury's mind, had Dr. Ramsbotham said: "As physiologists, we reasonably believe that impregnation may take place during insensibility; but, as practical men, we have never heard of such a case. If it took place in this instance, this is the first authenticated case ever heard of in the records of medical knowledge." In his cross-examination, indeed, he does qualify his opinion.

"You say that impregnation is possible to take place while a person is in a state of insensibility?—Yes; I believe so.

"Possible?—Yes.

"Not probable?—I do not say that."

Moreover, Dr. Ramsbotham bears witness that going up hill may produce miscarriage in an early stage of pregnancy.

"Mr. Serjeant Shee: Supposing a person was in an early stage of pregnancy, what effect would strong exercise and walking sharp up hill be likely to produce?—It is not certain that miscarriage would be produced by such exercise, but it might be; and it is one of the causes of miscarriage noted by authors. We do not allow patients to ride on horseback when in the early stage, because the rapid movement is likely to produce miscarriage."

Dr. Ramsbotham, again, does not think that persons suffering from hysteria are generally rather cunning.

Why Dr. A. S. Taylor was ever called to give evidence in the case, it is hard to understand, except upon the theory that his very presence as a famed and well known man of science and prosecution-witness strengthened the evidence for the prosecution. However, there can be no doubt that all he did say was to promote the cause of the prosecution.

"In your opinion, can impregnation take place while a woman is in a state of insensibility and unconsciousness?—Yes; and I have never entertained any doubt about that, nor do I know any authority to the contrary."

But why did not Dr. Taylor add: "But I do not know of a single authentic case on record"; and why did he not read to the jury three lines from his work on Jurisprudence:

"Many of the cases in which there are motives for pleading unconscious intercourse or pregnancy require close examination. They will frequently be found to be quite unworthy of belief."

Dr. Taylor also plays upon the same string as Dr. Ramsbotham about the cataleptic hysteria.

"How should you characterise her state?—I think it was a case decidedly of hysterical coma, and some of the symptoms of catalepsy.

"Have you heard the evidence of Dr. Ramsbotham upon that?—Yes, and I agree with him generally upon that point. The extent of coma varies extensively; by that I mean complete insensibility and unconsciousness."

The evidence of the other medical witness, Dr. Gully, was taken by commission at Pau, and is a remarkable specimen. As a display of medical knowledge, and of legitimate deductions from premises, it is, we should think, unique in its way. It requires no comment.

"John Manby Gully: I examined the mouth and neck of the womb, and the vagina. Upon pressure, her breasts gave out a milky fluid. I placed my hand upon the belly, and kept it there for twenty minutes or more, in order to detect any movement, but I found none. I did not discover any trace of ulceration of the womb. I found the mouth of the womb much more open than is usual in pregnancy. It was also swollen, and rough on the surface. The neck of the womb was also swollen. These parts presented the appearance of having been operated upon by instruments, and as if they had been injured by instruments. I came to the conclusion she was not pregnant, partly from my own examination of her, and partly from the statement of her previous medical treatment. I came to the conclusion that she was suffering from tumour of the womb. I treated for tumour until July 20th. The effect of my treatment on pregnancy would be to accelerate the birth of a child.

The circumstances of the case induced me to examine the parts, and they presented the appearance of those of a woman with small sexual desire." On cross-examination, Dr. Gully said: "I made, altogether, three or four examinations of the belly before the 26th of June. My examination on the 26th of June lasted half an hour quite. Openness of the mouth of the womb is a sign sometimes of excessive sexual connection. By excessive, I mean a woman having connection with a man once or twice every night. Nothing less. Three times a week would not produce such. From my experience of other cases where instruments have been used, I inferred in this case that instruments had been used. The things from which I inferred she was not pregnant, but had a tumour, were her statement that Dr. Waters had, fifteen months before, said she had a tumour of the womb, and my own examination not discovering any movement in the mass, and Dr. Waters, whom I considered a skilful and able man, had treated the womb as a diseased organ. I administered to her homœopathic medicine for her sickness (vomiting). The sickness proceeded from sympathy with the womb. The appearances from which I inferred that she was a woman of small sexual desire were that the passage to the womb was narrow, the external parts contracted, whilst in a lascivious woman they would be large and open. The clitoris was very small, and there was apparently no sign of amativeness in her head, which I examined as a phrenologist. In this particular case, I did not consider that the openness of the womb could be attributed to excessive sexual intercourse, because the mouth was rough as well as open. I think the clitoris would not have been so small had she been guilty of sexual intercourse. In my opinion, as a medical man, the use of instruments at all to any unmarried woman under thirty or thirty-five years of age is highly injurious."

Since the above lines were written, we find that at the last meeting of the Medico-Chirurgical Society of Edinburgh, Dr. Simpson brought forward the case of Bromwich *v.* Waters, Dr. Ramsbotham being present at the meeting. The views taken by Dr. Simpson were precisely those which have been produced in these pages. A few additional facts were, however, mentioned by him which are worthy of note. We may add that the explanations offered by Dr. Ramsbotham on the occasion were not accepted as satisfactory. After commenting on Drs. Lee and Rambotham's evidence, Dr. Simpson mentioned the following fact:

"About two years ago, an old patient of his (Dr. S.'s) came to him with a woman who had what was said to be an abdominal tumour. He examined the tumour, heard the fœtal heart, and stated that she was pregnant. She averred that, if it was so, she could have got into that condition only when a surgeon, well known to all of them, was operating on her for piles or some other slight disease of the rectum, and had given her chloroform. She most solemnly asseverated that she had never allowed a man to touch her. He thought it right to go to the surgeon and tell him that this accusation had been made with regard to him, that he might be on his guard. He was, Dr. S. believed, written to by some lawyers on the subject, but the details of the charge were so vile and truthless, that he was ashamed to speak of them to his friend till Dr. Waters' case came up. The surgeon then told him that the case had been dropped long ago, as far as he was concerned. But the later history of the case was instructive. The woman, who kept a large lodging-house, is making two of her lodgers pay for the child, as both of these gentlemen had been cohabiting with her, and they could not settle between themselves which of the two was the real father of the child."

As regards Dr. Gully's evidence, he says:

"It is difficult to comment upon evidence such as that of Dr. Gully's, for perhaps in the annals of medicine and medical jurisprudence it is unequalled in its character. It is an extraordinary compound of ludicrous professional pretension, and equally ludicrous professional ignorance.

"Would any old petticoated nurse in this country have committed such an unpardonable blunder as not to recognise pregnancy in so well marked a case as the above? This hapless woman was submitted by Dr. Lee to an examination extending over two hours. Dr. Gully stated that on one occasion he examined her 'for half an hour quite,' and placed his 'hand upon the belly and kept it there for twenty minutes or more!'

"Besides making a ludicrous diagnosis of her non-amative propensities phrenologically, Dr. Gully owns to having treated her hydropathically and homœopathically. It is only a pity for his own sake that he had not recourse to other such means as mesmerism and spirit-rapping, to escape the droll errors of diagnosis and so-called treatment into which he fell."

Dr. Ramsbotham remarked that

"Miss Bromwich was one of the most obstinate old ladies he had ever met with. She had said, as they were at lunch next day in the hotel where they were all living together, 'Is it possible that we have no redress? Is this poor girl's character to be taken away by individuals who were suborned to perjure themselves by saying she is not a chaste woman?' The counsel who was there said, 'The jury have given their decision, and we can say no more.' One of the younger counsel said to him (Dr. R.) at the trial, 'If I could keep my self-possession in the witness-box as that girl Whalley did, I would be very glad.' And it was just the same when she was examined by Dr. Lee and himself and all of them. She was, doubtless, on their supposition, an impostor; but she was not only one of the most heartless impostors, but one of the *best* impostors (if he might use the expression) that ever was known. With regard to Dr. Taylor, he might state that Miss Bromwich first wanted to make it out that the glass of wine which Whalley drank had been drugged by Dr. Waters to throw the girl into insensibility, that he might fulfil his foul desires. The matter was submitted to him (Dr. R.). He said that the thing was quite impossible. Dr. Taylor said the same thing, and it was to prove this that Dr. Taylor was brought down. He (Dr. R.) was very glad the case had terminated as it had, and he believed the solicitor for the prosecution was not displeased himself.

"Dr. Simpson remarked that, as to what Dr. Ramsbotham had said about Dr. Taylor, no such question was put during his examination in chief; but the matter was brought out on cross-examination by Dr. Waters' counsel. To pay Dr. Taylor that he might thus damage fatally her case was not probable; and Dr. Taylor would not, of course, take Miss Bromwich's fee and come to Chester with the intention of acting directly against her interests. There was one other point which he (Dr. S.) forgot to mention. The question was raised whether hysterical women were not often given to systematic falsehood and imposture. There was evidence brought from Dr. Prout's work, and from other books, to show this; and they all knew what thorough impostors hysterical women sometimes were. Dr. Ramsbotham in his evidence repudiated this opinion.

"Dr. Keiller asked permission to say a few words. He was glad that Dr. Ramsbotham was present to night, and that he had made a statement to the effect that he never intended to appear as a party against Dr. Waters. It could not but be gratifying to this Society to hear Dr. Ramsbotham express himself as he had just done; but,

he (Dr. K.) could not help thinking that Dr. Ramsbotham, in appearing in the witness-box on the side of Miss Bromwich, had adopted a strange way of exhibiting his sympathy for a professional brother who had been dragged into a court of justice to meet such an obviously trumped up and most injurious accusation. If Dr. Ramsbotham appeared at Chester as if against Dr. Waters, and yet was for him, such an anomalous position was not at least discoverable during the trial, for not only in matter, but in manner, the evidence of Dr. Ramsbotham seemed altogether opposed to the interests of Dr. Waters. As for Dr. Lee's appearance at the trial, he (Dr. K.) not having personally seen Dr. Lee before, but knowing and esteeming him by reputation, at first thought that the wrong man had stepped into the witness-box, for it was difficult for some time to believe that this mistake had not really occurred; his demeanour and answers were so very extraordinary. It would be difcult to describe the ludicrous scene enacted during Dr. Lee's examination. The evidence forced from Dr. Lee was, to say the least of it, unequivocally one-sided, and, such as it was, singularly biassed. He (Dr. Lee) did not in the least degree pretend to mince matters when the subject of the speculum was touched upon; and even after leaving the witness-box, he conspicuously continued to display his disapprobation of the instrument, by publicly exhibiting specula of various shapes and sizes in the body of the Court, before the Judge and Jury, and passing them round for the special inspection of the apparently much amused rows of barristers. After, however, hearing the evidence for the prosecution, the result could not for a moment be doubted. He (Dr. K.) had no hesitation in saying that a more trashy and transparent case never was before tried in a court of justice, nor one more worthy of receiving a decision which it is to be hoped will prove well calculated to teach the unscrupulous and over-credulous accusers a lesson not to be forgotten."

We must, before concluding this subject, refer to the remarkable proof of the old adage, *Qui s'excuse s'accuse*, exemplified by Dr. Ramsbotham. It now appears that Miss Bromwich's attorneys, Messrs. Kimber and Ellis, have turned round upon Dr. Ramsbotham, and repudiated the explanation which he has offered to the profession. We will without further comment give extracts from their letter to the *Medical Times and Gazette*.

"The part of his letter which we feel most bound to object to is the paragraph wherein he asserts that he had been consulted in the case some time 'before he had an idea that it was to be brought into a court of justice.' To that assertion, we are compelled to give a distinct denial. No medical gentleman has been consulted by us in this case without having been plainly told at the first interview the reason why his opinion was desired, and that an action for the seduction of the girl was about to be tried. Dr. Ramsbotham first saw the girl in the presence of another medical gentleman, whose name need not be mentioned, and knew perfectly well why they met in consultation.....

"The Doctor goes on to say, that it was 'with great pain to himself' that he became implicated in this case,' and that he told us 'his evidence would be of no use to us', and that he was 'obliged' to appear to speak to the fact that there was no mark remaining of an ulcer ever having existed.

"The profession may infer what pain the Doctor felt in appearing at the trial, from the following letter:—

"'*Bromwich* v. *Waters*.

"'Messrs. Kimber and Ellis.

"'Gentlemen,—I presume by the series of questions which you transmitted to me respecting the above case a few days ago, that you are desirous I should appear at Chester and give evidence at the trial. If so, you will oblige me much if you can inform me when my presence will be required. I understand it is expected that the trial will come off in April. Is that the case; and can you tell me what part of the month?

"'I am, very faithfully yours,

"'FRANCIS H. RAMSBOTHAM.

"'8, Portman Square, March 16.'

"In that letter, there does not appear to be any expression of great disinclination to be 'implicated' in the case; and it is only common justice to the girl to state, that Dr. Ramsbotham expressed a favourable opinion of the truth of her story after he had examined her himself, and also after he had heard her evidence given in open court, though he *now* suggests that he has been deceived.

"We must also state that since the trial the girl has not lost the confidence of her friends; and such is the opinion her mistress entertains of her, and so great is that lady's desire to prove in every possible way the innocence of Dr. Waters, that she has offered the large sum of £100 (notwithstanding the expense she has already incurred in her attempt to vindicate her servant's character), to anyone who will come forward and prove the paternity of the child in a satisfactory manner."*

AN ANTEDILUVIAN (?) HUMAN JAW-BONE.

THERE appears to be no incredulity, at all events, in the French Academy of Sciences, respecting the late "human" fossil jaw-bone found by M. Boucher at Abbeville. We read:—

"Our globe has just delivered up to us one of the secrets that human curiosity has so ardently sought for. Fossil man has been discovered. We now know that our ancestors were contemporaries of the great Mammiferæ which were swept away by the last deluge, of the elephant, of the rhinoceros, etc. This question has at last been solved by a fact, against which none of the objections offered in the case of bones found in caverns can be maintained. This great discovery is due to M. Boucher de Perthes; and M. Quatrefages has announced to the Academy the scientific event. Fossil man is represented by the right half of a lower jaw-bone, which was found at Abbeville in the same bed of diluvium in which M. Boucher has found so many flint instruments. M. Boucher long ago offered a reward to the workmen who would bring him out of the gravel beds a human bone. A short time since some human teeth were brought to him; and then it was announced that a bone had been found. Several English *savans* and M. Quatrefages hastened to the spot, and convinced themselves that the bone could not have been surreptitiously placed there. It lay five *mètres* below the level of the earth, at the bottom of the diluvium, in contact with the chalk. M. Quatrefages removed it with his own hands. The jaw-bone is well preserved; it does not appear to have been rubbed, for its coronoid process is intact. The angle of the jaw is very obtuse. 'Most probably,' said M. Quatrefages, 'the jaw belonged to an old person of small size. It has nothing of the ferocious or the monkey about it.' M. Quatrefages, in answer to M. Milne-Edwards, admitted that there was nothing either in the form or appearance of the bone opposed to the idea of a fraud having been committed."

* By an oversight, we omitted to state that the extract (in inverted commas) in the last number of the JOURNAL, p. 458, was taken from the *Medical Times and Gazette*.

MR. PROPERT AND MR. ADAMS.

Our readers will be glad to find that, thanks to the judicious suggestion made by the Journal of the British Medical Association, the painful dispute between Mr. Propert and Mr. Adams has been brought to a most happy conclusion. We have no doubt that this unfortunate affair could have been settled long ago, had it not been for the very injudicious manner in which it has been treated and fanned into flame by a portion of the medical press. When called upon in a suitable way, Mr. Propert at once acceded to the proposition, that the case should be submitted to the decision of mutual friends; and Mr. Adams as readily met the proposal. On both sides—this first step once taken—the greatest and most praiseworthy readiness to come to an understanding was manifested. As will be seen from the accompanying paper, two mutual friends, with unlimited power, met and easily and readily effected a settlement of the difference.

Mr. Propert has publicly expressed his regret at having allowed his feelings to get the better of his judgment to the hurt of Mr. Adams; and Mr. Adams has accepted his explanation. We, therefore, conclude, that however much Mr. Propert's behaviour in this affair may have been injudicious, Mr. Adams accepts his assertion that in what he did he was not prompted by any malevolent feeling towards Mr. Adams; but, being deceived, was led on by a generous though misguided impulse into a course of action which pressed injuriously upon Mr. Adams.

We are most glad to be able to add, that the understanding come to between these gentlemen is not merely verbal, but most cordial. A personal interview has taken place between them, apologies and explanations have been offered and received; and Mr. Propert has made a contribution to the Adams Committee fund.

We subjoin copies of the decision of the arbitrators, and of Mr. Propert's explanatory document.

"We, the undersigned, having been delegated with full and unrestricted authority to arbitrate in the matter in dispute between Mr. John Propert and Mr. William Adams, arising out of the late trial of 'Russell *v.* Adams', are of opinion that the subjoined document, signed by Mr. John Propert, should be considered as a satisfactory and an honourable settlement of the question at issue between these gentlemen.

"Forbes Winslow, 23, Cavendish Square.
"Francis Hird, 17, Clifford Street.

"London, May 5th, 1863."

"I am willing to admit that I ought to have complied with the request conveyed to me in Mr. Macrell's letter dated December 30th, 1861; and have conferred with that gentleman, as Mr. Adams's legal adviser, in relation to the charge of breach of promise brought by Miss Russell against Mr. Adams, previously to my forming any opinion of my own respecting its truth. I now recognise, if I had done so, much annoyance to both Mr. Adams and myself would have been obviated.

"I also regret that anything done by me should have led others to suppose that I advised or originated the legal proceedings taken by Miss Russell against Mr. Adams. I was no doubt misled by certain *ex parte* statements, but was influenced by no personal feelings of animosity to Mr. Adams, but solely by a desire to protect the daughter of a deceased member of the medical profession, alleged to have been cruelly treated.

"Whilst solemnly declaring that the motive governing me in these painful proceedings was strictly benevolent in its character, I nevertheless freely allow that, having been deceived by erroneous information, I unwittingly exposed myself to the imputation of acting imprudently towards Mr. Adams, whom I now conscientiously believe to be innocent of the infamous charge which Miss Russell attempted to establish against him in a court of law. "John Propert.

"6, New Cavendish Street, May 5th, 1863."

THE IODINE TEST FOR DIABETIC URINE.

The value of the iodine test for diabetic urine, lately referred to in the Journal, as proposed by M. Trousseau, has been disputed. It appears, in fact, that healthy urine also decolorises iodine when added to it, only it does so less rapidly than diabetic urine. We can ourselves corroborate the correctness of this statement. It would appear, from observations made by M. Corvisart, that the decolorising of the iodine tincture depends chiefly upon the action of the uric acid and the urates in the urine; and, consequently, that the decolorising power of the urine, whether diabetic or not, is measured by the relative quantity of these salts in the urine. If it is demonstrated that this power resides preeminently in diabetic urine, it will then be necessary to learn the relative quantity of those salts which are contained in it. Dr. Farge of Angers has found that highly diabetic urine has a minimum power of decolorisation; whilst a maximum power resides in febrile—uric acid—urine. M. Coulier examined three specimens of urine—one diabetic, one highly charged with uric acid, and another perfectly healthy; and he found that the diabetic urine (containing 28 *grammes* of sugar to the *litre*) did not decolorise more of the iodine than the healthy urine. With M. Corvisart, he considers the decolorisation depends upon the action of uric acid. *Apropos* of this subject, a writer refers to the fact that he found, after covering the whole surface of the swollen knee of a gouty patient with a solution of equal parts of iodine tincture and water, on the following morning, to his surprise, not a trace of the colour of iodine remaining; and he asks whether uric acid could have played any part in this decolorising action.

THE WEEK.

In the late election of foreign associate by the French Academy of Medicine, Faraday obtained 52 votes, and Matteucci 1. The other candidates were Ehrenberg, Rose, Bunsen, and Delarive.

We lately referred to the fact that a committee called the Adams Defence Committee had been formed to assist Mr. Adams in the defrayal of the enormous expenses of the trial Russell *v.* Adams. We are glad to find that the committee comprises names of gentlemen who will ensure the success of the subscription. The expenses, we understand, amount to something like £1000; and it certainly does seem a most cruel thing that an innocent man should be thus severely mulcted in purse, as well as tortured in mind and damaged in practice, through the abominable machinations of a designing wicked woman. The happy conclusion of the differences between Mr. Adams and Mr. Propert, the admissions honourably made by Mr. Propert, and the award of the arbitrators, must remove from the minds of every one all doubt and difficulty as to what course should now be pursued. Mr. Adams has most undoubtedly a strong claim upon the warm sympathy of his professional brethren. We trust that it will be warmly responded to. The following members of the profession have already placed their names on the committee; and we are sure that the settlement of the dispute between Mr. Adams and Mr. Propert will be the cause of adding many more names to the list.

Dr. J. B. Allan, Mr. Brady, M.P., Mr. C. Bader, Dr. L. S. Beale, Dr. J. R. Bennett, Mr. P. H. Bird, Mr. C. Brooke, Mr. I. B. Brown, Mr. A. Brown, Dr. G. Burrows, Mr. J. M. Burton, Mr. W. Bowman, Mr. H. H. Cannan, Dr. Lawson Cape, Mr. J. F. Clarke, Mr. E. Coleman, Mr. H. Coote, Mr. W. Coulson, Mr. W. H. Covey, Mr. G. Critchett, Mr. J. Dangerfield, Dr. Gueneau De Mussy, Dr. H. Dick, Dr. R. Druitt, Mr. J. U. Easson, Mr. J. E. Erichsen, Mr. W. Fergusson, Dr. A. L. Fisher, Mr. J. Gay, Dr. S. L. Gill, Mr. J. H. Green, Mr. W. W. Gull, Mr. E. A. Hart, Mr. J. M. Hogg, Mr. B. Holt, Mr. W. B. Hutchinson, Mr. T. C. Jackson, Dr. W. T. Kays, Mr. W. B. Kesteven, Mr. O. King, Dr. E. Lankester, Mr. H. Latter, Mr. W. L. Leaf, Dr. H. W. Lobb, Mr. E. Lund, Mr. J. S. Mansford, Mr. T. Nunneley, Mr. H. Obré, Mr. J. Paget, Dr. R. Quain, Dr. B. W. Richardson, Dr. J. Russell, Dr. W. B. Ryan, Dr. R. H. Semple, Dr. Brown-Séquard, Mr. B. Shillitoe, Dr. T. H. Tanner, Dr. E. S. Thompson, Mr. H. Thompson, Mr. J. R. Traer, Dr. H. G. Trend, Mr. H. H. Walton, Mr. G. Webster, Mr. S. Wells, Mr. E. Wilson, Dr. J. Yearsley; Dr. A. Anderson (Glasgow), Mr. A. Baker (Birmingham), Dr. T. H. Barker (Bedford), Mr. H. Blenkinsop (Warwick), Mr. P. Brendon, Mr. Cordy Burrows (Brighton), Mr. G. Bury (Whetstone), Mr. P. H. Chavasse (Birmingham), Mr. Flint (Stockport), Mr. Gorlick (Leeds), Mr. W. Harvey, Mr. J. P. Harris (Liverpool), Mr. H. W. Joy (Maidstone), Mr. G. Lawson, Mr. G. May (Reading); Mr. Meade (Bradford), Mr. T. Paget (Leicester), Mr. Shute (Greenwich), Mr. S. Smith (Leeds), Mr. T. P. Teale (Leeds), Mr. J. Tomes, Mr. T. Turner (Manchester), Dr. F. Winslow. Mr. J. B. Walker, 17, Clifton Gardens, Maida Hill, is the Honorary Secretary and Treasurer.

It will probably be in the recollection of our readers that in 1860, Major-General Slade, Lieutenant-Governor of Guernsey, and a certain professed homœopath, became rather notorious; the one by granting a commision of staff-surgeon in the Guernsey Royal Militia, the other by accepting it. The staff, regimental, and assistant-surgeons, attached to this force, unwilling to hold professional intercourse with an irregular practitioner, respectfully sought for further information through the chief of the medical staff. The curt answer returned by the militia Adjutant-General was that, "His excellency had no instructions to give!" Thereupon the whole medical body of the militia, on principle and in self-defence, were compelled to tender the resignation of their respective commissions. After a suspense of several months, the resignations of the staff-surgeons were accepted, and the regimental and assistant-surgeons were ordered to continue their duties. They have done so under protest. The following general militia order informs the world that the insular force is at length relieved from the important infinitesimal services of the homœopath:

"Militia Office, April 24, 1863.

"It having been intimated to the Lieut.-Governor that his term of service in this command will shortly expire, the necessity for retaining Surgeon John Ozanne upon the personal Staff of the Commander-in-Chief will no longer exist. His Excellency therefore accepts the resignation which that officer has tendered, of the appointment held by him, and has directed that his name be placed upon the unattached list of the Royal Guernsey Militia.

"By order,

"E. J. White, Colonel, Adjutant-General."

No one will feel inclined to question Major-General Slade's prerogative to patronise homœopathy, or any other species of charlatanism to which his fancy may incline. All we maintain is that in thus obtruding a homœopath into the company of medical men, his excellency committed an act both unjustifiable and despotic; and that in now placing his *protégé's* name as surgeon on the unattached list of the Royal Guernsey Militia, General Slade leaves the grievance complained of unredressed.

The following copy of a resolution passed at a meeting of the Executive Committee of the Medical Council, held on the 1st inst., has been forwarded to us for publication.

"Certificates having been produced to the Committee of the conviction of Evan Thomas, at Liverpool, for perjury, and of the conviction of Robert Wrixon, at Reading, for forgery, the Registrar was directed to erase the names of those persons from the *Medical Register*."

In an action lately brought before a law-court in New York for damages in a case of alleged malpraxis, Judge Hare very clearly laid down the principles which should guide the jury in arriving at conclusions. He said:

"We know nothing of the effects of the agents of this description, except from experience; and the records of that experience are to be found in scientific works, and the evidence of men who have made the subject their study. The jury are, however, to decide in the last resort; but even if they doubt the safety of the agent employed, there is still a consideration of the highest

reason which they ought not to disregard. All science is the result of a voyage of exploration, and the science of medicine can hardly be said yet to have reached the shore. Men must be guided, therefore, by what is probably true, and are not responsible for their ignorance of the absolute truth which is not known. If a medical practitioner resorts to the acknowledged proper sources of information, if he sits at the feet of masters of high reputation, and does as they have taught him, he has done his duty, and should not be answerable for the evils which may result from errors in the instruction which he has received. Medical opinion varies from time to time. What is taught at one period may be discovered to be erroneous at another; but he who acts according to the best known authority is a skilful practitioner, although that authority should lead him, in some respects, wrong. He will then have done all that he can, all that is given to man to do, and may leave the result, without self-reproach, in the hands of a higher power."

THE following are the addresses which were lately presented to the Queen and to the Prince of Wales by the College of Physicians:—

"*To the Queen's Most Excellent Majesty.*

"MOST GRACIOUS SOVEREIGN,—We, your Majesty's most loyal and dutiful subjects, the President and Fellows of the Royal College of Physicians of London, crave permission to lay before your Majesty our humble but fervent congratulations on the marriage of their Royal Highnesses the Prince and Princess of Wales.

"We hail their auspicious union, which has filled the land with rejoicing, as promising a renewal of the inestimable blessing which this nation has long enjoyed in the bright example of your Majesty's domestic life.

"We further rejoice in it through the hope and belief that to your Majesty it has already brought much joy and consolation, and will remain a source of felicity.

"With thankfulness, therefore, and with trust, we pray that divine goodness may support your Majesty under your heavy trials, may guard your Majesty's health, and largely increase the happiness of your Majesty and all your royal family."

"*To His Royal Highness the Prince of Wales.*

"MAY IT PLEASE YOUR ROYAL HIGHNESS,—The President and Fellows of the Royal College of Physicians of London humbly but ardently desire to congratulate your Royal Highness on your most auspicious marriage.

"We firmly believe that at no former period of English history has the heart of the whole nation been so warmly attached to its sovereign as it now is to our Most Gracious Queen and to all her Royal Family.

"Hence the universal joy, the irrepressible ardour, with which the nation welcomed the arrival of the Princess, whom fame had truly reported to be in every way worthy of your Royal Highness's choice.

"Therefore, in common with all her Majesty's subjects, we rejoice in a union which promises all that could be desired for your Royal Highness and the Princess of Wales, as well as for the best interests and future prospects of the realm; and we pray that divine Providence may shower down its choicest blessings on both your Royal Highnesses, and grant you uninterrupted health and happiness through a long life, cheered by the devoted affection of a loyal and contented people."

Italy has lately lost two of her *savants;* viz., the astronomer Amici, a senator of the kingdom, who died suddenly of apoplexy, at the age of 78; and Dr. Betti, professor at the School of Medicine of Florence.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

LANCASHIRE AND CHESHIRE BRANCH.

Sympathy with Dr. Waters. At a meeting of the Council of the above Branch, held April 28th, 1863, at the Royal Institution, Manchester; G. SOUTHAM, Esq., in the chair—it was unanimously resolved:—

"1. That the Council of the Lancashire and Cheshire Branch of the British Medical Association desires to express its deep sympathy with Dr. Edward Waters of Chester, in reference to a late trial; and to congratulate him on having, on that occasion, so successfully vindicated his moral and professional character.

"2. That this Council feels called upon to record its protest against the assumption, by medical witnesses in courts of law, of the function of advocates, and to deprecate the substitution of personal opinions in the place of facts, especially when, as in the above-mentioned cause, the honour of a professional brother is involved.

"3. That it be a recommendation from the Council to the members of the Branch, and to the medical men generally in the district, to contribute to the subscription which has been opened at Chester for the purpose of indemnifying Dr. Waters for the expenses incurred in the above trial."

METROPOLITAN COUNTIES BRANCH: SPECIAL GENERAL MEETING.

A SPECIAL general meeting of this Branch was held at 37, Soho Square, on Tuesday, May 5th, at 4 P.M.; R. DUNN, Esq., President, in the Chair.

Medical Evidence in Courts of Law. The PRESIDENT observed that it was scarcely necessary to remind the meeting how greatly the dignity and well-being of the profession depended on the moral bearing of its members. The Council of the Branch had, in consideration of this and of certain events which had taken place during the past year, thought it a duty to call the members of the Branch together with the object of laying down certain principles by which the conduct of medical men in the witness-box should be guided. He trusted that in the discussion on the resolutions to be brought forward all personal matters would be avoided, but that the question would be dealt with on general grounds.

A series of resolutions was then read.

After some discussion, it was resolved, on account of the importance of the subject,

"That the resolutions now read be referred to the Council of the Branch, and printed, with such amendments as they may judge necessary; that they be circulated for consideration among the members of the Branch; and that the discussion of them be adjourned till a general meeting, to be called by the Council at an early date."

The meeting then adjourned.

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 5th :—

Armstrong, Joseph Foster, South Shields
Atherton, Ebenezer, Bingley, Yorkshire
Beeby, Walter Thomas, M.D.St. And., Kilburn
Chaffers, Edward, Enfield, near Accrington
Clifton, George Herbert, Burwell, Cambridgeshire
Colman, Walter, Wymondham, Norfolk
Cope, Walter Henry, L.S.A., Buckingham Street, Strand
Davey, Francis Albert, Bath
Fawcett, Francis Molineaux, Yarm, Yorkshire
Foster, John Bunyan, Huntingdon
Grimbly, Owen, M.D.St. And. & L.S.A., Banbury
Mallam, Henry Parr, L.S.A., Oxford
Mudge, Belling Harvey, Bodmin, Cornwall
Parker, Benjamin Whitehead, L.S.A., Farington, Lancashire
Parson, Thomas Cooke, Bristol
Pearce, Francis Drake, L.S.A., Kingsbridge, Devon
Pigott, Paynton, Great Wilbraham, Cambridgeshire
Shillitoe, Richard, Hitchin, Herts
Sinclair, Duncan Francis, Halstead, Essex
Williams, John Babington, Sydney Street, Brompton

THE FELLOWSHIP. At a meeting of the Council of the College, on March 4th,

Crosse, John Burton St. Croix, of the 11th Hussars, was admitted a Fellow, having been elected at a previous meeting of the Council; diploma of membership dated August 11, 1837

Travers, William, of the Charing Cross Hospital, has just passed the preliminary examination for the Fellowship; having been admitted a member on April 17, 1860

UNIVERSITY OF ST. ANDREW'S. The following gentlemen, having passed the necessary examinations, were admitted to the Degree of Doctor of Medicine, on April 28th, 1863 :—

Butler, Alfred, London
Campbell, Hugh, London
Chavasse, Chas. A., Smethwick
Davey, James George, Northwoods, near Bristol
Hood, Peter, London
Hutchinson, Christopher Francis, Bridlington
Lennox, Walter W., Hamilton
Macintosh, Chas. H., Torquay
Robinson, John W., London
Taylor, George, Derby

The following gentlemen also passed the necessary examinations, and will receive the Degree next year.

Smith, Josiah Sidney, Tiverton
Walsh, James, R.N.

APOTHECARIES' HALL. On April 30th, the following Licentiates were admitted :—

Brown, Frederick Gordon, Finsbury Circus
Frankish, John David, Christchurch, New Zealand
Mason, Thomas Edward, Deal, Kent
Langford, Charles Phineas, Hingham, Norfolk
Morton, John, Holbeach, Lincolnshire
Reddrop, John, Tiverton, Devon
Stubbs, Henry, Brierley Hill
Sutton, Frederick, Marton Vicarage, Gainsborough
Taylor, John William, New Malton, Yorkshire
Weaving, Albert, Oxford

At the same Court, the following passed the first examination :—

Sanders, Thomas, University College

APPOINTMENTS.

BOOTH, Lionel, M.D., appointed additional Resident Medical Officer to the York Dispensary.

CLOUSTON, Thomas S., M.D, appointed Medical Superintendent of the Cumberland and Westmoreland Lunatic Asylum.

HALL, John, M.D., appointed Assistant House-Surgeon to the General Hospital, Nottingham.

MURRAY, William F., Esq., appointed Resident Surgeon to the Birmingham and Midland Counties Lying-in Hospital.

RINGER, Sydney, M.B., appointed Assistant-Physician to University College Hospital.

STURGES, Octavius, M.B., appointed Physician to the Chelsea, Brompton, and Belgrave Dispensary.

POOR-LAW MEDICAL SERVICE.

DONOVAN, Dionysius, M.B., to District No. 6 of the Basford Union, Nottinghamshire.

HAWKINS, James S., Esq., to the Workhouses of the Stepney Union at Bromley and Limehouse.

HITCHINS, Charles V., Esq., to District No. 3 (the parish of Weston-super-Mare) of the Axbridge Union.

LAKIN, James Henry, M.B., to the Sutton Coldfield District of the Aston Union, Warwickshire.

PALEY, James, Esq., to the Seventh District of the Sevenoaks Union.

SHAW, Jonathan, Esq., to the Bishopwearmouth West District of the Sunderland Union.

SHEPHERD, Thomas, Esq., to the Rainford District of the Prescot Union, Lancashire.

TURNER, Edward W., Esq., to the Fritwell District of the Bicester Union, Oxfordshire.

WYER, Otho F., Esq., to the Nuneaton District of the Nuneaton Union.

ARMY.

BEATSON, Deputy Inspector-General G. S., M.D., to be Inspector-General of Hospitals, *vice* W. Linton, M.D., C.B., retiring on half-pay.

CHAMBERS, Surgeon-Major J. W., M.D., 35th Foot, to be Deputy Inspector-General of Hospitals, *vice* J. S. Prendergast, M.D.

DEMPSTER, Staff-Surgeon-Major J. C., M.D., to be Surgeon 35th Foot, *vice* J. W. Chambers, M.D.

FRASER, Assistant-Surgeon D. A. C., M.D., 76th Foot, to be Staff-Surgeon, *vice* R. K. Prendergast.

INGLIS, Surgeon-Major J. G., M.D., C.B., 64th Foot, to be Deputy Inspector-General of Hospitals, *vice* G. S. Beatson, M.D.

MACKIE, Staff-Assistant-Surgeon D., M.D., to be Assistant-Surgeon 7th Foot, *vice* M. Quinlan.

MOORE, Staff-Assistant-Surgeon F. W., to be Staff-Surgeon, *vice* J. C. Dempster, M.D.

ORTON, Staff-Assistant-Surgeon R. J. W., to be Assistant-Surgeon 76th Foot, *vice* D. A. C. Fraser, M.D.

POWER, Staff-Assistant-Surgeon J. L., to be Assistant-Surgeon 97th Foot, *vice* T. Sharkey.

PRENDERGAST, Deputy Inspector-General J. S., M.D., retiring on half-pay, to have the hon. rank of Inspector-Gen. of Hospitals.

ROSS, Staff-Assistant-Surgeon W. G., M.D., to be Assistant-Surgeon 8th Foot, *vice* W. Jay.

SCOTT, Staff-Assistant-Surgeon F. B., M.D., to be Assistant-Surgeon 18th Hussars, *vice* W. R. Wall.

WHITE, Staff-Assistant-Surgeon W. A., M.D., to be Staff-Surgeon, *vice* W. Dick, M.D.

WILLIAMSON, Staff-Surgeon-Major G., M.D., to be Surgeon 64th Foot, *vice* J. G. Inglis, M.D., C.B.

To be Staff-Assistant-Surgeons :—

CARBERY, Assistant-Surgeon A. T., 14th Foot.
JAY, Assistant-Surgeon W., 8th Foot.
KEARNEY, Assistant-Surgeon P. B., 1st West India Regiment.
QUINLAN, Assistant-Surgeon M., 7th Foot.
SHARKEY, Assistant-Surgeon T., 97th Foot.
THOMPSON, Assistant-Surgeon J., 4th West India Regiment.

MILITIA.

PALEY, T. C., Esq., to be Surgeon 3rd West York Militia.

BIRTH.

FELCE. At Launceston, on May 3rd, the wife of *Stamford Felce, L.R.C.P.Ed., of a daughter.

MARRIAGE.

FOSTER, Michael, jun., M.D., of Huntingdon, to Georgina Gregory, second daughter of Cyrus R. EDMONDS, Esq., at Bloomsbury Chapel, on April 30th.

DEATHS.

BRETT. On May 3rd, at Watford, Herts, the infant son of *A. T. Brett, M.D.

DUNN. On May 1st, at Feckenham, near Bromsgrove, aged 35, Catherine Jane, wife of *George P. Dunn, Esq.

SILLIFANT. On April 25th, at Thornhill Square, Barnsbury, aged 35, Betsy H., wife of Horatio Sillifant, M.D.

VANDENBERGH. On April 30th, at 39, Bethnal Green Road, Mary Anne, wife of A. S. Vandenbergh, Esq., Surgeon.

DR. B. W. RICHARDSON has been elected a member of the American Philosophical Society, Philadelphia.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY WINDING UP ACT (1861) AMENDMENT BILL. This bill was read a second time on Monday last.

BEQUESTS. By will, George Lake, Esq., of Frinsbury, Kent, bequeaths to the Kent and Canterbury Hospital, and the Maidstone and Kent Ophthalmic Hospital, each £100.

ROYAL NAVY COMPASSIONATE FUND. In the Navy Estimates for 1863-64 there is a vote of £14,000 for allowances to the children of naval and medical *officers* who may be placed on the Compassionate List.

Open Competition. Of the 171 candidates who competed for 80 appointments in the civil service of India in 1862, 37 were the sons of clergymen, 3 of Dissenting ministers, 3 of missionaries, 3 of physicians, 6 of surgeons, 3 of schoolmasters, 6 of officers in the Indian army, 3 of Indian army surgeons.

University of Edinburgh, Dr. Douglas Maclagan, the new Professor of Medical Jurisprudence in the University, delivered his introductory lecture to the students on May 4, at the opening of the summer session. There was a considerable attendance of students; and Dr. Maclagan, on entering the class-room, accompanied by Professors Christison, Blackie, and Muirhead, was received by them with prolonged applause.

Westminster Hospital School of Medicine. On the 14th inst., the prizes connected with the Westminster Hospital School of Medicine were distributed in the board room by the Dean of Westminster. Mr. Bouverie, M.P., and the medical officers of the hospital, supported the very rev. chairman. The principal prizemen were Mr. Charles Hawkins, Mr. G. E. Pearce, Mr. W. Gandy, Mr. A. L. Peacocke, Mr. G. Mowatt, Mr. W. H. Kempster, Mr. F. P. Edis, Mr. R. Burnham, Mr. Bates, and Mr. B. N. Hyatt.

Importation of Peruvian Bark. The average importation of Peruvian bark for five years ending 1840 was 280,000 lbs. In 1845, 5,078 cwt. was received, of which 4,100 cwt. was re-exported. In 1850 the imports had increased to 10,536 cwt., and from that period they gradually advanced to 27,598 cwt. in 1856, the largest quantity ever received. Since that time there has been a steady retrogression to 21,000 cwt. in 1857, 18,000 cwt. in 1858, and 9,000 cwt. in 1860. In 1861 there was a partial recovery to 12,477 cwt., of the estimated value of £185,672.

The late Mr. Armstrong, of Carlisle. An appeal is made on behalf of the family of the late Mr. Armstrong, surgeon, of Carlisle. He has left a widow and seven young children, badly provided for; and some of his brother professionals, along with a few other gentlemen, have set on foot a subscription to assist those who are thus bereaved and distressed by the death of one who was an active public servant and a most estimable gentleman. Subscriptions to "The Armstrong Fund" will be received by Mr. W. B. Page; or by Dr. Elliot, Carlisle; or by any of the Carlisle Banks.

The Recent Accidents in the City. A parliamentary return just issued gives the number of persons injured during the Royal procession and illuminations of the 7th and 10th of March last. It appears that on the 7th there were reported to the City police accidents resulting in death, 2; broken limbs, 1; and otherwise injured, 1. On the 10th there were seven accidents reported resulting in death, three resulting in broken limbs, and five in other injuries. Of the returns made to the Metropolitan police, there was one only on the 7th, a Mrs. Langley, who was slightly bruised. On the 10th there were three cases, two of broken limbs, and one slight injury. The total of accidents reported is twenty-three.

Royal College of Veterinary Surgeons. The annual meeting of this body was held on the 14th inst., at the College, Red Lion Square, Professor Simonds in the chair. The number of members of the college practising in the kingdom was 1,018, while the number of those who improperly assumed the title of veterinary surgeon was 1,244, and those practising as farriers 1,189. It was strongly urged by the speakers that legislative interference should be sought to protect the legitimate members of the profession from the false representations of unqualified practitioners, and also to secure immunities and exemptions for the members in reference to serving as jurors.

Typhus in the American Army. The prevalence of typhus and typhoid fevers in the army, in military, and in many civil hospitals, is worthy of notice. In many instances the fever seems to be purely typhus, and very contagious. We hear almost daily notices of the sickness, and, too frequently, of the death of medical attendants. In another column we record the deaths of two members of the resident staff of Bellevue Hospital during the same week. It is to be feared that typhus may yet be prevalent in the military hospitals. To guard against this should be the study and effort of every surgeon in charge. (*American Medical Times.*)

Dangerous Lunatics. In the House of Commons, on Thursday week, Mr. M'Evoy asked the Chief Secretary for Ireland whether the Government would this Session introduce a Bill to extend to Ireland such provisions of the Act 16th and 17th Victoria, cap. 97, as would enable magistrates to commit dangerous lunatics direct to asylums instead of to the county gaol, as was now necessary. Sir R. Peel had no doubt considerable inconvenience existed in Ireland, particularly in the counties of Donegal and Wexford, in the matter alluded to by the hon. gentleman. When the new lunatic asylums were completed an alteration in the law would be effected.

Military Hospitals. The Army Sanitary Commissioners on the occasion of their visit to the hospitals, barracks, and other government buildings at Chatham, a few days since, approved of the proposal for the conversion of the buildings at Fort Pitt into a hospital for the whole of the troops of the garrison, including the Royal Artillery, the Royal Engineers, and the three depôts battalions of infantry. The invalids from the Royal Marines will continue to occupy Melville Hospital, as at present. Fort Pitt Hospital will accommodate about three hundred patients, which is probably in excess of the number who will occupy it at one time.

Medical Benevolent College. There are at the present time resident at the college at Epsom twenty pensioners, being aged medical men or their widows, each of whom is provided with three comfortably-furnished rooms, an allowance of three tons and a half of coals, and a pension of £21 a year. There are also resident in the college 180 boys, the sons of medical men. The income for the last year amounted to £9,340, made up as follows: Annual subscriptions, £3,114; donations, £1,006; dividends, £168; school payments, £5,052. The expenditure for the year had been £8,658.

Action for Slander. Barnes *v.* Horne and Wife. This was an action tried by a Common Jury. The plaintiff was a young surgeon, who sought to recover damages for a very serious slander alleged to have been uttered by the female defendant, who had accused him of having treated her unskilfully during her confinement. The defendants pleaded that what had been stated was true. Mr. Serjeant Ballantine, among other topics, urged upon the jury the hardship of making a poor man (an assistant at the British Museum at £65 a year) pay heavy damages because he had believed his wife and stood up for her; but Mr. Powell, in his reply, called their attention to the fact that the defendants had neither withdrawn the previous imputations cast upon the plaintiff's character, nor uttered one word of apology. The learned counsel added that he wanted only to clear the plaintiff from the charges made against him, and that very moderate damages would content him. The jury found for the plaintiff—Damages, £5.

Action for Recovery of Fees. Turner and Another *v.* Raynell. This was an action brought a few days ago, on a surgeon's bill to recover £46, in which a verdict was found for the plaintiff. A rule having been obtained to set aside this verdict and enter it for the defendant, on the ground that one of the plaintiffs was not registered as a surgeon when the action was commenced, and that

therefore, being partners, neither of them could sue for the partnership account. The Chief Justice, in giving judgment, said this was an action for medical attendance and medicines supplied, and there could be no doubt that the defendant had had the consideration for the bill, and he now claimed to defeat the action under the 22nd section of the Medical Act, which provided that no medical man should recover for his services unless he proved at the trial that he was registered under the statute. But the plaintiffs had complied with the words of the statute; they were registered at the trial. There was a direct judgment of the Court of Exchequer in Ireland that this was sufficient, and he entirely concurred with that authority. If one of the partners only was registered he still thought they were entitled to recover. A medical man might employ an assistant or other person not qualified. Here one of the partners was qualified from the beginning as a surgeon and an apothecary, and the defendant had the fullest security in employing a firm the head of which was qualified and registered. How could it matter to the patient when a medical man sent his assistant, who was not qualified, whether that person called himself a partner or assistant; or whether he was entitled to be paid for his services by a salary or by a proportion out of a partnership? So far as the patient was concerned, it seemed to him to be precisely the same thing. Here both partners were thoroughly qualified; but the head of the firm thoroughly well qualified and registered gave the valuable services for which the defendant was taking what he (the learned judge) might call a stamp objection to prevent his recovering, which he thought not tenable. The other learned judges concurred. Rule discharged.

The Wakley Testimonial. At a meeting of the Board of the Briton Medical and General (and New Equitable) Life Association, held at the offices, No. 429, Strand, on Thursday, April 23rd, 1863, Dr. Barlow in the chair, it was duly proposed, seconded, and unanimously resolved: "That the sum of fifty guineas be voted to the 'Wakley Testimonial Fund,' and that the same be forwarded to the Committee through Mr. T. H. Wakley, one of the Examining Surgeons of the Association. That the Board of Directors, being most anxious to place on record the esteem in which they hold the name of the late Thomas Wakley, Esq., the Founder of the New Equitable Life Assurance Society, gladly avail themselves of the present opportunity of recording their appreciation of the many excellent qualities and great abilities which secured him the deserved popularity he enjoyed with the medical profession and the public generally at the time of his comparatively early death; and thus especially, though inadequately, to recognise the valuable services rendered by him to the New Equitable Society." John Messent, *Secretary*.

Mortality in England. In the ten years 1851-60 the annual mortality in the districts comprising the chief towns was 24·57 per 1,000 living; in the districts comprising small towns and country parishes, 19·77; in all England, 22·24. The deaths of males averaged 23·18 per 1,000 living; of females only 21·24. Out of equal numbers living there were 109 deaths of males to 100 deaths of females. Of the persons who lived to be 100 years old there were two women to one man. Two of the 623 districts into which England is divided—namely, Farnborough in Surrey, and Bellingham in Northumberland, with a population respectively of 14,318 and 7,080, took the lead in healthiness, and had in the ten years an average annual of mortality of only 14 in 1,000; and two other districts in Northumberland, Glendale, with a population of 13,211, and Rothbury, with 7,147, had an average annual mortality of only 15 in 1,000. In no other entire district was the annual mortality so low as 15; but it was only 16 in 10 districts—namely, Epsom, Bromley, Steyning, Easthampstead (Berks), Dulverton (Somersetshire), Billesdon (Leicestershire), Hemsworth (Yorkshire), Belford (Northumberland), Bootle, (Cumberland), and Knighton (Radnorshire). In the entire district of St. George's Hanover Square, the average annual mortality was only 18 per 1,000, and the same in Lewisham, and in the Hampstead district only 17; taking the whole country through, not above one district in five had so low a mortality as 18. During the ten years 1851-61, from Census to Census, London increased its numbers 121 a day, 72 by excess of births over deaths, and 49 by immigration; but this continual accumulation of human beings within its limits did not bring an increased mortality. In the ten years 1840-49, the average annual rate of mortality in London was 25·1 per 1,000; in the subsequent decennium, 1850-59, it fell to 23·6 per 1,000. This may seem a small thing in a single thousand, but London has nearly three thousand thousands.

Small-Pox in London. At a special general meeting of the Metropolitan Association of Officers of Health, held on the 25th ult., at 8, Richmond Terrace, it was resolved unanimously to adopt the following circular, prepared by the General Purposes Committee, relating to the recent alarming progress of small-pox in the metropolis, and to the necessity of a combined effort to arrest the further diffusion of the disease:—"The Association having taken into their consideration the present prevalence of small-pox in London, deem it to be their duty to call the attention of the guardians of the poor and other local authorities of the metropolis to the subject. They regret to find that the epidemic is still on the increase. In some of the metropolitan districts, the mortality has already attained alarming proportions. It can scarcely be hoped that others equally populous will remain exempt, unless energetic measures are taken to arrest the further progress of the outbreak. While there can be no doubt that the prevalence of the disease is mainly attributable to the neglect of vaccination, and to the defective and unsatisfactory manner in which the operation is too frequently performed, and that if good vaccination were universal small-pox would be almost unknown, it is not the less apparent that the prolonged residence of infected persons in rooms occupied by others, the exposure of such persons in the streets, in public conveyances, or in the waiting-rooms in hospitals, and the absence of adequate means of isolation, have been the immediate agents in bringing about the recent rapid diffusion of small-pox. During the present epidemic, these causes are in operation to a far greater extent than they were in that of 1859-60. In consequence of the insufficient size of the Small-pox Hospital, and the absence of any other provision for the reception of cases, persons having small-pox are daily applying in numbers for admission into the general hospitals. Every such application is necessarily refused; the sufferer is sent back to his home, there to become, against his will, a source of infection to his neighbours. The Association are of opinion that, whenever a case of small-pox occurs in a populous locality, the patient ought, in the interests of public health, to be removed as soon as possible; and that, in order to facilitate such removal to the utmost, it is not only necessary to provide for the gratuitous conveyance of small-pox cases, but for their reception and treatment. For this purpose, it appears to them indispensable that, during the continuance of the present epidemic, temporary buildings or wards should be opened in such situations as may be best suited for the purpose, on the double ground of distance from inhabited houses and facility of approach. As regards vaccination, it is desirable that every facility should be offered for the gratuitous vaccination of all who are willing to apply for it, whether they have been previously vaccinated or not; and that the times and places appointed by the guardians for vaccination should be notified by bills posted in prominent places. It is fur-

ther necessary that, in all those districts in which small-pox is prevailing, and in which there is reason to believe that vaccination has been neglected, personal inquiries as to the cause of this neglect should be made by inspectors temporarily appointed for the purpose, who should be empowered by the guardians to take proceedings under the Vaccination Acts Amendments Act, 1861, in all cases of wilful refusal to comply with the requirements of the law. (Signed on behalf of the Association.) R. D. Thomson, *President;* Thomas Hillier, George Buchanan, *Secretaries.*

Action for Recovery of Physician's Fees: Gibbon *v.* Budd. This was an action to recover £21, for fees, tried before Baron Bramwell, at Guildhall, when a verdict was found for the plaintiff for that amount. Mr. Lush, Q.C., moved for and obtained a rule for a new trial, or to set aside the verdict and enter a nonsuit, on the ground that a physician could not recover fees without a special contract. The jury had found that the plaintiff had attended the patient in the character and capacity of a physician; and the question raised for the opinion of the Court was whether a physician could, under the Medical Practitioners' Act 21 and 22d Vict., cap. 90, recover his professional fees. The principal authority upon the point previous to the passing of that act was "Veitch *v.* Russell," in which the Court of Queen's Bench held, in 1842, that a physician had in general no legal right of action for his fees, but he might have it by a special contract. The College of Physicians have made a bye-law preventing any Fellow of the College from suing under this section, but there is no restriction placed upon members simply. In the Court of Exchequer, on Thursday, April 30, Mr. Serjeant Parry and Mr. H. T. Cole showed cause against the rule. They contended that the Medical Act required that all persons practising the medical profession should be registered according to their qualifications. The plaintiff was duly registered; and as a member of the College of Physicians he had a right to the remedy specially provided by the 31st section of the Act. Mr. Lush, Q.C., and Mr. Dowdeswell, in support of the rule, contended that the statute was not an enabling statute intended to confer upon a physician a right to sue; but, on the contrary, imposed upon him a liability to register before he could sue at all; but he was still obliged to make a special contract before he could maintain an action. The law with regard to a physician's right to recover his fees was in precisely the same state now as it was before the passing of the Medical Act, except that he must be registered. The Act did not compel medical men to register, but invited them to do so, pointing out that if they did not they should not recover their fees in courts of law. Unless the Act of Parliament created a liability which without the Act would not exist, then physicians had no right to recover. Their rights are not enlarged by the 31st section. They have a right to sue according to their registered qualification. A physician always could recover fees if he made a contract, and that was his position now. There still must be an actual promise to pay. The Lord Chief Baron said that all the members of the Court were of opinion that the rule should be discharged. The proviso in clause 31 put an end in his mind to all doubt about the true construction of the clause itself, because it said that all persons registered under the act should be entitled, according to their qualifications, to practise medicine or surgery, and to demand and recover in any court of law reasonable charges for professional aid, advice, and visits, and the cost of medicines. Then, with respect to physicians, it said that it should be lawful for the College of Physicians to pass a bye law to the effect that no one of their fellows or members should be entitled to sue in the manner aforesaid in a court of law, and that such bye-law might be pleaded as a bar to his action. That seemed to mean that whereas heretofore there was a doubt about the right of a physician to recover his fees, it should now be the law that he might recover them; but, nevertheless, the College of Physicians, if they desired to preserve that sort of dignity which was secured by not practising, except for some supposed honorarium, might pass a bye-law for the purpose. Formerly the presumption was that the services of a physician were honorary and gratuitous, at least so far that he could not make a legal claim for payment; but now it was the other way, and a physician practising without making a distinct arrangement that he was not to be paid, was entitled to be paid and recover his claim unless he were restrained by a bye-law of the College of Physicians. He, therefore, thought the plaintiff was entitled to recover. Mr. Baron Martin and Mr. Baron Bramwell having expressed a similar opinion, the rule was discharged.

Trial for Manslaughter. An inquest was held at Woughton-on-the-Green, Buckinghamshire, Sept. 6th, 1862, by Mr. Worley, on the body of a woman who had died as follows. Deceased was taken in labour on Sept. 3rd, and attended by Mr. Miles of Fenny Stratford. When Mr. Miles arrived, finding there was a good deal of bloody discharge, he ordered the woman to bed, and tried to deliver her with his hands. He had no instruments. After about five or six hours, Mr. Miles left the woman, saying that he would be back in three quarters of an hour, or an hour at the latest, but did not return at all. Before Mr. Miles left, the bed was covered with blood in all directions. The woman was in good health before labour; she had strong labour-pains, and appeared very well at the commencement of labour. Some hours later, finding that Mr. Miles did not return, the husband (a farm-labourer) procured an order from the overseer for Mr. Deyns, the medical officer of the district, to attend. Mr. Deyns found the woman in a very exhausted state, and that labour-pains had ceased. Stimulants were given; and Mr. Deyns sent for his instruments. On examination *per vaginam*, the head was found presenting, but was arrested in the superior strait of the pelvis. He cautiously introduced the forceps, and after a brief interval, removed, without any difficulty, a full-grown child, which had been dead apparently for some hours. The patient never rallied from the time Mr. Deyns first saw her till she died on the following day at 6 P.M. This was the sixth child deceased had borne, four being now alive. She was a stout, strong looking woman. At the inquest, Mr. Miles stated, that from the first he thought it a difficult case, and advised the patient repeatedly to have some other advice; but that she was averse, until the symptoms were so urgent that she consented for Mr. Miles going for Mr. Bryant of Stewkley (a distance of eight or nine miles), who, he said, was in the habit of meeting him in any difficult cases. Mr. Miles said that it was a cross-birth; and that on examination *per vaginam*, the head of the child was towards the back of the mother, and the back part of the neck was all that he could feel with his hand; but "that after some trouble he managed to improve the position by getting the head down partly into the vagina." The jury returned a verdict of manslaughter against Mr. Miles. At the request of Mr. Miles, an order was obtained from the Secretary of State, Sir George Grey, to have the body exhumed; and on September 25th, a *post mortem* examination was made by Mr. Coombs of Bedford, on behalf of Mr. Miles, in the presence of Messrs. F. Deyns, J. Hochee, and H. Hailey, surgeons, and Mr. Miles. Mr. Coombs having made an incision down the centre of the abdomen, and exposed the uterus, placed his hand into the cavity, immediately discovering a wound in the uterus just behind the symphysis pubis, to which he directed attention; adding that, "this is a serious finding." Mr. Coombes had his finger in the wound, which was afterwards examined in a similar

manner by Mr. Hailey. The uterus was then removed from the body; and a round wound was observed of about the size of a sixpence in its anterior part, about an inch and a half above the mouth of the womb, which would just admit the introduction of the finger. The parts surrounding this wound for about two inches and a half were much decomposed, and readily yielded to the pressure of the finger; a similar opening was thus easily produced. The trial of Miles took place at Aylesbury on March 18th. The medical witnesses examined on behalf of the Crown were Messrs. Deyns, Hochee, and Hailey; Mr. James Coombs of Bedford (who like the prisoner had for many years carried on the business of chemist and druggist) was called as a witness on behalf of the defence. The judge, in his opening address to the grand jury, dilated upon the case, and told those gentlemen he did not think they would find it necessary to bring in a true bill. The grand jury, however, found a true bill against the prisoner. At the trial, the medical testimony on the part of the prosecution was directed to the facts that the death of the patient was caused by prostration and hæmorrhage, the result of the lesion in the uterus; and also that the hole in the antero-inferior portion of the uterus, from its peculiar shape and size, could not have been produced by the forceps. The medical testimony for the prisoner was intended, if possible, to contradict the evidence already produced, and to prove that the instrument would produce such a lesion, and to assert that the attempt to produce a similar opening on the uterine surface with the finger had failed. The judge summed up in favour of the prisoner, eulogising him for his extensive experience in midwifery, and the jury returned a verdict of not guilty.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Newton Heale, "On the Physiological Anatomy of the Lungs"; Dr. Dickinson, "On a Fœtus without Heart or Brain."—Zoological.

WEDNESDAY. Society of Arts.—Microscopical—North London.

THURSDAY. Antiquarian.

FRIDAY. Royal Institution.—Western Medical and Surgical.

SATURDAY. Association Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 2, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1002 / Girls.. 973	1975	1374
Average of corresponding weeks 1853-62		1981	1287

Barometer:

Highest (Sun. & Fri.) 30.082; lowest (Tu.) 29.652; mean, 29.909.

Thermometer:

Highest in sun—extremes (Mon.) 104.5 degs.; (Th.) 79.3 degs.

In shade—highest (Mon.) 68 degs.; lowest (Fri.) 31.4 degs.

Mean—47.8 degrees; difference from mean of 43 yrs.—1.3 degs.

Range—during week, 36.6 degrees; mean daily, 22.6 degrees.

Mean humidity of air (*saturation*=100), 72.

Mean direction of wind, N.W. & N.E.—Rain in inches, 0.18.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. W. A. SMITH'S WORK ON ENTOZOA.—SIR: As the accompanying extract from a letter which I have recently (April 29th) received from my friend M. Davaine, author of the *Traité des Entozoaires*, will serve to show why my obligations to him were not acknowledged upon the title-page of *Human Entozoa* (in addition to the expression of thanks in the Preface, and the repeated mention of his name throughout the book), I should be greatly obliged by your giving an insertion to it.

May 1863. I am, etc., WM. ABBOTTS SMITH.

Extract from M. Davaine's letter.

"Je vous autorise à dire que c'est avec mon consentement que votre ouvrage ne porte point le titre de traduction. Cet ouvrage, ne reproduisant pas le mien intégralement, ne pouvait en être considéré comme le traduction."

PRACTICAL OBSERVATIONS ON THE PURULENT OPHTHALMIA OF INFANTS.—SIR: I am surprised that Mr. Wordsworth, in his "Practical Observations on the Purulent Ophthalmia of Infants", should have omitted to mention that which, I am thoroughly convinced, is the most important remedy in the treatment of the disease, as well as the true prophylactic. I allude to the "obscuration of light". Four years ago, I invited the attention of the profession to this fact; and my subsequent experience has strengthened my former conviction of its truth. As Mr. Wordsworth is evidently disposed to sympathise with the sufferings of helpless infants, I entreat his consideration of my observations on this subject, which were published in the medical journals, and in more detail in my little work on *The Diseases of Infants and Mothers*. I have entirely banished the disease from my own practice.

I am, etc., THOMAS BALLARD, M.D.

Southwick Place, May 2nd, 1863.

THE CASE OF GATTIE *v.* HALFORD.—SIR: A writer in your last number repeats an insinuation against me, which he had previously brought forward in the *Medical Times and Gazette*, and which had been already amply reported in that journal.

This writer avoids stating in precise terms what evidence it is that he would fain hold up to professional animadversion; but "*he believes* that Dr. Barnes affirmed that the conformation of the pelvis was perfectly normal, in order the more completely to exclude the possibility of unavoidable injury to the nerve during the passage of the head."

A writer who professes to quote from "an accurate account", might be expected to state his charge in definite terms. It must be left to the members of the Hunterian Society, or others who know the writer, to decide what amount of confidence is to be placed in what "he believes", when framing injurious insinuations against a brother practitioner. For those who may not know him, I beg to state that so far is the evidence, expressed or inferred, imputed to me, from being correct, that I spontaneously said in open court, that the accident which had happened to the defendant in the case—namely, injury of the sciatic nerve by the forceps—had also happened to myself.

The learned judge expressly commended the moderation and fairness of my evidence. In the reports of the trial, the names of the witnesses were all thrown together, as if they had all concurred in the same evidence. I deny generally the accuracy of the reports as applicable to myself.

In conclusion, I beg to say that I must decline to notice any further attacks emanating from this person.

I am, etc., ROBERT BARNES.

46, Finsbury Square, May 6th, 1863.

THE URETHROSCOPE.—SIR: In your publication of April 18th, there is an article, taken from the *London Medical Review*, on the use of the Urethroscope, on which I wish to make some observations. I have for the last ten years made use of M. Desormeaux's instrument, with some alteration effected by myself, and the use of the instrument I mentioned in my book on Gleet (1857). The urethral extremities of the tubes should be very blunt and nicely rounded. Some, which I got from Paris, were so sharp, that my patients could not bear their introduction. The patient should be placed on a long high table, and the instrument should have a separate stand for itself, capable of being elevated or lowered by a screw.

I am, etc., HENRY DICK.

Wimpole Street, W., April 22nd, 1863.

WOUND OF THE VERTEBRAL ARTERY.—SIR: In the event of the recurrence of so rare an accident as that recorded by Mr. Augustin Prichard in the JOURNAL of April 18th, where, as Mr. Prichard remarks, we cannot avail ourselves of ligature either of the artery itself or of any anastomosing branches to arrest the hæmorrhage, I think we should pay great attention to insure the perfect rest of the severed tissues; and for this end should prevent any gliding of the occipital bone on the atlas, or rotatory movement of the atlas

on the axis. The patient might be placed in a half-sitting posture, with his back supported by a bed-rest, so constructed as to reach rather above the occiput, having pieces on either side of the head opposite the temples, to which a screw with pad is attached, so that the patient's head may be fixed, as in a vice, and all movement of the divided parts prevented. By this means, the arterial tube would be in the most favourable condition for reunion or retraction and perfect occlusion. Perhaps the inclination of the head a little towards the wounded side would have the effect of preventing the gaping of the artery, should its tube not be quite cut through. This position should be maintained for at least ten days or a fortnight; for the hæmorrhage in Mr. Prichard's case began seven days after the accident. The application of ice at intervals would also tend to quiet the circulation in the wounded tissues, and perhaps by these means would be accomplished the "little all" that human art can do to remedy so serious an injury.

I am, etc., ASHBY G. OSBORN.

24, York Parade, Northampton, April 21st, 1863.

GRATUITOUS MEDICAL SERVICES.—SIR: While the important and difficult question of gratuitous medical services is under discussion, permit me to suggest a plan whereby all hospitals and infirmaries that are in want of funds may largely increase their incomes, provide ways and means for duly remunerating their medical officers, and largely extend their sphere of usefulness.

Let them exact a fee of ten shillings from every person applying for instant admission as an in-door patient, whose case was such as to permit of admission at all; and a fee of five shillings from each person applying for immediate out-door relief. The number of in-door admissions to be dependent upon the number of beds vacant, at the discretion of the resident competent authority; the number of out-door patients may be obviously unlimited. These fees should be exacted in every instance, where application for admission is made, without the usual recommendation from a governor, or where a governor has exceeded his privilege.

The poorest person, when so afflicted as to require the medical aid and other advantages that a public hospital affords, would, without a moment's hesitation, either from his own resources, or with the assistance of friends, cheerfully pay such small fees to secure an immediate entrance in the one case, and immediate attention in the other: for no money could be more advantageously applied, saving valuable time, and avoiding the trouble and inconvenience of hunting for a governor who may or may not have the power of according a letter of admission.

To the public, the boon would be invaluable. For instance, a servant, suddenly taken ill in a small house where bed-room accommodation is scarcely enough for the family, may, with perfect independence and propriety, be sent where he or she would be far better cared for, on the payment of a small entrance fee; relief being thus afforded in its widest sense to all parties. There may be many little matters of detail necessary to render this suggestion generally applicable to particular institutions; but I fully believe that the principle will be found very acceptable to the public, and the proceeds of material service to hospitals and infirmaries now languishing for want of funds.

I am, etc., JAMES BIRD.

Seymour Street West, Connaught Square, April 1863.

[We quite agree with our correspondent as to the general principle involved in his proposition. We are fully satisfied that payment by hospital patients is a necessary part of the doing away with gratuitous medical services; but the practical working of the plan is full of difficulties. We sincerely wish our correspondent would turn his attention to the dealing with the "little matters of detail" to which he refers. EDITOR.]

COMMUNICATIONS have been received from:—Dr. JAMES RUSSELL; Dr. DAY; Mr. FELCE; Mr. M. FOSTER; Dr. GEORGE BUDD; Dr. MERYON; Mr. G. P. DUNN; Mr. STONE; Dr. HYDE SALTER; THE HONORARY SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. BARNES; Dr. KIDD; Dr. FORBES WINSLOW; Mr. J. C. ROOPE; Dr. S. MARTYN; Mr. REDFERN DAVIES; Dr. J. THORBURN; Dr. MURCHISON; Dr. BALLARD; Dr. FOWLER; Dr. W. A. SMITH; Dr. BREIT; Dr. GIBB; Mr. FURNEAUX JORDAN; and Dr. J. B. SANDERSON.

BOOKS RECEIVED.

1. Report of the Richmond Lunatic Asylum, Dublin. By the Medical Superintendent.
2. The Seventh Annual Report of the Lunatic Asylum, Nottinghamshire. By W. P. Stiff, M.D.
3. Catalogue of the Museum of Guy's Hospital. London: 1863.
4. Transactions of the Obstetrical Society of London. Vol. iv. London: 1863.
5. Syphilitic Diseases of the Eye and Ear, consequent on Inherited Syphilis. By Jonathan Hutchinson. London: 1863.
6. Jaundice: its Pathology and Treatment. By G. Harley, M.D. London: 1863.
7. On Malaria and Miasmata. By T. H. Barker, M.D., F.R.S.Edin. London: 1863.
8. The Pharmacopœias of Thirteen of the London Hospitals. By Peter Squire, F.L.S. London: 1863.
9. The Cure of Club-Foot without cutting Tendons. By R. Barwell, F.R.C.S. London: 1863.

ADVERTISEMENTS.

Medical Psychology; comprising a Brief Exposition of the Leading Phenomena of the Mental States, and of the Nervous Apparatus through which they are Manifested, with a View to the better Understanding and Elucidation of the Mental Phenomena or Symptoms of Disease. By ROBERT DUNN, F.R.C.S.Eng., Author of an Essay on Physiological Psychology, etc. Price 3s. 1863.
JOHN CHURCHILL and SONS, New Burlington Street.

Now ready, in 8vo, with Wood Engravings, price 8s.

On Human Entozoa: comprising the Description, Pathology, and Treatment of the INTESTINAL, HYDATID, and other Species of WORMS found in MAN. Partly translated, by permission, from M. DAVAINE'S "Traité des Entozoaires." By W. ABBOTTS SMITH, M.D., M.R.C.P.Lond., Senior Assistant-Physician Metropolitan Free Hospital, late Senior Physician City Dispensary, etc.

By the same Author, Second Edition, cloth, post-free, 1s. 6d.

On ENURESIS (Incontinence of Urine) in CHILDREN and in ADULTS; its Nature, Causes, and Treatment. "We can recommend this little book to our readers."—*Med. Circular.*
London: H. K. LEWIS, 15, Gower Street, North, W.C.

Now ready, Seventh Edition (being the tenth thousand), price 2s. 6d.; by post for 32 stamps.

Diseases of the Skin; a Guide to their Treatment and Prevention: for the Use of the Student and General Practitioner. By THOMAS HUNT, F.R.C.S., Surgeon to the Western Dispensary for Diseases of the Skin.
London: T. RICHARDS, 37, Great Queen Street.

Now ready, price 6d., by post 7d.

The Addresses delivered at the THIRTIETH ANNUAL MEETING of the BRITISH MEDICAL ASSOCIATION, held in the Royal College of Physicians in London, on August 5th, 6th, 7th, and 8th.
London: THOMAS RICHARDS, 37, Great Queen Street, W.C.

Society for Relief of Widows and ORPHANS of MEDICAL MEN in London and its Vicinity. Instituted 1788. The SEVENTY-FIFTH ANNIVERSARY DINNER of this Society will take place on WEDNESDAY, MAY 20th at the Albion Tavern, Aldersgate Street.
THOMAS ARTHUR STONE, Esq., President, in the Chair.

Tickets, One Guinea each, to be obtained from the Stewards, from the Secretary, or at the Tavern. Dinner to be on table at half-past Six o'clock precisely. Any registered member of the Medical Profession residing in the County of Middlesex, or within the limits of the London District Post, is eligible as a Member of the Society, at a Subscription of Two Guineas a-year. Widows and Orphans of Members of not less than two years standing are eligible for relief, and to such applicants relief was granted last year to the amount of £2,023 : 10 : 0. S. W. J. MERRIMAN, M.D.,
55, Berners Street, W. Secretary.

Hospital for Insane Patients of the UPPER and MIDDLE CLASSES.

Patients are admitted into the Lincoln Lunatic Hospital at £1 per Week and upwards. The Weekly Board has power, under special circumstances, to reduce the rate of payment. This Hospital, which was established in 1819 as an Asylum for the County, and since 1853 has been furnished and adapted for Patients of the Upper and Middle Classes, stands on an eminence in its own grounds of over seven acres, and commands most extensive views of the surrounding country.—Applications to be made to the Resident Medical Superintendent. By order of the Board of Governors,
Board Room, April 1863. RICHARD HALL, Secretary.

Hospital for Sick Children, 49, GREAT ORMOND STREET.

A Series of CLINICAL LECTURES will be delivered by the Medical Officers of the Hospital, every WEDNESDAY, at Four o'clock.

The FIRST LECTURE will be given by Mr. T. HOLMES, on WEDNESDAY, MAY 13th, at Four o'Clock precisely. Subject—"Congenital Extroversion of the Bladder and on the Surgical Means to be adopted for its relief by Plastic Operation."

The Lectures are free to Practitioners on presenting their card, and to Students after their first year, by Tickets obtainable on on application by letter to the Secretary, at the Hospital.
April 1863. SAMUEL WHITFORD, Secretary.

Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VI.—On Capillary Bronchitis.

Comparative Rarity.—History of Case.—Peculiar Sputum.—Post-Mortem Appearances.—Points of Diagnosis from Ordinary Bronchitis.—Rapidity of Respiration.—Pulse-Respiration Ratio.—Relation of Moist Sounds to Sputum.—Resemblance of the Condition to the State of Animals Drowned.—Treatment: the Question of Alcohol and of Bleeding.

I wish to call your attention today to a case of bronchitis that has been recently under our observation. And perhaps you may wonder at my making a single case of so common a disease the subject of a clinical lecture. But this case was altogether of a different type and kind from the ordinary cases of bronchitis with which we are so familiar. This variety has been named *capillary bronchitis* from its extending to the smallest ramifications of the bronchial tubes, and was known to the last generation of doctors as *peripneumonia notha*. Bronchitis as it generally shows itself is a long way the commonest affection we have to treat. I do not think I am overestimating it when I say that, in the winter months, one-half of the cases that come under our observation are cases of bronchitis; sometimes the out-patient room presents us with little else. But although I have given clinical lectures here for seven years, this is the first case of this particular form of the disease that I have had an opportunity of bringing before you.

In one unfortunate respect the case is strikingly exceptional—its speedy and fatal termination. *Ordinary acute bronchitis does not kill;* of the hundreds of cases I have seen, I have never seen a patient die of it, except at the extremes of life; infants die of it, very old people die of it, and at all ages the chronic affection, which it often leaves behind it, proves largely fatal. This chronic bronchitis decimates the poor; it is a veritable scourge. But the acute affection, as I have said, does not kill, except at the extremes of life. Its tendency is to do one of two things;—either to terminate in perfect recovery, leaving perhaps only a greater tendency to the affection than existed before; or else to run on into the chronic form, of which the patient may, at some remote period, ultimately die. Whereas, we see in the case before us a healthy man, as is shewn by his nutrition, in the prime of life, coming into the hospital within two days of the supervention of his first symptoms, and in four days he is dead.

But besides its rapidly fatal issue, we shall see, as we proceed, that the case is peculiar and distinctive in many other respects—in its clinical history, its physical signs, and its *post mortem* appearances.

The history of the case is as follows:—

Francisco Rondi, aged 24, presented himself among the out-patients at the hospital on December 22, 1862. His face was pallid, his expression anxious and exhausted, and he was obliged to be supported into the room. His aspect indicated such depression that at the first moment of seeing him I suggested he might be going to have fever. His tongue, however, had not at all the fever character, and inquiry immediately showed that his symptoms were thoracic. His breathing was very much accelerated, and he had a constant short cough, which, without bringing anything up, gave him no pause or rest. This constant coughing somewhat embarrassed our auscultation. However, the signs were so plain and so pronounced that there was no misreading them: they were simply these. Breathing hurried and laborious; respiratory murmur clear but exaggerated at the apices, but from that situation downwards, everywhere, front and back, supplanted by an abundant, moist, crunching crackle, like squeezing a sponge half saturated with water, especially loud at inspiration, but also audible at expiration. At the upper boundary of this sound the respiratory murmur was heard through the crepitus, but as you descended it became less and less audible and the crepitation louder, which, in the lower half of the chest, drowned everything. It was clearly produced by the bursting of multitudinous bubbles, and resembled pneumonic crepitation in its character—in the idea that it gave—and in being mainly an inspiration-sound; but it differed from it in not being fine enough—it was decidedly coarser. It was manifestly produced by drawing air through innumerable capillary tubes occupied with fluid. There could be no doubt, then, that the man was suffering from intense and almost universal capillary bronchitis. I at once ordered him into the hospital. His pulse was rather above 120, not small. The respirations I did not count. Although the morbid sound was of so moist a nature, there was no expectoration—the short, incessant, hacking cough did not bring up a particle of sputum. No sternal pain. Percussion-sound normal. I should mention that the part of the lung that seemed the most free was the upper part of the left lung in front, where, from the clavicle to the fourth rib, the respiratory sound was almost natural except that it was strongly compensatory.

I ordered ætheris chlorici ℥x; ammoniæ carb. gr. v; tincturæ scillæ ℥xx; decocti senegæ ℥j; to be taken every four hours.

Turpentine fomentations to be applied to the chest, front and back.

This man being an Italian, I could get but little history out of him; but I ascertained that his illness was but of two days standing, previous to his application at the hospital, that it seemed to be the result of cold, and was ushered in by shivering and headache. Our patient is one of the unfortunate race of organ-grinders, and no doubt owes his attack to the mingled wet and cold which has prevailed lately, and to which his occupation has necessarily exposed him.

On going into the wards the next day, I found the patient evidently very much worse. He was manifestly in a state of impending suffocation; dyspnœa extreme—laborious and making sixty-eight respirations a minute; face dusky, or rather, deeply cyanosed; the conjunctiva even pervaded with the same leaden hue, turgid and suffused; lips purple. But he was lying quite flat on his back. I immediately ordered him a bed chair and a shawl-blanket, and had him propped up in bed. This seemed to give him some slight comfort. On examining his chest I found precisely the same signs as on the day before, only still more pronounced, and the area of uninvaded lung still smaller—confined to a small part of the left apex in front. The same fine churning crepitation, mainly inspiratory, everywhere else—above and below, front and back. There was audible, however, now, in addition to the fine sound which alone existed

yesterday, a larger moist sound about the middle zone of the lung; indicating either that the larger tubes were implicated, or that the exudation thrown out in the smaller tubes was passing along the larger in its progress towards discharge. The action of the extraordinary muscles of respiration was very strong, the inter-sternomastoid and the inter-scalenal pits deeply sucked in at each inspiration. The same sucking in was seen at the lower part of the chest—scrobiculus and cartilages of the false ribs—in fact, along the entire attachment of the diaphragm. The expectoration had just, and but just, appeared: I was shewn a single pellet of stiff mucopus, attached to the bottom of the spittoon, as the only portion that had been spat up. The respiration, as I have mentioned, was 68, the pulse 136; the pulse-respiration ratio, therefore, was exactly 2. The pulse of good volume and strong. Urine scanty, intensely dark, but clear.

I ordered the mixture to be given *every alternate hour*, and the turpentine fomentation to be frequently applied, front and back.

Dec. 25th. Much worse; cyanosis still deeper; surface damp with perspiration; aspect heavier and more exhausted, at the same time more anxious; the dyspnœa was so intense that the patient could only get a word out now and then. The constant "hack" has ceased, and instead there is a frequent cough in short paroxysms, attended, on each occasion, with the discharge of expectoration. This free discharge has come on since my visit yesterday; I was shewn a spittoon containing half a pint of it, and the material is so peculiar as to deserve a particular description.

On taking up the spittoon I not only observed the frothiness of the sputum, but was struck with the lightness of the spittoon, considering how full it was. On pouring the material from one spittoon to another this was at once explained;—the whole consisted of nothing but a sort of foam, and was as spongy and full of air at the very bottom as at the top; it was like whipped syllabub, or that beaten white of egg and cream which they pour over trifles, only more ropy; but equally spongy, and aërated throughout. I have never seen any sputum exactly like it; generally, however frothy, the froth is confined to the top, and the lower strata are free from it: but this was not so. On pouring it from one vessel into another it "flopped" out in an elongated mass, leaving the bottom of the empty vessel as clean as if it had had nothing in it. There was not the slightest trace of rusty tinge about it. I regret to say I did not examine it microscopically.

Pulse 128, respiration 60; pulse-respiration ratio, therefore, 2·13. The pulse was voluminous, but flabby and compressible. In consequence of the man's increased weakness I ordered him, in addition the diligent maintenance of the previous treatment and great external warmth, an ounce of wine every alternate hour.

Dec. 26th. The man is dying. He sits supported in bed with his head thrown back, in a state of unconsciousness, and with a loud rattling respiration; eyes half-closed, pupils contracted; face darkly cyanotic, and sweating profusely, as is his whole body. All efforts at rousing him produce hardly any effect. The temperature has fallen, being at the groins 92° Fahr. He ceased to be able to swallow, to expectorate, to cough, or to articulate, early this morning, about eight hours ago; since that time he has been gradually sinking into a state of deeper unconsciousness. Pulse 120, respiration 44; pulse-respiration ratio 2·72.

Death took place at six o'clock P.M., four hours after the last visit.

Post-mortem examination, nineteen hours after death. On opening the chest, the first thing that struck me was that the lungs did not collapse; they maintained their full size in the living thorax; the part of the heart left uncovered did not exceed the natural region of precordial dulness. The upper part of the anterior surface of both lungs presented an appearance of a slight general emphysematous enlargement of the air-cells, and the surface here was pale; lower down this distended condition of the parenchyma did not exist, and the surface was red and vascular—in some parts bright red. The pleural surface of the lungs was uneven, some of the lobules standing out in relief from the others, or rather, I should say, some of them not coming up to the pleural level; but there were none of them anything like "carnified"—all crepitated, and were full of air. On pressing the lung with the finger the impression remained, giving it a doughy, pitting character. On being withdrawn from the body the bulkiness of the lungs, and their refusal to collapse, were very conspicuous. Their posterior parts were seen to be of a chocolate colour, passing into a brighter red both forwards and upwards.

On cutting into the lung the whole structure was seen to be of a deep dull red, everywhere spongy, unusually so, and tolerably dry. Very little material escaped from the cut ends of the air-tubes, but on squeezing the lungs, a viscid frothy muco-purulent matter shewed itself at innumerable points. I apprehend that the reason why it did not flow from the tubes without pressure was from its great viscidity. On cutting open the larger bronchial tubes, they were seen to be of an even deep rose red, and this colour extended up into the windpipe, where, on a section, the redness of the mucous membrane, in its entire thickness, presented a strong contrast to the whiteness of the cartilaginous rings. The same deep redness extended down to the finest bronchial tubes that could be cut open. Nowhere was there anything like ulceration, or even abrasion of the surface.



On examining the white opaque froth that everywhere filled the bronchial tubes, large and small, it was found to consist of two materials only—pus-cells and columnar epithelium—suspended, of course, in a clear fluid (see fig.); but so numerous were these bodies that they covered the field with hardly any interspaces. The material was perfectly free from blood-cells.

Such is a picture, from beginning to end, as well as I can give it, of this fatal affection. There are many points of interest about it: let us see what they are.

In the first place, I would indicate to you the points of contrast between such a case as this and one of ordinary bronchitis—what would be called now-a-days, by a pleonasm, their points of differential diagnosis. These are of three kinds;—as seen in the clinical phenomena, in the physical signs, and in the *post mortem* appearances. The great distinctive clinical phenomenon was the intensity of the dyspnœa. The respiratory changes were suspended to a degree never seen in ordinary bronchitis: the man was blue from the day of his admission; death

by suffocation was manifestly impending over him from the time he came in till he finally succumbed. The clinical fact, too, of this rapid succumbing was of itself, as I have stated before, a distinctive clinical feature. Again, the sputum we must reckon distinctive; ordinary bronchitis would never yield such a material. The peculiarity of the physical sign (for there was but one) was; first, its character—that it was a capillary crepitation, non-pneumonic, as distinctive and as individual, in my opinion, as the true crepitation of pneumonia; secondly, its distribution—that it was not patchy or partial, but universal; and thirdly, its singleness—that it was this one sign alone, not, as one gets in common bronchitis, mixed moist and dry sounds of various sizes. The distinctive *post mortem* appearances were, universal non-collapse of lung, universal florid redness of the respiratory mucous membrane, and universal blockage with a viscid froth.

I think, too, that the point where the inflammation commenced and the course that it travelled were peculiar. We know that ordinary bronchitis travels downwards. The bronchitis of catarrh, of whooping-cough, of measles, always travels in this direction. A man catches cold to-day; to-morrow he has a sore throat; the next day he is hoarse; the next, he has sternal soreness, indicating an affection of the lower windpipe and large bronchi; the next, dry or moist sounds, showing that the affection has reached bronchiæ of smallish size. Now, if we may judge by the physical signs, the inflammation in this case would appear to have started in the capillary bronchules, for the first-heard sounds were seated in them; as the case advanced, the sounds became larger; and, on examination after death, we found that the inflammatory action had involved the whole of the respiratory mucous membrane, even into the windpipe. I do not mean to assert positively that the different parts of the respiratory mucous tract may not have been affected simultaneously; and the reason why the crepitus appeared in the smallest tubes first may have been merely because they *were* the smallest, and therefore the earliest infarcted with a sufficient amount of mucus to produce a moist sound; the larger tubes, from their wider calibre, requiring a more abundant exudation before they could be the seat of similar sounds. But the fact admits of another interpretation; viz., that the inflammation extended from below upwards, and that the moist sound registered its progress. At any rate, there was none of that "creeping down" which seems to be the law of ordinary bronchitic progress.

Another circumstance to which I would call your attention is the extreme *rapidity* of the respiration. On the 24th, it was 68 in a minute—a most unusual rapidity in an adult, and a circumstance that of itself would constitute a most unfavourable prognostic sign. I do not know the law of the rapidity of respiration in the different forms of dyspnœa, nor do I know that it has ever been worked out; but it seems to me to be, approximatively,—that the nearer the mischief is to the parenchyma of the lungs, the more is the breathing hurried. Thus pneumonia appears to present us with the most rapid of all forms of dyspnœa; capillary bronchitis, as in this case, gives us a high degree of acceleration; in ordinary bronchitis, the breathing is generally by no means much quickened; in asthma, I have often noticed it not at all so; while in chronic laryngitis, I have seen the respiratory interval actually lengthened. In this respect, rapidity of respiration appears to be in inverse proportion to respiratory distress and violence of respiratory efforts, both of which I have noticed to be more intense and agonising the nearer the seat of the difficulty has been to the orifice.

Closely connected with this is the ratio existing between the rate of respiration and the pulse,—what has been called the pulse-respiration ratio. We know that in health we have four beats of the pulse, or four and a half, to each complete respiration; whereas, in this case, a complete respiration, consisting of an inspiration and expiration, was performed for every two beats of the pulse, although the heart was acting at the rate of 136 pulsations in a minute; or, if we reckon each respiration as a double act (an expiration and an inspiration being each a respiratory act), there was a respiratory act to every heart's beat, or 136 in a minute. In this case, then, the pulse-respiration ratio was on the 24th exactly 2, instead of 4.5. I am unable to offer you any facts as to the law of the variation of this ratio—why it should be very much disturbed in some pulmonary affections, and not at all in others. Nothing but close and prolonged clinical observation, directed to this particular object, will furnish the clue to such a law, supposing it to exist. I would only commend to your memories the clinical fact illustrated by this case, and mentioned by Dr. Walshe, that in capillary bronchitis the ratio of the respiration to the pulse is very high.

Let me also call to your attention, in connexion with this subject, the curious fact, that on three days, the 24th, 25th, and 26th, while the man was going from bad to worse, and the condition of the lungs daily aggravating, the rate of the respiration, and consequently the pulse-respiration ratio, was constantly approaching a more natural standard. Thus the respirations per minute, on these three days, were 68, 60, and 44; and the pulse-respiration ratio 2, 2.13, and 2.72 respectively. This falling of the ratio of respiration as the condition becomes more aggravated, and death approaches, has also been referred to by Dr. Walshe.* What can be the explanation of it? Why, as the state of the lungs gets worse and worse, the respiratory changes more and more in arrears, and the demand for air increasingly urgent, should the respiratory efforts become less frequent? I believe the reason to be, that the increasing carbonic narcosis accompanying the deepening asphyxia renders the patient less and less sensitive of the respiratory arrears, and therefore tends to diminish those respiratory efforts of which the sense of arrears, or, in other words, the respiratory distress, is the immediate stimulus. Whether the poisoning of the blood with carbonic acid could have any similar lowering effect on the heart's action, and thus account for the diminished rate of the pulse, I am not prepared to say. I have never directed my attention specially to the effect of cyanosis on the cardiac pulsations.

[*To be continued.*]

* Pulse-respiration ratios of 3.0, 2.5, or 2 35 to 1, are not uncommon; but sometimes, even as much as forty-eight hours before decease, the frequency of the respiration falls, while that of the pulse continues to rise; under these circumstances, I have known a ratio of 4.5 to 1 (that of health) coincide with a pulse beating 144 per minute.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

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Lecture II. (*Continued.*)

Differences between the Surgical Affections of the Digestive System in the Child and in the Adult.

In the digestive system there are no special surgical affections which belong to early life, excluding the congenital deformity of hare-lip, which has already received attention; but I possess the notes of some few interesting cases which appear worthy of record.

Salivary Fistula is a rare affection both in early and in adult life; and it is somewhat difficult to understand how it can be produced, unless an injury should have been the cause.

Case. In 1858, a boy, aged 7, came under my care with a fistula in his left cheek, which had been discharging a clear fluid for one month. A swelling had previously existed at the spot for one year, and this had gradually increased until it had acquired the size of half a walnut. The mouth was dry upon that side; and the boy stated that, when eating, the discharge from the cheek was very profuse. This fact was readily tested, and proved to be correct; and several drachms of saliva were quickly obtained. Upon exploring the cyst with a fine probe, no opening into the mouth could be detected. I therefore passed a seton through the cheek, and left it in for two weeks. By that time the saliva had found its way through the artificial opening; and, as a consequence, the seton was removed. The external wound rapidly closed, and convalescence was secured.

Ranula, or rather *sublingual cyst*, is not a more common affection in early than it is in adult life; but when it appears in children, its increase is certainly more rapid. But this is only consistent with the fact that all secretion is more active at that early period of life. Ranula is now well known by recent pathologists to be simply an obstruction to the ducts of the mucous glands, and is not in any way connected with the salivary. In children, the secretion of mucus is always active and profuse; and on that account cases of ranula are generally rapid in their appearance. The most effectual treatment is to be obtained by the passage of a seton through the tumour, a double thick silk being the best. It is seldom necessary to leave it in more than one week, sufficient inflammation having been excited during that period to cause a destruction of the secreting wall and a cure of the disease.

I have before me the records of cases which have fallen under my own care, in which this ranula was very large. One was in a female child, aged only 5 years. The tumour was of the size of a large egg, and was only of three weeks' growth. The child was unable to articulate, and could not eat; the tongue being pushed quite out of its place against the roof of the mouth. A seton was put in, and the secretion let out; two ounces of thick albuminous fluid escaping. After one week, the seton was removed, and recovery followed.

In a second case, of a boy aged 8, the ranula was so large, that it appeared as a fluctuating tumour beneath the jaw. The tongue was also much displaced, rendering articulation difficult and indistinct. By the introduction of a seton, a complete cure was readily secured.

It is scarcely necessary to dwell longer upon this subject; the special point of interest in these cases being their rapidity of growth, and the readiness with which a cure can be obtained by the passage of a seton.

Warty Growth upon the Tongue. To illustrate this subject, I propose to quote a case of warty growth upon the tongue, which came under my care in 1857. It was in a female infant, aged 1 year; and the mother had observed the growth for five months. It occupied a greater part of half the tongue; the extreme tip was, however, free. The warts were raised and pedunculated. The child's health was otherwise good. A free application of nitrate of silver proved sufficient to destroy these growths, and recovery followed.

In contrast to this simple affection, I must quote a second case of warty growth upon the tongue; which was, however, due to a different cause, evidently constitutional. It was in a female child, aged 1 year, who had, one month after birth, shown every symptom of congenital syphilis. It had had the snuffles and a general cutaneous eruption, which had been cured at St. Thomas's Hospital. The child remained apparently well for five months, when a warty growth was observed upon the tongue, which gradually increased. When I saw the child, this growth was of about the size of a sixpence, and was precisely analogous to the condylomata which are found in the female genitals. A like growth also existed upon the lips and anus. Grey powder in one-grain doses, combined with seven grains of dried soda, was given twice a day; and in one month the child was well.

These two cases form an interesting contrast—one of simple warty growth, the second of syphilitic.

I will now proceed to quote a third case of warty growth of the tongue, of a totally different nature from either of the former cases. In its nature it is so distinct, that it is hardly possible for any one to fail to recognise it when once aware of the class of cases to which it belongs. I allude to a degenerating nævus. It was in a child 10 years of age, who had had a swelling in the tongue from an early date; but it was only during the last twelve months that it had put on the appearances which it presented when the child was brought to me. The posterior part of the tongue was covered with the peculiar vesicular and warty growth which is so characteristic of a degenerating nævus; and, without the history, the true nature of the case could be made out. But the mother had observed that the tongue in previous years was at times much swollen, particularly when the child cried; this fact being very visible, as the child used constantly to protrude the organ involuntarily when screaming hard. This temporary enlargement would rapidly subside, and the tongue

again appear natural as to size. The above history clearly pointed to a vascular tumour or nævus.

With these three cases, the diseases of the tongue may be passed over; and I have been tempted to bring them before you mainly for their own interest.

I must, however, add one word respecting

Wounds of the Tongue, and more particularly relating to their treatment; being anxious to show the necessity of treating all such cases by means of sutures, if the substance of the organ be much involved; for such wounds have a great tendency to gape, and much serious inconvenience may subsequently arise from a neglect of this measure. If they be treated, however, by sutures, good union will generally take place; repair here going on very rapidly. In a case which came under my care eight years ago, the evils of a neglect of this practice were well shown. It was in a girl aged 9 years, who had received an extensive wound of the tongue from a fall six months previously. The case had been neglected, and no surgical treatment had been employed. As a consequence, the right half of the tongue was nearly separated about the centre, and it was with difficulty that the child could speak or masticate. I pared the edges of the wound, and applied sutures; a good recovery taking place.

The *Tonsils* and their diseases hardly require any special observations. Their chronic enlargement may be found in children as well as in adults, although perhaps such cases are more common in early life. It is a disease essentially of debility, and is to be met by iodine and tonics; quinine and the iodide of iron being undoubtedly the best. If they become very large, indurated, and pale, so as to affect the powers of deglutition and respiration, excision should be performed; the guillotine being the safest instrument to employ. In one case which came under my notice, these glands were so large as to prevent the patient's deglutition of solid food. The child was 3½ years old, and had lived for six months upon liquids only.

I have never seen any good result from the local application of nitrate of silver, iodine, etc., in these cases; and have sometimes thought that they do harm. I never use them. Internal remedies prove generally successful.

Surgical Affections of the Anus and Rectum. We will now pass downwards towards the terminal end of the digestive canal, and consider if there be any surgical diseases of the anus or rectum which are either special to childhood, or are more frequently found then than during adult life; and the first to which I will draw your attention is *Polypus Recti.* This disease is by no means an uncommon one in children, but in adults it is without question comparatively rare. It has been only of late years that much attention has been paid to this subject.

In 1859 I had the pleasure of bringing before your notice a short paper, in which I wished to prove that in children hæmorrhage from the bowel is a very certain indication of the existence of a polypus; and I brought forward at the time, to demonstrate the fact, many cases as well as preparations of the polypi which I had removed. Since that date, many similar cases have fallen under my care; and I must confess that it is a rare thing for me to meet with any instance of hæmorrhage from the bowel in children, which is not to be explained by the presence of such a growth.

These growths are generally found in children under ten years of age. In some cases, the discharge of blood from the bowel is constant, and the patient will be brought with its clothes stained, and its buttocks smeared with a bloody mucus. In these instances, the polypus will generally be found to be within, if not protruding from, the sphincter. In other examples, occasional discharges of blood will be observed, although not to a great extent, and will generally accompany and follow the act of defæcation. In others, again, the hæmorrhage will take place independently of any such process. In a patient exhibiting any of these symptoms, a careful local examination should be made. Much care is required in the examination, as the growth is readily passed by and overlooked. The best plan is to sweep the finger, passed well into the rectum, completely round the walls of the bowel. The polypus will thus be dragged from its attachment, and its pedicle will be made tense; thus arresting the attention of the examiner. By a careless examination, it is almost sure to be overlooked, unless very large.

When it is once detected, the cure is not difficult. The removal of the growth is the only correct treatment; and this may, in a large proportion of cases, be readily done by simply hooking the finger over the pedicle, and breaking it off. I have never known any evil result from this practice, not even hæmorrhage; the process of lacerating the pedicle preventing this occurrence.

In other instances, the polypus may be brought externally, and ligatured. If the pedicle be thick, and the polypus high up, it should be dragged down by means of forceps, or by a wire noose, and then ligatured. The removal by the finger is the readiest and best practice, and it is the one which I have almost always followed.

After the removal of the growth, a cure may confidently be predicted; some care being always taken by the surgeon to satisfy himself that a second growth does not exist.

The following are brief notes of some of the more recent cases which I have treated.

Case I. J. P., aged 4½, was brought to me after he had been losing blood at stool constantly for seven months, and at times even when walking. Nothing, however, protruded from the anus; and he was free from pain. Upon examination, a polypus was found, which was brought down by means of forceps, and ligatured; the growth being cut off below the ligature. Recovery followed.

Case II. A boy, aged 10, was brought to me for bleeding from the bowel of twelve months' duration; and for three months it had been profuse and constant. When seen, the child was blanched and powerless. A polypus of the rectum was at once detected, and torn away, convalescence rapidly following.

Case III. A boy, aged 7, for two years had been the subject of hæmorrhage from the bowel when at stool, and for one year had lost blood even when walking. Powerful straining had also been observed when at stool. On examination, a large polypus was found, with a pedicle which allowed the growth to pass downwards within the sphincter; this fact explained the straining and the occurrence of the hæmorrhage which took place independently of defæca-

tion. A ligature was applied to the pedicle, and the growth excised. Recovery followed.

Prolapsus Recti is another surgical affection which is common to both children and adults, but it possesses some peculiarities when found in young life which demand our notice. It is by no means a rare affection; but, in the majority of cases, it is only a symptom of some other disease—a result, and not a cause. It is constantly found in children who are the subjects of gravel or of calculus in the bladder, or of any disease causing irritability of the urinary organs, such as phimosis and inflammatory affections of the mucous membrane covering the glans penis, with adherent prepuce; it accompanies also constipation of the bowels, and the presence of worms. In whooping-cough, and in cases of great debility, it is also not infrequent.

A correct interpretation of its cause is, therefore, plainly an important point to be acquired before any hope of its successful treatment can be entertained. It must be observed, however, that in the majority of cases of so-called prolapsus recti, there can be no doubt that the projection is only of the mucous membrane; but, in some rare and extreme instances, the whole bowel appears to be forced downwards, giving rise to a form of intussusception.

It is needless to quote examples illustrating all the various causes of prolapsus recti, for the experience of most surgeons will readily suggest many; but, in every case which comes before our notice, it is as well to examine carefully the condition of the urinary organs; to see that no stone exists in the bladder, and more particularly that there are no adhesions of the prepuce to the glans penis, or retained secretion from Tyson's glands; these concretions, without doubt, being amply sufficient, as well as the most frequent causes of all the symptoms.

If habitual constipation be the cause, it must be treated. I have seen a girl aged 16, who for five years had been the subject of prolapsus recti whenever any action of the bowels took place, this action seldom being under five, six, or seven days; and, in passing, I may remark upon the great benefit which patients suffering from this disease experience from the habit of relieving the bowels at night; that is, of assuming the recumbent position after the act. In these cases, the benefit is most marked; but the habit is a good one in all cases of rectal disease.

As a symptom of ascarides, prolapsus is very common; for this, a good calomel purge is often amply sufficient to obtain a cure; but, otherwise, enemata of some bitter infusion, such as quassia, will answer the same purpose.

In some cases, however, this disease is due to a weakness of the parts and a general want of constitutional power. In such instances, the general health must be attended to, and the bowel reduced after each prolapse. In many examples, this treatment answers every purpose; but in some, more energetic local treatment seems called for; and in these I have found much benefit and no evil result from the local application of the nitrate of silver to the whole surface; this must be done, however, rapidly and regularly, and the whole prolapsed membrane should be well covered, dried, and returned. It is seldom that more than one application is called for; and I have never seen any evil result from the practice.

Hæmorrhoids in childhood are a remarkably rare affection. I have seen many cases so called, but very few which were genuine cases of this disease; the majority of such being undoubtedly examples of rectal polypi. In looking down my notes of cases of polypi, I find the observation "treated for piles" to nearly all.

Anal Abscess and Fistula in Ano in early life are very rare diseases; that is, when compared with their frequency in adults. I have had one case under care in a boy aged 5 years; but this is the youngest subject in which I have seen this affection. They call upon me for no remark.

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

WEST LONDON HOSPITAL.

CASES OF DISEASE OF THE THYRO-HYOID ARTICULATION AND LIGAMENT; WITH CLINICAL REMARKS.

Under the care of G. D. Gibb, M.D.

[*Concluded from page* 473.]

Case v. *Cynanche Tonsillaris; Inflammation of the Left Thyro-hyoid Ligament.* A young married woman, aged 20, was admitted on April 27th, 1863, with sore throat of six weeks duration. She got better; and four days ago a lump formed in the left side of the neck, involving the thyro-hyoid ligament, which was sore and tender. It is disappearing under treatment.

Case vi. *Subacute Laryngitis and Follicular Disease of Throat; Inflammation of Left Thyro-hyoid Ligament.* The subject of this case is at present under treatment, and was admitted on April 27th, 1863, with subacute inflammation of the larynx and fauces of seven weeks duration, attended with aphonia at first. The left thyro-hyoid ligament was inflamed, and swollen to the size of a small and oval Barcelona nut; it was very tender to the touch; there was no dysphagia. The throat was so very irritable that laryngoscopic inspection was obstructed. He is already better from treatment.

Case vii. *Acute Sycosis Mentagra of Three Weeks; Inflammation of both Thyro-hyoid Ligaments.* Mary Ann L., aged 32, was admitted on February 2nd, 1863, with acute sycosis mentagra, that had been developing three weeks. There was an absence of tubercles; but bright yellow pustules formed in patches, burst, and formed crusts. They reformed several times. Dysphagia was present; and two painful and tender lumps, of the size of small nuts, were felt in the neck, corresponding to the right and left thyro-hyoid ligaments. Poultices were used for the face, and Donovan's solution was given internally in eight-minim doses thrice a day.

By the end of March, the cutaneous affection was cured, and the lumps in the neck had wholly disappeared; but some tenderness remained, with retraction of both cords to the extent of one-half of their natural length.

Commentary. The small and delicate cord which holds together the cornua of the hyoid bone and upper part of the thyroid cartilage is frequently inflamed; and if not attended to early, ends, in many cases, in obliteration, so that the cornua either come into contact, or nearly so, in a capsule that surrounds them, in which is one or more small sesamoid bones. When the capsule is formed, there is a tendency to dislocation of the joint, and a peculiar pricking sensation is felt in

the neck, which is very uncomfortable. In the cases above detailed, in one only had the joint formed, and it was the result more probably of a compensatory effort for the elongation of its fellow on the opposite side from the bronchocele, than from inflammation. Usually, however, as far as my experience permits me to determine, inflammation and effusion of fibrine precede obliteration of the ligament, when the capsule which primarily is its sheath becomes thickened, contracted, and then surrounds the terminal ends of the cornua. This has been determined by dissection and examination of cases of true dislocation in the living. The thyro-hyoid articulation, therefore, is one of interest and importance, and should always be remembered when inspecting throat disease. In some cases there is a tendency to recurrence of disease until the ligament has become obliterated. It also sometimes happens that the thyro-hyoid joint becomes affected with dropsy; instances of which, with other allied affections are related in my essay on the *Diseases of the Hyoid Bone*. The symptoms of thyro-hyoid disease, as above described, are not unfrequently wholly misinterpreted, and erroneously supposed to depend upon intrathyroid or laryngeal disease.

Original Communications.

ON NIGHTMARE, THE ACTION OF ANÆSTHETICS, ETC.

By Thomas Hodgkin, M.D.

Having for some years been occasionally subject to that disagreeable affection called nightmare, I could not help paying some attention to the physiology of the symptoms which attend it. I shall not attempt a review of the opinions which have been advanced on the subject, having paid very little attention to them; but I have not been able to adopt the commonly received opinion, that it depends on some disturbance of the circulation.

It is unnecessary that I should describe the variety of pictures presented to the half-sleeping imagination of the sufferer from nightmare, some of which have furnished ludicrous subjects for the painter. The essential symptom, which may take place either with or without these apparitions, seems to consist in the distressing consciousness of inability to move. As this state mostly ceases on waking, and as the attention of others is not likely to be called to the symptoms while they exist, it is not surprising that they have been imperfectly studied.

Of later years, I have observed that waking has not so completely done away with the conditions on which the nightmare depends, but that the mind, when recalled to perfect consciousness, has had sufficient opportunity to analyse them; and a wakeful companion, interested in averting or arresting the attack, has, by recognising the premonitory symptoms, been able to prevent or cut short the paroxysm.

By examining the state of the pulse and heart as soon as consciousness reminded me that the inquiry was to be made, I became satisfied that no material derangement could have taken place in that quarter. At a later period, I noticed some partial condition of the limbs somewhat resembling that which is felt when a part is said to be asleep, but to a minor degree, and without the peculiar sensation called pins and needles. As the duration of the waking symptoms has increased, I became struck with the fact that the involuntary movements of respiration seemed to be suspended, whilst the chest seemed to be passively collapsing from elasticity and other causes. I was naturally desirous to have the paroxysm terminated by being awakened as soon as abortive efforts at articulation called attention to my distress; but I noticed that this kind attempt at first rather increased than mitigated the suffering, if it tended in any degree to favour the collapse of the chest, as in the case of the hand being placed upon it. On the contrary, the most prompt and effectual relief has been obtained by so moving the arms that the pectoral muscles might elevate the ribs; and it is now some years since I have begged that one arm might be worked like the handle of a pump, which completely agrees with the theory and practice which have of late been ably advocated by Dr. Silvester in relation to the treatment of suspended animation from asphyxia. Reflecting on these symptoms, I recollected the views of the late Sir Charles Bell regarding the involuntary movements of respiration, and the doubts which I had entertained as to a particular part of the spinal cord, with the nerves emanating from it, being specially devoted to this part of the respiratory function; and I felt almost compelled to subscribe to his doctrine, the strongest argument in favour of which seemed to be supplied by the fact that when, in the state which I have described to exist, on waking in the paroxysm, I have made forced voluntary efforts at inspiration by raising the ribs to expand the chest, the diaphragm, instead of simultaneously descending, was, on the contrary, elevated by the pressure of the atmosphere on the abdomen—a result which would hardly have taken place had the normal provision for the cooperation of these parts been in working order. I felt persuaded that, if the state which I have described were not relieved by the early waking of the patient or by the efforts of assistance opportunely at hand, death must be the consequence. It is probable that persons who have been found dead in their beds may have so perished; and verdicts of death from affection of the heart may have been recorded in consequence of the distended condition of the right cavities.

Another reflection is perhaps of some importance in connexion with the investigation now going forward: I mean that in relation to the causes of death under the use of chloroform.

Is it not highly probable that, under the influence of chloroform and other anæsthetics, there may be, simultaneously with the loss of feeling and consciousness, the suspension of the involuntary movements of respiration; the one suppressing the symptoms of distress which the other would induce, if the sensation were not more abolished than in sleep? That interruption of the involuntary movements of respiration is not necessarily commensurate with the degree to which sensation and consciousness are lost, is evident from the effectual persistence of these movements, though accompanied with stertor, in cases of apoplexy and drunkenness, as well as in the majority of cases in which chloroform is used. The prompt employment of the most effectual means of maintaining artificial respiration would, therefore, seem to be the first step to be taken when danger is threatened after the employment of chloroform or ether. On the other hand, placing the patient on his back, and rubbing the chest and other parts of the trunk to remove supposed syncope, would be injurious rather than beneficial; and, could he be conscious of what was going on, the dreams of nightmare would to him be realised.

It seems to afford some confirmation of the view which I am offering, that both the production of nightmare and the occurrence of danger under the use of chloroform are connected with the state of the stomach. Nightmare is frequently attributed to taking a full supper shortly before going to bed. In my own case, it is most certainly induced by a draught of cold water or soda-water on retiring to rest; but I have also known it after continued absolute fasting, both in the sitting and in the reclining posture, though very seldom in the

former position. So, in the administration of chloroform, experience has taught that neither a perfectly empty nor a very full stomach is desirable. My friend Steggall of Queen Square has informed me that, having occasion to give chloroform to a child previously to the performance of an operation, he was surprised at the appearance of very alarming symptoms when but a moderate dose of the anæsthetic had been given. From these the child was happily and quickly relieved by rejecting from the stomach a large quantity of rich plum-cake which the child had, without the knowledge of the operator, eaten but a short time before. Facts like these direct the attention to the eighth pair of nerves; and I remember that, so long ago as in 1821 or 1822, I wrote a juvenile essay, the subject of which was the section of these nerves, in which I expressed the opinion that death, not being the immediate consequence of the simultaneous division of both nerves, was to be attributed to the maintenance of voluntary respiration for some hours after involuntary respiration had ceased.

Having commenced but not completed committing these reflections to paper before starting for a journey on the continent, I have had an opportunity of conversing upon the subject with my friend Dr. Foville, whose attention is well known to have been long turned to the anatomy, physiology, and pathology of the brain and nervous system, and whose abandoning of the completion of his work is a grievous loss to our profession. The doctor, after patiently hearing my statement, was so far from rejecting my ideas, that he related a case tending to confirm them. A patient of his, labouring under some form of paralysis which ultimately occasioned his death, complained of being distressed with nightmare on falling asleep. The doctor, having an opportunity of watching the approaches of the paroxysms, observed that his respiration became interrupted, and then suspended, which resulted in his waking up in agitation and fright. Attention to position in his sleeping state to some degree, but imperfectly, prevented the paroxysms. Dr. Foville further told me, in reference to what I had said regarding the eighth pair of nerves, that Professor Blainville had made some experiments on the section of them, in the course of which he observed that the death of the animal was accelerated if it were placed on its back, but retarded by the chest being downwards, as when it is in the standing position; which seems to coincide with the need to facilitate and maintain the voluntary efforts at respiration.

In close relation to the points upon which I have here touched, I would take leave to add a few words of a practical tendency, though I fear they may be regarded by some as crotchety. It is well known that ether and chloroform have very conspicuously the power of averting or greatly mitigating the paroxysms of spasmodic asthma, which they probably do by blunting the exaggerated perceptions, the normal and healthy action of which call for and determine the involuntary movements of respiration. If, on the other hand, their influence be superadded to a state approaching to morbid, and in which these perceptions are too feeble, we may expect the symptoms which occur when the influence of chloroform is alarming or even fatal. I have repeatedly noticed that medicines which contain ether or chloroform, although at first very agreeable, as is especially the case with the latter, have a decided influence in disturbing the stomach and producing indications of indigestion; whilst an influence diametrically the reverse of this is produced by brandy and other nearly pure alcoholic spirits. Hence their frequent employment to correct the stomach, and the abuse thereby induced. This conviction as to the effect of ether, etc., has made me for a long time averse to the use of etherial medicines, though so commonly resorted to as antispasmodics. Here also we may suspect that the influence is exerted through the eighth pair of nerves.

Though I have not and at present cannot consult medical authorities, I must observe that, a short time before leaving home, I read part of a paper relating to the agency of chloroform in the British Medical Journal. It went far in support of the views which I have long held, and have here endeavoured to sketch. I think it was by Dr. Kidd, and bore chiefly on the employment of chloroform in obstetrics. The condition very suitably designated as *apnœa* seems to be exactly that to which I have here referred. I am sorry that I omitted to look to the other portions of the same essay, given in different numbers of the periodical.

Marseilles, 30 Imo., 1863.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page* 478.]

The anatomical connection between the sensitive posterior columns of the spinal cord in their entirety and the cerebellum, the extension of nerve-fibres from the cerebellum to the corpora quadrigemina, and from these bodies to the optic thalami, are facts which indicate the existence of close physiological relationship between these parts. And I venture to assume that it is through these channels that objective sensations are conveyed to the cerebrum, the centre of volition; that from the ganglionic cells contained in the corpora striata and optic thalami, the mandates of the will are extended through the vesicular matter of the crura cerebri, of the pons, and of the medulla oblongata, to the anterior horns of grey matter contained in the spinal cord by means of the corpora pyramidalia and the anterior columns of the cord, the fibres of which communicate directly or indirectly with the ganglionic cells of the anterior cornua, which become the excitors of muscular motion; and that the transverse fibres in the mesocephale and medulla oblongata, which are almost, if not quite as numerous as the longitudinal, serve as conductors of the orders of the will to the nuclei of motor nerves, for the consentaneous action of corresponding muscles in the movements of the face and tongue for expression and speech, in the contraction of the gullet for deglutition, and in the movements of the ribs for respiration.

But how are these several acts performed? In other words, what is the nature of that mysterious nerve-force which, beginning its physical career in the organs of sense, passes to the sensorium, where it becomes an object of consciousness, and, operating on the cerebrum, engenders actual ideas or volitions which are transmitted to the spinal cord, and there excite muscular motion?

Is it simply electricity, in the development of which every minute molecule of nervous matter, by virtue of a dipolar attribute, adds its quota to the evolution of an electric current? Or is it some other power which may be represented by a given quantity, say of heat, which would be required to raise the temperature of a given quantity of water so many degrees as to produce a certain amount of mechanical energy or motion?

Many physiologists have embraced the latter opinion, chiefly in consequence of the different behaviour of a muscle when under the influence of a nerve in a physiological active state, and when artificially placed in an electrotonic state by the transmission of a constant galvanic current through it. In the first case, the muscle is kept in a constant state of contraction; in the electro-tonic condition, contraction occurs only on closing and opening the circuit. In the interval, the muscle is in a state of relaxation, and remains so.

This objection to the electric theory of nerve-force has been met by the proposition, that animal electricity may exist in a static form; but Pflüger's investigations, to which I shall immediately have to refer, have resulted in the establishment of a theory of nerve-excitation, strictly in accordance with the laws of muscular contraction.

Electricity is developed in some animal tissues in direct proportion to the size of the nerves; and M. Armand Moreau has recorded many experiments to prove the identity of the agent discharged from the electric organ of the torpedo, with that discharged from a Leyden battery. (*Experiences sur la Torpille Electrique. Annales des Sciences Naturelles*, 4e serie, t. 18. 1862.)

Furthermore, it is well known that the galvanic current can be made not only to imitate the natural nerve force, but that it may also replace it in producing many of the phenomena of life; and that these latter can only be explained by supposing that the development of nerve action is associated, if not identical with the assumption of a polar condition by the molecules of nerves.

In my history of medicine, it will be my duty to refer to many Italian physicians who have established these facts, but to no one more than to Professor Matteucci, of Pisa, who has shown that a galvanic current affects both sensitive and motor nerves to a greater degree when the current is made to pass through either in the direct or natural course of the nerve force (centripetal in sensitive nerves, centrifugal in motor nerves) than when it is transmitted in the inverse or opposed course; that the excitability of motor nerve-fibres is modified by their juxtaposition with sensitive nerve-fibres (most nervous trunks being composed of both); and that electricity is developed during muscular contraction.

All these facts have been investigated by M. Du Bois Reymond, whose great work on *Animal Electricity* forms a second era in that science. All his experiments have been conducted with a galvanoscope, by means of which he has established the fact that every molecule of fresh excitable nerve is the source of electro-motive power; and that every part of a nerve acts in obedience to the same law as that which governs the function of the entire nerve.

He supposes that every nerve consists of a number of dipolar molecules arranged in couplets, and that in a state of rest the similar poles of each pair of molecules are turned towards each other, so as to represent the condition of a closed current, the negative poles being turned towards the extremities of the nerve.

In the active or electrotonic state he supposes that an electrolytic process takes place, and that the molecules arrange themselves so that the opposite poles are turned towards each other; the negative pole (—) being turned towards the point at which the current enters, the positive pole (+) towards the point at which the current leaves the nerve.

Du Bois Reymond has also suggested that, in a state of rest, each nerve molecule may have its external surface in a positive, and its internal part in a negative state of electricity; and that excitement or irritation may induce an opposite state of polarity, namely, a negative condition of the external and a positive state of the internal part of each molecule—an active or electrotonic state.

Now, if the sciatic nerve of a living frog be dissected out from the muscles of the thigh and the thigh removed, so as to leave the nerve in connection with the spinal cord above, and with the leg below, when the nerve is placed on the cushions of a galvanoscope, it produces a deflection of the needle.

If through the same nerve a constant galvanic current be passed in the same direction as the nerve-current, an immediate increase of the deflection of the needle takes place; but if the current be passed in the opposite direction to the nerve-current, an immediate decrease of the deflection is observed.

The reason assigned by M. Du Bois Reymond is obvious. In the first case, the superinduced current is just so much added to the original nerve force, in the second, it is just so much subtracted or neutralised by the opposed current.

On further investigation, by placing a transverse section of a nerve in contact with one cushion of the galvanoscope, whilst the longitudinal surface rested on the other, a strong deflection of the needle indicated the course of an electro-motive current passing from the external surface to the transverse. Hence, the external surface is shown to be positive (+) in its electric relations with the transverse which is negative (—).

From this and other corresponding observations, M. Du Bois Reymond inferred that the power in question acts according to a definite law which may be stated as the law of antagonism of the longitudinal and transverse sections, the former being positive, the latter negative.

All this, however, did not diminish the objection which has been stated to the electric theory of nerve-force; therefore, M. Du Bois Reymond instituted other experiments, and discovered that if, instead of a continuous galvanic current, a series of instantaneous currents of high tension electricity (Faradaic currents) be made to pass along a nerve connected with a muscle, the contractions follow each other so rapidly that the muscle has no time to regain its state of relaxation, and a condition of continued contraction, like that of tetanus, is the result.

When examined by the galvanoscope, this interrupted current occasions the positive and negative deflections of the needle, but the positive variation is less than the negative (in the constant current the positive variation is greater); hence it would appear that in the tetanised nerve the characteristic phenomenon is expressed by a negative deflection.

The question remains, is the tetanised nerve identical in character with the physiological active nerve? If it be, then a negative deflection of the needle is the expression of the natural nerve-current.

At this point Pflüger began his researches, by examining the effects of a constant galvanic current varying in strength; and he discovered that, by the weakest current he could establish, a continuous contraction of muscle may be produced; that by a stronger current, but still so weak as barely to deflect the needle, tetanus may be produced; and that a very powerful current produces no contraction at all, except at the moment of closing and opening the circuit, the opening being followed by weak contraction only. Hence, he infers that the most important consideration in conducting these physiological experiments is the strength of the current employed; that an extremely weak current is the function of an active healthy nerve; and that a very powerful current suspends the action, and perhaps even causes the death of the nerve-molecules. (*Untersuchungen über die Physiologie des Electrotonus.* Von Eduard Pflüger. Berlin, 1859.)

He has furthermore shown that the phenomena of action, so far as the sensitive nerves are concerned, are the same as those in motor nerves, the direction of the current being of course reversed. A very weak centripetal constant current produces pain; a very powerful current produces no pain. There is, therefore, every reason to suppose that the law of excitation in the sensitive nerve is analogous to that of the motor nerve.

In further illustration of this, Matteucci's experiments may be here mentioned. He has shown that by exposing a mixed nerve, say the sciatic, and by applying the positive pole of a weak galvanic current towards the spinal end, and the negative pole on the peripheral end of the exposed portion of nerve, muscular contraction occurs, but no pain. If, however, the poles be reversed

so that the positive is brought into contact with the peripheral end, and the negative with the spinal end of the exposed nerve, then pain is produced, but no muscular contraction.

The peripheral termination of motor nerves, as connected with the ultimate muscular fibre, is a most interesting subject of inquiry. Kühne supposes that the neurolemma always joins the sarcolemma, and that the nerve-molecules pass beneath the sarcolemma so as to come into intimate contact with the contractile substance. To these nerve-molecules he has given the name of peripheric nervous nodules.

Dr. Lionel Beale contends that the nerve-fibre is far more extensive than is supposed by Kühne; that it extends into the interstices of the ultimate muscular fibres in the form of a most elaborate network; that the nerves never lose themselves in other tissues, or become continuous with them; that they are brought into close relation with muscular fibre by their nuclei, but never lose their distinctness as special nerve-tissue. And I think he is right.

If, then, we admit the existence of a current of nerve-force, we must also admit that every act of muscular contraction and every perception of sensation involve a given expenditure of nerve-force; a disturbance of electric equilibrium along the whole course of the nerve, and a corresponding movement to restore the equilibrium, an inverse sequence of phenomena being understood; namely, a centrifugal disturbance in the case of muscular motion, a centripetal disturbance in the case of sensation, and in each case an inverse reaction to establish the equilibrium.

Pflüger's experiments have led him to conclude that one and the same irritant applied to a nerve acts more powerfully the further it is applied from a muscle, in the case of a motor nerve, or from the spinal cord in the case of a sensitive nerve. His idea is, that a progressive molecular movement is developed at all points of a nerve; so that the sum of force is greater at the extremity of a nerve, along which an irritation has travelled, than at the point where the irritation was applied.

Whatever the peculiar nature of the nerve-force may be, we know that muscles cannot act singly, but that the cooperation of a group is necessary to perform every movement of the body, whether it be made for locomotion, respiration, deglutition, or any other special motion for which the muscles are intended; and there is great reason to suppose that such consentaneous action results from the functional activity of separate groups of ganglionic cells in the spinal cord (each group being strung together by nerve-fibres like the jars of a Leyden battery) which transmit their influence through the motor nerves. Each group is probably excited to action by a longitudinal nerve-fibre which conducts the mandates of the will to the organ of coordination; and thus the telegraphic nerve-fibres in the anterior columns are relatively few to the number of motor nerves which proceed from the spinal marrow.

Sympathetic Nerves.

The physiological researches of Professor Bernard and others, have led to the conclusion that the sympathetic nerves are motor nerves of blood-vessels—vaso-motor nerves—and that they form a complementary organism, placed by the side of the cerebro-spinal axis, communicating with it, endowed with similar attributes, obedient to the same laws, but exerting their action on different tissues.

In 1851, Professor Bernard showed that a section of the cervical portion of the sympathetic nerve is always followed by a dilatation of the blood-vessels, and an increased afflux of blood in those parts of the head to which the sympathetic nerve is distributed. In 1852, Dr. Brown-Séquard demonstrated the converse; namely, that either direct or reflex excitation of the sympathetic nerve by galvanism is followed by a contraction of the blood-vessels and a diminished afflux of blood. Again, in 1857, he showed the resemblance between the effects of a section of the sympathetic nerve in the neck and a transverse section of a lateral half of the spinal cord. In both cases a paralysis of the vascular nerves, and therefore a paralysis of the blood-vessels, is induced; there is a greater afflux of blood in those vessels to which the divided nerves are distributed; nutrition is increased, and the vital properties of nerves, muscles, and blood-vessels are augmented. Many points of resemblance are also found, on comparing the side of the face where the sympathetic nerve has not been divided with the posterior limb of the uninjured side of the spinal cord. Both receive less blood than usual; in both the temperature is diminished, and the vital properties of both are decreased.

By the doctrine that the blood-vessels and secretory organs are dependent on the influence of the sympathetic nerves, almost all physiological and pathological phenomena which have hitherto been obscure, admit of an explanation. Moreover, some experiments which Professor Wagner has lately made upon the head of an executed criminal, tend to prove that the contraction and dilatation of the pupils are due to the influence of the sympathetic nerves. The head was cut off by the guillotine, the blade of which passed through the sixth cervical vertebra; and, eighteen minutes afterwards, the experiments were commenced. An electro-magnetic current was applied to the divided end of the great sympathetic trunk, first on one side of the neck, and then on the other. The eyelids of the corresponding eye were observed to separate, and the pupil to dilate, until the breadth of the iris did not exceed four-fifths of a line. The experiment was repeated six times in twenty-five minutes, and always with the same result. After the nervous trunks had become insensible, the superior cervical ganglion was laid bare, and similar results were obtained on applying the magneto-electric current to it. (*Zeitschrift für Rationelle Medicin*, 3e serie, bd. 5, Nos. 2 and 3.)

[*To be continued.*]

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., etc., Spilsby.

The study of diphtheria is a subject of the greatest possible interest and importance. It is interesting on account of the comparative novelty of the disease, and of the as yet unsatisfactory state of our knowledge bearing upon its pathology and treatment; and, when we reflect on the terrible mortality with which it is so frequently attended, its importance, I think, can scarcely be overrated. Happily of late this mortality, which occurred more especially during the climax of the epidemic, has considerably diminished; the disease, however, still continues to prevail extensively, keeping the public mind in a state of anxiety and alarm, and justifying, I trust, any one who shall endeavour to contribute, however slightly, towards a better understanding of its true nature.

As might be expected, a visitation so serious has greatly aroused the observant faculty of the profession; and thus facts have been abundantly accumulated and recorded, and speculations the most opposite and conflicting, freely and confidently promulgated. To attempt to generalise somewhat these facts, and reconcile these opinions, is what I propose to myself in the present paper.

By some, by far the greater number of my professional brethren, diphtheria is looked upon as a distinct acute specific disease, having general and local symptoms; and this is the view which justifies our great nosologist Dr. Farr, in giving to it its present name and place in his classification of diseases. By others, again, it is believed to be but a modification of some one of the previously recognised diseases—of common epidemic sore-throat, of

scarlet fever, of croup, etc.; and undoubtedly a considerable amount of evidence can be adduced to show a close relationship, in particular cases, between diphtheria and each one of these several disorders; thus tending to prove that, whatever the true nature of the affection may be, it must have a relation to them all generally, rather than to any one particularly.

The principal characteristic of diphtheria, that from which the disease takes its name, undoubtedly is the peculiar, leather-like pseudomembranous *formation**; and this it is which I propose to consider first. I shall next examine into the general symptoms with which this pathognomonic sign is observed to coexist. Lastly, I shall endeavour to find out what relation or connection, if any, the general and local symptoms have to one another. I shall then, I hope, be able to build up a theory of the disease under consideration.

In speaking of the *physical properties* of the diphtheritic formation, it will be sufficient to consider it as when fully matured; for, owing to the rapidity of its construction and to other circumstances, it is often very difficult to trace it through its stages of development and growth. It will be found to vary greatly in colour, tenacity, consistence, etc., according to site, stage of development, and other modifying influences. In some cases, it presents the appearance of curd or cream; in others, that of white kid or wash-leather; and between these extremes may be observed every gradation of consistence. The *soft* or curdy variety is always greatly infiltrated with various secretions, the subjacent part being in a state of much exudative inflammation. Under the microscope, according to Dr. Jenner, it consists of "pus-corpuscles, other larger and smaller corpuscles, epithelium, and oleoprotein." The *touyh* variety may be seen either in isolated distinct patches, or as an uniform layer, forming a complete mould of the subnatant parts; and, when well developed, it has the tenacity of leather. At the centre, its thickest part, it has been known to measure as much as the eighth of an inch, gradually becoming thinner towards the edges. The colour varies from white to yellowish white; or owing to the admixture of blood, to brown or black. When it is about to be thrown off, a process of decomposition takes place, beginning at the edges; and then it is that fœtor is perceived. The microscope, beyond the fibrous characters, reveals chiefly negative properties; it seldom or never discloses vegetable or other growths, such as the *oïdium albicans*, which Dr. Laycock supposed to be the specific cause of the complaint, but which other observers have failed to discover in the true diphtheritic product, though often in discharges of other more harmless diseases affecting chiefly the cavity of the mouth. It is soluble in alkalis; shrivels in acids; out of the body it gradually softens and decomposes. It is never organisable.

Such is a slight sketch of some of the facts which have been observed, bearing chiefly upon the physical properties of this pathognomonic sign. There are, however, other features, of perhaps more importance, which require enumeration. Thus, with regard to its site; it is a singular and important fact that it manifests itself on such parts of the body only as are exposed to the action of the air; hence it follows that it is to be met with any where on the skin, and on a limited portion of the mucous membrane, as the lips, gums, cheek, fauces, tonsils, palate, uvula, pharynx, and possibly, though rarely, the uppermost part of the œsophagus; on the interior of the nose, lacrymal canal, larynx, trachea, and bronchial tubes; on the conjunctival membrane of the eye, and lining membrane of the vagina and os uteri. On the subject of this selection of site, Empis, in a valuable essay translated by Dr. Semple for the New Sydenham Society, remarks: "One fact which is rather remarkable in relation to the seat of *diphtherite*, is this: namely, that all the parts which are completely removed from the contact of the air are preserved from the invasion of the disease. Thus we very frequently see the membranous affection occupying the lower part of the throat, and the posterior wall of the pharynx, and spreading gradually to the larynx and the deeper parts of the air-tube; but I have never seen true *diphtherite* propagating itself by continuity into the œsophagus and the parts of the digestive canal, which are withdrawn from the influence of the air;" and he naïvely asks, "May the presence of air, then, exert in these circumstances some influence which escapes our notice?" (*Memoirs on Diphtheria.* New Sydenham Society: p. 311.) That the diphtheritic formation, whether occurring on either of these sites—the tegumentary or the mucous surface—is essentially a like morbid product, is, I believe, generally admitted. The fact, however, is fully established by Trousseau and Daviot, in their respective essays, by reference to numerous cases. The latter author in another of Dr. Semple's translations, says: "There is also a point upon which I ought to insist, in order to prove, if necessary, the perfect identity existing between pillicular inflammation of the mucous membrane and cutaneous *diphtherite*. It is the fact that, during our epidemic, under the influence of the same cause and a similar predisposition, I have seen *diphtherite* raging simultaneously on several members of the same family, attacking in one, the pharyngeal mucous membrane; in another, the cutaneous tissue; in another, the respiratory passages, and lastly, in another, all those organs at once or successively and presenting no other modifications than the symptomatic differences peculiar to each region." (*Memoirs on Diphtheria.* New Sydenham Society: p. 379.)

Another peculiarity of this diphtheritic formation, about which most observers are agreed, notwithstanding the remark of Daviot to the contrary, is, that in order for its appearance on the *skin*, the epidermis must at least be removed. It may then be seen complicating and interfering with the proper healing of slight abrasions, ecchymoses, leech-bites, blistered surfaces, herpetic and other eruptions, cuts, wounds, burns, etc. So also, in order for its appearance on the *mucous membrane*, I think it will always be found that the site chosen is a part, which at the time is congested, ecchymosed, inflamed, ulcerated, or undergoing some pathological process.

It is, however, from its great proneness to spread especially in a downward direction, either by extension of an individual patch, or by coalescence of patches having distinct centres of origin, and thus, as in the larynx, affording mechanical obstruction to the performance of a vital function, that probably the greatest importance is to be attached to the presence of this singular morbid product.

Let us now glance at the constitutional symptoms with which this leather-like pathognomonic sign is associated. The first thing which strikes us is their great variety in kind, and their still greater diversity in severity and importance. In some cases, especially in the many instances of *cutaneous* diphtheria, constitutional symptoms may be considered as almost or altogether wanting; the general health may, I grant, perhaps be somewhat deranged; but we are quite unable to trace the slightest connection between such derangement and the purely accidental formation of the diphtheritic product. The same, too, holds good when the formation presents itself in the cavity of the *mouth*, on the lips, gums, lining membrane of the cheek, etc. It may then almost always be observed that, whenever general symptoms are present, they denote such a derangement of the system as occurs in

* I employ the word *formation* here and in other parts of this paper, not because I particularly like it, or think it conveys a very correct idea of the thing signified, but because I consider it less objectionable than *exudation*. I use the term somewhat after the geologic sense, as expressing merely a something formed, without implying anything as to the how or whence formed. Exudation, I believe, expresses but one of the factors necessary for the construction of this singular morbid product.

cancer, stomatitis, and other allied affections. The patient may show signs of disordered nutrition, vitiated secretion, unhealthy digestion, general debility, etc.; but nothing which can in any way be considered as having any specific relation to the diphtheritic formation. It is, however, in the *throat* that the characteristic pseudo-membrane is most frequently to be seen; so much so, that by those who advocate the doctrine of diphtheria being a distinct specific disease, this region of the body is considered to be the especial site of the local symptom. When, however, we look to facts, we find the diphtheritic formation, even here, to be associated with the greatest possible variety of general symptoms. The throat with regard to its pathology is a peculiar region; being, as it were, an inner portal between the external world and the interior of the economy; it has to receive the impression of all atmospheric changes or impurities. In this climate of ours, many habitually suffer from throat ailments, enlarged tonsils, ulceration, or that form of chronic inflammation termed relaxed throat; and with such ailments the diphtheritic formation frequently coexists, general symptoms being almost or altogether absent. We find, too, that a more or less sore throat, in other words, a pathological change going on in the mucous membrane of the throat, is the constant concomitant of all the acute specific diseases. Not unfrequently the diphtheritic formation makes its appearance in the latter stage of phthisis and other chronic disorders. These exhausting general diseases are numerous, and differ greatly in specific characters; and yet diphtheria, in ordinary language, is said to be connected with them all, thus making it self-evident that it can have no especial relation to any one. In such cases, we are compelled to admit either that diphtheria is a constitutional disease which can coexist in the same body, and at the same time, not only with one but with a great variety of general diseases; or that the particular manifestation is but a local complication, which at certain seasons affects and fixes upon parts of the body undergoing disease.

Owing to the possession of certain positive characteristics, several diseases of the fever class now admit of accurate and close definition, thus rendering their recognition comparatively easy and sure. Between these well-defined diseases and the condition of uninterrupted health, there exists, I believe, an important series of general diseases belonging probably to the same class, but which, owing to the possession of only negative properties, are not capable of such accurate definition or classification. All we know is, that the balance of the economy is disturbed; that general fever exists; and when, as is not unfrequently the case, local complications coexist, we give names and direct attention to such local complications rather than to the specific blood-disease with which they may happen to be associated. When epidemic, as such diseases almost always are, we speak of them as the "reigning illness," epidemic catarrh, influenza; or, as when accompanied with sore-throat, epidemic sore-throat, etc. Now and then, herpetic eruptions appear in the course of such complaints, always producing improvement in the general symptoms; and thus manifesting a close relationship to the exanthemata. Not unfrequently, pneumonia or other inflammation attends these deranged states of system, when the coexisting inflammation becomes all important, and its origin in a disease of the general system is generally overlooked and misinterpreted; and (to digress a moment) in this fact may, as I believe, be found the reconciliation between the various opinions existing as to the right mode of treating this terrible disease. When it is idiopathic, occurring as a very rare affection in otherwise healthy subjects, possibly the heroic remedies so much extolled by practitioners of the last generation may answer best; while for the blood-disease, running as it does its appointed course, it is marvellous to what extent the local inflammation may be neglected, and the somewhat expectant plan of Dr. Hughes Bennett, or the more decidedly stimulating plan of the late Dr. Todd, be resorted to. These several blood-diseases may either one and all be the effect of a single cause, manifesting itself in a diversity of ways owing to modifying influences; or of a variety of causes closely related or possibly correlated to one another. Be this as it may, should such diseases at any time appear with well-marked epidemic prevalence, virulently typhoid characteristics, malignant consequences, and having throat-ailments as the particular local complication, we have all the circumstances which obtain with regard to general symptoms in the most well-marked cases of diphtheria. Again, should such general symptoms be found to occur only in connection with the diphtheritic formation, or, on the other hand, it only with them, we might be justified in looking upon them as component parts of one specific disease. Unfortunately, however, both these premises are found to be faulty, the latter especially so; for, even when in the throat, we find this remarkable formation coexisting with the general symptoms, not only of all the acute specific diseases—scarlet fever, measles, small-pox, erysipelas, ague, etc.,—but with every possible derangement of the general health.

If the *faucial* region is the most common site for the diphtheritic formation, the *laryngeal* is by far the most dangerous and important; and here it is that we observe such general symptoms as attend cases of croup; which may be primary and uncomplicated when the disease commences in the respiratory tube, or secondary and complicated when it is simply an extension of mischief from above, the croupal symptoms being then mixed up with those of the primary disease under which the patient at the time laboured. Diphtheritic measles is particularly liable to be attended with croupal symptoms.

Now comes the question: What connection is there between the local pathognomonic sign and the general symptoms? We have seen the latter to be most varied in every particular, the former to be *sui generis* with regard to physical properties, and possessed of certain pathological peculiarities. But, more than this, we are quite unable to establish any concordance between the amount of the local complication (except in croupal cases) and the severity of the case; frequently the danger is but slight, and the *formation* very abundant; and, on the other hand, the *formation* may be very scanty, and the danger most imminent. This latter state of things particularly prevailed in the Brighton epidemic; so much so, that Dr. Ormerod, who contributed an account of it to the *Lancet*, somewhat complains that the name diphtheria inadequately conveys a correct idea of the nature of the complaint. Again, there is no order of time or sequence as to the appearance of the local symptom as is the case with the exanthemata. Often, the characteristic formation is abundant before the development of general symptoms; and often again it appears at the climax or during the latter stages of some general complaint. When, then, we consider these facts, coupled with the pathological peculiarities of the pathognomonic formation before enumerated—its presence on parts only which are exposed to the action of the air, and requiring such parts to be undergoing morbid changes; its frequent appearance in the same subject, not only with like but often with vastly different general symptoms—we have an accumulation of evidence pointing to the conclusion that there is no especial relationship between the characteristic local symptom and any one particular state of the general system, but that the diphtheritic formation is merely a local and external complication which, as it were, engrafts itself on many diseases generally.

If these suppositions be correct, the true *nature* of diphtheria must be very different from that hitherto received. We can no longer consider it to be an acute specific disease, having uniform general and local symp-

toms. The leather-like formation, hitherto held to be the diagnostic sign, at once loses its significance, if it have to be viewed only in the light of a complication of nearly every ill that flesh is heir to; manifesting itself, it is true, only at certain seasons, such seasons being noted for the extensive prevalence of zymotic diseases generally. To show that the season of the present diphtheritic epidemic is so noted, I quote the following from Mr. J. N. Radcliffe's paper in the *Lancet*: He says, "If we examine the mortality returns for the thirteen years 1847 to 1859, we find that *scarlet fever* underwent a prodigious increase in 1858, and prevailed in that year to a greater extent than in any previous year of the thirteen; annual average deaths 17·411, in 1858 30·117. The mortality from *croup* advanced year by year from 1854; the disease being epidemic in 1857-58-59; the epidemic culminating in 1858. The mortality from this disease was also prodigiously above the average of preceding years, increasing from 3,660 in 1853, to 6,220 in 1858. The mortality from *thrush* was also greatly increased in 1858-59. The mortality from *quinsy* was increased in 1857-58; in the latter year attaining a higher point than in any previous year. The mortality from *noma* underwent a remarkable change in 1855-56-57-58-59; the acme being in 57. Finally, the mortality from *laryngitis* underwent a steady development from 762 in 1847 to 1439 in 1858. In fact, it is not too much to say," he goes on, "that all the affections allied to diphtheria prevailed epidemically, cotemporaneously with the epidemic of diphtheria." In other words, all and every state or condition of the general system with which the diphtheritic formation is known to be associated, prevailed epidemically, cotemporaneously with the present epidemic of diphtheria. Let me not be misunderstood. I dare not and do not deny that, during a diphtheritic epidemic, a distinct, and, to a certain extent, new zymotic disease may possibly exist, to which the name diphtheria may, though rather inaptly, be applied; all I maintain is, that if such a disease do exist, we have no positive symptom by which to recognise it; and that, as far as its general symptoms go, they only represent a condition of blood-poison analogous to, though possibly increased in severity over, diseases already known—presenting differences of degree more than of kind; and that the so-called local pathognomonic formation associated, as it is found to be, with an endless variety of general symptoms, can no longer be employed as a diagnostic sign.

But, it may be asked, are not swollen glands, albuminous urine, and the numberless varieties of nerve-derangement, symptoms sufficient to show diphtheria to be altogether distinct and different from other general diseases? In Dr. Jenner's book (p. 7), there is a foot-note which, in my humble opinion, sets glandular enlargements as a symptom of diphtheria in a proper light. He says: "Trousseau attaches much diagnostic value to the enlargement of the lymphatic glands of the neck in diphtheria. I cannot agree with him on this point. The enlargement of the glands has been, in the cases of diphtheria which I have seen, in proportion to the severity and depth of the local, nasal, pharyngeal, laryngeal, and tracheal disease. I have never seen it greater in proportion to the local primary mischief than in other forms of cynanche pharyngea. In children, generally, the swelling of the glands, other things being equal, is greater than it is in adults; and in strumous children the enlargement is always greater, other things being equal, than it is in ricketty or healthy children." Albuminuria occurring in diphtheritic cases is certainly a symptom of grave import; and great credit is due to Dr. Willoughby Wade, of Birmingham, for being the first to direct attention to it. Its presence may perhaps assist us in forming our prognosis; but for diagnostic purposes it avails absolutely nought. In well-marked cases of acknowledged diphtheria, it is as often absent as present; it is absent often in cases the most severe, and present in cases comparatively mild. In short, it can only be looked upon, as Dr. Headlam Greenhow has it, as an occasional concomitant of the complaint. Of all the symptoms indicative of diphtheria being a distinct general disease, the various manifestations of nerve-derangement undoubtedly claim the first place. Analogous conditions have from time to time been observed in connection with other general diseases; though, I must confess, with scarcely the same regularity and frequency. Unfortunately these symptoms, when present, appear too late to be of any diagnostic value. They occur mostly as sequelæ; and, although they may perhaps indicate the previous disease to be somewhat new in its nature, for practical purposes they become comparatively useless. But if, for the sake of argument, we allow the three symptoms just mentioned to be sufficient to indicate a specific general disease, we ought at least to find them to be constantly associated in the same individual case, a condition of things by no means corroborated by clinical experience; otherwise, these three several symptoms might just as well be held forth as indicative of three several states of system, and thus be made to support the theory of diphtheria being made up of a variety of diseases.

If, then, a variety of general diseases, alike only in having the common diphtheritic complication are any longer to be considered as one distinct disease to be called diphtheria, the sooner for all practical purposes the name is done away with the better, for it cannot but mislead. It conveys not the slightest notion of the true nature of the affection (or affections); and it renders utterly nugatory all attempts to reduce either diagnosis, prognosis, the question of contagion, or the method of treatment, to a scientific basis. Far better would it be to employ the word to all and every case generally, no matter what the general symptoms may be, wherein the pathognomonic sign presents itself, only reducing it to the rank of a qualifying adjective. We should then speak of cases as diphtheritic, whatever the general symptoms showed the patient to be at the time labouring under. We should be induced to study more closely such coexisting malady, and, not being led away by a name, be more likely to form a correct idea of any particular case.

The *theory* of the nature of diphtheria to be induced from the foregoing facts and observations may be briefly stated in the following conclusions, viz.:—

1. The characteristic formation is but an external complication, and has no specific relation to any particular state of system.

2. The general symptoms with which this formation is found to be associated are most various; ranging from the most trifling *malaise* to the most virulent septicæmia, and extending through the whole class of acute specific diseases.

3. Possibly, during the prevalence of a diphtheritic epidemic, there may be a distinct general disease, altogether different from other known diseases; but we have no positive evidence on the subject.

4. Diphtheria, in the sense in which the word has hitherto been employed, is to be looked upon not as one disease, but rather as many diseases alike only in being associated with the common characteristic formation.

Believing as I do, the theory of the nature of the disease under consideration embodied in the above conclusions to be essentially correct, I purpose in a further communication to point out how many of the discrepancies which have hitherto prevailed on the subject are, by it, readily removed and explained away. In short, I hope to establish its truth somewhat deductively; and to show—

That the difficulties which have beset bibliographers in collecting the ancient history of the disease are in a very great degree removed;

That the various questions arising on the subjects of diagnosis, prognosis, etiology, and contagion, admit of more satisfactory solution; and

That treatment having more reliable indications becomes less empirical, more rational, and more successful.

SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, ETC.

By J. Vose Solomon, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[*Read before the Midland Medical Society, February 3rd*, 1863.]

[*Continued from page* 452.]

The statistics of iridectomy operations are sufficiently favourable as to results on vision in acute *primary* attacks of glaucoma, but in the other class (subacute and chronic) are most unsatisfactory and discouraging. None have been published in England since Dr. Bader's valuable and very candid report appeared in the *Ophthalmic Hospital Reports*.

If, however, the profession should agree to consider, with Bowman, *all* excess of tension as glaucomatous tension, and apply for its relief iridectomy, the statistics will then bear the light of day, and criticisms from hostile schools of ophthalmology. Such a recourse to Von Gräfe's operation, I consider, would be most unjustifiable, because there are other surgical measures unattended by danger, and which do not entail a permanent deformity, that are fully competent to insure all the advantages which arise from the restoration of the intraocular tension to its healthy standard.

It has been asserted by Dr. von Gräfe and some of his followers in this country, that the removal of the glaucomatous state by iridectomy from one eye has no effect (practically) on its fellow. As a general rule, this is correct; but I have occasionally met with instances wherein the relief of the disease in the more seriously compromised organ has been followed by a spontaneous subsidence of the tension in the opposite eye.

An iridectomy sometimes gives rise to confusion of vision from the rays of light which pass through the zonula and margin of the lens, causing "circles of dissipation" on the retina. I propose to remedy this very serious optical inconvenience, when occurring among the labouring poor, by covering the coloboma with an artificial pterygium derived from the sclerotic conjunctiva; this proceeding has a great advantage over a perforated black diaphragm set in a spectacle-frame (a contrivance which one of my iridectomy patients has worn seven years), because it permits of lateral vision. Where the conjunctiva is much atrophied, my plan is inadmissible, and hence has not been applied in the case to which I have referred.

When estimating the value of other methods of treatment, the English section of the Berlin school appear to have forgotten that Von Gräfe has modestly said of his great discovery, "The theory is as yet infinitely darker than the empirical facts". (*Memoirs*, New Sydenham Society's edition, page 357.) They have also failed to remember that, in urging upon the profession the adoption of iridectomy, their appeal has been solely to "empirical facts", and in no wise to any physiological principle which has been made out with distinctness and certainty in the course of the inquiry. They have also overlooked the fact that, with the exception of a few cases of acute glaucoma, the profession have not been placed in possession of full details of the large majority of cases of glaucoma which have been treated by iridectomy. I submit they are not, therefore, in a position to demand of the innovators of iridectomy that which they themselves have hitherto withheld.

Few if any operations on the iris are more easy of performance, or less dangerous, than iridectomy, where the dimensions of the anterior chamber, the texture of the iris, the attachment of the zonula to the lens, and the tissue of the choroid, are normal. Unhappily, acute glaucoma not unfrequently attacks eyes which have been for years undergoing a slow disorganising process. In such instances, grievous accidents commonly attend on iridectomy, let the operator be ever so skilful and experienced.

The operation, in the hands of able surgeons, has been followed by one or more of the following accidents: opacity of the lens; loss of vitreous humour; hæmorrhage from the ciliary processes; escape of the lens some days after the operation; closure of the pupil; ophthalmitis; and even by sloughing of the cornea.

Whatever may be the ultimate position assigned to iridectomy as a curative agent in glaucoma, there can be no doubt that the publication of von Gräfe's *Memoirs on Iridectomy* by the New Sydenham Society has produced a most beneficial influence on the English school of ophthalmology, by causing greater exactness to be observed in the investigation of diseased processes and the effects of surgical treatment.

Several theories have been suggested to explain the relief of glaucoma by iridectomy. In Dr. von Gräfe's *Memoirs*, we find relaxation of the ciliary muscle, diminution of the secretory surface of the iris, a more perfect exosmosis through the cornea, put forth as in some measure explaining the diminished tension. I shall be forgiven if I remind the Society that, so far back as the spring of 1860, I orally enunciated my belief that the division of the ciliary nerves, at the point where they pass from the ciliary muscle into the iris, formed an important element in the operation; that thereby a more healthy action was induced in the ciliary ganglion, which, as proved by the experiments of Dr. Radclyffe Hall, presides over the organic function of the eye. Through the kindness of Mr. Square of Plymouth, my theory was embodied in the valuable practical address in Ophthalmic Surgery, delivered by him before the meeting of the British Medical Association at Torquay, in August 1860, and which was published in the Journal of the same year. Since that time I have been gratified by observing that the tendency of opinion among scientific surgeons has been in the direction which I was the first to indicate; viz., that the nerves of the ciliary vessels play an important part in the *rôle* of symptoms which constitute glaucoma, as described by the new school of ophthalmology.

I have been led to attribute considerable importance to *section of the ciliary nerves at the point where they pass from the muscle of the lens into the iris*—

1. From having observed the subsidence of non-inflammatory glaucoma after an intraocular myotomy* which was attended with so little discharge of aqueous humour as to occasion a doubt whether any had escaped. There was no loss of vitreous in these cases.

2. From the superior results obtained in glaucoma cases treated by iridectomy where the iris has been cut close to its origin, as compared with those in which such precaution was not taken; also from the superior results of intraocular myotomy, as compared with division of the ciliary structures at a right angle with the cornea, and with paracentesis of the cornea.

3. The phenomena of some forms of glaucoma are only explicable on the supposition that they are due to a non-inflammatory irritation of the vessels; *e.g.*, the transitory nature of the obscurations, the sudden and

* Intraocular myotomy is performed by making an incision, with a cataract-knife, on a line parallel with one of the equators of the eye, through the corneo-sclerotic union, pillars of the iris, and ciliary muscle.

complete recovery of distinct vision, and the increased secretion of vitreous, without the prior occurrence of inflammation or congestion.

4. Because the principal nervous endowments of the vessels of the inner eye are derived from the ciliary ganglion; also because the fifth pair has an intimate relation to the same nervous centre. (The function of the ganglion-cells discovered in the choroid by Schweiger, and which Mr. Hulke informs me he has seen in Schweiger's preparation, is not yet, I believe, determined.)

5. From a consideration of the reflex action of which the ciliary ganglion must be the centre.

6. From a consideration of the manifestly improved nutrition which takes place after a neurotomy in limbs the subject of neuralgia; and in amblyopic eyes after section of the frontal branch of the fifth nerve, performed for the relief of traumatic irritation of the nerve.

7. From the frequent occurrence of glaucoma among persons who have passed the meridian of life, and whose nervous power was at the time much depressed.

8. From having obtained an enlargement of atrophied and flaccid eyeballs after intraocular myotomy.

9. From having observed long sustained excessive tension of an eyeball from which the *whole* of the iris had been detached by a blow, so that the two chambers were thrown into one; and in which, consequently, there could be no impediment to exosmosis through the cornea. In this case, paracentesis of the cornea failed to afford relief.

10. From observing that a healthy tension is maintained in eyes affected with congenital coloboma iridis.

The observations 8, 9, and 10 appear to me to weaken very much the importance of a coloboma iridis in the production of a reduced tension as a consequence of an improved exosmosis by the cornea, and to support the theory that section of the ciliary nerves at the place I divide them by my operation constitutes an important step in the direction of cure of glaucoma. This theory is not in any way hostile to the opinion that an iridectomy becomes an imperative necessity where certain chronic pathological changes have taken place which impede or stop the physiological relationship of the vitreous to the anterior segment of the eyeball.

Division of the Ciliary Muscle. Those who have followed me thus far will not fail to have been convinced that section of the ciliary structures is not by any means a modern operation for the relief of tension of the eyeball. The danger, real or imaginary, which has been attributed to operation on these parts, I have shown, were set at nought by Whyte and Desmarres, and, I might have added, in numerous instances by needle-operators for cataract, and the early operators for artificial pupil after a cataract extraction.

A series of ingenious and popularly written papers have appeared in the *Lancet* for 1860 and two following years, from the pen of Mr. Henry Hancock, on "Division of the Ciliary Muscle in Acute Glaucoma", which it now becomes my duty to examine.

In his first lecture, published on February 11th, 1860, he revives the old and exploded doctrine that "glaucoma depends upon an arthritic condition of the blood"; adding that, "sooner or later, the blood-vessels (of the eye) become structurally diseased in the same way as the vessels and valves of the heart become affected in arthritic disease. Consequent upon these changes, the humours of the eye are affected. *As the disease progresses*, effusion takes place within the eyeball, rendering it tense and hard by the resulting intraocular pressure, which, acting upon the ciliary nerves and retina, causes intense pain, and ultimately total blindness."

The notion that glaucoma is related to an arthritic condition of the blood is not only opposed by such observers as the late Mr. Guthrie senior, Von Gräfe, and Donders, but by the whole of Mr. Hancock's clinical references. Of the large number of cases published by him in illustration of his views, during the last three years, one only (Case III) had suffered from rheumatism, and one from "occasional attacks apparently of an arthritic nature"; this patient (Case XXV) "habitually enjoyed good health". (*Lancet*, Sept. 23rd, 1862.)

The next statement in the lecture which demands notice is, that the ophthalmoscopic signs of glaucoma (cupping of the optic nerve, congestion of the retinal veins?) and "puckering of the retina" (*sic*) "are greatly enhanced, if not in some instances entirely due to the obstruction of the circulation exerted upon them by the spasmodic or extreme contraction of the ciliary muscle, analogous to the spasm so often observed in the muscular fibres of the urethra, as well as in the sphincter ani muscle, in certain affections of those parts."

Mr. Hancock asserts that he arrived at this view by a study of the anatomy of the ciliary muscle and the vessels which pass through it, etc.; but, although he has often repeated this statement, he has not informed his readers in what consist the *anatomical peculiarities* which bring about derangement of the whole internal circulation of the eye, with cupping of the optic nerve, and "puckering of the retina", in glaucoma; nor has he adduced any physiological proof, than which nothing could be more easy, did it exist; and, what is still more provoking, his disciples are not permitted even to have clinical evidence of the alleged constriction or spasm. Not a single case is recorded where the spasm was overcome by paralysing the muscle with atropine, and the cupping of the optic nerve and puckering of the retina were *seen* to gradually subside. It is true, he claims to have discovered a sign of *acute* glaucoma which had been "hitherto unnoticed", and which is considered by him to prove the presence of a condition of ciliary spasm similar to what is observed in the sphincter ani, etc. The sign on which he relies consists in a conical condition of the cornea, and the presence of a groove or neck in that part of the sclerotica under which the ciliary muscle is situated. We naturally turn to the cases which illustrate his paper for the clinical proof of this statement; but here the only instance of glaucoma in which the cornea is reported as conical is that of a woman whose eye had been diseased *ten* years, and the vision of it seriously impaired for *six* years. (Case III). We will not stay to discuss whether the case was an example of glaucoma or not. It is enough that it was essentially a chronic disease of the eye, and therefore in no degree supportive of the alleged discovery. Mr. Hancock may be interested by the following short extract from an article on *chronic* glaucoma by Dr. Desmarres: "J'ai vu la cornée, après avoir pris une forme légèrement conique." (*Traité des Maladies des Yeux*, p. 762; Paris, 1847.)

[*To be continued.*]

UNIVERSITY OF LONDON. On Wednesday, a meeting of the members of the University of London and their friends was held in the convocation room of the University, Burlington House, Piccadilly, for the admission of candidates for degrees. Earl Granville, K.G., the Chancellor of the University, presided. The following gentlemen were then presented for degrees, among others: *M.D.*—Charles Hilton Fagge, Guy's Hospital; John Henry Galton, Guy's Hospital; Morell Mackenzie, London Hospital; Walter Basnett Ramsbotham, University College; Joseph Rutter, University College; Robert Bowie Walcott, St. Thomas's Hospital. *M.B.*—Richard Dawson and Edward Thos. Tibbits, University College; Frederic Marsdin, King's College; Henry Colley March, St. Thomas's Hospital; H. Jeaffreson, St. Bartholomew's Hospital; J. Bayldon, Surgeons' Hall, Edinburgh; W. Dale, Leeds School of Medicine and Middlesex Hospital; F. Stockwell, St. George's and Bath United Hospitals.

Progress of Medical Science.

Operative Surgery in Children. M. Guersant of Paris has published the conclusions at which he has arrived, after an experience of twenty years as surgeon to the Children's Hospital of that city. He treats of the preparation of the patients; the performance of the operations; and the consecutive treatment.

1. *Preparation of Patients.* Certain malformations, especially imperforation of natural openings, must be operated on at birth without preparation. The treatment of others, which do not interfere with the performance of the vital functions and the child's growth, may be deferred to a later period; such as club-foot, phimosis, webbed and supernumerary fingers, complicated hare-lip, cleft palate, etc. In general, operations, even those which it is thought advisable to perform at an early date, are more likely to succeed if delayed a fortnight, three weeks, or a month, when there has been time for ascertaining whether the child thrives well, than if performed two or three days after birth. In the meantime, if there be danger of small-pox, the child may be vaccinated before being operated on.

If the necessity for operation be not urgent, it is a principle of good surgery to choose for its performance, both in hospital and in private practice, a period of the year when the smallest amount of disease prevails, and especially when there is no epidemic. There will rarely be opportunity for operating in the spring, as has been hitherto advised; in general, the months of June, July, August, September, and even October, are to be preferred, as ordinarily presenting a more regular and less variable temperature than prevails at other seasons of the year. In these cases, the little patients should be vaccinated if this have not been already done; and even those who are fifteen or sixteen years old should be revaccinated as a precautionary measure. If this be not done, children who are in a fair way of recovery after operation may take small-pox and die. M. Guersant performed disarticulation of the thigh, for osteosarcoma of the femur, on a child five years old; the wound was almost cicatrised and recovery seemed certain, when the patient, who had not been vaccinated, was seized with small-pox, and died thirty days after the operation.

It is of the greatest importance, before determining on an operation, that the surgeon should examine the patient with the most scrupulous attention, in order to ascertain that there is no internal disease or peculiar condition which may endanger the success of the operation and the life of the patient. Thus, it is extremely useful to know whether the child be liable to convulsions or of the hæmorrhagic diathesis. M. Guersant has several times met with evidence of this diathesis in children. In one case of the kind, he was obliged to defer excision of the tonsils in a little patient who had purpura hæmorrhagica; and it was not until a course of astringents and iron had been persevered in for two months that he decided to operate; and even then the excision was attended by alarming hæmorrhage. He advises that children subject to hæmorrhage should be prepared for operation by the internal use of perchloride of iron for a week at least. In another case, a child from whom he excised the tonsils died of convulsions, to which it had been subject.

Certain preparations, according to the operation to be performed, are often indispensable. Thus, before opening an imperforate anus, the bladder must be emptied; before performing lithotomy, the rectum must be unloaded; and, in all operations, digestion must have been completed, and the bowels as freely evacuated as possible.

As to the *moral*, there is not much to be done as regards infants. Some children, however, may be led to submit to operation by being made to understand, that if any pain is to be inflicted on them, it is for the purpose of curing them. Most, however, must be operated on by surprise. In all cases, it is indispensable to have efficient assistants. If it be proposed to use chloroform, this should be sometimes attempted before the day of operation.

Performance of Operations. In a tolerably large number of cases, anæsthesia may be dispensed with. In opening abscesses, sounding the bladder, examining the rectum, and removing small polypi from that region, M. Guersant generally operates without chloroform. In some operations, the use of this agent must be rejected, as in very nervous and impressionable individuals. In some such cases, local anæsthesia may be produced by the application of chloroform, or, still better, of ice; while in other instances, as in excision of the tonsils and in tracheotomy, no anæsthetic can be used.

There are many circumstances in which the use of chloroform is strongly indicated; and, after having employed it in the cases of 5000 or 6000 children, M. Guersant sees no reason to regret having done so. He uses Charrière's instrument; the anæsthetic may also be given on a sponge having a sufficiently large opening to allow the air to pass freely. He has never had to lament an accident from the use of chloroform. Very early age is not a contraindication to its use; he has given it to very young subjects; among others, to two children less than four months old, on whom he operated for strangulated hernia. He has often used chloroform to render children insensible during examination; as when they refuse to open the eyelids in diseases of the eyes, and in certain very painful cases of coxalgia. He advocates especially the use of chloroform in operations which give rise to much pain, and at the same time demand precision in execution, such as lithotomy.

The performance of an operation on a child demands the most perfect knowledge of anatomy on the part of the surgeon; for, the parts being of small extent, the incisions must be limited to the strictly necessary dimensions. As examples of the necessity of attending to this precept, he mentions tracheotomy and lithotomy in children two years of age; and says that it is plain, although many ignore the fact, that operations are more difficult in children than in adults. In certain cases, the precept which recommends the surgeon to operate slowly must be departed from; for children endure pain for a less time than adults, and losses of blood are generally more dangerous in them. Thus, the tonsils must almost always be removed very rapidly. In some cases, tracheotomy must be performed quickly, in order to prevent the patient from dying under the surgeon's hands, especially if the veins have been opened and pour out much blood.

Consecutive Treatment. The first point to be attended to is the ligature or torsion of vessels; and, when only a small number of vessels have required to be tied or twisted after an amputation of one of the large limbs or after extirpation of a tumour involving a great loss of substance, M. Guersant advises that the dressing should be delayed for half an hour or an hour after the operation. He says he has always followed this plan with advantage. This precept, which was given by Dupuytren, has the advantage of allowing time for the reestablishment of the circulation, and obviates the necessity of removing the dressings to arrest hæmorrhage which has come on after the application. If it be necessary, after certain operations, to plug the wound with perchloride of iron, this should be well diluted with water, to avoid sloughing.

M. Guersant, following the advice of Dupuytren and Lisfranc, almost always renews the dressings on the day after the operation. The removal of the charpie and lint, the bandages and sutures not being interfered with,

prevents the danger of many accidents. Erysipelas is prevented, by the removal of charpie impregnated with blood and serosity; pus, if it have formed, is allowed to escape from between the lips of the wound; and, if the edges of the wound have been strangulated by the sutures being too numerous or drawn too tight, they can be removed or loosened. If there be erysipelas, M. Guersant has often seen benefit derived from the application of collodion. This, with the internal use of tincture of aconite, sometimes prevents purulent absorption—a very rare accident in children, but which occasionally occurs.

If the wound become pale and grey, the application of charpie soaked in solution of chlorinated soda is very useful; and the application of pure lemon-juice has, in M. Guersant's hands, given a healthy aspect to an unhealthy looking wound.

General treatment is often of still more importance than local treatment. Usually, if there be no convulsions (an accident which rarely occurs even after the most severe operations), or if there be no special contraindications, a nutritious diet should be allowed from the day of operation. Whenever it is possible, infants should be put to the breast from the first day, rather than be fed from a bottle: they should be allowed to suck as much as they desire, at intervals of two hours. For other children, the food should at first be liquid, and consist of milk and beef-tea; after the first day, wine may be given. A return should be gradually made to the child's ordinary food, to which may sometimes be added chocolate, coffee, quinine, and other tonics. This regimen is indispensable, unless consecutive internal disease set in and demand on the part of the surgeon the amount of medical knowledge necessary for detecting and properly treating them—without which there is no success in surgery. We must, M. Guersant says, never forget that the operator must be a physician before operation, a surgeon during its performance, and again a physician to terminate and even to bring to a successful issue many surgical operations.

Finally, all the means which have been here described may fail, if the hygiene of the patients be neglected. Thus, all things being otherwise equal, children who are operated on in the town, in the homes of parents in good circumstances, and who reside in well ventilated and warmed rooms, according to the indications of the case, are in better conditions for recovery than those who are operated on in hospitals, where numerous patients are collected in one room, of which the air is, in spite of all that can be done, more or less vitiated. (*Bulletin Général de Thér.*, 15 Mars 1863.)

Large Erectile Tumour of the Scalp and Face in an Infant; Ligature of the External and Common Carotid Arteries; Recovery. On May 14, 1860, a woman brought to Dr. Bertherand, at Algiers, her female infant, aged four months and a half, on account of a large erectile tumour which it had on the head. The tumour had appeared at birth as a nævus of the size of a bean, on the left side of the forehead. It had remained stationary for some time; but during the last fortnight had increased with extreme rapidity. It occupied the left side of the head; it commenced a little below the external orbital angle in the eyelid, extended half over the temporal fossa and superciliary region, was prolonged upwards to the level of the sagittal suture, and thence descended towards the external occipital protuberance. It formed a curve with the base below and the apex above. Its length was more than six inches; its greatest breadth about two inches and a third. It was soft, pasty, and formed a violet coloured projection, irregularly lobed, the most prominent parts of which were rather less than half an inch above the level of the scalp. To the hand, it felt warmer than the surrounding skin; and there was felt in it pulsation, isochronous with the radial pulse, and more distinct at the lower part and towards the temporal fossa. A similar tumour, of the size of a small nut, existed in the parotid region of the same side. The tumour raised the hairy scalp; and was advancing beyond the palpebral angle, so that the eyelids, hypertrophied and œdematous, could not be opened.

The only mode of treatment which appeared to Dr. Bertherand at all likely to succeed, was ligature of the carotid artery; and to this the consent of the child's parents was obtained.

On the next day, the child was brought into the operating theatre; and the question then arose, which artery should be tied? Although the fact that the principal mass of the tumour occupied the temporal fossa and the integuments of the size of the head pointed to its origin being limited to the external carotid, Dr. Bertherand was at first disposed to tie the common trunk; because the participation of the eyelids in the disease made him doubt that its origin was single. At the same time, certain statistics which were being collected by Dr. J. Ehrmann, showed that 25 per cent. (42 in 187) of the cases of ligature of the common carotid were attended with severe cerebral disturbance; and, as these statistics supported the advice given by Wutzer and Maisonneuve, to tie the external rather than the common carotid when one of the external arteries of the head is affected, Dr. Bertherand determined to ligature the external carotid first, and, this failing, to tie the common trunk.

A sufficient quantity of chloroform was given to prevent movements on the part of the child; and the ligature was placed on the external carotid. The operation was necessarily performed rather slowly; but, beyond this, presented in itself nothing worthy of note. As soon as the artery was tied, the whole tumour suddenly sank in, and became yellow, flabby, wrinkled, and empty. The infant, on being carried to its mother, took the breast immediately; it manifested no cerebral disturbance, nor derangements of sensation or motion, and soon slept.

In the evening, the tumour had regained the appearance which it presented before the operation. This doubtless arose from the anastomosis in the orbital and frontal regions, through the ophthalmic artery; and perhaps also by means of the anastomoses between the vessels of the two sides of the head. Chloroform was again given; the dressings were removed; the edges of the wound separated; the incision was carried downwards, a ligature was placed on the common carotid, and the external carotid was released. This time, the sudden sinking of the tumour did not take place. No disturbance of the nervous system either accompanied or followed this second operation.

The child passed a good night and slept well; on the following two days, it had a little fever. On the third day, the tumour began to grow pale and to diminish, but very slightly. On the eighth day, it had almost entirely lost its colour in certain parts; the skin over it was thicker; and the eyelid was free, so that the eye could be properly seen. Towards the middle of the third week, several parts of the surface of the nævus, which still projected, and had not undergone the same changes as the rest of the tumour, softened and suppurated. They gradually cicatrised, and were replaced by tissue which soon became undistinguishable from the skin covering the rest of the tumour. The small parotid tumour was the last to disappear. The ligature being drawn away, the wound in the neck cicatrised, and the little patient left the hospital perfectly cured.

Dr. Bertherand, in presenting this case to the Surgical Society of Paris, observed that it presented several points worthy of remark.

1. It is the earliest recorded instance in which recovery has followed the operation at so early a period. In a case, where Wardrop tied the common carotid in a child six

weeks old, death took place; and a return of the disease followed an operation performed by Mayo on a child five months old. Of four other children operated on at seven and eight months by Wardrop and Rogers, one at nine months by Pirogoff, and one at fifteen months by Zeis, the first two survived and the others died.

2. The necessity which was found to exist for tying the common carotid after ligature of the external carotid had been found insufficient, should not be lost sight of by surgeons, whenever nævi, limited to the external and upper parts of the head, yet touch closely on regions supplied by arteries arising from the internal carotid. In all cases, if the operator decide on tying the external carotid, he ought not to depend absolutely on the success of this operation, and to apply the dressings so as to be able readily to reach the common carotid in case of failure.

3. The difference in the behaviour of the tumour after the two operations may be explained by its mode of development and the manner in which it was supplied with blood. The remarkable diminution which immediately followed the first operation, indicates that the greatest portion of its blood arrived directly through the temporal arteries; and this interpretation is confirmed by the point at which the nævus first appeared. After having been slowly refilled, it remained stationary after the second operation, because the circulation, which had then become exclusively capillary and anastomotic, could not at once be affected by the suspension of the course of the blood through the great vessels. Dr. Bertherand suggests also, that the arrest of the blood in different parts of the tumour determined the formation of those isolated spots which did not yield with other parts, but underwent inflammation, softening, and suppuration.

4. The absence of all nervous disturbance should encourage the repetition of a similar operation under like circumstances.

5. The last point which Dr. Bertherand points out, is the tolerance exhibited by the child towards chloroform; two prolonged inhalations of which were administered, with an interval of ten hours. (*Gaz. Méd. de l'Algérie*; and *Gaz. Méd. de Paris*, 21 Mars, 1863.)

Section of the Pneumogastric Nerves: its Effects on the Respiratory Organs. Dr. R. Boddaert, in a thesis presented to the University of Ghent in April 1862, has described elaborately the effects produced on the organs of respiration by injuries of the pneumogastric nerve. He discusses the subject under the following heads:—1. Physiological Study of Paralysis of the Inferior Laryngeal Nerves: 2. Paralysis of the Pulmonary, Cardiac, and Œsophageal Branches of the Pneumogastric Nerve; 3. Effects of Section of One Pneumogastric in Man and of Both Pneumogastrics in Birds; 4. Critical Examination of the Various Theories; 5. Theory of the Mode of Production of the Anatomical Lesions by the Functional Disturbances. The following are his conclusions.

1. In mammalia, section of the pneumogastric nerves in the cervical region produces various effects on the respiratory apparatus, of which some are to be referred to paralysis of the inferior laryngeal nerves, others to paralysis of the pulmonary branches.

2. To these two orders of effects correspond two orders of pulmonary lesions. The phenomena of inflammation observed under certain conditions in some animals are due to the entrance of foreign bodies into the air-passages in consequence of paralysis of the larynx; while emphysema, hyperæmia, and their results, are due to the fulness and rarity of inspiration, consequent on paralysis of the pulmonary branches.

3. Paralysis of the œsophagus is a secondary cause of the first series of the phenomena just now referred to; while modifications of the heart's action and the formation of blood-concretions in the pulmonary artery contribute to those of the second class.

4. Section of one pneumogastric nerve produces only insignificant lesions in the lungs, since it does not give rise to the physiological disturbances above mentioned.

5. Section of the par vagum in birds does not produce structural changes in the lungs; because of the two causes referred to in conclusions 1 and 2, the first is absent, and the second acts on organs formed differently from those of mammalia. (*Jour. de la Physiologie*, Oct. 1862.)

Clubbed Fingers. M. Labalbary gives a theory of the production of clubbed or Hippocratic fingers, which have long been recognised as a sign of pulmonary phthisis. M. Trousseau believes the deformity to depend on hypertrophy of the last phalangeal bone, or on abnormal development of the fibro-cellular tissue of the digital pulp. M. Labalbary refers the origin of this condition to the imperfectly arterialised state of the blood, and to venous stasis in parts furthest removed from the centre of the circulation, in consequence of which, tubercular matter, carried by the blood to all parts of the body, is there deposited. Having had an opportunity of examining the ungual phalanx of the right forefinger of a phthisical patient, he found the following appearances. 1. The osseous tissue was enlarged and thinned, presenting a state analogous to *spina ventosa*. 2. The venous capillaries of the digital pulp were much more developed than in the normal state. 3. The arterial capillaries were remarkable only for their flaccidity. 4. On the adherent surface of the nail, considered by many anatomists as the prolongation of the matrix, there was a deposit of cretaceous granulations, presenting much analogy with calcareous molecules. 5. The digital pulp was infiltrated with black blood, and was much thickened. On scraping it with the handle of a scalpel, a pitchy fluid was removed, which, on being rubbed between the fingers communicated a sensation as of touching finely powdered plaster of Paris. 6. The two lungs, especially the right, were literally riddled with masses of tubercle in a state of suppuration. 7. The other organs were healthy. (*Gazette des Hôpitaux*, 26 Mars, 1863.)

Inosuria. At the meeting of the Academy of Sciences on March 23rd, M. Claude Bernard presented a memoir, by M. Gallois, on the presence of inosite in the urine. M. Gallois states that he has never found this substance in the urine of healthy men or animals, but that it occurs in some pathological states. M. Cloetta found it accompanied by albumen and diabetic sugar; and the same observation has been made by Lebert and Neukomm, and is confirmed by M. Gallois. Inosuria and glycosuria may then coexist; but glycosuria is most commonly found alone. When saccharine urine contains inosite, the proportion of glycose may be considerable, or it may be very small. When inosite is found in albuminous urine, there is reason for searching carefully for glycose; which, if not actually present, may be about to appear in the urine, or may have been found in it at a former period. M. Gallois has never found inosite in the urine in polyuria, which in several of its symptoms approaches saccharine diabetes. He has not been able to find it in numerous specimens of diseased urine, unless in cases of saccharine diabetes or acute or chronic albuminous nephritis; nor in the urine of women during lactation. He does not think that the inosite is derived from the food, nor from the transformation of glycose. Its formation in the animal body appears closely connected with the glycogenic function of the liver; and inosite, like dextrine and glycose, appears to be one of the products resulting from this function. In certain cases, puncture of the floor of the fourth cerebral ventricle will produce inosite as well as sugar in the urine. (*Gazette Méd. de Paris*, 4 Avril 1863.)

Reviews and Notices.

On the Cure of Clubfoot without cutting Tendons; and on certain New Methods of Treating other Deformities. By Richard Barwell, F.R.C.S., Assistant-Surgeon to Charing Cross Hospital. Illustrated by Engravings on Wood. Pp. 224. London: 1863.

When the tide of opinion on a certain subject sets very strongly in any one direction, it often happens that at some period a reaction in the opposite direction takes place. By this is tested the correctness, and consequently the strength, of the doctrine that has prevailed; and therefore, whether the views of the reactionary party gain ground by their soundness, or by their futility only prove the correctness of those which they have been designed to overthrow, the man who brings them forward must be considered to have performed a wholesome act.

Mr. Barwell is a reactionist against the prevalent modern practice of tenotomy in deformities of the feet; and it is due to him to say, that his arguments are founded on observation, and are brought forward in a manner calculated to ensure attention, if not to convince. In choosing cases for illustration, he very properly, as he tells us, has "purposely avoided selecting the worst instances of each deformity; the type of such cases lies . . . . midway between severe and slight distortion." He hopes also, that "if in the course of the work phrases have been used, which might appear somewhat severe, they will be ascribed to his zeal for true principles, and not to any personal feelings."

The book consists of twelve chapters; namely, 1. Introductory; 2. Deformities of the Foot and their Proximate Causes; 3. Impropriety of Tendon-cutting and its Evil Results; 4. The Mechanical and After Treatment; 5. New Method of Treatment; 6. Flat Foot; 7. Talipes Valgus; 8. Talipes Varus; 9. Talipes Equinus; 10. Talipes Calcaneus; 11. Deformities of the Leg; 12. Crooked Shins; and at the end is an Appendix of twenty cases, illustrating the different chapters of the volume.

Mr. Barwell's theory of the production of deformities is, that the loss of balance is nearly always caused by paralysis of a certain set of muscles; the healthy muscles drawing the part in the opposite direction by their "tonic contraction," at first temporarily, but afterwards permanently. The problem to be solved, then, is how best to aid the weakened muscles, and enable them to recover their healthy condition, Tenotomists, according to Mr. Barwell, have acted on a wrong principle in operating on the sound muscles as if they specially were in fault; thus, as the author says, "destroying the power of those organs which are still healthy." As a result of this practice, he says that he has seen many cases

"In which the only muscles having no power—that is, the only irretrievably lame ones—are those that have been cut; or, what is not quite so bad, neither the tenotomised muscles, nor the ones that had been paralysed, have any power over the limb (except perhaps the sural muscles), and it swings almost uncontrollably with the walk, being sometimes put down on one side, sometimes on the other, the toes generally being the only part that comes to the ground." (Pp. 30-31.)

The real results of tenotomy are very fairly put by Mr. Barwell. A tendon is divided; the muscle to which it is attached shortens. Union takes place between the divided ends of the tendon; but the tonic muscular contraction continues, and, *plus* the contraction of the cicatrix of the tendon, leaves the deformity just where it was—unless it be prevented by mechanical means, or unless these have by force "stretched the muscle to the proper dimensions." The result, then, of tenotomy is, that

"The operation renders the first application of force apparently more effective, since there is nothing to resist its power; but the work to be done is only postponed till complete union has taken place, and thus the tenotomy has entirely wasted all that time, which was employed in the repairs of the artificial injury." (P. 34.)

The mechanical treatment adopted after tenotomy —*i.e.*, the wearing of orthopædic shoes—meets with equally little favour from Mr. Barwell. He objects strongly to the plan of treating the foot *as a whole* by means of an "iron-soled shoe." The function of the healthy muscles is destroyed or suspended by tenotomy; and, the whole muscular motion of the foot being prevented by the apparatus for six weeks or even as many months, the patient will be fortunate if he escape fatty degeneration of even the muscles which are neither paralysed by disease nor by the surgeon's knife.

After this iconoclastic attack on the tenotomists, what plan has Mr. Barwell to substitute for that which he condemns? The principles on which he proceeds are thus laid down in the fifth chapter:—

"1. As the loss of balance in muscular action, which produces the deformity, is nearly always caused by paralysis of a certain set of muscles, we are to restore that balance.

"2. This restoration is to be accomplished by substituting a force for the weakened or paralysed muscles, and not by depriving the still useful ones of their power.

"3. The succedaneum must be applied as nearly as possible in the direction and position of the paralysed organ or organs; and must act on the parts, and on those only, on which the muscular force is normally expended.

"4. Thus, the foot is not to be treated as a whole, but as a compound of many bones; each of which, being subject to muscular action, plays a definite part in deformities.

"5. Since motion is essential to prevent or overcome fatty degeneration, as well as to allow the weakened muscles to recover their power, the foot is not to be fastened to any rigid clog; but, on the contrary, each part is to be allowed movement, which is gradually to be guided by the imitative force from an abnormal into the normal direction." (Pp. 55-6.)

To carry out these principles, Mr. Barwell substitutes for the weakened muscle a spring or springs of India-rubber, having a tension calculated to supplement the deficient force. The insertions of the muscles are imitated by strips of adhesive plaster placed over the ordinary points of attachment; and to these strips the India-rubber spring is fastened. To give further security to the apparatus, the leg and foot are strapped, and a piece of tin is applied, in a manner for the details of which, in the various forms of talipes, etc., we must refer the reader to the book. For bow-legs and crooked shins, Mr. Barwell uses a spring splint of well-tempered steel plate—the object here not being to supplement defective

muscular force, but to rectify the direction of the bone.

From the cases which Mr. Barwell relates in his appendix, his treatment appears sufficiently successful to be worthy of trial by other surgeons; and, if it be found that by its adoption the use of the knife, and the consequent injury of healthy parts, can be dispensed with, he will deservedly gain the reputation of having made a valuable contribution to conservative surgery.

THE PHARMACOPŒIAS OF THIRTEEN OF THE LONDON HOSPITALS; arranged in Groups for easy Reference and Comparison. By PETER SQUIRE, F.L.S., Chemist in Ordinary to H.M. the Queen and H.R.H. the Prince of Wales. Pp. 152. London: 1863.

MR. SQUIRE informs us in his preface that, being engaged in the preparation of the *British Pharmacopœia*, he has had occasion to classify the formulæ used in the different London hospitals; and that it has occurred to him

"That such a classified collection of these formulæ, many of them very valuable and not generally known, would be acceptable to the profession in general, and particularly useful as a ready work of reference to pharmaceutists who may be called on to make up prescriptions according to the hospital formulæ"; and "that their publication in this form might suggest to the different hospital authorities, when preparing new editions of their *Pharmacopœias*, whether it would not be advisable to modify many of their formulæ, so as to assimilate them to those of a like nature in the *British Pharmacopœia*, and thus simplify and reduce the number of compound drugs."

If druggists are often called on to make up prescriptions from the hospital formulæ, they must be puzzled, so great in some cases is the diversity in the composition of preparations bearing the same name. Thus, under the head "Gargarisma Sodæ Chlor.", there are five formulæ, each prescribing four drachms of chlorinated solution of soda, but directing this to be mixed with sufficient water to make up two, four, seven and a half, eight, and twelve ounces; so that the first formula (that of St. Thomas's) is six times as strong as the last (that of St. George's and St. Bartholomew's). Again, there are seven formulæ for Linimentum Olei Crotonis; five for Lotio Ammon. Hydrochlor., besides a Lotio Ammon. Hydrochlor. Spirituosa used at Guy's; five for Lotio Hydrarg. Bichlor., in which the proportion of corrosive sublimate to an ounce varies from one-eighth of a grain to a grain; five for Lotio Nigra, the quantity of calomel to each ounce of lime-water varying from three grains and three-quarters to fifteen grains; six for Mistura Copaibæ; five for Mistura Quinæ; five for Pilula Plumbi Acet. c. Opio; etc. Now, admitting that, in prescribing and dispensing at hospitals, it is convenient to have set formulæ, we cannot see why so great a diversity should exist in many bearing the same name, and used, in all probability, under similar circumstances. Individual cases of course occur, in which it is desirable to modify the formulæ; but it is difficult to understand why the patients at St. Thomas's should require their chlorinated soda lotion to be six times as strong as at St. George's or St. Bartholomew's; or why black wash should be four times as strong at St. George's as it is at St. Bartholomew's.

In compiling this work, Mr. Squire has given the titles of the preparations in Latin,* and the directions in English. He has employed his time usefully, and deserves thanks for his trouble, and for his generosity in making the results of his labour generally available.

British Medical Journal.

SATURDAY, MAY 16TH, 1863.

THE LONDON SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE members of the Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity will hold their annual dinner on Wednesday next; and we take this opportunity of earnestly calling the attention of our associates residing within the limits of the Society's operations, to the benefits derivable from this admirable institution. It is indeed, at first sight, surprising that a Society founded on conjoined principles of benevolence and providence, and which, during three-quarters of a century that have elapsed since its foundation, has done so much towards alleviating the condition of the necessitous widows and orphans of its members, should at present number only four hundred and thirty-six members among the large medical population of London and its vicinity. This apparent neglect of the Society's benefits, however, has probably in part arisen from the fact that its constitution and *modus operandi* are not sufficiently known; and therefore, to supplement this deficiency, and, if possible, to induce our readers to join the Society, we give at another page a statement of its constitution, objects, and operations, compiled from official documents.

It will be seen that the Society is at once provident and benevolent. It is provident; inasmuch as, by the yearly subscription of two guineas, each member protects his family from destitution, should they at his death need relief. It is benevolent; inasmuch as persons of all classes, medical or otherwise, who have wealth at their disposal, have the opportunity of increasing the usefulness of the institution by donations and legacies; while each member has the satisfaction of knowing that, if at his death his widow and children should happily be in circumstances not requiring the Society's aid, he will have

* The Latinity is, in a few instances, very curious; but this, we believe, is no fault of Mr. Squire, who has probably copied the titles as they were presented to him. What, for instance, is the meaning of "Guttæ Argenti Nitratis *Fortioris*"; "Guttæ Argenti Nitratis *Fortissimi*"; "Guttæ Atropiæ Sulphatis *Mitis*"? The epithets denoting strength or mildness are, we had imagined, applicable to the drops, and not to their active ingredients. Again, certain of the hospital pharmacopœia-makers must have forgotten their Latin syntax when they wrote directions for making "Mistura Ferri Muriatici*um*"; "Mistura Oleos*us*"; "Gargarisma Cinchonæ Acid*us*"; and Gargarisma Communi*s*".

contributed towards the relief of those who do require such aid.

Can it be necessary that, having placed before the members of our profession in London and Middlesex the operations of the Society, and having thereby endeavoured to give them an idea of its benefits, we should urge on them the moral duty of every man to provide, according to his ability, for the support, after his death, of those who are now dependent on his exertions? We would hope not; and would rather think that the too frequent and lamentable instances which we see of the neglect of this principle have arisen from mere ignorance of the existence of a scheme affording such advantages as this Society. It will, however, probably be useful to place the advantages of the Society in a business aspect before those who are eligible to it, and to show at how small a cost they may obtain its advantages.

The annual subscription is two guineas, which, in the case of members now admitted, is not required to be paid after the end of the twenty-fifth year—the subscriber then becoming a life-member, having paid fifty guineas to the funds of the Society. Any member may also, according to his age at the time of admission, obtain the privilege of life-membership at any time within ten years after his election by making up his subscriptions to twenty-five, thirty, or thirty-five guineas, according to his age; or a newly elected member may at once become a life-subscriber, by paying, under the same circumstances as regards age, the sum of twenty, twenty-five, or thirty guineas.

Thus the subscription-expenses of a member may vary from twenty guineas paid down as a life-fee by a man under thirty years of age, to fifty guineas, the payment of which is spread over twenty-five years: and now what return is received for this outlay? If, on the one hand, the circumstances of the subscriber be such as to give him a reasonable expectation of being able to provide adequately for his family, he has the satisfaction, which as a right-minded man he must feel, of knowing that he has contributed towards the relief of the widows and orphans of some of his less fortunate brethren. If, on the other hand, his family after his decease do require the assistance of the Society, and if he have been a member for two years previously to his death, the amount of pecuniary aid which they receive is such as would, *à priori*, be almost thought incapable of being purchased for so small a sum as the total of any one member's yearly subscriptions. The last yearly statement shows that twenty-one widows were each receiving an annuity of £40; while to each of twenty-two others an annuity of £35 was being granted; and twenty-three children of deceased members under fifteen years of age were each receiving an annual grant of £12. Thus it is evident that any widow requiring the Society's help receives back in annuities, *within two years*, a much larger sum than has been invested by her husband in subscriptions; and, if she have two or three children entitled to aid, the amount may be surpassed even in the first year. In one year, indeed, a widow and six children received £107. Last year, the sum of £2023:10 was expended by the Society in ordinary and extraordinary grants.

We might ask our readers to compare this institution with an ordinary assurance society, and to consider what yearly amount they would have to pay to such a society to obtain the payment at their death of a sum having the yearly value of £35. There may be, indeed, certain elements over and above the strictly benevolent and selective character of the "Society for Relief", which prevent such a comparison from being fairly carried out in this place; but still the fact must remain obvious, that this Society offers to its members a good insurance at a very small cost.

It is trusted that what has been here said will induce members of the profession in London and its vicinity, who have not yet joined the Society, to do so; but, before concluding, we have a few words to say to those who, being wealthy, are also benevolent, and who approve of the principles on which a society of this kind is conducted. We would remind such, that by donations and legacies they may materially contribute towards the efficiency of the Society. The capital stock of the Society is at present large; and the interest thereof, added to those portions of the yearly receipts which are allowed to be spent in current expenses, is amply sufficient for all claims. Still a time may come when the proportion of necessitous claimants may much increase—the amount of relief demanded overbalancing, even more than at present, the income from members' subscriptions and other casual sources; and the result will be, that the Society will be compelled to diminish its usefulness. We therefore call on the more opulent members of the profession in London to follow the example which has been already set them by many benevolent men, and increase the capital of the Society so as to secure its present usefulness on a firm basis; for we can assure them that it is a fallacy to imagine that, because the Society is rich, it cannot be likely to need such assistance as the opulent may be able to give to it.

We hope that those practitioners who are members of the Society will endeavour to attend the dinner at the Albion Hotel on Wednesday next, and thereby, and in any other way that may be practicable, manifest their interest in the institution, and their sincere desire for its prosperity in that course of usefulness in which it has so long been advancing.

Gentlemen who contemplate joining the Society, will receive every necessary information on application to the Secretary, Dr. Merriman; who attends at the Society's rooms, 53, Berners Street, between the hours of 4 and 5 P.M. on every Wednesday and Friday.

THE WEEK.

THE small-pox, as elsewhere in the neighbourhood of the metropolis, is rife at Croydon. At a meeting of the Local Board of Health of that town, Dr. Carpenter and Dr. Sutherland suggested one main cause of its prevalence; viz., the non-vaccination of the children; and he attributed this non-vaccination in great part and with great reason to the miserable fee paid by the Board of Guardians for the operation; viz., eighteen-pence.

"Dr. Carpenter said: I must throw the principal blame upon the guardians, for this reason, that they do not pay a sufficient sum to their medical officers to go and find out those persons who are unvaccinated. If the medical men were properly paid for this work, they would do it; and it is not in human nature that a medical man, living by his profession, should go to the houses of the poor for the paltry fee which the guardians pay them.

"Dr. Sutherland remarked that for the miserable fee of 1s. 6d. the medical officers had, first of all, to go and find out the children who required vaccination; then they had to perform the operation, and to attend afterwards and see its result; and then to give a certificate to the parents, another to the registrar, and a third to the clerk to the Board of Guardians."

The Local Board of Health agreed with this view of the case; and eventually passed a resolution to the effect that the Board of Guardians should have their attention called to the lowness of the fee, and the evils thence resulting.

IT turns out, as we anticipated it would. One of our weekly contemporaries is disgusted with the settlement of the Adams and Propert difficulty. A pretty quarrel is suddenly arrested, and the scandal-loving appetite of the profession baulked of its hebdomadal aliment. Two mutual friends—one on the part of Mr. Adams, and the other on the part of Mr. Propert—meet together to allay the difficulty; and they sign a paper stating that the "subjoined document, signed by Mr. John Propert, should be considered as a satisfactory and an honourable settlement of the question at issue between these gentlemen." Well, one would have thought that all rightly minded men in and out of the profession must have regarded such a document as a happy and a final conclusion of the unfortunate affair; and that when in fact Mr. Propert and Mr. Adams had themselves agreed, and their friends on their behalf had agreed, that the question was disposed of, the profession at large would hardly venture to dispute the settlement. But so thinks not the *Lancet*, which, in an article remarkable for language, pours out its vials on Mr. Propert. But that journal seems to forget one thing, and it is this: that the friends aforesaid—viz., Dr. Forbes Winslow and Mr. Hird—are consolidated with the settlement of the dispute; and that consequently every word of abuse which it has showered down on Mr. Propert also falls equally on their heads. For if the "document" is one which "brings a flush of shame and indignation to the cheek," the suffusion must in the first place overwhelm the countenances of Mr. Hird and Dr. Forbes Winslow for being a party to its construction. Our own belief is that the blush of shame, etc., is a mere mythical suggestion. We are certain that neither Dr. Forbes Winslow nor Mr. Hird would put their hands, or ask Mr. Propert to put his hand, to a document, whose subscription could not be effected without a blush of shame, etc. Indeed, we verily believe that no member of the profession blushed when he read it; at all events, we will willingly record the names of any gentlemen who did do so if they would give us an opportunity. Whether or not the editor of a journal is more likely than the rest of the profession to have his cheeks "flushed with shame and indignation" on such an occasion, we will leave others to guess. We will only venture to suggest (and we think we fairly may from the premises of the case before us) that if there was any sanguineous determination to the editorial cheek on perusal of this document, it was rather occasioned by the sort of feeling which is excited when an animal is suddenly deprived of a rich quarry. The *Medical Times and Gazette* sees with other eyes, and thus speaks of the suffusive document:—"We have received the following for publication, and heartily rejoice that the affair has been brought to a satisfactory and honourable settlement."

WE have no doubt that a large section of the members of the Medical Council will again strongly oppose any attempt made to introduce reporters at their sittings. We believe that the chief ground of opposition is founded on the fact that there are members of the Council who are afflicted with a *cacoethes loquendi*, and who, as it is, by their long orations, sadly impede the progress of real business. If these gentlemen had the press at their service, it is feared that the meetings of the Council would be still further grievously lengthened, and in fact never come to an end within any reasonable time. Besides, it is thought, and not unreasonably, that if gentlemen knew their discourses would be published, they would address their remarks and reasonings to the profession rather than to the Council. We certainly should advise the profession to pause before it makes any serious demand upon the Council for the admission of reporters. The proceedings, the actual work done by the Council, are regularly published by the Council itself, and given to the profession. The

great objection which the profession might reasonably take to the reporting proposition, is the immense expense which it would almost inevitably entail upon the profession, and for the reason above given. The much speechifying which would be its inevitable result would greatly lengthen the business of the Council; and every day's meeting of the Council costs a very heavy sum of money. Moreover, it is certain that the Council must often have matters of considerable delicacy to deal with, which would hardly bear publication with propriety. For these reasons, it seems to us that the profession should pause before they make any strong call upon the Council in the matter.

The profession will be glad to hear that Messrs. Longman are about to publish a complete edition of the works of Sir Benjamin Brodie, including his papers scattered in journals, etc. This edition will also contain some remarks on surgical cases upon which Sir Benjamin Brodie was engaged at the time of his death. The work will be edited by Mr. Charles Hawkins; and is to be accompanied with an autobiographical sketch of Sir Benjamin Brodie.

Mr. Gascoyen has been appointed assistant-surgeon to St. Mary's Hospital. Mr. Gascoyen's services as dean, and his long connexion with the school of St. Mary's, made him naturally the unopposed candidate for the office.

Mr. Henry Lee's candidature for the office of surgeon to St. George's Hospital has passed over without opposition. We congratulate Mr. Lee on his rapid rise at St. George's; and we congratulate the hospital on the strength which it has gained by the accession of this gentleman to its staff; and equally condole with King's College in the loss sustained by his secession from that school. All opposition to Mr. Brodhurst as candidate for the office of assistant-surgeon to St. George's, vacant through the promotion of Mr. Henry Lee, was withdrawn. This gentleman, therefore, has also walked over the course. The support which he has received from the staff shows that Mr. Brodhurst is a welcome accession to the school and hospital.

The decision given in the Court of Exchequer, in the case of Gibbon *v.* Budd, shows that *Members* of the College of Physicians of London can legally recover their fees. The *Fellows* of the College have passed a by-law (in accordance with powers granted in the Medical Act), under which they are excluded from the power of legal recovery. The College did not include the Members and Licentiates in the excluding by-law, because (as we suppose) they did not feel justified in legislating in such case—the Members having no direct voice to represent them in the College.

The Queen, as President of St. George's Hospital, has been pleased to appoint the Prince of Wales one of the Vice-Presidents of that institution.

We hear that the action for libel against Dr. Lingen of Hereford, which we noticed a few weeks back, will be tried at Gloucester next assizes. The plaintiff applied to have the venue removed to London; but this was refused by the judges; and, though the change to Gloucester was ruled, she has to find security for the payment of the extra expenses.

We publish the following correspondence, which has appeared in a Manchester paper, in reference to the action of Dr. Clay *v.* Dr. Roberts. We really are at a loss to understand what the position is which is assumed by Dr. Clay. Dr. Roberts maintains that Dr. Clay has met homœopaths; and we do not see that in his letter Dr. Clay denies that he has done so. He only says that Dr. Roberts withdrew the cases adduced, which Dr. Roberts denies that he has done. As far as we can understand what we should call this very stupid action, it seems that all Dr. Clay has taken by it is simply this; viz., an opinion of learned judges to the effect that it is not disgraceful to him to meet homœopaths in consultation. Surely this declaration should satisfy him. But Dr. Clay, we gather from his note, is not contented with this, and leads us to suppose that there is some other issue yet to be tried.

"*To the Editor of the Examiner and Times.*

"Sir,—In reference to the report of the 'Alleged Libel upon a Manchester Physician', in yours of to-day, I beg to observe that the action was not, as there stated, against the *Lancet*, but against Dr. Roberts of this city. It is not easy, from your report, for the public to understand the case, which is simply this: Dr. Roberts, in a series of letters, some anonymous, published in the *Lancet*, charged me with meeting homœopaths in consultation, and stated that such conduct was considered by the medical profession as improper and disgraceful; and he offered to find three cases in proof.

"Subsequently, however, Dr. Roberts withdrew the cases, not being able to substantiate them; and in one of his pleas he alleged 'that it was not disgraceful or improper to meet a homœopath in consultation', being directly contrary to the position first taken by him, and a contradiction which has yet to be reconciled. The court held on the argument, that even if such had been admitted to be true, *it was not improper or disgraceful to meet homœopaths;* and that, *so far*, the plea demurred to was good. But as to the letters in question, it was stated that if the object of the defendant was maliciously to place me in an invidious position, and to injure me in my profession, the publication of them might be actionable, *which is substantially the question yet to be tried.*

"Yours respectfully, Chas. Clay, M.D."

"101, Piccadilly, 8th May, 1863."

"*To the Editor of the Examiner and Times.*

"Sir,—It is with much regret that I feel compelled to trouble you in consequence of a letter of Dr. Clay inserted in your issue of Saturday last.

"It is *not* the fact that I stated in my letters to the *Lancet*, that Dr. Clay's meeting homœopaths was 'improper and disgraceful'; or that I 'withdrew the cases' mentioned by me, 'not being able to substantiate them'.

"It was *Dr. Clay*, in his declaration, that used the words that it was 'improper and *disgraceful*' for him and other medical practitioners to meet homœopaths; and in my second plea I alleged that his statement was not correct. My instructions to my counsel were that, although contrary to the usual etiquette, it was not 'disgraceful' to do so; as a minority of the profession disagree to this rule, and no physician or surgeon would refuse to meet them if such refusal proved detrimental to a patient in danger.

"To this plea Dr. Clay demurred, on the ground that I could not deny (what, in fact, I had *not* stated) that it was 'disgraceful' to meet homœopaths; and it was on this demurrer that the judgment of the Court of Exchequer was given in my favour.

"Mr. Baron Bramwell stated, in the course of the argument, that the declaration of the plaintiff *was* libellous on the profession, but *not my letters*; and the whole court gave judgment that my plea was GOOD and his *declaration bad*, thus deciding that my letters were not libellous, and, consequently, that no action was sustainable upon them.

"Dr. Clay, from his letter, evidently leads you to believe that there is a question yet to be tried in the action. Now he well knows, or ought to know, that the decision of the court *goes to the whole cause of action*; and that if he should, from any motive whatever, go to trial, he will have to pay for his experiment, as the court, after its decision, *must* set aside any verdict which might by possibility be given in his favour.

"The cases mentioned by me, in which Dr. Clay had met homœopaths, so far from being *withdrawn*, were, under a judge's order obtained by *him*, actually *supported* by me; and the particulars of the cases were given by me to the court under my plea of justification.

"In conclusion, I have to state that I was at first advised by my solicitors that my letters were *not* libellous; and that, consequently, I had a good defence to any action which the plaintiff might bring; and upon that advice I acted, and the result has proved its soundness.

"If I had done anything wrong in the course I pursued, I should have been ready to make an ample and suitable apology; but I have only been discharging the duty which I owe to myself and to the other members of my profession by the line of conduct I have pursued.

"I am, sir, your obedient servant,

"WM. ROBERTS, M.D.

"10, Chatham Street, May 11th, 1863."

THE report of the Briton Medical and General Life Association for the present year shews an amount of increase in business which must be gratifying to the medical profession, largely represented as it is in the management of the society. The amalgamation between the "New Equitable" and the "Briton" Life Associations has been completed during the last year; and the society, under its new name, has removed its offices to more commodious premises. The tabular statement shows that the number of policies issued, and the amount of premiums paid, was greater in 1862 than in 1861 in the proportion of three to two; being an augmentation of one-half. The increase in the years 1858-61 was but gradual —from 1342 to 1839 policies, and from £8328 to £10,084 annual premiums; whereas the increase in 1862 as compared with 1861 is represented by 2023 policies granted and annual premiums to the amount of £15,275, against 1839 policies and annual premiums amounting to £10,084 in 1861. These figures shew that the society is gaining ground in public confidence. There is one feature in this society which, independently of its prominent recognition of the importance of the medical profession, is worthy of note; and that is, the system which it has instituted of making life-policies payable during the life of the person assured. This, we presume, can only take place from the extinction of the annual premiums by the bonuses declared at successive periods; and, if the society continue to prosper as at present, the privilege thus afforded to persons assured will doubtless in many cases be a matter of much convenience. We are gratified in finding that the Briton Life Association is in a prosperous condition, and would direct the attention of our readers to the report which is published in our advertisement pages.

THROUGH the Imperial Academy of Sciences, M. Chevallier announces that he has constructed a compound microscope of 250 power, which he can supply at the moderate sum of sixty to seventy *francs*. Through the same body, M. Hoffmann sends a new receipt for the cure of hydrophobia—"the only use of such receipts being," said M. Flourens, "to distract attention from the one only efficacious remedy; viz., cauterisation."

The petition of the Sieurs Linas and Mayer, Parisian doctors, and of Sieur Manuel, doctor, at Gass (Hautes-Alpes), addressed to the Imperial Senate, have, on the report of Senator Tourangin, been referred to the Ministers of Justice, of Public Instruction, and of Commerce. The petitions refer to the illegal practice of medicine. In his report, M. Tourangin gives a history of the failure of all attempts hitherto made to put down quackery. The present law is, he says, quite futile; for it does not fix either a minimum or a maximum fine; and consequently the Cour de Cassation has, by numerous judgments, determined that in the absence of such a fixation of the fine by the law, tribunals can only apply the low pecuniary fines established by the police, the maximum of which is fifteen *francs*. Of course, at such a fine the quack laughs. The report concludes thus: "It is a worthy task of the imperial government to settle questions which have been so long disputed; and we believe we may say, that the ministers will accept this useful and delicate task."

M. Mabru of Paris offers a prize of 3000 *francs* to any medium or somnambulist who will furnish scientific proof of their being able to see through a brick wall, or read without the aid of their eyes "It would appear," he adds, "as if *la haute Société Pa-*

risienne falls into the trap of every juggler; is penetrated, in fact, with the same nature as the gross and half-savage rustics of our most uncivilised provinces. One believes in mediums, and the other in ghost stories; that is all the difference."

Dr. Trélat informs the Academy of a case of "voluminous polypus of the larynx" which had been extracted by laryngoscopic apparatus.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.

This Society was formed in the year 1788, by Dr. Thomas Denman, Dr. Richard Dennison, Dr. Andrew Douglas, Dr. John Sims, Dr. John Squire, Mr. William Chamberlaine, and Mr. Thomas Rendall, with the object of establishing a Brotherhood for relieving, half-yearly, those Widows and Orphans of its deceased Members who might need assistance.

This Society consists of Physicians, Surgeons, and Apothecaries, or General Practitioners, resident in any part of the county of Middlesex, or within the limits of the London District Post. Physicians or Surgeons in the Army or Navy; Bachelors of Medicine of the Universities of Oxford, Cambridge, London, or Dublin; and all other medical practitioners duly registered according to Act of Parliament, residing within the aforesaid limits, are also eligible.

Every person desirous of becoming a Member of the Society is required to sign a declaration, stating to what department of the profession he belongs, his place of abode, his age, and (if he be married) the age of his wife, and the number, names, and ages of his children. To this declaration is annexed a form which must be signed by at least two Members of the Society, stating that, from personal knowledge, they recommend him as of good character, and of good health, and proper to become a Member of this Society.

The affairs of the Society are managed by a President, twelve Vice-Presidents, and three Treasurers, who are *ex-officio* Members of the Court of Directors, and twenty-four other Directors. Of the Vice-Presidents and Directors, one-third are Physicians, and two-thirds Surgeons, or Apothecaries. The six senior Directors annually go out of office, and are ineligible for re-election during twelve months. A Court of Directors is held on the first Wednesdays in the months of March, June, September, and December.

Every Member pays an admission fee of One Guinea, and a half-yearly subscription of One Guinea, which becomes due on the first of May and of November in each year.

Every Member elected under the present regulations, whose age at the time of proposal does not exceed thirty years, may become a Life Subscriber upon payment of the sum of *Twenty Guineas;* if his age be above thirty, and do not exceed forty years, upon payment of the sum of *Twenty-five Guineas;* and if his age exceed forty years, upon payment of the sum of *Thirty Guineas;* provided that such payments, in addition to the admission fees of *One Guinea*, be made within three months from the date of his election.

A Member who is an Annual Subscriber of Two Guineas, elected under the now-existing regulations, is not required to pay the subscription for a longer term than twenty-five years exclusive of his admission fine; and when the term of twenty-five years is expired, the Member so subscribing is considered as a Member for life.

Every Member now elected, being an Annual Subscriber, and desirous of becoming a Life Member, may do so within ten years of his admission, by making up his subscription, exclusive of his admission fine, to *Twenty-five Guineas*, if he shall have been under thirty years of age; to *Thirty Guineas*, if under forty years of age; and to *Thirty-five Guineas*, if above forty years of age, at the time of his proposal as a Member.

The Widow or Orphan of any person who was at the time of his death a Member of the Society, and had been so for two or more years previously, is eligible to receive Relief from the fund, subject to the following conditions.

The Widow of a Member who has no certain income or provision exceeding altogether the yearly value of £50, is eligible to receive such relief from this Society as the state of the funds permit, and the Court of Directors may determine; the same being paid half-yearly in advance. The present amount of yearly relief to each widow is, according to circumstances, in some cases £35, in other £40.

The Widow of a member, who is left with a child or children under fifteen years of age, entirely or in part dependent on the said Widow, and who has no certain income or provision exceeding the value of £12 yearly, for each child, in addition to the £50 mentioned in the preceding law, is eligible to receive such additional assistance half-yearly as the funds of the Society permit, and the Court of Directors may determine; but if such child or children have any provision independent of the mother, such provision must be distinctly stated to the Directors, in the usual half-yearly declaration of the Widow. At present, each child receives, under this law, £12 a year.

The Orphan of a Member, being under fifteen years of age, deprived of both parents, and having no certain income or provision, exceeding the yearly value altogether of £25, is eligible to receive such relief half-yearly as the funds of the Society will permit, and the Court of Directors shall determine.

The Children of Members coming under the description specified in the preceding Laws, and being under sixteen years of age, are eligible to receive such sum as the funds of the Society permit, and the Court of Directors think fit to give, for the purpose of assisting them to the means of self-maintenance. No further relief is allowed after the payment of such sum.

In cases of manifest and urgent distress, visitors, appointed by the Directors, may grant such immediate relief as the circumstances may require, not exceeding the sum of *Ten Guineas*.

The Laws provide that the Capital Stock of the Society shall never on any account be diminished. The interest of the Capital Stock, and the half-yearly Subscriptions of Members, with all Benefactions and Donations, when the contrary is not directed by the Donors, are applicable to the general purposes of the Society. So much of the Funds of the Society as is not wanted for immediate use, or to meet the usual accruing liabilities, is, with the consent of the Committee of management, invested by the Trustees in Public Funds. All payments constituting Members for Life, and all Legacies, where the contrary is not directed by the testators, are also added to the Capital Stock of the Society.

In the period from the year 1793 up to November 1862, when the last financial statement was made up, the sum of £61248 had been distributed in relief among 123 widows and 188 children, comprised in 132 families. According to a statement published, the Society consists of 218 life members, and 218 paying annual subscriptions: and is now affording relief to forty widows and nineteen children of deceased members. During the year ending November 20th, 1862, the sum of £2023:10 was expended in grants for relief.

The following abstract of the official statement of the

income and expenditure for the last financial year, will give an idea of the capabilities of the Society.

INCOME.

	£	s.	d.
Balances at Bankers' on November 20th, 1861	785	18	8
"Ware Fund"	0	2	6
Year's dividend on £210 New Three Per Cents., "Ware Fund"	6	6	0
Dividends on money invested in New Three Per Cents.	490	2	1
Interest on moneys deposited with the Commissioners for the Reduction of the National Debt	1,808	10	8
Interest on, and paid with, the preceding amounts of interest	4	6	6
Benefactions	193	13	0
Half-yearly Subscriptions, Arrears, and Entrance Fees	416	17	0
Life Subscriptions, Compositions, and Legacy	147	5	0
	3,853	1	5

EXPENDITURE.

Grants for Ordinary Relief	1933	0	0
Grants towards Self Maintenance	45	0	0
Grants for Extra Relief	15	0	0
Grants for Immediate Relief.	10	10	0
Grants to an Adult Son	20	0	0
Purchase of £705 : 17 : 11 New Three Per Cents.	640	11	2
Salary to the Secretary	105	0	0
Other Expenses	285	1	9
Expenses of "Ware Fund"	6	5	0
Balance at Bankers on November 20th, 1862	792	10	0
Balance in hand, "Ware Fund"	0	3	6
	3,853	1	5

The following is a summary of the property of the Society on November 20th, 1862.

Capital deposited with the Commissioners for the Reduction of the National Debt	47,567	10	7
Half-year's Interest due November 20th, 1862	911	14	0
	48,479	4	7
New Three Per Cents. held by the Society on November 20th, 1861	15,794	2	1
Ditto, purchased on December 10th, 1861	405	17	11
Ditto, purchased on June 12th, 1862	300	0	0
New Three Per Cents., "Ware Fund"	210	0	0
	16,710	0	0

In addition, £400 New Three Per Cents. have been purchased during the present year.

The total number of members who have been admitted since the foundation of the Society is 1313.

THE ROYAL VISIT TO NETLEY HOSPITAL.

On the 8th of May, the inmates of the Royal Victoria Hospital, near Southampton, which has lately been opened for the reception of the invalids of the army sent home from foreign stations, were much excited by the news that the Queen was going to visit the hospital; and, before the news had well spread through the hospital, Her Majesty arrived. By her express desire, her intention had been kept secret; and no one except the high officials of the hospital knew of the event. It was, happily, a most beautiful day, quite cloudless, and with enough wind to temper the sun's heat very pleasantly. The hospital and grounds looked very cheerful; and the Queen could not have had a better day. She was accompanied by Prince and Princess Louis of Hesse, Prince Alfred, and seven or eight ladies and gentlemen. She spent nearly two hours in the hospital, and certainly inspected it most thoroughly, going not only into a great number of wards, but into the chapel, dining-rooms, kitchen, library, the army medical school-rooms, and the married soldiers' quarters. It was a real inspection, in which every point was looked into. All the arrangements were minutely explained to her by Colonel Wilbraham, the commandant, and Inspector-General Dr. Anderson, the principal medical officer.

In passing through the wards, she stopped at the bedsides of all the severe cases, spoke a few kind words of sympathy to each man, and inquired about him from the officers of divisions, Deputy-Inspectors Longmore and Maclean. Nothing could have been kinder than her manner of doing this. She was inspired evidently by a real sympathy and interest; and this was at once perceived by the men, who were greatly touched by it. One poor fellow, almost at death's door, said, with a most touching *naïveté*, "I am proud to see you; I thank God he has allowed me to live long enough to see you with my own eyes." Those near her say that they saw the Queen's lip quiver at this little speech, which came really from the heart of the poor fellow.

It was understood that Her Majesty was greatly pleased with the hospital. She has always taken a great interest in it, and now will do so more than ever, as the hospital was a special object of interest to the Prince Consort, who not only frequently visited it, but, it is understood, expressed his belief that it was one of the most important works ever undertaken for the benefit of the sick soldier.

The Queen looked well, but her face in repose is sad and anxious. She walked rapidly and firmly; and when she spoke to the men, her voice was very sweet. By this visit she has commenced to break through her long retirement, and all will allow that she could not have chosen a more appropriate occasion and cause of doing so.

IDENTIFICATION OF DECOMPOSING HUMAN BODIES.

On Saturday last, Dr. Richardson conducted an inquiry to ascertain if a man who had been drowned in the Thames and had undergone putrefactive change to such an extent that he could not be recognised, could be so far restored that certain witnesses could make deposition as to his identity; the supposition being, that the body was that of the man who had committed the murder in St. Giles's. At an inquest on the body of this man on the preceding Wednesday, the witnesses who had seen the supposed murderer during his life were taken to the man who had been found in the Thames; but, owing to the extreme decomposition (for the face was as dark as that of a negro, and the tumefaction very great) they were unable to form any opinion concerning him. This result, reported in the papers, led Dr. Richardson to communicate, first with Dr. Lankester, and afterwards with Mr. Humphreys, the coroner for East Middlesex; the result being that he was deputed by Mr. Humphreys to ascertain if the body of the man could be rendered at all capable of recognition. Dr. Edmunds was requested also to take part in conducting the inquiry. The process followed out consisted in immersing the body for two hours in a salt water bath, to which a little hydrochloric acid was added; the face was then taken out of the water and treated with chlorine; ultimately, a solution of chlorine water and chloride of zinc, with a small quantity of sesquichloride of iron, was injected through the carotids into the tissues of the face. By these means, the extreme blackness of the face was removed; the colour was brought to a light clay or ashy appearance; and the distension of the features was so far removed that three witnesses were all able to state that the man was not a person whom they knew; while one swore definitely that he was *not* the man whom he had seen with Emma Jackson, the murdered woman. Drs. Richardson and Edmunds were also able to depose that the man was very young—not more than 22. In a judicial point of view, these results were, as the coroner remarked, satisfactory; indeed, nothing more than the evidence rendered was required to settle the question of the identity or non-identity of the man with the murderer of Emma Jackson. Dr. Richardson states, how-

ever, that he does not consider the process adopted as yet perfect; and that, owing to the extreme decomposition of the body and the limited time at his disposal, the operations performed were attended with many difficulties. At the same time, the process admits, in future cases, and after further experience, of being brought to a remarkable degree of perfection.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

AN ordinary meeting of this Branch was held at the York House, Bath, on Thursday evening, April 30th; W. J. CHURCH, Esq., President, in the chair. There were also present forty-four members and two visitors.

The Death of Mr. Soden. The PRESIDENT most feelingly alluded to the loss the Association has sustained in the death of Mr. Soden, a former president of this Branch, and one of the oldest and staunchest supporters of the Association.

New Members. The following gentlemen were elected members of the Association and of the Branch:—Henry Hurry Goodeve, M.D., Cook's Folly, Bristol; and George William Callender, Esq., 47, Queen Anne Street, Cavendish Square, London, W.

Papers. The following papers were read:—

1. A Recent Case of Arsenical Poisoning. By W. B. Herapath, M.D., F.R.S.
2. Case of Wasting Palsy. By J. K. Spender, Esq. (The subject was exhibited.)
3. On the Recent Prevalence of Typhus Fever in Bristol. By S. Martyn, M.D.
4. On the Prevalence of Itch. By W. Budd, M.D.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

APRIL 16TH, 1863.

A. B. STEELE, Esq., Vice-President, in the Chair.

The Calabar Bean. Dr. NEILL made some remarks on the use of this substance; and said he did so in compliance with a request made by Dr. Argyle Robertson, for the results of experiments made with it. It is used as a means of contracting the pupil, and the importance of this action is very great. Formerly, powerful stimulants were used to effect this end. Mr. Guthrie used to use tincture of capsicum; veratria also is sometimes used; but here we have a means that produces no pain, is followed by no inflammatory action, and yet causes the pupil to contract. The name of the Calabar bean in its native country is the "chop bean" or "ordeal bean", from its being used as a test in cases of suspected sorcery or freemasonry. It is only permitted to be grown at Calabar, where the king has a monopoly. Other matters are used for ordeals in other places in the same region; and Dr. Neill shewed a portion of bark, which, when it had been powdered and made into boluses, was administered both to the accuser and the accused. It acts upwards and downwards, and the completing of this double action is the test of the innocence or guilt of the person concerned.

The bean itself weighs from forty to fifty grains, and it is a very deadly poison. Dr. Christison gave his personal experience of its action in February 1855. He first chewed six grains, then a feeling of giddiness came on, but he slept pretty well that night, and felt no effects next morning. He now took twelve grains more, and in a quarter of an hour felt exceedingly giddy, and immediately swallowed an emetic of soap and water; he then lay for a long time suffering from a most distressing feeling about the heart; in the evening he was better, and a cup of coffee restored him.

Dr. Argyle Robertson had kindly sent to him three beans; and Mr. Bickersteth placed under his (Dr. Neill's) care a patient of his, a boy, who had had a blow on the forehead, and who had one pupil largely dilated. Veratria had been used before, and had produced very slight contraction. Dr. Neill dropped in an alcoholic solution of the bean, and in ten minutes some contraction had taken place; and, at the end of twenty more, Mr. Bickersteth found the pupil contracted to the size of its fellow; in half an hour more, it was contracted to the size of a pin's point. The patient said he felt a sense of heaviness about the eye. The use of the solution was continued with benefit.

We have to use belladonna so frequently now to dilate the pupil for the ophthalmoscope, that it will be a great convenience to have something that will remove that dilatation.

In answer to the Chairman, Dr. Neill said he believed no alkaloid had yet been discovered in this bean.

Diseased Elbow-Joint. Mr. FLETCHER shewed a specimen of "pulpy degeneration of the elbow-joint", for which he had performed excision. The head of the radius, and also of the ulna, seemed completely invested with this pulpy matter, and all appearance of cartilage had gone from the articular surface of the humerus, which was also covered with this matter. The disease had first shewn itself as a swelling, like a bursa, over the point of the olecranon, and had gradually gone on, in spite of rest; the joint became loose, and he had felt grating, which, however, may have been deceptive. The patient was now going on favourably.

Mr. LOWNDES referred to the valuable information with regard to the nature of this particular form of strumous disease, in Barwell's work on *Diseases of the Joints*. This author shews that this pulpy deposit, which partakes much of the nature of granulations, may become in cases not too far advanced reabsorbed, or may itself undergo degeneration of a fatty or purulent character.

Dr. NOTTINGHAM said that in this case grating was felt; but often we may have this pulpy disease going on to such an extent, that the joint may be destroyed, and yet we have no grating.

Fractured Thigh-bone. Mr. FLETCHER also shewed a curious specimen of fractured femur. The fractured portions seemed to have been widely separated, and yet they were firmly united laterally by a broad strong ridge of bone extending from one to the other. There was no history with the specimen, which was taken from an old woman who had died in the workhouse hospital.

Diseased Bladder and Kidneys. Mr. HIGGINSON shewed a specimen taken from a patient who had died at the Southern Hospital after an injury to the back. A sailor had fallen from the yard-arm of a ship at sea. When admitted into the hospital, he had constipated bowels, and his urine was dribbling away. Mr. Higginson drew off nine pints of urine, and next morning

seven more. The urine gradually became ammoniacal, and involuntary action of the bowels came on, for which an ointment composed of strychnia and lard was used with very good effect. The bladder was found to be very much thickened, and its internal surface corrugated, and in parts presenting an appearance like carneæ columnæ. The kidneys were much enlarged.

Dislocation into the Foramen Ovale. Mr. LOWNDES related a case which had come recently under his care at the Northern Hospital. The accident had happened through the man's falling into an old quarry, and there he had lain all night unable to move or to make himself heard. On admission, as he lay on his back, the thighs were widely separated, the left thigh flexed on the body and rotated outwards, and the leg flexed on the thigh nearly at right angles. The left thigh, measured from the symphysis pubis to the inner condyle, was about two inches longer than its fellow. There was a great want of fulness over the situation of the trochanter major. The head of the bone was not to be distinctly felt anywhere, but there was some fulness and tension to the left of the perinæum. The man in falling had clutched the rock with his hands, which were torn; and he had also a severe lacerated wound under the chin, and his tongue was deeply bitten. He was in a very exhausted state, and reduction was deferred for two days; and on February 17th, 1863, was very readily performed under chloroform by rotating the knees inwards and lifting it over its fellow, at the same time that the head of the bone was drawn outwards.

Mr. LOWNDES made some remarks on the rarity of this accident, and on the probable mode of its occurrence in the present case.

Mr. HAKES would like to take this opportunity of mentioning a case of dislocation into the ischiatic notch that was under his care at the Northern Hospital some time ago; and in which fracture of the thigh had taken place during the attempts at reduction. Mr. Hakes did not see the person until six months after the dislocation had taken place. He made two attempts at reduction; in the first, the apparatus broke; and in the second, when extension had been made to its full extent, he was using some manipulation when the bone broke in an audible manner. Pasteboard splints were applied, and in about three months the bone had united and the patient could walk. About two months ago, Mr. Hakes received notice of an action for damages, but had heard nothing of it since.

The CHAIRMAN said he believed efforts had been made to get evidence in this town against Mr. Hakes in this case, and it was creditable to the profession here that these efforts had met with no success. It would be well if other large towns would adopt the same course.

Mr. HAKES asked if any one present had seen a similar accident during the attempt at reduction of a dislocation.

Dr. NOTTINGHAM remembered a case at the Southern Hospital, where he believed this happened in an attempt to reduce a dislocation of the upper extremity.

Disease of the Suprarenal Capsules. Mr. HAKES related a case of this disease.

APRIL 30, 1863.

A. B. STEELE, Esq., Vice-President, in the Chair.

The Calabar Bean. Dr. NEILL made some further remarks as to this drug. He had found that the watery solution of the spirituous extract soon becomes fœtid, and Mr. Abraham had made for him a solution in glycerine that keeps well. He believed that a druggist of the name of Ferguson, at the north end of the town, was the first person in Liverpool who obtained a specimen of this bean. Dr. Neill had used it since the last meeting in a case of Dr. Nevins's, in which the pupil had been greatly dilated with belladonna, and remained in that state. The solution of the bean was dropped in and contraction took place to a small extent only. Next morning he found the pupil again greatly dilated. He again put in a drop of the solution, which had become partially decomposed, and in about half an hour the pupil was contracted to less than its normal size. Dr. Neill had now brought with him to the society the boy whose case he had related at the last meeting. The pupil of the eye affected was still considerably larger than its fellow, and acted very slightly when exposed to bright light. Dr. Neill now put in a drop of the glycerine solution with a probe, and repeated this in a few minutes, and in half an hour's time it was found that the pupil, which had occupied about two-thirds of the transparent part of the eye, was now so much reduced in size that it did not occupy more than a third, and it was more sensitive to the action of light.

Sarracenia Purpurea. Mr. MARSH said he had used this substance recently in a severe case of small-pox without observing any particular effect. The patient, however, said it made him feel more comfortable.

Mr. HIGGINSON said he had just heard of two fatal cases of this disease in Toxteth Park district. It was worth while noticing that washing the patients with soap and water while the eruption is out does not interfere with the course of the pustules, and adds very much to the comfort of the patient.

Dr. GEE frequently applied calamine with good effect. Small-pox is decidedly more prevalent of late, and there have been many cases in the workhouse hospital.

Abortion. Mr. HAKES showed an ovum of about six weeks.

Mr. HODGSON spoke of cotton wool as an useful substance with which to plug the vagina; but he had found some difficulty in introducing it, from its collecting into pellets as it got wet.

Mr. BAILEY said he wrapped the cotton in a handkerchief and then introduced it, and found it very useful.

The *Secretary's Report* of the session was then read; from which it appeared that the attendance of members had averaged nearly twenty-two, and that there had been a very fair supply of pathological specimens, and also of papers and cases. In accordance with a resolution of the Society, the Secretary had sent reports of nearly all the meetings to the BRITISH MEDICAL JOURNAL, and the Society was much indebted to the editor of that journal for the space he has afforded them.

The report was adopted; and, on the motion of Dr. Gee, seconded by Mr. Higginson, thanks were voted to the Honorary Secretary for his services during the session.

Correspondence.

BROMWICH *v.* WATERS.

LETTER FROM F. H. RAMSBOTHAM, M.D.

SIR,—I do not think it necessary to answer any of the remarks you have made in the last number of your JOURNAL respecting the evidence which I gave at Chester lately; but, as the letter of Messrs. Kimber and Ellis, which was written nearly six weeks after I had seen the young woman, and extracts from which you have reprinted, might produce a wrong and unfavourable impression on my friends in the profession, I will thank you to publish this in your next issue.

Those gentlemen have put forward my letter as showing a desire on my part to give evidence in the case; while I contend it is a mere business letter, requesting to know, for my own convenience, when my presence would be required, that I might make my arrangements accordingly. I felt tolerably sure at that time that I

should be subpœnaed, though I had not been told so, and might be compelled to attend, because I had spoken to a matter of fact, important to the issue, which had come within my own knowledge; and, therefore, to show any disinclination or unwillingness to do so, in my correspondence with the solicitors, would have been puerile and worse than useless. I repeat, that I did feel pain in being engaged in such a painful case; though I certainly had no intention of suggesting that I had been deceived by the gentlemen employed.

When I wrote the letter in which I stated that I had been consulted in the case some time before I was aware it was to be brought into a court of justice, I was in Edinburgh, and had not my notebook at hand. I was then under the impression that a week at least had elapsed between the time when I was first applied to and the day of my visit to the girl. I now find, however, that the interval was only two days. Messrs. Kimber and Ellis say that "no medical man was consulted in this case without being plainly told at the first interview why his opinion was desired, and that an action for seduction was about to be tried. Dr. Ramsbotham first saw the girl in the presence of another medical gentleman, and knew perfectly well why they met in consultation." I did not know the particulars of the case until I met Dr. Lee in consultation; and, unless my memory plays me very false, it was Dr. Lee who first told me an action was pending, as we were waiting to be let in and walking up stairs together; for we met at the street-door.

The following is a simple narrative of what occurred. On February 4th, a gentleman whose face appeared familiar to me, and whom, indeed, when he first entered my room, I took for an old pupil, called on me and asked me some medical questions. He requested me to make an appointment to meet a certain physician, which I did by naming the 6th at 2 P.M. He might have said something about its being a case of seduction, but of that I have no recollection; and I feel positive, for a specific reason, that he did not mention Dr. Waters' name. I have a perfect recollection, however, of his asking me what my fee would be for this consultation; by which I naturally concluded that my connexion with the case would terminate at that interview. On arriving at the house, instead of the physician I expected, I met Dr. Lee, who told me he had seen the patient a few days before. There were present in the room the girl's mistress and a gentleman from the solicitor's office; and we were requested to adjourn into the next room—a bedroom—where the young woman was. On returning to the sitting-room, a few minutes after, I was asked my opinion as to the state of the girl's uterus, and I replied, "Perfectly healthy", or words of similar import. The charge then became the subject of conversation, which till that time I was not fully acquainted with. I believe at that interview I recommended that the case should be abandoned, and was told it had gone too far for that course being taken. I also stated there was no use in my going to Chester, for my evidence would be of no service to them; and was answered, that "I could speak of the then state of the uterus, and that would be important," or something to the same effect. If this did not occur at that meeting (which I firmly believe), it did on a subsequent occasion. When I came away, it was a subject of doubt with me whether I should hear any more of the case beyond my fee being transmitted to me.

To prove that I did not afford a blind credence to the girl's story, I wrote on February 10th, four days after I had seen the girl, to the solicitor: "But this is only one side of the question; and, when the other is heard, circumstances may appear which will very much modify our judgment." And to show my feeling on the case, and the *animus* with which I went down to Chester, I wrote on February 14th, in answer to one of seven questions submitted to me, the following.

Question. "Do you consider it proper treatment to use the speculum at all to a chaste single woman?"

Answer. "The speculum is constantly being used in the case of single and chaste women, both in London and elsewhere. For myself, I do not know that I ever used it in the case of an unmarried woman, unless it had been previously employed in the same case by some other practitioner. But this is also a matter of opinion; and no medical man has a right to put himself forward as the *arbiter morum*, especially when his doing so would arraign the conduct of a brother practitioner in so delicate a question." I am, etc.,

FRANCIS H. RAMSBOTHAM.

8, Portman Square, May 11th, 1863.

P.S. You ask if I have ever read or heard of a well authenticated case of impregnation taking place while the woman was in a state of unconsciousness. I would refer you to Beck's *Medical Jurisprudence*, the close of chap. vi, for an answer; and Carpenter, in his *Physiology*, 1st edit., p. 625, says: "It is a fact well established, that fruitful intercourse may take place when the female is in a state of narcotism, of somnambulism, or even of profound ordinary sleep." These are both good authorities, and are regarded as safe ones to follow; and Ryan (*Medical Jurisprudence*, 1836, p. 245) says Gooch, Evory Kennedy, and himself, had met with such cases.

DR. HASSALL'S WORK ON URINE.

LETTER FROM E. A. PARKES, M.D.

SIR,—I observe in your review of Dr. Hassall's work that you think I gave him "guidance and advice" in its composition. I think it only right to Dr. Hassall to say, that this is not the case. The work was finished and printed before I knew anything of it. A correspondence opened by Dr. Hassall, about the quantitative determination of the "extractives" of the urine, led to my sending him a note on the iodine reaction (before the observations of Trousseau were published), and eventually to my reading the proof-sheets. But the work was then wholly printed and struck off. I think it only right to say this, that I may get no credit for a work the "ability and judgment" of which your reviewer very justly commends. Indeed, I might reverse your reviewer's comment, and say that there are many parts of urinary pathology on which I should be glad of Dr. Hassall's "guidance and advice." I am, etc.,

E. A. PARKES.

London, May 1863.

[The remarks made by the reviewer were not intended, nor, in our opinion, calculated to deprive Dr. Hassall of the credit due to him. They mean merely what Dr. Hassall himself admits by the candid mention of Dr. Parkes's name in reference to certain addenda at the end of his book—that, while his work was in preparation (*i.e.*, before its final publication), he did derive "guidance and advice" from Dr. Parkes. It is, as our respected correspondent must well know, no disgrace for any man engaged in an important work, whatever his ability may be, to seek "guidance and advice" from another who has gone over the same ground. EDITOR.]

VACANCIES. The following appointments are vacant:—Physician to the Newcastle Dispensary; physician to the Swansea Infirmary; physician to the Brighton Dispensary; assistant-physician, house-physician, and house-surgeon, to the Westminster Hospital; medical superintendent to the Gloucester County Lunatic Asylum; accoucheur and surgeon to St. George's and St. James's Dispensary; medical officer to the western district of the Gower Union, and for the union workhouse in the parish of Penmaen; medical officer to the Swords Dispensary district of the Balrothery Union; and medical officer to the Carberry Dispensary district of the Edenderry Union.

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 6th:—

Allkin, William John, Manchester
Andrew, James Lawton, Moseley, near Manchester
Cockerton, Charles Edward, Aberystwith Terrace, Islington
Covey, Charles Edward, Basingstoke
Currie, John Legge, Bungay
Elmes, Thomas, Limerick
Flack, James, Shoreditch
Forman, Elijah Baxter, Derby
Greaves, Charles Augustus, L.S.A., Derby
Hilton, Caleb Samuel, M.D.St. And. & L.S.A., Preston
Hindle, Frederic Thomas, Askerne, near Doncaster
Jackson, Thomas, Whitehaven
King, Edwin Holborow Green, Portsmouth
Long, Frederick, East Dereham
Orton, George Hunt, Narborough, near Leicester
Smith, William, Spilsby, Lincolnshire
Sutcliff, Edward, Camberwell
Taylor, John William, M.D.St. And. & L.S.A., New Malton
Trevan, Matthew, L.S.A., Padstow, Cornwall
Turner, Edwin, Dudley, Worcestershire
Ward, John, M.D.St. And., Glossop, Derbyshire
Way, John Palmer, L.S.A., Southsea, Hants
Wilcox, William, Cardigan, South Wales

At the same meeting of the Court—

O'Flaherty, Thomas Alexander, M.D., of H.M.S. *Britannia*, at Portland, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date July 19, 1859.

Admitted on May 7th:—

Alderson, Frederick Henry, Ipswich
Clarke, William, L.F.P. & S.Glasg., Longsight, near Manchester
Cooper, Horace, Caversham
Edlin, Ebenezer William, L.F.P. & S.Glasg, Manchester
Fuller, James Mortimer, St. John's Wood
Gibbs, Edward, Birmingham
Grubb, Richard Theodore, Cahir, Ireland
Harvey, John Stevenson, Boulogne-sur-Mer
Haward, John Warrington, Leicester Square
Johnson, Richard Hison Daly, Liverpool
Meadows, George Frederick Walford, Otley, Ipswich
Nash, George Branston Valentine, L.S.A., Liverpool
Pope, Edmund, L.S.A., Puddleton, Dorset
Richards, Joseph Peeke, Oxford Terrace, Islington
Seabrook, William Milward, Brighton
Stowell, Thomas, Brighton
Terry, Septimus, Northampton
Tibbits, Robert William, Ashton, Bristol
Wearne, Vivian, Helstone, Cornwall
Webber, Hulton Joseph, Tunbridge Wells
Wey, William John, Plymouth
Wilby, John Burdett, Leicester
Fox, Cornelius Benjamin, Truro, Cornwall

APOTHECARIES' HALL. On May 7th, the following Licentiates were admitted:—

Brewer, Thomas, Halifax
Ferris, John Spencer, Bradford-on-Avon
Gargory, Caleb, Birmingham
Pilkington, Thomas, Enfield, Accrington, Lancashire
Sharp, George Wyatt, Great Cumberland Street
Thompson, William Allin, Oxford
Woodman, Samuel, Finchley Road, St. John's Wood

APPOINTMENTS.

*BAKER, John W., Esq., elected Surgeon to the Derbyshire General Infirmary.
CORNER, Matthew, M.D., elected Surgeon to the Tower Hamlets Dispensary.
DAY, Edwin E., M.B., appointed Assistant-Physician for Diseases of Women and Children, King's College Hospital.
GASCOYEN, George G., Esq., appointed Assistant-Surgeon to St. Mary's Hospital.
*JOHNSON, John W., Esq., elected Honorary Consulting Surgeon to the Derbyshire General Infirmary.
LATHAM, Peter W., M.B., appointed Physician to Addenbrooke's Hospital, Cambridge.
PLAYFAIR, William S., M.D., appointed Assistant-Physician for Diseases of Women and Children, King's College Hospital.
WALSH, Robert P., L.K.&Q.C.P.I., appointed to the Commission of the Peace for the county of Fermanagh.

POOR-LAW MEDICAL SERVICE.

CHAMBERLAIN, Joseph R., Esq., to the Southern District of the Pateley Bridge Union, Yorkshire.
DALE, John, Esq., to the Borrowby District of the Northallerton Union, Yorkshire.
HOLMES, William M., M.D., to the Hartington District of the Ashbourne Union.
LARMUTH, Mark O., Esq., to the Workhouse of the Salford Union.
LEE, Matthew, M.D., to the Horton West District of the Bradford Union.
MARRIOTT, Robert B., Esq., to the Igburgh District of the Swaffham Union.
SHERATON, George R., L.R.C.P.Ed., to the Bishopton District of the Sedgefield Union.
SPURGIN, Branwhite, Esq., to the Brigstock District of the Thrapstone Union.
WILLIAMS, John J., Esq., to the St. Mary's District of the St. Mary, Newington, Union.

ARMY.

ANDREWS, Staff-Surgeon R. F., to be Surgeon 5th Lancers, *vice* H. Huish, M.D.
CLOSE, Staff-Assistant-Surgeon C. S., to be Assistant-Surgeon 5th Foot, *vice* T. R. Whitty.
HUISH, Surgeon H., M.D., 5th Lancers, to be Staff-Surgeon, *vice* R. F. Andrews.
WHITTY, Assistant-Surgeon T. R., 5th Foot, to be Staff-Surgeon, *vice* H. T. Reade.
YOUNG, Staff-Assistant-Surgeon J. E., M.D., to be Staff-Surgeon *vice* G. Williamson, M.D.

ROYAL NAVY.

BOLSTER, George, Esq., Assistant-Surgeon, to the *Triton*.
BROWNE, Thos., Esq., Acting Assistant-Surgeon, to the *Columbine*.
CRABBE, Benjamin, Esq., Surgeon, to the *Trident*.
DAVIS, Francis W., Esq., Surgeon, to the *Alert*.
DINES, William, Esq., Surgeon, to the *Marlborough*.
HUDSON, John, Esq., Surgeon, to the *Columbine*.
MCDERMOTT, W. L., Esq., Acting Assistant-Surgeon, to the *Egmont*.
MACKAY, Alexander E., Esq., Surgeon, to the *Revenge*.
SHIELDS, John, Esq., Acting Assistant-Surgeon, to the *Alert*.
WARD, John, Esq. (*a*), Surgeon, to the *Active*.

MILITIA.

MICHELL, S., Esq., to be Surgeon Royal Cornwall and Devon Miners Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BARTON, F. E., Esq., to be Assistant-Surgeon 1st Administrative Brigade Cinque Ports A.V.
BICKERTON, T., Esq., to be Surgeon 1st Lancashire A.V.
PIGG, Thomas, M.D., to be Assistant-Surgeon 1st Newcastle-upon-Tyne R.V.
RAINS, J., M.D., to be Assistant-Surgeon 1st Manchester R.V.
WARD, J. D., Esq., to be Surgeon, 40th Lancashire R.V.

To be Honorary Assistant-Surgeons:—

BUTLER, T. M., Esq., 24th Surrey R.V.

BIRTH.

ROPER. On May 4th, at Exeter, the wife of *C. H. Roper, Esq., of a son.

MARRIAGE.

HUGALL, Thomas John, Esq., Surgeon, Stadhampton, Oxfordshire, to Harriet Elizabeth, second daughter of *Lancelot NEWTON, Esq., Surgeon, at Alconbury, on April 22.

DEATHS.

BOYCOTT. On May 8th, at Canterbury, aged 6 months, Mary, infant daughter of *Thomas Boycott, M.D.
*CHALLICE, John, M.D., at 13, Great Cumberland Street, aged 48, on May 11.
GREGORY. On May 5th, at Weymouth, James Liebig, only child of the late William Gregory, M.D., Professor of Chemistry in the University of Edinburgh.
MANSON. On May 7th, at Muswell Hill, aged 74, Ann, widow of the late Alexander Manson, M.D., of Nottingham.
WHITFORD, Anthony, M.B., of Cranbrook, at St. Colomb, Cornwall, aged 29, on May 8.

UNIVERSITY COLLEGE HOSPITAL. Her Majesty the Queen has been graciously pleased to transmit a donation of 100 guineas in aid of the funds of the hospital, in anticipation of the annual dinner, which is to take place on June 2nd.

ROYAL INSTITUTION. Sir Henry Holland, Bart., has been nominated a Vice-President of the Institution for the ensuing year; Dr. W. T. Brande has been re-elected Hon. Professor of Chemistry; and Professor Faraday, F.R.S., has been re-elected Professor of Chemistry.

Death of Dr. Reid. Many Edinburgh citizens will learn with regret the death of Dr. David Boswell Reid, well known by his labours in regard to ventilation. Dr. Reid, who has been for some years in America, died at Washington on the 5th of April. The death was sudden, and caused by congestion of the lungs. Dr. Reid had been appointed by the Government Medical Inspector to the Sanitary Commission, and he was about to leave Washington, to be employed in ventilating the new military hospitals which have been erected in different parts of the country. Dr. Reid was a native of Edinburgh, grandson of the celebrated Hugo Arnot, the historian of Edinburgh, and was himself at one time an extensively-employed and successful teacher of chemistry here. His connexion with the ventilation of the Houses of Parliament is but too well known. He ventilated St. George's Hall, Liverpool—the only building in the world, he said, in which his principles of ventilation have been completely carried out. The ventilation of this building is considered very successful. Dr. Reid began his public career in Edinburgh as assistant to the late Dr. Hope, Professor of Chemistry in the University. He was also a candidate for the Chair when Dr. Hope resigned. (*Scotsman.*)

Alleged Libel upon a Manchester Physician: Clay *v.* Roberts. The action was tried in the Court of Exchequer, on May 4th. The declaration stated that, among the great body of the medical profession, it would be thought improper and disgraceful for any one of them to meet in medical consultation any medical practitioner or physician professing or known to be a homœopath or homœopathist, and deemed a breach of professional etiquette, and injurious to his professional character and reputation. It then stated that the plaintiff never professed to be nor was a homœopath; and that the defendant, well knowing the premises, falsely and maliciously published the libel in question. To this the defendant pleaded that it was not, nor was considered by the profession to be, disgraceful for any member of it to meet a homœopath in consultation; and to this plea the plaintiff demurred on the ground that it was no answer to the action.—Mr. D. Keane, on the part of the plaintiff, submitted that the declaration was good and the plea bad.—The Lord Chief Baron said he saw some difficulty in saying that to charge a physician with being a homœopathist was a libel. Would it be a libel to say that a lady of fashion had been seen riding in an omnibus? There must be no confusion between matters of crime or sin, which would disparage a person in society, and matters of mere taste, fashion, or caprice, in which there was nothing sinful or improper.—Mr. Keane suggested that this case involved a different point, as actual injury was sustained.—The Lord Chief Baron: Would it be a libel to say of a man of rank, wealth, and fashion, that he was so mean and sordid that he burnt tallow instead of wax candles? Or would it be libellous to say that he habitually ate tripe?—Mr. Keane: It would never occur to me to object to that. I will put to your lordship another case, that of a barrister on circuit riding with an attorney in a stage-coach, and requesting him to give him briefs in preference to other barristers.—The Lord Chief Baron: That is a very different matter. I cannot concur in the suggestion on which the declaration is founded. A homœopathist is a regularly educated medical man.—Mr. Keane: I have generally found them to be so, and I think they are quite able to defend their own opinions.—Mr. Baron Bramwell: I think there is a libel in the declaration on the general body of physicians.—After some discussion, the Lord Chief Baron said that, if the object of the defendant was maliciously to place the plaintiff in an invidious position and injure him in his profession, the publication might be actionable, but could not be said to be a libel. He thought the declaration was bad and the plea good, and that judgment should be for the defendant.—The other judges being of the same opinion, judgment was given for the defendant. (*Manchester Examiner.*)

An Overdose of Chloroform. An inquest was held at the village of Dalston, Cumberland, on Monday, before Mr. W. Carrick, surgeon, and a respectable jury, upon the body of Gustavus Evans, M.D., who died suddenly on Saturday last. It appeared from the evidence of Barbara Nixon, the woman with whom the deceased lodged, that he had been subject to acute pain in the head and neck for some time past. On Friday night, on his return from visiting a patient at Barnard Castle he complained that the pain was very severe. Next morning after breakfast he took his usual walk in the garden, and smoked his pipe there for half an hour, after which he went up into the drawing-room. On his landlady going into his room shortly afterwards she found him lying on the floor as if he had rolled off the couch. He said to her, "Let me rest;" but in about twenty minutes he became insensible, his last words being, "Oh Mrs. Nixon, can you spare—." He never completed the sentence. His partner, Dr. Cornelius Hall, of Carlisle, was sent for during the day, and also Mr. Brown, surgeon, Carlisle, but their efforts to relieve the patient were unavailing, and he died about nine o'clock in the evening. It appeared that the deceased had been in the habit of using chloroform and chloric ether to relieve the pain with which he was afflicted; and it was stated in evidence that bottles containing chloroform had been found in his conveyance since his death. One of these contained water, and as much chloroform as would be taken for a dose. Dr. Hall stated that he had no reason to suppose that the deceased was suicidal; on the contrary, his circumstances were comfortable, his mind was tranquil, and on the day before his death, he had expressed his intention of taking a rest from his professional duties and trying a change of air. A *post mortem* examination of the body had been made by Mr. Brown, Mr. Hall, and Mr. Page, and they arrived at the conclusion that death had been caused by an overdose of chloroform. The coroner having summed up the evidence, the jury returned a verdict of accidental death, in accordance with the medical testimony. The deceased was highly respected in the neighbourhood of Dalston, and also in Carlisle, where he practised for many years. Among the poorer classes he was especially esteemed; for he seemed ever to have their welfare at heart. The Dean of Carlisle alluded to the melancholy event in his sermon at the cathedral on Sunday afternoon.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Asiatic (Anniversary).

Tuesday. Statistical.—Pathological.—Ethnological (Anniversary).

Wednesday. Society of Arts.—Geological.

Thursday. Zoological.—Royal.—Antiquarian.—Chemical.—Harveian: Clinical.

Friday. Royal Institution.

Saturday. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 9, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys..1078 / Girls..1077 }	2155	1459
Average of corresponding weeks 1853-62	1911	1244

Barometer:
Highest (Fri.) 30.171; lowest (Mon.) 29.667; mean, 29.869.

Thermometer:
Highest in sun—extremes (Tu.) 109 degs.; (Th.) 99 degs.
In shade—highest (Tu.) 72.9 degs.; lowest (Fri.) 35.9 degs.
Mean—53.2 degrees; difference from mean of 43 yrs.+1.7 degs.
Range—during week, 37 degrees; mean daily, 25.9 degrees.

Mean humidity of air (*saturation*=100), 73.

Mean direction of wind, N.E.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

RECENT IMPROVEMENT IN RESUSCITATION FOR CHLOROFORM DEATHS.—SIR: Would you let it be stated, for the information of some few members of the Association who take an interest in chloroform, that in a recent very marked sudden instance of suspended animation from that agent, and in a second most remarkable case, of what also would have proved irretrievable death from drowning, the most astonishing effects with perfect recovery were brought about by the new mode of induction electricity described by Mr. Faraday, passed in interrupted currents through the phrenic nerve and respiratory muscles, not through the heart or cardiac nerves. The largest number of accidents from anæsthetics yet collected is one by Langenbeck, in a German manual recently brought out; but he admits it is mine, and his deductions are essentially the same as those I drew from this list of these one hundred and thirty-three cases. The list now amounts to nearly two hundred deaths from anæsthetics; all pointing to one fact or great want, which the Faradisation current supplies. Snow's "cardiac syncope" is an error; and the Marshall Hall "ready method" is absolute destruction of the patient. Ether mixed with chloroform (one part of the latter to four of the former) has many points in its favour compared to pure chloroform, especially in exhausted patients. Deaths occur twice as frequently in healthy adult men as they do in females, though chloroform is much used in midwifery. I am, etc., CHARLES KIDD, M.D.
Sackville Street, April 16th, 1863.

COMMUNICATIONS have been received from:—Mr. J. WEST WALKER; Mr. L. NEWTON; Dr. WILLIAM BUDD; Dr. HEYWOOD THOMSON; Dr. GIBBON; Mr. T. M. STONE; THE SECRETARIES OF THE HARVEIAN SOCIETY; Mr. J. W. BAKER; Dr. PARKES; THE SECRETARIES OF THE BATH AND BRISTOL BRANCH; Mr. THOMAS BRYANT; Dr. RAMSBOTHAM; Mr. T. H. SMITH; Mr. FURNEAUX JORDAN; Dr. A. CARPENTER; Mr. J. JONES; Dr. J. EDMUNDS; and Dr. HYDE SALTER.

BOOKS RECEIVED.

1. The Anthropological Review. No. 1. London: 1863.
2. On Rupture: Inguinal, Crural, and Umbilical. By John Wood, F.R.C.S. London: 1863.
3. Sussex County Asylum. Fourth Annual Report. 1862.
4. Outlines of a New Theory of Muscular Action. By the Rev. Samuel Haughton, M.D., F.R.S. London: 1863.
5. Studies in Physiology and Medicine. By the late Robert J. Graves, F.R.S. Edited by William Stokes. London: 1863.

ADVERTISEMENTS.

Royal College of Surgeons of ENGLAND.—PROFESSOR GULLIVER will commence a Course of SIX LECTURES on the Blood, Chyle, and Lymph, in the Theatre of this College, on Tuesday, the 2nd of June next, at Four o'Clock, and will continue the same on each Tuesday, Thursday, and Saturday, at the same hour.

PROFESSOR SOLLY will commence a Course of SIX LECTURES on the Brain, and some of its Diseases, in the Theatre of this College, on Tuesday, the 16th of June next, and will continue the same on each Tuesday, Thursday, and Saturday, at the same hour.

EDMUND BELFOUR, Secretary.

Wanted, a House Surgeon and SECRETARY to the MANCHESTER EYE HOSPITAL. He must be a legally qualified practitioner, and devote the whole of his time to the Hospital. Salary, £130 per annum, without board or residence. Application, with testimonials, to be forwarded to the Hospital, South Parade (addressed to the Hon. Secretaries), on or before the 20th of May.

Hospital for Sick Children, 49, GREAT ORMOND STREET.

A Series of CLINICAL LECTURES will be delivered by the Medical Officers of the Hospital, every WEDNESDAY, at Four o'clock.

The Lectures are free to Practitioners on presenting their card, and to Students after their first year, by Tickets obtainable on on application by letter to the Secretary, at the Hospital.

April 1863. SAMUEL WHITFORD, Secretary.

Society for Relief of Widows and ORPHANS of MEDICAL MEN in LONDON and its VICINITY. Instituted 1788.—The Members are reminded that a QUARTERLY COURT of DIRECTORS will be held on the 3rd day of June next, at which Candidates for admission into the Society can be proposed. It is desirable that the form of proposal be filled up and forwarded to the Secretary a few days before the Meeting. The form of proposal may be obtained of the Secretary. The benefits of the Society are restricted to the families of deceased Members of not less than two years standing.

The Secretary attends at the office every Wednesday and Friday, from 4 to 5 o'clock. S. W. J. MERRIMAN, M.D.,
53, Berners Street, W. Secretary.

Surgical Instruments.—Arnold & SONS continue to supply Instruments of the best workmanship at moderate prices, manufactured on the premises under their own superintendence.

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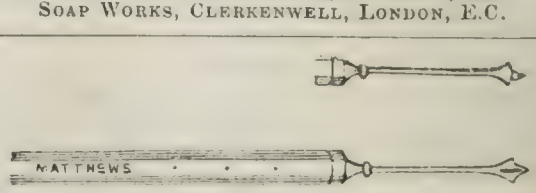
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The *Lancet.*
The *Medical Times and Gazette*
The *Medical Circular.*
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Spratley's Vaccinator, see the *Medical Times* and *Lancet*, November 3rd, 1860. The most efficient little instrument ever invented. Made "only" by W. MATTHEWS, Surgeons' Instrument Maker to King's College Hospital, 8, Portugal Street, W.C. Catalogues of Instruments and Osteology gratis.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture II. (*Concluded.*)

The Differences in the Surgical Diseases of the Urino-Genital Organs in the Child and Adult.

Almost every surgical affection of the urinary organs in children is primarily manifested by irritability of the bladder. This symptom may exist alone, or it may be associated with others; but it is unhesitatingly the chief and most prominent symptom by which the attention of the parent is first directed to the part.

By far the most common cause of this irritability is to be found in the condition of the penis; a long prepuce, retention of the secretion from Tyson's glands around the corona, or an adhesion between the prepuce and the glans penis, being amply sufficient to produce this symptom, and, indeed, almost any or every other symptom of vesical disease.

I have seen this simple condition of penis produce every degree of irritability of bladder, even to hæmaturia. I have seen retention of urine result from the same cause, and also constant priapism.

The following cases will, perhaps, best tend to illustrate these points.

Case I. A boy, aged 1½ years, was brought to me in July 1862, with great irritability of bladder, which had been observed for many months, and hæmaturia of six weeks standing. The pain which the child experienced in micturition was apparently very severe, as it was always followed by a shrill scream. On examining the penis, the prepuce was found to be very long and adherent to the glans. Circumcision was performed, and the adhesions were torn away, perfect recovery rapidly following.

Case II. A boy, aged 3 years, was brought to me in Oct. 1862, his mother having observed that the child had constantly from birth played with his penis after micturition; and for six months he had had at intervals a somewhat profuse hæmaturia. On examination, I found that he had an elongated and adherent prepuce. Circumcision was consequently performed with complete success, every symptom of distress rapidly disappearing.

Case III. A boy, aged 20 months, was brought to me in June 1861 with retention of urine; the mother stated that he had had no relief for three days, and he was becoming drowsy. He had been suffering from occasional attacks of retention of urine for six weeks, having passed two days on several occasions without relief. On examination, his prepuce was found to be firmly adherent to the glans penis, and a quantity of retained secretion was also present. Circumcision of the prepuce and its complete separation from the glans was performed; and a catheter was passed, by which at least a pint of urine was drawn off. Convalescence followed; and, although he was under observation for three months, no return of his symptoms had been observed.

Case IV. A boy, aged 2 years, was brought to me in May 1862 for constant priapism, the mother having observed that such a condition was always present. On examination, it was seen that he had an adherent and lengthened prepuce; consequently he was circumcised, and the adhesions broken down, a complete cure following. It must be added, that this child was said to have had an attack of tetanus when teething.

It is hardly necessary to quote other examples illustrating the same subject. The above are typical of certain classes, and have been selected from their extreme severity; it is enough, therefore, to add the caution that, in all cases of irritability of the bladder, or in any cases in which urinary disorder is suspected, the first inquiry should invariably be directed to the condition of the penis; for I have shown that almost every symptom of urinary disease may be produced by an elongated or adherent prepuce.

When any young subject is brought to me with a history of calculus vesicæ, I am always at first disposed to doubt the fact of its existence; for, in by far the larger proportion of such cases, the symptoms will be found to be due to the simple affection I have just described; and too often an opinion has been given to a parent that a stone exists, when every symptom has been produced by the condition of penis which has been already dwelt upon. The importance, therefore, of recognising the truth of these remarks cannot be overestimated; for, if the nature of the case be mistaken, the fear of the parents of a child will be unnecessarily excited; and the necessary and simple means which are required to effect a cure will be omitted, and the suffering of the child consequently prolonged.

Treatment. In all these cases, circumcision is the only correct practice. The prepuce must also be carefully separated from the glans penis; and all retained secretion from Tyson's glans removed. Common cleanliness is all that is subsequently demanded, and a good and permanent cure may, with confidence, be pronounced. No other measures will have a chance of succeeding; and it is only for the practitioner to realise the connection between the symptoms and their cause, to understand the importance and necessity of the practice which has been brought before you.

Idiopathic or Inflammatory Stricture is an unknown disease in early life; although cases of stricture are occasionally met with in practice, the nature of which is somewhat inexplicable; for, unless some injury to the urethra have been previously experienced, and as a consequence some subsequent contraction have taken place, producing what is described as a traumatic stricture, no other cause for an urethral contraction is generally looked for.

It is, perhaps, hardly fair to regard all cases of stricture which cannot be put down to the result of injury, as cases of irregular development; but such an explanation appears most probable, although I have no proof to bring forward to support this theory.

I have had a case of so-called stricture under

my care, in a boy only 9 years old; but I do not think it necessary to take up your time by dwelling at greater length upon the subject.

Extravasation of Urine. When extravasation of urine is found in the *adult*, it is almost invariably due to an urethral stricture; when found in the *child*, it is almost always produced by an impacted urethral calculus; for I have already stated that, independently of some accident to the urethra, idiopathic stricture is an almost unknown disease in young life; and I think it can be stated with equal truth that extravasation of urine from an impacted calculus in the urethra of an adult is very rare.

Extravasation of urine, therefore, when found in children, is almost always the result of an impacted calculus. It is to be treated also upon only one plan, and that is, by opening the urethra and removing the stone. It is not in every case that a calculus will be detected; for the stone may be small, and under such circumstances it may be lost in the sloughing and œdematous tissues; but in the majority of instances it will be detected at the time; and if otherwise, it will be found at some future period in the discharges which come away.

I possess the records of at least a dozen instances of this affection, and in all of these the practice just laid down was followed; in such cases, also, a good result may be anticipated if they be taken early and the extravasation of urine have not been too extensive.

This point of difference in the cause of an extravasation of urine in the child and the adult is very marked, and is worthy of attention.

Stone in the Bladder. The two great points of difference between this disease occurring in children and in adults, are to be found in the established facts that two-thirds of the cases which come under observation in hospital practice are in children, and that not one in twenty of these cases proves fatal after operation. On the other hand, one-third only of the cases of stone in hospital practice occur in adults; and of these one-sixth die after operation when performed during middle age, and one-half at a later period. Again, in the majority of cases of stone in children, the general health of the patient is very good; indeed, when compared with other children, the inmates of a hospital, the subjects of stone are by far the most ruddy and robust; and it is tolerably certain that the deposition of a calculus is not connected with any cachexia or feeble condition of the vital powers; it is only when the calculus has existed for a lengthened period that the general health of the child begins to fail, and danger to life from its presence and from its operative treatment is to be dreaded. In another place (*Medico-Chirurgical Transactions*, vol. xlv), I have been enabled to show that in all cases of death after lithotomy, whether in children or in adults, extensive renal disease is the unquestionable cause; and that this disease is a necessary result of the long continued presence of a vesical calculus.

In children, stone in the bladder is not a fatal disease, unless neglected, and it is very amenable to treatment, the operation for its removal being most successful, not more than one case in twenty proving fatal. This mortality includes the special risks which attend lithotomy and every difficult operation; and also the more serious dangers to which a patient is always liable; renal disease being the chief. As a conclusion, therefore, I believe it may be left to the fancy or the fashion of the operator to select the form of operation which may be proper. The lateral and the median appear to be equally successful when skilfully executed; the success of the operation depending little upon the one which is selected. If the patient be a healthy one, and either operation be carried out with caution, a good result may be fairly predicted; but if the child be cachectic and the stone have existed for some years, or for a large proportion of the child's life, however well either operation may be performed, a bad result may be anticipated; for it has been shown that, in every fatal instance of lithotomy, renal disease is the true cause of death, and that without such a complication, death is by no means common. The special risks of the operation itself and the results of accident are, of course, omitted in this estimate; but, happily, these are rare.

From the influence of example, practice, and preference, I always perform the lateral operation; and the straight staff is the one on which my choice falls; but these points, I imagine, are quite unimportant if the execution of the operation be skilful and correct, and renal complications be not present. So let the advocates of Allarton's or the median operation dispute the value of the lateral; and the advocates of the latter doubt the advantages of the median. For my part, I believe that both are right if rightly executed; and that a fatal result depends upon other and less doubtful grounds.

The Fossil Remains in the Drift. At a recent sitting of the French Academy of Sciences, M. de Quatrefages replied to certain doubts which had been expressed concerning the authenticity of the human jaw and flint hatchets found in the drift of Moulin Quignon. It had been objected that since the attention of geologists had been drawn to flint implements, very successful endeavours had been made to imitate them, and that a number of hatchets recently taken over to England had all proved forgeries. Now, that such has been the case with certain hatchets does not prove, M. de Quatrefages contends, that all should be counterfeit, and there were certainly many the authenticity of which remained unchallenged. Now, when he was on the spot, he made a labourer strike the soil with his pickaxe, upon which a flint hatchet fell out with the gravel, which did not seem to have been previously touched; nevertheless an artificial cavity might have been made and the hatchet stuck in; but at the moment of this discovery M. de Quatrefages perceived the point of another hatchet sticking out half an inch; it was imbedded in gravel, which had evidently not been touched, and he got it out with his own hands. Here, therefore, there could be no deceit. This hatchet and the preceding one were both laid before M. Delesse, who, after a minute comparative examination, came to the conclusion that they were both authentic. As to the jaw, the only testimony in favour of its authenticity was that of M. Boucher de Perthes; no doubt a most reliable testimony, but yet a solitary one. However, a minute examination of the relic, and a comparison of the earthy crust which covers it with the soil in which it was found, tended materially to confirm the opinion of its authenticity. M. de Quatrefages had tried to produce such a crust artificially, but without success. Nevertheless an analysis of the bone was to be made, to place the question beyond all doubt. He concluded with reading a letter from M. Delesse, in which the latter declared his firm belief in the authenticity both of these hatchets and the jaw.

Original Communications.

ON EXOPHTHALMIC GOITRE.

By J. O. Fletcher, M.D.

[*Read to the Medical Section of the Manchester Royal Institution, Manchester.*]

In selecting the subject of Exophthalmic Goitre for my paper, I have been influenced by the fact of having seen, perhaps, more than an average of these cases, and been intimately acquainted with their histories.

It is only within the last few years that this disease has excited much attention in England, although in Ireland, France, and Germany, it has been studied by various inquirers under different names; as "Glotzaugen Cachexie" (Basedow); "Exophthalmos ac Struma cum Cordis Affectione" (Henoch); "Exophthalmie Séreuse" (Datin); "Anæmic Exophthalmos" (Mackenzie); "Cachexia Exophthalmica" (various); "Anæmic Protrusion of the Eyeballs" (Taylor); "Affection of the Thyroid Gland" (Graves); "Affection of the Heart and Thyroid Gland" (Stokes); "Maladie de Basedow" (Hirsch); "Maladie de Graves" (Trousseau); "Anæmia and its consequences" (Begbie); etc.

Case I. The first case that I noticed was in August 1858, at which time I was requested to see a Mr. C., aged 26, whose father and mother were said to have died of phthisis. He was a nervous excitable subject; had previously enjoyed excellent health; never had piles. He was the principal in a business requiring considerable mental exertion; just previously to this time he had been very much engaged, working night and day; and had lost a great deal of rest, from anxiety about business matters and family troubles, having the responsibility of being guardian to his orphan brothers and sisters; he had also a matrimonial engagement that was near its consummation. He had been in the country for the end of the week, to pay his last visit as a bachelor to some friends; took freely of the good things peculiar to such feasts; and, after a sleepless night, started back to town by an early morning train; felt very cold, and soon after he arrived home (August 2, 1858), had a rigor; and was seized with very severe *colic*, that continued in spite of the free use of antispasmodics for twenty-four hours. The bowels were relieved by enemata; still the colic returned from time to time for five days, when he passed *one gall-stone*. After this he gradually recovered, but was so much reduced as to be unable to walk about his room for eight or ten days. Knowing as I did, that he was engaged to be married in about ten days, and that his plan for a wedding tour was to spend a month or six weeks in France and Italy, I proposed that his matrimonial engagement should be adjourned until he had perfectly recovered his strength. Of course, my wishes were not attended to; he was married, went his tour, and returned one month from the day of his starting. On the evening of his return, I was requested to see him, as it was "thought he could not live long." I found him (September 28, 1858) sitting up; able to walk a short distance, and then failing, not for want of muscular power, but from the severe palpitations, caused by the slightest motion or excitement.

He was greatly emaciated, his clothes hanging upon him in folds. The eyes protruded to a considerable extent, and were more than ordinarily brilliant. The rest of his face was pale, sickly, wasted, and expressionless; no wrinkles nor painful expression, but rather a want of it; yet the peculiar staring of the eyes gave him a most wild look, intensified by every motion of the body, or mental excitement. The colour of the skin was peculiar, being something between the paleness of simple anæmia and slight jaundice; differing from the greenish yellow of chlorosis or the malignant tinge. When he was spoken to, the face flushed slightly; the eyes started more from their sockets; he complained of increased palpitations, throbbing in the neck and head, and constriction about the throat, which caused him to remove all covering therefrom. He complained of the heat of the room (although it was a cold night), and requested the fire removed, and the window to be opened; evincing a great tolerance of cold, and intolerance of heat. Upon examining the heart, it could be felt beating in its normal situation with a tumultuous jerking impulse. (He observed this symptom three days after his marriage.) The palpitations were increased by alteration of position and excitement to a considerable extent, giving him the idea, as he expressed it, "as if it would jump out of the chest or burst." There was a loud systolic murmur extending along the great vessels. On percussing the region of the heart, I did not observe any increased vertical or horizontal dulness. The carotids could be seen beating most violently, and gave a loud *bruit*. The abdominal aorta could be felt pulsating in the same way through the thin wasted abdominal walls; and here also the *bruit* was heard. The radial pulsations were 136 per minute, full and soft; during excitement they had some of the violence and irregularity of the carotids, but at all times there was a marked difference in the radial and carotid pulsations. The thyroid body was enlarged; the lateral lobes being each of about the size of a duck's egg, the right a little larger than the left; it was soft to the feel, conveying a thrill to the fingers and a *bruit* to the ear. During excitement, the gland increased in size, the thrill and *bruit* were increased. He noticed the enlargement of the thyroid gland fifteen days after the palpitations, eighteen days after his marriage. There was a distinct venous murmur in the jugulars. The abdomen was flat, and gave out the normal physical signs, except the pulsations and *bruit* of the aorta, and increased vertical and lateral dulness over the regions of the liver and spleen. The limbs were much wasted, the tissues hanging flabbily to the bones; there was slight œdema of the ankles. The eyes projected from the orbits; by pressure of the finger the protrusion could be diminished, but it returned on the removal of the pressure. He could move the eyes freely in any direction, but the tendency was to look straight out. The coats of the eye were not injected. Vision was perfect; but there was a great disinclination to read, because the fatigue and consequent excitement caused an increase of the palpitations. The skin was cool except during a paroxysm of excitement, when it was covered with a clammy perspiration. The urine was slightly increased in quantity, specific gravity 1021, pale, acid, deficient in urea, but otherwise normal. The tongue was clean, except near the base, where there was a creamy fur. He had much thirst, the desire being for acid liquors. Whilst on the continent, he had taken freely of the light acid wines, which were no sooner taken than rejected, as he thought, from their not agreeing with him; he, therefore, day by day changed his wine, without any different result. This irritability of the stomach had troubled him during the convalescence from the attack of colic; and up to the time of his leaving England, he had only been able to take milk diet, without great risk of its being rejected. His appetite was variable and capricious, the desire being for highly seasoned soups, which were frequently rejected. In this way he accounted for the emaciation. He had diarrhœa during the first ten days, the stools being "dark and bilious"; then constipation, which still continued. The bowels had not acted for three days before this evening; the motion was scanty and pale. He complained of inability to sleep; he could not lie upon the left side in consequence of increase of the palpitations, nor on the right side from difficulty of breathing,

nor on his back from constriction of the throat; the only way in which he could sleep was in a semirecumbent position, or upon his stomach. For more than three months, he said, his sleep had been disturbed and unrefreshing, from mental anxiety; and now, he thought, "sleep had almost forsaken him." He went to bed with a fixed impression that he would not get an hour's sleep, and arose in the morning, nervous, fretful, irritable, and morbidly anxious. He had gone to bed night after night of late, rising in the morning worse than on the previous day. He gave this as the reason for sitting up in his present emaciated condition.

The treatment consisted of nutritious, unstimulating food, in small quantities and at short intervals; a full dose of morphia at night to produce sleep; digitalis to steady the heart; and tincture of sesquichloride of iron to improve the condition of the blood.

He was under this treatment for a month; and at the end of December 1858 went to the west coast for a month without medicine, and returned perfectly well. The improvement in the symptoms followed the order of their appearance; better nights, less irritability of the stomach, more perfect digestion, diminished excitement of the heart, gradual loss of *bruit*, sinking of the eyes, and diminished goitre. When he left for the seaside, there still remained a little of the goitre, but it was quite gone on his return. Up to the present time (over four years), he has enjoyed perfect health, and passed a critical examination in London in connection with a life assurance society.

Case II. Mr. G., a relation of my own, aged 28, married, of nervous temperament, never was ill, except from dyspepsia and jaundice four years ago. He never had piles; his habits were regular and temperate, in the ordinary acceptation of the term; but he was very intemperate in tea-drinking; he thought this often kept him from sleeping at night, and induced his dyspepsia and palpitations. In the spring of 1859 he had to battle with a number of severe calamities and business troubles, "the anxiety of which kept him awake night after night." Then came the irritability of the stomach; food of all kinds except the most bland being rejected. He had also great thirst. Bilious diarrhœa, alternating with constipation, now troubled him. The specific symptoms were the same, and came on in the same order, as in the last case; except that there was a greater extent of dulness over the region of the liver. The skin was more of a dusky yellow colour; the conjunctiva was slightly yellow. Early in July, the palpitations were first noticed; in August, the exophthalmos came on, and ten days later, the goitre. All the symptoms in this case were more severe than in the last.

The treatment was as in the last case, except that hyoscyamus was substituted for the morphia, which did not procure sleep. The improvement was immediate and gradual; in two months, he went to the sea-side, where he remained for six weeks, returning without heart-symptoms, exophthalmos, or goitre. He has since remained in good health. The blood in this case coagulated slowly and imperfectly; under the microscope, there was seen to be a deficiency of red corpuscles and an excess of white cells.

Case III. John M., waiter at an hotel, married, aged 37, had previously very good health; he lived freely, was frequently kept up the greater part of the night, getting very little sleep, and what he did was disturbed and unrefreshing.

On September 20th, 1859, he consulted me for what he considered to be heart-disease, that had been gradually getting worse for four months. He could not give an exact account of the accession of the symptoms. He now complained of sleeplessness and irritable stomach; his bowels were constipated; the stools were light in colour. He had no piles. He had heart-symptoms, exophthalmos, and goitre, well marked. He was under the same treatment as the other cases for four months, and was then perfectly cured.

In May 1860, from anxiety and other causes, his sleep again became uncertain, disturbed, and unrefreshing; the palpitations and a slight *bruit* returned. A few doses of morphia were given at night, and he recovered. He has since enjoyed good health.

Case IV. A girl, aged 16, who had always been delicate, feeble, and stunted, was thought to have heart-disease. She had never menstruated. In May 1860, she came under my care, for excited heart, goitre, and exophthalmos. The treatment was the same as in the other cases, and was continued for seven months, with gradual improvement, ending in perfect recovery, and establishing of the menses. She has since this time continued in good health, and grown considerably.

Case V. Mrs. H., aged 37, had been married six years, but had not had any children. She had been regular, had no abnormal discharges; she had very good health previous to her marriage. For the last three years, from irregularities in the habits of her husband, her rest had been very uncertain and broken. She had considerable mental and emotional excitement, from which her health had given way. She suffered from dyspepsia and vomitings; once she had "slight jaundice, followed by bilious diarrhœa," which left her very weak, and brought on the palpitations.

On October 10th, 1861, she first consulted me. She was then greatly emaciated; hardly able to walk. She had a very loud systolic *bruit* almost obscuring both sounds, with goitre and exophthalmos.

The treatment was the same as in the other cases, and was continued for eight months, ending in perfect recovery.

Case VI. I am indebted to my friend Dr. Ledward for this case. Mrs. H., aged 47, married five years ago; had no hereditary tendency to disease; always had good health previously to her marriage. She menstruated regularly up to the last four years, when the catamenia ceased. She did not remember ever being without leucorrhœa. She married a widower with a family of grown-up children; and during the first two years of her married life had great trouble and anxiety with them. She frequently went to bed and lay awake all night thinking of her troubles, and got up disinclined to take, and unable to digest, her food. Three years ago she first noticed the palpitations, weakness, and emaciation. She could not fix the time of appearance of the other symptoms. She had now exophthalmos and goitre; a slight *bruit* only was heard in the carotids, but not in the heart. Pulse 130. The blood coagulated slowly and imperfectly; the red corpuscles were deficient; it contained cholesterine. The fæces were pale, and contained a considerable quantity of cholesterine; also, a trace of bistearate of soda, and very little stercorine. Mr. Hudson has checked this examination. Mr. T. Windsor found some atrophic changes in the choroid coat of the eye.

Dr. Thorburn has very kindly given me notes of three cases he has met with.

Case I. A man, aged 35, with palpitations, emaciation, goitre, and exophthalmos (double), was treated with iodine and hydropathic remedies without benefit. He was first seen on June 26th, 1861. It was a well-marked case, with the usual symptoms of vomiting, disturbed digestion, nervous excitement, goitre, and exophthalmos.

The treatment consisted of ice to the goitre, soda water and milk, mild unstimulating diet, morphia, and iodide of iron. In two months, he was much better; and by the middle of 1862 was strong and well, a little of the exophthalmos remaining.

Case II. A female, aged 40, had the usual symptoms, but in a mild degree. Her sister had been treated for symptoms resembling aneurism of the aorta, unsupported by physical signs, with iodide of potassium; it

was given in this case for eighteen months, with only diminution of the symptoms.

Case III. A female servant, aged 29, had symptoms resembling the last case. Iodide of potassium was given internally; and iodide of lead applied to the goitre with improvement. The case was then lost sight of.

In searching the literature of this subject, I find that, in the year 1722 (*a*), Saint-Yves gives cases of exophthalmos, evidently of this kind. In 1774 Louis (*b*), and in 1791 Gilibert (*c*), relate cases. In 1800 Flajani (*d*), an Italian, first alluded to goître in connexion with palpitations. After him, Wardrop (*e*) in 1809, Testa, Wenzel and Ware (*f*) and Demours (*g*) in 1818, also noticed the disease. Dr. C. H. Parry of Bath (*h*) says "he has so often seen this swelling (goitre) follow diseases of the heart and other maladies more especially called nervous, such as epilepsy, etc., in which the blood is propelled with excessive momentum to the vessels of the head, and yet at the same time has observed such sudden augmentation and diminution of the swelling," that he was led to suspect that the thyroid body acted as a diverticulum to the cerebral circulation. The same writer, in his posthumous (*i*) works, alludes to a case he saw in 1786. Middlemore (*j*) and Brueck (*k*), etc., in 1835, Hamilton in 1836 (*l*), Pauli (*m*) in 1837, and Datin in 1839, give cases of goître with palpitations, and exophthalmos with palpitations. Yet there is no account of cases where the three so-called characteristic symptoms are given, before the time of Dr. Graves (*n*) in 1835, who evidently was the first to distinguish this disease, although there cannot be a doubt that both Flajani, Parry, and others, alluded to these cases. In the year 1840, Basedow (*o*), in Germany, entered more fully into the subject, with cases to illustrate his statements. In 1841, Sir H. Marsh (*p*) exhibited to the Dublin Pathological Society the heart of a case that had resulted fatally, and alluded to other cases. Graves (*q*) in 1843 enlarged upon his former statements. The disease has also been described by Sichel (*r*) in 1844, McDonnell (*s*) in 1845, White Cooper (*t*) in 1849, Mackenzie in 1850, Naumann (*u*), Romberg, and Henoch in 1851, Desmarres (*v*) in 1853, Stokes (*w*) and Schoch (*x*) in 1854, Charcot (*y*) in 1855 and 1857, Begbie (*z*) in 1855, Taylor (*aa*) in 1856, Hervieux (*bb*) in 1857; in America, in 1859, by Flint (*cc*), Taylor, Biglow, Moreland, etc.; in in France, an excellent memoir by Fischer (*dd*), with a very complete bibliographic account of the subject; in Germany, by Withusen, translated by Dr. Moir (*ee*); in 1860, Genoville (*ff*), Gros (*gg*), Demarquay (*hh*). Dr. Williams and others, at the London Medical and Chirurgical Society, discussed the subject. In 1861 Aran (*ii*) and H. Walton (*jj*), in 1862 Begbie (*kk*) and Trousseau (*ll*), have enriched the subject by cases and comments.

Pathology. The earliest record of a *post mortem* examination I have met with is in an examination of a supposed fatal case of heart-disease, given in the *Edinburgh Medical Journal* of 1820, vol. i. The thyroid gland was much enlarged, scirrhous, adhering to and pressing on the left carotid. (Goitre had existed several years.) The body was much emaciated. The pericardium adhered to the heart; it contained four ounces of brownish serum; the heart was enlarged and thickened, particularly the left ventricle, which was filled with coagulated blood. The aorta was enlarged at its origin. There were specks of ossification over the surface of the heart. The liver was greatly enlarged, and its structure much deranged. The mesenteric glands were enlarged and diseased. The spleen was enlarged, and contained an abscess filled with dark coloured pus. The kidneys were much enlarged, but the structure was not much changed. Sir H. Marsh, in 1841, exhibited to the Dublin Pathological Society the heart of a case to which he had alluded before. The left auricle was enlarged, not hypertrophied; the capacity of the right auricle was increased, but in a less degree than the left; and there was a little hypertrophy of its walls. The left ventricle was hypertrophied and dilated. There was thickening of the mitral valve; other valves healthy. No account of the other viscera. Hirsch in 1840 (*Casper's Wochenschrift*, March 28th, 1840) examined a case that died comatose; he found blood in the arachnoid cavity, and over the left hemisphere; brain injected; thyroid body hard; vessels dilated; heart slightly hypertrophied; valves healthy; not much fat in the cavity of the orbit. Naumann in 1851 gave an examination where the left ventricle was hypertrophied, the aortic valves ossified, with insufficiency of the mitral valves, atheroma of several arteries, as ophthalmic, etc.; dilated veins; orbital fat increased; aqueous humour thick, with crystals of cholesterine in it; capsule of the lens opaque; coats of the eye more or less injected. Heusinger (*mm*) found the cellular tissue in the orbit in two cases yellow, thick, and increased in quantity. Praël, in 1854, found the cellular tissue in the orbits not much increased; the jugular veins were much dilated; and the heart fatty. In 1857 (*nn*), he examined a man aged 50, that had died from this disease; and found hypertrophy with dilatation of the left heart; the mitral valves thin; atheroma and osseous degeneration; diseased aorta; and the brain in some parts softened. Lécorché (*oo*) examined a fatal case with albumen in the urine. He found serosity of the membranes of the brain. The heart was enlarged, the left ventricle hypertrophied, the valves healthy; the kidneys were diseased. Roche, in a fatal case with hæmoptysis and coma, found an apoplectic clot in the brain, and fluid in the pleura and pericardium. The kidneys were diseased; the heart was large; and there was œdema of the cellular tissue of the orbit. Ferrand relates a fatal case, but there was nothing special in the *post mortem* examination. Begbie gives a case of Dr. Christison's, where the body was much emaciated, the right cavities of the heart dilated, the walls

(*a*) Nouveau Traité des Maladies des Yeux, chap. xx, page 141. Paris: 1722.
(*b*) Mém. de l'Acad. de Chir., t. xiii.
(*c*) Adversaria Medico-Practica.
(*d*) Collezione d' Osservazioni di Chirurgia, vol. iii, p. 270.
(*e*) On Fungus Hæmatodes.
(*f*) Observations on the Treatment of Epiphora.
(*g*) Maladies des Yeux, t. i, p. 484.
(*h*) General Pathology, vol. i, p. 188.
(*i*) Posthumous Works of Dr. C. H. Parry, vol. ii, p. 111. 1825.
(*j*) Treatise on Diseases of the Eye, vol. ii, p. 589. 1835.
(*k*) Ammon's Zeitschrift, Band iv. 1835.
(*l*) Dublin Medical Journal, vol. ix, p. 255.
(*m*) Heidelberg. klin. Ann., Band iii, Heft ii. 1837.
(*n*) Clinical Lectures, vol. ii, p. 193.
(*o*) Casper's Wochenschrift, 1840.
(*p*) Dublin Journal of Medical Science, vol. xx, p. 471.
(*q*) Clinical Medicine, p. 674.
(*r*) Bulletin Général de Thérapeutique, t. xxx, p. 344.
(*s*) Dublin Journal of Medical Science, vol. xxvii, p. 200.
(*t*) Lancet, May 26, 1849, p. 551.
(*u*) Deutsche Klinik, 1853 and 1854, p. 24.
(*v*) Gazette des Hôpitaux, 1853, p. ii; and Maladies des Yeux, t. i, p. 210, 2nd edit.
(*w*) Disease of the Heart, p. 278. 1854.
(*x*) De Exophthalmo ac Strumà cum Cordis Affectione. Berlin: 1854.
(*y*) Gazette Médicale de Paris, 1856; and Mémoires de la Société de Biologie, 1857.
(*z*) Edinburgh Medical Journal, vol. lxxxii. Case-book. 1855.
(*aa*) Medical Times and Gazette, p. 515. May 25, 1856.
(*bb*) L'Union Médicale, 1857.
(*cc*) A Practical Treatise on Diagnosis, etc., of Diseases of the Heart, p. 267.
(*dd*) Archives Générales de Médecine, t. xi, pp. 521 and 652. 1859.
(*ee*) Dublin Medical Press, July 1859.
(*ff*) Archives Générales de Médecine, t. i, p. 82. 1860.
(*gg*) Archives Générales de Médecine, t. xi, p. 238. 1860.
(*hh*) Traité des Tumeurs de l'Orbite, p. 157. 1860.
(*ii*) Archives Générales de Médecine, t. i, p. 106. 1861.
(*jj*) Surgical Diseases of the Eye, p. 301. 1861.
(*kk*) Practical Medicine, p. 116. 1862.
(*ll*) Clinique Médicale, t. xi, p. 614.
(*mm*) Casper's Wochenschrift, 1851.
(*nn*) Archiv für Ophthalmologie, t. iii, p. 187.
(*oo*) Theses, 1858.

of the right auricle thin, the valves healthy, the right pleura adherent, and the left healthy. The thyroid gland was much enlarged from hypertrophy. The stomach was displaced downwards; its mucous membrane was healthy. The intestines were glued together by old adhesions, but their mucous membrane was healthy. The liver was congested, indurated, and had the nutmeg appearance. The spleen was large, but healthy. One kidney contained a cyst. The other viscera were healthy. The blood was fluid in every part. Begbie then relates the examination of a fatal case of his own, in which there had been engorgement of the liver, jaundice, signs of diseased heart, general dropsy, and exophthalmos for more than a year. The body was moderately stout; there were evidences of decomposition going on. The cellular tissue contained very little fat, but was infiltrated with serum. The pericardium was large, and contained six ounces of clear yellow fluid. Upon the anterior surface of the heart, near the base, a milky spot of about the size of a florin-piece was observed, and another upon the opposite surface of the pericardium. All the cavities of the heart were filled with dark coloured blood, more fluid than usual; one well formed decolorised clot was found in the right ventricle. The heart was large, soft, and flaccid; all its chambers, especially the ventricles, were dilated. The tricuspid and mitral valves were large, but otherwise normal; the sigmoid valves were normal. The vena cava inferior was large; the aorta was small, compared with the pulmonary artery. The endocardium and inner surface of the aorta were stained of a deep red colour; both pleuræ contained dark red turbid fluid. The sterno-hyoid and thyroid muscles were thinner and broader than natural; the external jugular veins were normal, the internal large. The thyroid body was generally increased in size to four or five times its normal extent; it was of a dusky red colour, well defined, but slightly irregular on its anterior surface. The kidneys were large and soft. The liver was certainly not enlarged, perhaps rather small; its surface was somewhat irregular, slightly fissured at points superficially. No rounded nodules of cirrhosis could be observed. On cutting the tissue, it was rather hard and dense. The organ seemed partially atrophied; its colour was of a deep orange; and in some places there was an approach to nutmeg congestion.

The Etiology of this disease is obscure and doubtful. It is allowed to be rare in children, although cases have been recorded by Louis, Coulon, Demours, etc. It is more common in females than males, as proved by Taylor, Genoville, Withusen, etc.; yet it is by no means rare in males, for Fischer, Romberg, Taylor, Aran, White Cooper, Trousseau, Begbie, and others, have recorded cases. It may coexist with, and is thought to be to some extent depending upon, wasting discharges, as leucorrhœa, menorrhœa in females, and piles in males; of which Fischer, White Cooper, Haynes Walton, and others, give illustrations. It may occur where there is a tendency to heart-disease, as in a remarkable case recorded by Dr. Gros; or may succeed an attack of rheumatism, as has been recorded by Hervieux, Naumann, etc.; or albuminuria (Roché, Coulon, and Lécorché); abscess (Ferrand); ague (Gros); epilepsy (Taylor); typhoid fever (Romberg). One or all of these may precede, or arise as an intercurrent affection, and perhaps play some part in the causation of the disease; yet it must be allowed that these so-called causes very frequently exist without any connexion with this disease. We, therefore, must look for something earlier in the chain of causation, and more definite in its connexion than any of the above. I am of opinion that we must look for this to the nervous system, and especially to the brain; for the disease appears to me to be "hyperneuria", induced by sleeplessness, anxiety, excessive excitability, and irritability, impairing digestion and assimilation; secondarily interfering with the normal nutrition of the nerve-centres, causing a state of hyperneurosis with want of power, which induces imperfect secretion by some organ, and, as a necessary consequence of this, if long continued, causes organic changes. And I would here suggest, hypothetically, as a, if not the, remote cause, the excessive formation and abnormal elimination of *cholesterine* or some primary organic compound inducing a specific spanæmic and other changes. Dr. A. Flint, jun. (*American Journal of Medical Science*, Oct. 1862), in studying the physiological relations of cholesterine, found there was more cholesterine in the blood of the internal jugular vein than in the carotids; *ergo*, cholesterine is produced in the brain. He also found, on taking blood from each arm of three hemiplegic persons, that there was more cholesterine found in the blood of the healthy than the diseased side; hence he infers that it is produced by nerve-action. He found more cholesterine in the blood of the portal vein than in the hepatic; hence he infers that cholesterine is eliminated by the liver, but that it is not eliminated unchanged; for neither he nor Marcet was able to find it in the fæces in health. Dr. Flint, however, on treating dried fæces with ether and alcohol, obtained a substance resembling "seroline", to which he has given the name of "stercorine", differing from Marcet's "excretine". He further concludes that "stercorine" results from some change in the "cholesterine", which takes place during the process of chylification; because the amount of stercorine corresponds to the amount of cholesterine discharged from the liver. Cholesterine is found in the meconium, but stercorine is not; yet, as soon as digestion begins, cholesterine disappears, and stercorine is found. In hybernating animals, when they are asleep and not taking food, cholesterine is found; but when they are taking food, only stercorine. The fæces of animals fasting contain a small quantity of cholesterine.

Now in these cases we have as an early, if not the earliest symptom, evidences of hyperneuria, which would produce cholesterine in excess of what is normal; and, secondarily, disturbed digestion, imperfect chylification, and something wanting in the zoochemical changes of the cholesterine into stercorine; for in the fæces of Mrs. H. there was found cholesterine, and little or no stercorine. Again, in the first of my cases, there was evidence of excessive formation of cholesterine, by the existence of gall-stone at that early age. The constant symptom of alternating diarrhœa and constipation indicates a disturbed biliary secretion. The frequent pathological changes found after death in the liver; the finding of cholesterine in the aqueous humour by Naumann; the existence of cholesterine in the atheromatous changes that secondarily take place in the arteries,—tend to support this hypothesis; but I am free to confess that these facts are very meagre, and only venture to point to this as a subject for further investigation in this disease.

Symptomatology. We have first loss of, or disturbed and unrefreshing sleep, from excitement of various kinds; then disturbed digestion, through morbid excitation of the par vagum and sympathetic; impaired chylification, causing pallor and anæmia; constipation or diarrhœa, through excessive, diminished, or altered bile-discharges, a result of the presence or absence of bile—a thing necessary to the healthy transformation of cholesterine into stercorine; then palpitation from altered innervation of the heart; emaciation from imperfect secondary assimilation and blood-elaboration, in which the thyroid body takes a part. The pulsation of the carotids is due to the impulsive character of the *vis a tergo* and disturbed function in the nervi molles, lowering the tonicity of the contractile coats of the arteries, which, with a want of specific gravity of the blood, a result of imperfect blood-formation, causes the *bruit*. The *bruit* in the heart arises from altered power of con-

tractility in the muscular fibres of that organ, disturbing the balance between the contracting walls, and resisting fluid; hence it is systolic. The nervation which induces this peculiar action is one of great tension, but small in quantity (if I may be allowed the term). In this way we can explain the absence of the *bruit* as recorded by Datin; also its localisation in the carotids whilst absent in the heart, as in the case of Mrs. H. The rushing and throbbing in the head, particularly during excitement, is due to temporary excessive *vis a tergo;* any injurious consequences to the brain being guarded against by the thyroid body acting as a diverticulum; hence the goitre which is from simple hyperæmia at first, then hypertrophy, increases with excitement, and essentially differs from endemic goitre. The exophthalmic state is a consequence of distension of the intraorbital vessels, pressing the eyeball forwards, as thought by Henoch, Walton, Sichel, Hirsch, etc.; and it is proved to have this origin by the fact of pressure reducing the exophthalmos, and in fatal cases by the eye receding into the orbit after death (Begbie). It is certainly not due to serous infiltration, as thought by Hamilton, Roche, etc.; nor to excess of intraorbital fat (Middlemore, Desmarres); nor to increase of intraorbital cellular tissue (Basedow, Kœben, Heusinger, Naumann); nor to increase of the vitreous humour (Stokes), because the measurements of the globe are not increased; nor to irritation of the sympathetic affecting the orbital muscles (Aran), because the motions are perfect. Vision is rarely impaired, as might be inferred from the ophthalmoscopic examinations of Withusen, Follin, and Argyll Robertson, who found some changes in the choroidal pigment, and increased vascularity.

The coexistence of heart-disease is accidental in the early stage; but, if the disease persist for a long time, we should reasonably expect dilatation of the cavities, without relative hypertrophy of the walls; which has been proved to exist before death by Trousseau, and recorded as a pathological fact by Marsh, Christison, Begbie, etc. The dilatation of the veins is the last expression of the disease; it is not due to the pressure of the goitre, for Begbie found the inferior vena cava dilated; but is no doubt due to static congestion.

Diagnosis. The presence of heart-symptoms, emaciation, goitre, and exophthalmos, characterise this disease. From organic disease of the heart it is known by the history, its rapid development and subsidence under treatment; from endemic goitre, by the size of the tumour, by its feel, by the thrill and bruit, and by its subsiding after, and increasing with, excitement.

The Prognosis is always favourable, and the more so when the disease has not existed long; the more chronic it is, so much the more likely are we to have secondary organic complications.

The Indications of Treatment are to allay the irritable stomach by the use of ice; to give bland unstimulating nutritious food in small quantities and at short intervals; to produce sound and refreshing sleep by morphia, or any non-stimulating soporific; to administer digitalis to steady the weak heart and control its excitement. Iron is to be given to improve the quality of the blood; and hygienic means must be employed. I do not think local applications of iodine have any good effect upon the goitre. Ice will frequently give relief by diminishing the hyperæmic state.

In considering the disease in its totality, I cannot agree with Begbie, that it is a variety of anæmia, induced by wasting discharges; nor with Bouillaud, that it is a variety of chlorosis; nor with Aran, that it is always associated with heart-disease; nor with Stokes, that it is neurosis of the heart and cervical vessels. I am inclined to think it is hyperneuria of the brain and sympathetic; that this hyperneuria modifies the primary and secondary assimilation; that the latter interferes with the normal elimination of one of the primary animal compounds formed in secretion (cholesterine?), and thus induces spanæmia; that this spanæmic state, acting upon the brain and cardiac nerves, causes the palpitations; and that the other symptoms arise as a consequence of a continuance of this peculiar action of the heart, and of spanæmia, even up to organic changes in the viscera, heart, and vessels.

CHOREA: RHEUMATISM: PERICARDITIS.

By S. O. Habershon, M.D.Lond., F.R.C.P., Senior Assistant Physician to, and Lecturer on Materia Medica at, Guy's Hospital.

Instances occasionally occur in which, during the acute symptoms of rheumatism, or shortly afterwards, irregular choreal movements come on. These cases are especially manifested after the heart has been implicated in the rheumatic affection; and the closeness of the sympathy between the heart and the spinal centres has led to the supposition that the fibrous tissues of the cord become affected by rheumatic disease. Of this there is no proof, although it is almost exceptional to find chorea without abnormal sound about the heart, either from pericardial or endocardial disease: still, the connection appears to be one arising from the nervous system, and not from organic change of the spinal membranes or metastasis. Fatal cases of chorea rarely happen, and in such instances either acute pericarditis or valvular mischief, as shewn by fibrous vegetation on the mitral or other parts, are generally detected; but no organic change has been discovered in the spine or its membranes.

It is a matter of doubt whether the energetic treatment, generally adopted in rheumatic carditis, does not favour the irritability of the nervous system, of which chorea is the expression; for patients are rendered anæmic and prostrate by the free use of salines, by calomel and antimony, by depletion and spare diet.

Of the following three cases, the first was one of acute rheumatism with heart affection, in a girl aged 16. Salines were given; and, at the end of the second week, choreal symptoms came on, but quickly subsided under the use of bark and an improved diet. In the second case, a young married lady had acute rheumatism, with slight affection of the heart, four months after the birth of her second child. She was compelled to wean her infant; but, although the rheumatism soon subsided, chorea shortly supervened, and did not completely cease till her strength became established by change of air and sea bathing. The third instance was that of a boy afflicted with chorea. He was relieved by generous diet and by steel medicine, and a systolic bruit became less distinct; but in three months he returned with another attack of chorea, and with pericarditis. The prostration of strength was extreme; still, he rallied, and the chorea ceased; but, after a relapse, the cardiac mischief increased, and fatal syncope ensued. This case was also interesting from the presence of erythema circinatum, an occasional accompaniment of rheumatism. In the first and last of these cases, although pericarditis was well marked, there was an absence of pain in the left side and in the region of the heart; and this will be found to be generally the case in simple pericarditis, that is, where the pleura is not also affected.

Case I. *Rheumatic Fever: Pericarditis: Chorea.* Sarah B., aged 16, was admitted, under my care, into Guy's, October 26th, 1862. She was a servant; and, two days before admission, experienced pain in the ankles, feet, and legs; and when she was brought to the hospital the symptoms of rheumatism were well developed. A purgative of blue pill and compound rhubarb pill was

given, and half a drachm of bicarbonate of potash in barley-water every four hours; and a diet of milk and beef-tea.

On October 28th she was in severe pain in the joints, which were red and swollen; the skin was perspiring; there had been no sleep; the bowels were open; there was a to-and-fro sound over the region of the heart, and a systolic *bruit* in the course of the aorta; the pulse 116, compressible; the respiration 28. She had no pain in the region of the heart, nor tenderness at the scrobiculus cordis. A grain of opium was ordered at night.

On Oct. 29th there was rather less pain; she had had a little sleep in the night; and the friction-sound was less distinct; but the systolic *bruit* was more distinct. The respiration was easy, 28 in number; the pulse 112.

On the 30th she had a distressed expression of the countenance, although there was less pain in the joints, and none in the region of the heart, nor in the left side; the friction-sound was again very distinct; the pulse tolerably compressible and small, 116; respiration 40. The bowels were open; the tongue had moderate white fur. She was ordered to continue the bicarbonate of potash; and six ounces of blood were taken by cupping from the cardiac region.

On November 1st the symptoms continued as before, and it was found difficult to maintain the warmth of surface which was desired, on account of the patient throwing aside her flannel gown.

November 3rd. The friction-sound was still very distinct, of a harsh and dry character; the pulse was irritable, compressible, and frequent; but there was rather less pain in the limbs. Other symptoms remained as before. A blister was applied to the region of the heart.

On the 5th there was no pain in the joints, but the friction-sound persisted; and, on raising the patient up, the base of the left side of the chest was found to be dull, with tubular breathing, bronchophony, and imperfect tactile vibration; the tongue was clean; the respiration 40 to 50; the pulse 116, compressible. A small quantity of iodide of potassium was given with the bicarbonate of potash. She positively stated, that she had not suffered from any pain in the left side.

On November 7th the friction-sound was still very marked; but she had no pain in the joints; the tongue was clean; the pulse sharp and frequent; the bowels open. For two or three days, irregular jactatory movements had been observed; the mouth was distorted when she attempted to drink, and the hands and arms were suddenly jerked about. She was ordered four ounces of sherry wine, fish, two eggs, milk, etc.

November 11th. The irregular movements continued. The respiration was hurried; pulse 120, small, compressible, and jerking. The friction-sound was less distinct, but audible at the base of the heart. She was ordered to take, three times a day, bicarbonate of potash gr. vij; tincture of bark ℥ss; syrup of orange ℥j; decoction of bark ℥j; and to have eight ounces of wine.

November 12th. There was less choreal movement, but the pericardial sound could be heard; and signs of effusion still existed on the left side. Pulse 144, irritable; tongue clean; bowels open freely. A blister was ordered to be applied to the left side.

November 15th. The chorea was diminishing; so also the friction-sound; but a double *bruit* (valvular) could be heard over the aortic valves. Pulse 116, compressible. Early in the morning, when she was more composed than when visited midday, the pulse was 92; the tongue was clean. She was ordered to have ten grains of potassio-tartrate of iron three times a day in water.

November 22nd. The friction-sound had ceased, and only a systolic *bruit* was heard. She was evidently gaining strength.

November 26th. Systolic *bruit* over the aorta was still audible; but the fluid had become absorbed from the left base; and, although the resonance on percussion was not good, the respiratory murmur was heard to the base.

December 2nd. She was sitting up, and quite convalescent.

On the 9th the systolic *bruit* was much less distinct. The patient was walking about the ward, and about to go home in a few days.

Remarks. The presence of heart-disease of a functional or organic character with chorea is of very frequent occurrence; and, as a sequence of rheumatic carditis, chorea is by no means rare. Chorea from fright only occurs where the system is in a weakened state, and in proportion to the nervous exhaustion the disease is easily induced; it would seem, also, that the exhaustion from loss of blood, the anæmia following mercurialisation and the excessive use of alkalies, may induce a state in which chorea is easily set up. The connection between pericarditis and chorea is one which is not easily explained; for the supposition that the fibrous tissues of the spinal membranes are implicated in similar disease has not been borne out by pathological observations. It is, however, notorious how very closely the heart sympathises in changes taking place in the cerebro-spinal system of nerves, as shewn by the slow labouring pulse of cerebral disease, and not less intimate is the connection of the heart with abdominal disease; thus palpitation, irregularity of rhythm, feebleness of action, even actual syncope, may take place from diseases of the stomach or intestines. The irregular movements of chorea may be the converse of these symptoms, and the nervous supply of the heart in its altered state may induce changes in other parts of the nervous system.

The saline treatment in this case was not pushed to an extreme degree; ℥iij were given in the twenty-four hours; but she soon became anæmic and prostrate, and then the choreal symptoms came on; the improvement after the administration of bark and of a more generous diet was very rapid. This beneficial effect of the cinchona and its alkaloid, quina, is well known, and we have often witnessed its value; but we have no experience in the use of large doses of quinine during the acute stage of rheumatism.

The entire absence of pain in the side was remarkable, with the signs of pleuritic effusion; but we have seen dulness, bronchophony, bronchial breathing, and loss of tactile vibration produced by great distension of the pericardium, an instance in which thirty-six ounces of purulent serum were found after death, the pericardium filling nearly the whole of the left side. In the patient with rheumatism, however, the pericardial friction-sound being persistent, with the signs of effusion, precluded such an idea. Both endocardium and pericardium were affected; and, though the signs of valvular mischief disappeared, it is probable that pericardial adhesions took place.

Case II. *Acute Rheumatism: Chorea.* A young married lady, having an infant four months old, went out December 5th, and walked in the wet without goloshes; again on the 6th she went out in a dense fog, and felt a sense of great coldness in the extremities. On the 10th she suffered from febrile excitement, and some aching pain in the left foot; saline medicine was ordered. On the 11th the ankle was swollen and slightly reddened. On the 12th the left knee was attacked, and she experienced faintness from nursing. The tongue was furred; the heart was free from abnormal sound; pulse 120, compressible. She had taken a scruple of bicarbonate of potash every four hours, and a grain of opium at night. She was ordered to wean her baby, and sherry wine was given. On the 13th the right leg became affected; but the pulse was improved, 108. The bowels were acted on by magnesia and colchicum; the tongue was slightly

furred. On the 14th both legs were affected; the right arm slightly. The skin was perspiring; the tongue had a whitish fur; the heart's action was free; the night was disturbed. She was ordered to continue the salines and opium at night. On the 15th the limbs were generally affected, and she was quite fixed in bed, but suffered from slight pain only, except when moved. The pulse 104, and less compressible; the skin perspiring; the tongue had a creamy fur; the bowels were confined. She had nursed only once during the day. The medicines and the magnesia draught were repeated. On the 16th she had several hours sleep in the night. The bowels acted three times; urine was passed more freely; pulse 96; the sounds of the heart were not perfectly smooth and clear. Acetate and nitrate of potash with tincture of henbane were added to the bicarbonate; and the opium was repeated at night. On the 18th she was considerably relieved; and still more on the 21st. On the 24th there was a slight relapse; but on the 29th she was able to sit up, and to walk round the room. The slight muffling about the sounds of the heart ceased, and she continued steadily to improve under the use of quinine and a more generous diet; but very soon afterwards, while she was still pale and weak, irregular movements of the arm came on, with irritability of the pulse. Steel and quinine were given with relief: but the symptoms did not entirely cease till the strength was completely restored by change of air and sea-bathing.

Remarks. This was an ordinary case of acute rheumatism with slight affection of the heart, but it came on when the strength was taxed by almost wholly nursing an infant four months old. The symptoms quickly subsided, but they left the patient in an anæmic state; it was then, without any very definite exciting cause, the chorea came on. In the former case, the irregular movements came on more quickly, but they also subsided more speedily.

Case iii. *Chorea: Pericarditis: Erythema Circinatum: Rheumatism: Fatal Syncope.* Frederic M., a delicate anæmic boy, aged 10, from Croydon, was admitted under my care into Guy's Hospital, June 11th, 1862. About five weeks previously, he had been frightened; two days afterwards, pains in the head and limbs came on; and three weeks later, irregular jactatory movements. These movements increased till admission. He was a spare, pallid boy, with dilated pupil, irritable pulse; tongue clean; bowels confined; abdomen contracted. The movements were excessive, and he was unable to stand. A faint systolic *bruit* was audible. He was ordered two drachms of steel wine three times a day; a saline rhubarb powder twice a week; and meat diet with milk and vegetables.

The movements slowly but steadily diminished; and on July 8th he could walk tolerably well. On the 22nd he was sent home, well.

On October 29th he was again brought to the hospital; and it seemed that he had again been frightened. He stated that a man ran after him in the streets. The general symptoms were the same as before; but the heart-affection was more marked. A double sound was heard over the heart, and a systolic *bruit* below the nipple; the pulse was sharp and irritable. There was no pain whatever in the joints; but the child was anæmic and very feeble. Steel wine was again ordered. On November 1st, on examining the surface of the skin, a red rash in crescentic curves, rings, and in long gyrate markings, was observed on the trunk and legs. The edge was slightly raised; the centre of the patch presented the normal colour of the skin; the rash resembled erythema circinatum.

On the 5th a systolic *bruit* only could be heard over the heart; the rash was more distinct; the bowels open; the chorea as before. The child was very feeble. He was ordered to have a grain of quinine three times a day, and two ounces of wine.

On the 11th the irregular movements were diminished, but the rash was still present.

On the 22nd the rash was nearly gone, but the child was very feeble; the general movements were better, but the tongue was especially affected; the child being scarcely able to speak, and the tongue was jerked out for a moment, if protruded at all.

On the 25th he was not so well. His friends had brought sweets for him; and he had been taken out of bed, imperfectly clothed. Vomiting followed, the pulse became rapid, and he became also pale and prostrate. At the base of the heart a friction-sound was very distinct, and there was a systolic *bruit* below the nipple. He was ordered ten minims of aromatic spirit of ammonia in water every four hours.

On the 28th he was very ill, anæmic, and prostrate; the friction-sound was as distinct as before. Ten minims of the tincture of sesquichloride of iron were ordered in water three times a day; and the wine was continued.

On the 30th he died suddenly.

Inspection was made on the 1st December. The lungs were emphysematous at the edges; the lower lobes congested, soft, and dense. The heart was enlarged; the whole pericardium was covered with an adherent layer of lymph, but the adhesions easily separated. In the right auricle was an *ante mortem* clot. Minute vegetations were found around the whole of the mitral valve, and upon the aortic crescents. The liver, spleen, and kidneys were healthy; the mesenteric glands were slightly enlarged. There were patches of lymph both in the pleura and pericardium.

Remarks. This patient on his first admission resembled one with ordinary chorea; and, although he had experienced a fright, the pain in the head and in the limbs were remarked as being probably of a rheumatic character. On his second admission, he was more than usually prostrate, the pulse was very compressible; the pupils widely dilated, and there was manifest affection of the heart; still there was no pain whatever, except slight pain in the head after some wine had been given; and no febrile disturbance, but an unwillingness to take nourishment or to be in any way disturbed. The choreal movements subsided, and he regained a little strength; but after fresh exposure to cold, and the administration of improper diet, the heart became so enfeebled by the renewed attack of pericarditis, that death took place suddenly from syncope.

The erythema appeared to be uninfluenced by the renewed pericarditis; neither could we trace any connection between it and the fatal termination. The presence of erythema marginatum and circinatum is not common in acute rheumatism; and in patients thus affected under my care several years ago, bright patches of erythema marginatum appeared during the acute symptoms, and, as the rheumatic affection subsided, gave place to purpurous spots. The history and progress of the case entirely confirmed the following remark of Wilson, in his work on *Diseases of the Skin.* "I have before me the notes of a case of this form of erythema associated with acute rheumatism which occurred in the hospital practice of Dr. Watson. The spots were first developed on the abdomen, and quickly spread from this point as from a centre, until they had occupied with their curves the whole surface of the trunk of the body and limbs. The case in other respects presented no characters different from ordinary rheumatism; the characters of the latter were neither aggravated nor relieved by the invasion, and it appeared to be developed in connection with augmented perspiration." Again, he states that in erythema marginatum "there is a greater degree of congestion of the skin than in the preceding (erythema circinatum), there is a deeper but variable tint of redness, which frequently approaches to a purplish hue; the border of the circles is more raised, and slightly papular, and the margin is well defined."

THE QUESTION OF OPENING HEPATIC ABSCESS: WITH A CASE.

By Sir Henry Cooper, M.D., Hull.

Hepatic abscess is a disease of comparatively rare occurrence in temperate climates; and hence we derive our knowledge of it, and our rules for its treatment, chiefly from the experience of tropical service. Still we do occasionally meet with it here, sometimes as the result of acute inflammation of the organ, rarely of dysentery; sometimes, and perhaps most frequently, after slow subacute action producing few special symptoms during life, and found unexpectedly after death. I do not include in this notice those deposits of pus in the liver which are often found after pyæmia and local injuries, and of which it is difficult to give a satisfactory explanation.

The opinion of authorities on the question of surgical interference is much divided; and I have thought that the following case presents features of interest in this, as well as in some other respects.

Mr. J. R. is a powerful, energetic man, aged 52, of sedentary occupation and habitually abstemious and regular habits, and enjoys generally robust health. Two or three years ago, however, he had an attack of chronic hepatitis or extreme congestion of the liver, which presented, as I understand, all the usual symptoms of that condition in a violent form. From this attack he completely recovered, and continued well till the latter months of last year, when he complained of general indisposition and lassitude. In November he applied to his medical attendants, Messrs. Hardey and Roberts, who treated him for congestion of the liver, with relief. In the early part of December, a diffused enlargement was perceived in the right hypochondrium, which continued to increase.

On December 15th, I was called in consultation. The constitutional symptoms had now become very severe. He had had no rigor; he was not jaundiced, nor were the secretions much affected; but hectic and sweats had set in, he was much attenuated, and his appetite had failed. There was general fulness, with dulness of the right hypochondrium, and a prominent portion, of the size of the fist, midway between the ribs and the crista ilii. No tenderness, but obscure fluctuation. For a few days the swelling appeared to increase; it then became stationary, or even, as we believed, receded; but the general symptoms increased in gravity. Diarrhœa set in, and we suspected that the matter had found its way into the intestine. Microscopic observation did not, however, confirm this view; and the purging subsided, to return from time to time. A few days after, he had a severe bronchial attack; but this, too, passed off without any proof that it was connected with the liver, unless through the irritation arising from contiguity.

By this time the patient's condition had become perilous; and it was clear something must be done, as nature did not make any progress towards the solution of the difficulty, either externally, or by any of the usual channels. Then arose the question of opening the abscess. The general enlargement remained unaltered; the central prominence certainly not increased; the fluctuation still obscure. Dulness extended almost to the crista ilii, where the hardened edge of the organ could be felt. A raised margin could be traced round the base of the central prominence; and it was on this ring only that tenderness was complained of on pressure. A coil of intestine lay over the lower and inner angle of the swelling, or portion nearest the umbilicus. In this state, two dangers threatened the patient—escape of pus into the peritoneal cavity, and death by exhaustion.

The rule of practice in these cases is not settled. The one great essential, on which all are agreed, is the necessity of adhesions to prevent peritoneal effusion. Frerichs says (*Treatise on Diseases of the Liver*, p. 147, New Sydenham's Society's edit.): "When the abscess takes a direction outwards, we ought not to delay in making an artificial opening." He then goes on to describe the processes adopted by Bégin and Recamier for securing adhesions before the opening is made, either by an incision carried down to the peritoneum, in which inflammation is excited by charpie dressings; or by a caustic issue eating through the abdominal parietes to the same point, and with like intent. Dr. Graves gives a case (*Lectures on Practical Medicine*, vol. ii, p. 248) in which an exploratory incision was made, fluctuation being absent; and the pus escaped by a lateral channel, on the patient making an effort, seven days afterwards. On the other hand, Dr. Budd advises leaving the evacuation of the abscess to nature; and our Indian authorities seem to be of the same opinion, which they confirm by a formidable table of statistics of mortality after operation. Sir Ranald Martin, in his recent work on the *Influence of Tropical Climates*, p. 485, says: "It is little we can do for the unhappy sufferer from hepatic abscess"—"in no instance did the operation (opening) appear to me to result in eventual good"; and he then proceeds to express his agreement with Budd, that "it is generally best, when an abscess of the liver projects at the side, to allow it to open itself." Dr. Waring of the Madras Army says that, of eighty-one operated on, only fifteen recovered, and sixty-six died (*An Inquiry into the Statistics and Pathology of some Points connected with Abscess of the Liver, as met with in the East Indies*); and so M. Rouis gives, as the result of Algerian experience, four deaths of five cases operated on (*Recherches sur les Suppurations Endemiques du Foie*, Paris, 1860). The French method of exciting peritonitis by charpie and caustics is open to the obvious objection of provoking the very danger we are seeking to avoid. If the adhesions have not formed already, we are exciting an inflammation on which we have no means of imposing a limit; if they have, the proceeding is unnecessary. In either case, these processes, especially the caustic, interpose a serious delay at a very critical period. The truth, I believe, to be that, in all cases in which the suppuration has extended so near the surface of the liver as to give the sense of fluctuation, irritation, effusion, and adhesion of the contiguous membranes, have taken place. This tendency of a foreign body to seek the surface, and secure for itself a safe opening, is too well established to be further dwelt on. The proposal to leave the opening entirely to nature is undoubtedly sound and good, provided the powers of the patient are adequate to the long process of ulceration through the textures. But this is assuming a greater amount of vital power than is usual at this stage of the disease; and it must not be forgotten that the patient is thus exposed to the constant risk of spontaneous rupture and its fearful consequences. The formidable Indian statistics above alluded to must be taken with the important reservation, that we have no means of judging how far the mortality was due to the operation itself, and how far to the disease and the state of general health induced by climate and other causes.

To return to Mr. R.'s case. We had no doubt as to the existence of matter, and very little as to its site. There was also reason for thinking that the desired adhesions had taken place, chiefly from the tender edge which surrounded the central prominence; and, further, there was no time for delay. It was finally determined to open directly into the abscess by incision and trocar; an exploring needle having failed, from the depth of the structures, to give any indication. On December 28th, Mr. Hardey divided the textures to the depth of an inch and a half with a bistoury, and then plunged in a trocar. From sixty to seventy ounces of thick, chocolate-coloured, very fœtid, and tenacious matter was evacuated

in the first two days. A considerable quantity of oil floated on the surface of the pus. The abscess was evacuated once, afterwards twice, in twenty-four hours; care being taken to exclude the air from the cavity, and by firm and gentle pressure to keep the walls in contact. At the end of ten days, twelve or fourteen ounces were still discharged every twenty-four hours. An injection of Condy's fluid, much diluted, was tried without satisfactory result; and, as the quantity of pus remained undiminished, a drainage-tube was inserted, and the abscess *kept empty*, when the discharge rapidly decreased.

The condition of our patient fluctuated much after the operation, and was often such as to make us very anxious to reduce the quantity of discharge. A very quick and decided improvement, however, followed immediately on the diminution caused by the drainage-tube; and Mr. R. may now (March 26th) be considered well, as he has been twice into the country to recruit, and has now resumed his usual habits and occupations. There is a very slight occasional oozing from the wound, which is sometimes entirely closed. The side is puckered, adherent, and deeply depressed around the wound, and has very much the appearance of the thorax after empyema and the external discharge of matter.

I do not wish to attempt to draw a rule of practice from a single case; yet I think the foregoing may furnish some useful data. Where there is reasonable ground to believe that nature has decided upon making an external outlet for the matter, we need not be deterred by the fear of peritoneal effusion from making an artificial opening, inasmuch as one of the earliest and most certain of her operations is to make the connections necessary for security. Tenderness of the tumour is perhaps the most satisfactory indication of this condition, and a hardened base of effused lymph a certain confirmation. Again, there is no object to be gained, under such circumstances, by opening the abscess by successive stages, either by the knife or (still less) by caustics; for delay exposes the patient to the risk of rupture of the walls of the abscess by coughing, sneezing, or the like, and to the laceration of any adhesions which may have formed; or it allows him to perish unrelieved, from the effects of constitutional irritation and consequent exhaustion.

CASE OF ACUTE HYDROCEPHALUS: RECOVERY.

By John Candy, M.D., M.R.C.S.Eng., etc.; late Resident Surgeon-Accoucheur Birmingham General Dispensary.

The following case of recovery from a disease so alarming in its nature, and so fatal in its effects in too many instances, is perhaps worthy of record, as exhibiting the power of remedies to control disease when rightly administered.

On March 12th, I was called to attend Mrs. B. in labour with her fourth child; when my attention was drawn to her youngest boy, an infant of eleven months. It had been very fretful for more than a week, which its nurse attributed to teething; but, upon closer examination, I discovered a minute vesicular eruption irregularly distributed over the head, face, trunk, and upper extremities, which I at once recognised as varicella. I did not take the case in hand forthwith, as the father had procured some powders a few days previously from a neighbouring practitioner, who had not, however, seen the child.

On the evening of the 18th, I was requested to come immediately, as the child had been taken with convulsions. I found it lying quite unconscious, with the thumbs of both hands drawn inwards, too plainly marking cerebral irritation. Finding that there was preternatural heat of the head, I poured a stream of cold water from a little height. This in a few minutes caused the child to open its eyes and shew other signs of returning consciousness. I prescribed the following mixture and powders, and ordered cloths dipped in equal quantities of vinegar and cold water to be constantly applied to the head.

℞ Solut. magnesiæ carb. ℥j; spiritûs æther. nit. ʒj; tincturæ card. comp. ʒj; aquæ puræ ad ℥ij. Misce. One teaspoonful to be given every hour.

℞ Hydrargyri chloridi gr. iv; pulv. rhei gr. viij; pulveris ipecac. gr. ii; sodæ bicarbon. gr. iv. M. Divide in pulveres iv; detur i 4tis horis.

March 19th. The child was not quite so fretful, and the bowels had been freely moved. The head was still very hot. The powders were repeated.

March 20th. The patient was about the same. The mixture and powders were repeated.

March 21st. He had passed a restless night. The head continued very hot. Pulse 120. The pupils were dilated, but acted sluggishly under the stimulus of a bright light. I observed that the child constantly moved its mouth, as though chewing; and would swallow anything that was put into its mouth, although sensibility seemed quite extinguished. Finding the child no better when I called in the evening, I applied a small blister to the occiput, and prescribed as follows:—

℞ Magnesiæ sulphatis ʒj; spiritûs æther. nit. ʒj; syrupi aurantii ʒ iij; aquæ ad ℥j. Misce. A dessertspoonful to be given every two hours.

℞ Hydrargyri chloridi gr. iv; pulv. jalapæ gr. viij; sacchari albi q. s. M. Divide in pulveres iv; detur i 4tis horis.

March 22nd. The blister had risen well, and the bowels had been freely moved, and the child seemed more conscious. I ordered a bladder of ice to be constantly applied to the head.

℞ Magnesiæ sulphatis ʒj; solut. magnesiæ carb. ℥j; syr. aurantii ℥ss; spiritûs ætheris nit. ʒj; aquæ puræ ad ℥ij. Misce. A dessertspoonful to be given every four hours.

℞ Hydrargyri cum cretâ gr. iv; pulv. rhei gr. xij; sodæ bicarb. gr. vj; sacchari albi q. s. M. Divide in pulveres vj; detur i 2dis horis.

The diet was ordered to consist of milk and water and beef-tea.

March 23. A decided improvement in the symptoms had taken place. The ice had had a most beneficial effect in lowering the temperature of the head; and the fæces were beginning to assume a more healthy colour.

March 24th. The child had a few hours sleep last night, and seemed to be much improved in every respect, and began to take notice of those around it. It continued to improve daily, and is at present free from any ailment.

Remarks. The exciting cause in this case I attribute to the attack of varicella during the period of dentition. Another fact worth noticing, is the rapid improvement which took place after the ice had been applied and the bowels freely moved by calomel combined with rhubarb. I applied a small blister to the back of the neck, as I thought it would have a more beneficial effect than leeching the temples in so young a child; and the result has confirmed my opinion.

TREATMENT OF PUERPERAL CONVULSIONS.

By W. W. Jones, Esq., Cleobury Mortimer.

I read with much interest Dr. Swayne's paper in the Journal of April 4th. I find that his treatment of puerperal convulsions entirely accords with my views; and I am induced to send the following cases, from the remarks which have been made by Mr. Prosser, and would only ask what would have been the result of at least

three of the cases had not the congestion of the brain been relieved by bleeding.

Case I. February 3rd, 1847. Mary P., aged 17, single, was delivered by a midwife, at 7 A.M. Her labour was natural. She was seized, at 12 noon, with convulsions, which continued to occur up to four o'clock, when I first saw her. She was totally insensible; her pulse was 130; breathing stertorous; and her face nearly black. The pupils were dilated and insensible to light. She was bled to forty ounces; calomel, and croton oil injections, were given; and cold was applied to the head. At 7 P.M., the convulsions still continued. On the following morning, the bowels had been moved several times. She was still insensible. The convulsions had abated; and there was less stertor. On the 5th, the patient passed her motions and urine involuntarily; and was totally insensible and very restless. There was much heat of surface. The next day, she was partially sensible, and could swallow a little gruel. On the 7th, she was improving. The gums were tender from mercury. A very troublesome cough is noted as having been present on the next day. The case did well; but was tedious in consequence of congestion of the lungs, which was relieved by tartarised antimony.

Case II. April 6th, 1849. Mrs. M., aged 23, married, primipara, in the ninth month of pregnancy, was attacked, at 9 A.M., with convulsions, which continued until 2 P.M., when I first saw her. She had not been conscious for some time. Pulse 120, full; breathing stertorous. The pupils were dilated and insensible to light. She was bled to thirty-four ounces; cold douches were used; calomel and croton oil were given; and injections administered. At 4 P.M., the convulsions continued with violence. The os uteri was firmly closed. The patient was in a state of profound coma. She was now bled to ten ounces. At 8 P.M., the convulsions continued. Pulse 130. There was much heat of scalp, and throbbing of the temporal arteries. The pupils were dilated. Arteriotomy was performed; and ten ounces of blood were withdrawn. On April 7th, at 4 A.M., the convulsions were not so frequent. The bowels had acted; and the os uteri was slightly open. The pulse was 150, feeble; the respiration was blowing or hissing; there was no stertor. The membranes were punctured. At 12 noon, labour-pains came on, and delivery took place. The next day, the bowels were moved. On the 9th, she was not quite sensible. This case progressed favourably.

The urine contained a large amount of albumen; and she had swelling of her feet and legs for some time before the attack. The gums became tender from the effects of mercury.

Case III. On May 20th, 1856, at 2 A.M., I was called to a lady who had been attended by a surgeon of a neighbouring town, and had been delivered about twelve hours. She was of full plethoric habit; she had had three very severe convulsions, and was not quite conscious. Her pulse was 140, full and strong; countenance flushed. I bled her to sixteen ounces, and remained with her. At four o'clock, the convulsions recurred with great violence. I took another twelve ounces of blood, and applied leeches, cold, etc., with aperients and injections. By midday, she was quite comfortable. In this case I am fully convinced that the bleeding was the grand remedy.

Case IV. On April 17th, 1859, Ann Colley, aged 22, primipara, was attacked with convulsions at 9 A.M. At 12 noon, she was quite insensible. The os uteri was firmly closed. She had lost her eyesight some days before. She was bled to twelve ounces. Labour-pains came on in the course of half an hour. The convulsions subsided after the bleeding, and she was delivered. Her urine was very albuminous, and continued so for several weeks. She perfectly recovered.

Case V. On October 23, 1861, Jane Gettens, aged 18, primipara, of spare habit, and having a spinal deformity, was attended by a midwife at 2 A.M. Sickness and vomiting, with convulsion, occurred at 3; the convulsions continued to recur every ten or fifteen minutes. I saw her at 7 A.M.; she was then apparently dying. After the convulsions set in, she had very strong labour-pains. I found the head of the child firmly impacted in the pelvic cavity. She was totally insensible; I looked upon the case as utterly hopeless; but as the fits were so terrific, I had recourse to bleeding (fifteen ounces) and delivery by the forceps. She remained insensible during five days; but eventually did well. Her gums became tender from mercury.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

EXTRACTION OF BULLETS.

By Redfern Davies, M.R.C.S., Birmingham.

[*Read April 7th*, 1863.]

Till within the last few months, the detection of a bullet hidden in the body had been a matter depending only upon touch. The evidence of lead, as interpreted by the sensation it communicates through a probe is, I believe, quite sufficient, although in good and experienced hands it is deemed to be not a certain or a thoroughly reliable diagnostic. I was remarkably struck with this when I was acting assistant-surgeon in the United States army, and stationed in Frederick City, Maryland.

A private came under my care on December 16, 1862, He had been wounded by a gunshot on September 17th. The ball entered on the outside of the leg just above the ankle, and it had never come out. Upon examination, the bones of the leg were found to be unbroken, the ankle-joint uninjured; but the soft parts around were much swollen. At a distance of about one inch and a half from the surface, both blunt and sharp-pointed probes gave the sensation of striking upon lead, and for the space of a shilling around this the bone was denuded of periosteum. The direction of the wound was lateral. Upon a consultation, the wound was dilated with spongetents, and in ten days time an ordinary round ball was withdrawn.

The diagnosis of a bullet's presence, from the indescribable doughy sensation communicated to the fingers upon contact with it through a silver probe, blunt or sharp, was only a matter of degree in sensational development up to the time of M. Nélaton's proposal that the bullet which he felt in Garibaldi's leg should, by letters written in its own leaden hand, declare its presence.

The instrument which I now show was made by Charrière, after M. Nélaton's idea, and consists of a knob of unpolished china at the end of a probe. By simply rubbing this upon any leaden surface, a mark, that could be caused by nothing else, is impressed upon it, and which would not be removed by the parts around or their secretions.

The scrapings made by a tooth-drill upon a bullet have been proposed as a diagnostic of its presence; but I have never seen or heard of its having been used serviceably.

The extraction of a ball generally is not difficult; the golden rule, as old as Hippocrates, being observed, of placing the patient in the same position, as far as possible, as that in which he was when he received the injury; and likewise consulting the patient's own ideas about the position of the ball; and paying attention to what Guthrie calls the general "anatomy of the whole circle of injury."

The instruments that have been devised for the extraction of balls are innumerable; but they have generally been discarded, being found practically to be inefficient. They affect one of the three forms—viz., forceps, spoon, and corkscrew.

Of the forceps, that most recommended is the following. (Fig. 1.) Its blades may either be used together or be applied singly, their joint allowing of their being very easily adjusted. The most commonly used is doubtless an ordinary pair of dressing-forceps, having a long and fine handle and a well-serrated extremity.

I have never used any extractor upon the "corkscrew principle"; but should imagine that it would require a greater *point d'appui* than flesh or bone would bear, if we except those instruments in which the counter-resisting force consists in part of the instrument itself, which goes behind the bullet.

Some amount of lateral extension of the surrounding parts is *necessary* for these different instruments to be applied or used. Should, however, the ball be driven into the tissue of the bone and firmly retained there, what is the course to be pursued? Should it be allowed

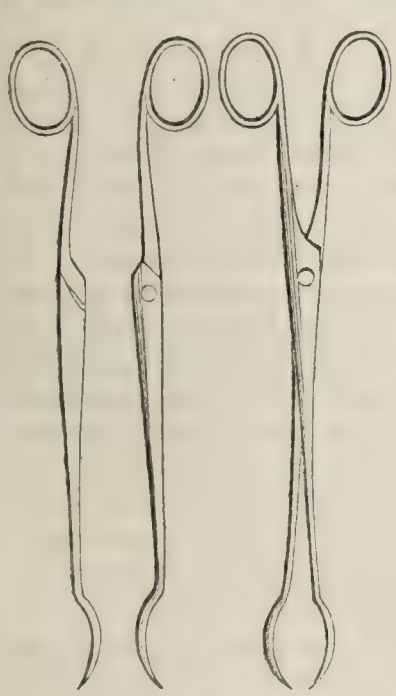


Fig. 1.

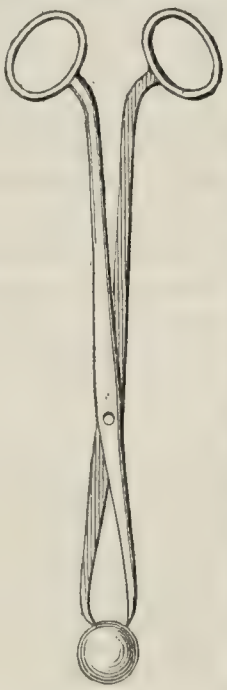


Fig. 2.

to remain there, as seems to have been the case in some examples contained in the museum of Fort Pitt Hospital?

The ball being, for a time at least, stationary and fixed in the bone, it will not be likely to do much damage; but if from any cause it become moved and travel about it may invade vital organs or create alarming constitutional disturbance. Before a ball becomes encysted it may set up grave inflammation, which will mat together and embarrass the soft tissues, ulcerate blood-vessels, and so irritate nerves as to occasion as severe and fatal results as even tetanus (Macleod), or when pressing upon bone cause it to exfoliate; and even when encysted a slight blow or derangement in health may set it free again. Gravitation and muscular action may also so change the position of a ball, that from a harmless site it may be removed to one of much danger. Dupuytren even cautions a surgeon against acting upon the information regarding the site of a ball obtained the day before, from the rapid manner in which he has seen them change their place.

Surgeons are said to be not agreed as to what is to be done where a bullet is driven into a bone and firmly held there. Trephining the bone has generally been employed, where it is considered advisable that the bullet should be removed. But, probably, this uncertainty has arisen from the fact, that the means that have been employed to remove the ball were themselves inefficient.

Now, however, there need exist no doubt as to both the certain and easy removal of any leaden bullet. The bullet-forceps I now show (Fig. 2) is made by George Tieman of New York, and is graduated to sustain a weight of fifty pounds. However deeply or firmly a leaden bullet may be driven into a bone, a sufficient space for its teeth to hold by is created from the mere passage of the bullet. It is constructed with long and stout teeth, set outward like the incisors of a mouse, and will seize upon and hold a leaden ball, when even a quarter of its diameter is within their grasp. From ample practical experience I can testify to its efficiency.

British Medical Journal.

SATURDAY, MAY 23RD, 1863.

A COMMITTEE ON SMALL POX.

We would suggest that the subject of small-pox is one which might well undergo investigation by a Committee of the Royal Medical and Chirurgical Society. There are several points of practical interest connected with it which are not yet decided, and which nevertheless require decision. Thus, for example, we have no fixed or definite opinion as to whether revaccination is or is not requisite or advisable after a given period from the date of the first vaccination. The profession, on this most important point, is divided in opinion. There are medical men who consider that vaccination, which has been once well and truly performed, is effectual for the whole life of the individual on whom it has been practised. There are, again, those who believe, and certainly with a good show of reason, that the virtue of the vaccination gradually becomes feebler with the advancing age of the vaccinated, and therefore requires renewal. To decide, or to come to a reasonable conclusion on this very important point, would require the collection of a vast number of facts. Then, again, we want to know whether the virtue of the vaccine becomes feebler by transmission through a long series of individuals, or whether it is as powerful and effectual in the last as it was when introduced into the body of the first of the series.

In reference to these questions, we would call particular attention to the papers of Dr. Budd just published in the Journal. These are questions of deep practical importance; and it is for this reason that we venture to think they are worthy the consideration of the Medical and Chirurgical Society, as being an authority best suited to assist in their solution.

As for the cause of the prevalence of small-pox at this period, that, we suppose, is evident enough to

every member of the profession, and really requires very little consideration at our hands. The prevalence undoubtedly depends upon the neglect of vaccination mainly, and in part upon its defective performance. The remedy is manifest enough; but it is not one which can be applied by the profession without the aid of Parliament. Vaccination is, it is true, compulsory; but the compulsion is practically a mere name. The Act of Parliament is virtually inoperative. The London medical officers have well pointed out this. They in fact assured the Government, before the present Bill was passed, that the compulsory clause could not be other than a failure; and they also showed how it might be made effectual. It is probable that the Government may, under the pressure of the present epidemic of small-pox, now follow out the suggestions originally made to it by these gentlemen. But, as we have already said, the questions concerning which we require enlightenment in the profession are: 1. Whether revaccination after a given time is desirable; or, in other words, whether or not the vaccine gradually loses some of its protective influence over the individual: and 2. Does the vaccine virus lose any of its virtue by transmission through a series of individuals?

M. PASTEUR ON PUTREFACTION, ETC.

M. PASTEUR, in a memoir read to the French Academy of Sciences, tells us:—

"Fermentation, putrefaction, and slow combustion, are the three natural phenomena which concur in the accomplishment of the destruction of animal matter—a condition necessary to the perpetuating of life on the surface of the earth. Dead matter which undergoes fermentation or putrefaction does not yield to forces of a physical or chemical kind only. The slow combustion which goes on in dead organic matter when exposed to the air is, in most cases, closely associated with the presence of beings of an inferior grade. Life, in fact, presides over this labour of death."

M. Pasteur exposed to the action of air, which had been deprived of all organic germs, organised matters of a kind which readily undergo changes and slow combustion, when exposed to high temperatures, such as urine, milk, moist saw-dust, albuminous matters; and he found that not only do these matters not undergo putrefaction or fermentation, under such conditions, but that they are only very slightly oxidised. After several years of exposure to a temperature from 25° to 30° cent., the oxygen in the vases is not yet consumed.

M. Pasteur then repeated the same experiments,

"Under the influence of the development of the germs of minute infusoria, and in the space of a few days, the whole of the oxygen disappeared, and was replaced by carbonic acid. Hence, then, these minute beings are the principal agents of the slow combustion of animal and vegetable organic matters. The immediate principles of living beings (cooked and hermetically enclosed in glass vessels), would consequently be nearly indestructible, if we could only separate from them these most minute and apparently useless of organic forms."

The theory has hitherto been that when putrescible matter, water, and air, met together, a movement took place which was capable of producing inferior organisms. But M. Pasteur affirms that, under such conditions, no change at all takes place, unless what is brought about by those same inferior organisms which are derived from without. "These facts," adds M. Pasteur, "give the last blow to the theory of spontaneous generation and of fermentation." But probably M. Pouchet will hardly agree to this.

THE DUALITY OF CHANCRE.

IN the *Gazette Médicale de Lyon*, M. Diday thus sums up the dual character of chancre:—

In the one case, the chancre is indurated.	In the other case, the chancre is soft.
Has an incubation of two or three weeks.	Has no period of incubation.
The inflammation of the adhesive sort (Mr. H. Lee).	The inflammation is of the suppurative kind.
The chancre is not inoculable on the subject who has it.	The chancre is inoculable to an indefinite degree on the subject who has it.
Is not abortive.	Is always abortive when thoroughly destroyed.
Exists exclusively in man.	Is transmissible to several kinds of animals.
Is invariably accompanied by indolent affection of the glands.	Not constantly attended by glandular affection; the glands suppurating like the ulcer which provoked them.
Invariably produces at a certain time a characteristic series of general symptoms.	The action is always local.
Is susceptible of the curative influence of remedies called specific.	Is quite unaffected by specific remedies.
Only affects the same person once in the same manner.	May be reproduced, and with the same degree of intensity, in the same individual, by inoculation.

THE WEEK.

IT has been suggested to us by a correspondent, that the Committees who are engaged in carrying out the object of the Adams and the Waters defence funds would do well carefully to superintend the distribution of the moneys collected. This advice is well worthy of attention. We have the highest respect for gentlemen of the law; but we nevertheless venture to think that their bills generally require a certain degree of supervision; and that especially do they so require it in cases of this nature. What the actual expenses, for example, of Mr. Adams's suit are do not yet appear to be known; but it is significant that the estimate has been weekly growing greater. We were in the first place informed that the trial would cost Mr. Adams between £300 and £400; next, we heard that the expenses could not be less than between £600 and £700; then, as soon

as it was announced that members of the profession would take the matter up, it was discovered that they would reach £1000; and now we are informed by a hot-headed medical journal that they will be something like £1300. We would, therefore, venture to suggest that the Committees should obtain some definite and positive information on this material point. In the report of the bankruptcy proceedings *in re* Miss Annie Russell, who was last week adjudged to four months detention in prison as a bankrupt for the non-payment of the costs of the trial Russell *v.* Adams, we notice that the taxed costs of the solicitors of Mr. Adams amounted to £315 : 6 : 6. It was, however, stated in court by Mr. Wild, one of the attorneys, that the costs in the trial are about £1000—"the defendant (Mr. Adams) having been obliged to bring a vast amount of evidence from Holyhead and elsewhere," etc. Now, we can readily understand that Mr. Adams's expenses—that is, those over and above the taxed costs—should be considerably greater than £315; but we cannot understand, without explanation, that they should amount to so enormous a sum as £700 over and above the actual costs allowed by law. A legal friend, to whom we have imparted our doubts, tells us that to him the amount of extraordinary costs is utterly incomprehensible; and that, in his opinion, the bill ought to be taxed as between client and lawyer. We have no doubt that other persons, like ourselves, have been struck by the large and gradually increasing estimate of these expenses; and it is, therefore, in the interest of Mr. Adams and of Dr. Waters that we would call upon the Committees to state what is the actual amount of costs incurred in these cases; and, in the case of Mr. Adams, over and above the £315—the costs taxed and charged against Miss Russell.

There were this year forty-five candidates for the honour of the fellowship of the Royal Society; and of this number fifteen have been recommended by the Council for election. Two members of the profession only, out of some fourteen medical applicants, are among the selected—viz., Dr. Pavy and Mr. S. J. A. Salter.

Mr. Henry Thompson was called to Brussels a few days ago, to attend upon the King of the Belgians. The King, as is well known, has been long suffering from calculous affections, and has been attended and operated upon by several celebrities—Civiale, Langenbeck, and others. It is supposed that the stone, or a fragment of it, is impacted somewhere in the bladder. At all events, it has now for some long time past baffled all efforts made for its removal. We sincerely trust that the efforts of English surgery, as represented by Mr. Thompson, may be crowned with success; although it is fair to Mr. Thompson that we remember that the King is aged, that his affection is of long standing, and that surgeons of high fame have been unsuccessful in relieving him.

Bethlehem and St. Thomas's Hospital cannot, after all, come to terms. Bethlehem's managers do not approve of the proposal that their lunatic asylum should remove into the country; they consider their patients are happier and recover better in London than they would anywhere else. The proposal made at the meeting of the Bethlehemites that the offer of £150,000 made by St. Thomas's Hospital for the site of Bethlehem should be accepted was rejected by a large majority. The negociations between these hospitals may, therefore, be considered at an end; and St. Thomas's must now begin afresh its wanderings in search of a site, unless it should, from the force of circumstances, think it well to take permanent root on the ground where it is now fixed, the Surrey Gardens. We think it is now highly probable that it will do so, as a matter somewhat of necessity.

The following suggestion has been made in a letter addressed to the Oldham Board of Guardians, and we are glad to add that the Board has agreed to receive a deputation of medical men on the subject:—

"May 13th, 1863.

"*To the Guardians of the Oldham Union.*

"Gentlemen,—We, the undersigned, medical practitioners resident in the district, having seen the placards calling attention to the state of small-pox existing amongst us, beg respectfully to call your attention to the main reason that prevents the effective carrying out of the Vaccination Act.

"We are of opinion that if contracts were made with every legally qualified medical man, or that if every medical practitioner were to vaccinate all those who come under his notice, and to receive a fee the same as at present paid to those only who are specially appointed, an effective arrangement would be made that would fully carry out the provisions of the Vaccination Act.

"If, in the opinion of the guardians, it is desirable that a deputation should wait upon them, for the purpose of explaining the advantages that would accrue from the arrangements proposed, the undersigned will have pleasure in appointing a deputation so to do.

"S. P. Armitage, M.D.	W. H. F. Ramsden.
J. F. Howard, M.D.	Frederic Bromley.
Joseph J. Riley.	Jas. Whitlam.
Joseph Prestwich.	Joseph Handley.
James Johnson.	

Mr. Adams's solicitor states that:

"Had the witnesses from Holyhead been examined, we should have shown that, according to the statement of the Russells, Miss Russell was, at various times, engaged to be married to no less than four different clergymen there.

"Prior to their acquaintance with Mr. Adams they resided in the neighbourhood of Bedford Row; there, also, they informed their landlady that Miss Russell was engaged to be married to another medical man. But the strangest part of the story is yet to come. Previously to the trial of the action Adams ats. Russell, the Russells

resided in the neighbourhood of Peckham, and, until within a recent period, Miss Russell continued to reside there. Her landlord, a Mr. Wilkinson, a poor hardworking carpenter, called upon us a few days ago and stated that he had been induced to afford the Russells board and lodging prior to and since the trial, upon the strength of their statements to him that Miss Russell was about to be married to Mr. Pike, the gentleman who conducted the case against Mr. Adams, and who had broken off an engagement with another lady to secure her. Mr. Wilkinson also said that the mother and daughter had frequent quarrels, which the daughter informed him was on account of the mother's objection to the match. Ultimately Mr. Wilkinson saw Mr. Pike with reference to these statements, and, finding them to be false, turned Miss Russell out of doors; but the peculiar hardship of this case is, that the poor man has expended all his little savings in keeping her.

"We have also received a visit from a member of Mrs. Russell's family, on behalf of the family, who appear to be people of high respectability; they sympathise deeply with Mr. Adams in the annoyance he has undergone, and the member in question informed us that Mrs. Russell had long ago been discarded by her family.

"We may add, that Mr. Adams some time since consulted us as to the advisability of indicting Mrs. Russell for perjury at the trial, but being unwilling to incur the responsibility of advising him on this point, we had a conference with Mr. Lush, Q.C., who was of opinion that the technical difficulties in obtaining a conviction were too great to render that course advisable."

The *American Medical Times* has the following remarks on what it calls the New School of Obstetrics.

"Practical surgery is evidently, at the present time, thoroughly committed to conservatism. Practical medicine, also, long since adopted expectancy as its governing principle. But what is the tendency of modern obstetric medicine? Time was when the ruling motto among accoucheurs ran thus: 'meddlesome midwifery is bad.' The frequent employment of artificial aid in midwifery practice was an opprobrium under which no accoucheur would willingly rest. It was the pride of practitioners to report the number of cases which they attended annually without the use of forceps. Several of the oldest and most eminent obstetricians of this country can boast that they never had occasion to use the forceps more than once, twice, or thrice, in their own practice. But whoever is familiar with current medical literature, must have become convinced that a new and powerful school of obstetrical practitioners and teachers is rising into importance, which has for its chief aim to popularise operative midwifery. With them the old text, 'meddlesome midwifery is bad,' passes for a prejudice of our forefathers. While science is leading practical physicians and surgeons to conservatism, its teachings are having a contrary influence upon obstetricians. As the *armamentum chirurgicum* diminishes, the 'kit' of the obstetrician increases. Twenty years ago, few practitioners had obstetrical instruments, and these were carefully concealed; to-day they are a necessary part of the graduate's outfit.

"The change in obstetrical practice which we have indicated as now in progress, must be witnessed with alarm by every believer in conservatism in medicine. Many lying-in asylums give a far larger mortality of puerperal cases and of still-births at full term than formerly. The medical journals teem with the death-records of meddlesome midwifery; and it is surprising what senseless audacity is frequently exhibited by these progressive obstetricians in publishing to the world the records of their own shame.

"It would seem quite impossible that a school of practice, founded on such erroneous principles, could ever make proselytes. Such a code of practice has, however, many elements of popularity. The *éclat* of an operation is never lost sight of by the ambitious. The tedious waiting at the bedside may also be limited by interference, and the practitioner is liable to consult his convenience rather than the interests of the patient. This has become so common, that people unacquainted with medicine have taken the alarm, and many persons have put a black mark against the name of practising physicians for prematurely proposing a resort to ergot in order to secure a night's rest for themselves.

"In the earnest and eloquent language of a recent author, 'It is time that plain language should be spoken on this subject; the spirit of conservative midwifery seems to have been lost in sleep; the ordinances of nature have been disregarded, and the accoucheur, with instrument in hand, rampant in his desire for opportunity, rushes with good heart and unmeasured confidence to what he deems the scene of conquest; but too often, alas! it proves a scene of harrowing agony to the unhappy patient.'"

The seventy-fifth anniversary dinner of the Society for Relief of Widows and Orphans of Medical Men in London and the Vicinity took place on Wednesday last at the Albion Tavern. The President, T. A. Stone, Esq., occupied the chair; and about seventy members and visitors were present. Donations to the amount of £235 were announced; and the secretary stated that several applications for admission had been received from gentlemen desirous of becoming members. The President, in the course of the evening, said that, by the advice of Mr. Tidd Pratt, steps were being taken by the Court of Directors to obtain a royal charter of incorporation for the Society; and he hoped at the next annual dinner to be able to refer to the charter as having been procured. The desirability of a charter was also referred to by Mr. Tidd Pratt and the Honourable George Denman, M.P., both of whom were among the guests.

The subscription of the medical profession in Liverpool, opened to indemnify Dr. Waters of Chester for his expenses in the late trial, amounted a few days ago to above £80. The lists lie at the Library of the Medical Institution, Mount Pleasant, Liverpool; and subscriptions are also received by the treasurer, Dr. Stookes, 1, Rodney Street. We would call the attention of our associates in Liverpool to these facts, and would urge them to add their names to the list.

Mr. Henry Lee states that pure proper vaccine lymph is amorphous and transparent. Any lymph which, under the microscope, shows the presence of blood- or pus-corpuscles, is unfitted for use.

The *Gazette des Hôpitaux* of May 3rd relates a case of laryngeal polypus removed by M. Trélat, whereby the patient has been rescued from approaching death and restored to perfect health.

UNIVERSITY COLLEGE, LONDON.

At the late distribution of prizes in this College, Dr. Parkes, who occupied the chair on this occasion, made the following admirable remarks, which we have much pleasure in recording, as they are well deserving the attention of all students of medicine.

Ladies and Gentlemen,—I am quite sure that you will permit me to offer, in the name of this assembly, our hearty congratulations to those gentlemen who have so distinguished themselves to-day; not merely because they have gained, in honourable rivalry, so many medals, but because in gaining them they must also have acquired the things which these prizes typify. They must have acquired habits of industry, accuracy of thought, excellence of memory, and, to a given extent, knowledge of their profession. And in congratulating them, I will also express a hope that they will consider these prizes merely as steps, not as goals; as means, not as ends; as incentives to perseverance and progress, not as signals for cessation from labour. Cessation from labour comes to no man, least of all to men of our profession with its incessant progress and its ever-widening area. But if there be no cessation from labour, yet as we advance labour becomes less laborious; the grooves of thought become smoother; and the habits which required emulation, and rivalry, and prizes, and medals, to excite and sustain them in our youth, become a part of ourselves, and ceasing to be labours are transformed into pleasures. Into that career of wholesome and pleasant labour our prizemen of to-day have entered; they must hold fast by what they have won; remembering and encouraging themselves by the remembrance that the first steps of application are the most difficult, and that they have happily passed over that rugged introduction to science, which, doubtless, has both tested and developed their resolution and their industry.

But, in congratulating our prizemen, we ought not to forget the unsuccessful competitors, the gentlemen who have won no prizes. It is possible that these gentlemen will think it rather paradoxical if I congratulate them also, and will consider it no compliment to be told that they are all the better men for being beaten. But something may be said on that score. There is an old saying, "He stands not surely who never slips"; and certainly there is no such teacher as failure. How usefully, not only in our college exercises, but throughout life, does failure come in to show us our deficiencies, and to admonish us that there is something which must be probed and mended. Ask any man of experience what has acted most beneficially on his character, and he will refer, not to his successes, but his failures. "Sweet are the uses of adversity." And even in a failure for a college prize may arise an improvement which may act on the whole character. Let any man who has failed ask himself whether there is not something to amend; a want of industry, a want of purpose or method, an over-estimate of himself, or an under-estimate of others; and if he rightly conduct and act upon this self-examination, then we may safely venture to congratulate him even on his failure.

There is, however, in every college, a third class of students—here, I hope, a small one—who cannot, I am afraid, in any way be congratulated; viz., those gentlemen who have not contended for prizes at all. There are some who will not compete, either from idleness, or from fear of being beaten, or by a fancy that one subject may take up too much time, or by what they consider a philosophical contempt for such rewards. But search well into the motive for such inertia, and we shall very seldom find it a sound one. And every one should remember that the working for the prize is the real gain, not the prize itself; and certainly in the working for prizes, in the sustained industry it calls out during the whole session, in the reconsideration of all that has been gone through which it renders necessary before the day of competition, nay even in the task of answering a number of questions rapidly in a short time on the day itself, are precious means of education which no student is wise to throw aside.

On the whole, the advantages of the prize system so preponderate over its disadvantages, that without it there would be a great falling off in the aggregate amount of learning acquired in a given session; but the full uses of the system will never be called forth until the emulation extends to the whole college; till every student competes, not with the mere wish of proving superior to his neighbours, but as a means of compelling himself to war against idleness, and carelessness, and inaccuracy, and distaste, and to sustain the feeling of duty by the stimulus of an honourable emulation.

And now let me say a few words to those students some of whom, I hope most of whom, are among the prizemen of to-day; I mean those to whom this is the last prize anniversary, and who are about to pass out of these gates into the crush and turmoil of the world. They will enter, in fact, into another college, where education, if differently conducted, is not less real and continuous. And I believe it may be said for our profession, that, intellectually and morally, it educates those who practise it as well as any other, and probably better than most. For, intellectually, what can be a better training for the mind than the science of our day—bold, yet cautious; wide, yet deep; sceptical, yet believing; holding what is old, yet striving for what is new; like Janus, having two faces, one looking to the past, and one to the future? The true science of our day does really carry out the precept given us for a different matter; viz., "Prove all things; hold fast by that which is good." And in this proving all things lies one of those difficulties which are our best educators. It is no easy matter for the mind to hold the balance even between old and new, and to be neither too stubborn to retain nor too rash and eager to receive; and yet this is a state of mind which we must sedulously watch and strive to acquire. And I believe that those who are leaving this College will hereafter say that the education they have received here has greatly aided them in the acquirement of this power; for it is the legitimate boast of those who administer University College that, standing on the old ways, they have yet often been the first to open fresh roads; and, by happy innovations which are not destructions, they have greatly advanced and benefited the teaching of medical science.

And if our profession is a great intellectual trainer, it is no less a moral one. It not only excites the feelings of pity, of sympathy, and of friendship, but it places those who practise it in positions in which they must exercise the great and guiding quality of justice, without which the purest benevolence and the most fervent charity would only lead astray.

That those who are soon about to leave us may obtain these intellectual and moral prizes, as well as the worldly advantages which, let poets say what they will, do certainly commonly fall to the lot of those who act at the same time sensibly, judiciously, and honestly,—is, I need not say, our earnest wish. I would ask them not to forget their Alma Mater and their old teachers, to whom in after life they will feel that they owe the precious gift of a sound and enlightened education.

And now, ladies and gentlemen, I feel that I am only meeting your wishes when I venture to congratulate the professors themselves on another year of useful and successful labour. As we have heard in the Report, great changes have taken place in the medical department during the past year. The College has lost the keen, subtle, and practised intellect of Dr. Walshe, and

Dr. Garrod's ingenious and industrious mind. It is much to the credit of the College that it has been able to fill up, and most worthily to fill up, these important vacancies from the ranks of its own pupils, and thus to secure a continuance of that excellent teaching which has placed this College in so high a rank among the great medical schools.

It is, I am sure, the earnest wish of this great assembly that the usefulness and prosperity of the future may throw into the shade even the prosperous and useful past of University College.

DEATH OF DR. JOHN HATCH POWER.

With the deepest feelings of regret we have to record the decease of this distinguished and respected member of the medical profession. Dr. Power was one of the two Professors of Surgery in the Royal College of Surgeons in Ireland, and one of the Surgeons of the City of Dublin Hospital; appointments which he obtained by steady perseverance in an uninterrupted course of successful labour as a teacher, writer, and practitioner, and which he filled with credit to himself and advantage to both these institutions. By colleagues and pupils he was valued as a friend, and by observers of his character admired as a straightforward and conscientious member of society, ever ready to afford advice and assistance. To those entering the medical profession we can with confidence point to the career of our lamented fellow-labourer as a lesson not to be forgotten or disregarded; proving as it does that the honest, steadfast, and industrious pursuit of legitimate objects of ambition is the surest course towards success and reputation. The object of these our imperfect encomiums was indebted to no questionable expedients to obtain admission into the body of which he became a conspicuous member, neither was he indebted to any unsuitable practice to arrive at the position he occupied. As a student he was a diligent and punctual attendant in all places of instruction, and an attentive observer of all facts and objects of importance submitted to his view, while as a practitioner he was content with that recognition of his just claims to public confidence which a quiet discharge of professional duties secures. We believe that the fatal disease was in the beginning of a rheumatic nature, accompanied by severe symptoms, in the sequel assuming a formidable typhoid character. The procession which followed his remains to their resting place in St. Patrick's Cathedral on Monday last bore a sad testimony to the respect in which his well applied talents and Christian virtues were held, for it included nearly every member of the profession in this city, his colleagues, and almost every student of medicine at present in Dublin, as well as many of our most distinguished citizens, whose professional confidence and friendship he had enjoyed for many years. (*Dub. Med. Press*)

Cocoa Statistics. Ten million pounds weight of cocoa were imported into the United Kingdom last year, an increase upon the returns of 1861 of about 880,000lbs. Considerably more than one-half of the entire supply in the latter year came from the British West Indies. Ecuador sent one and three quarter million lbs.

Productiveness of Fish. Mr. Buckland tells us that there are probably no creatures in nature which are better calculated to repay our care by their enormous productiveness than fish. From experiments he had ascertained that the salmon and trout both deposited eggs at the rate of 1,000 for every pound weight of the parent fish. Turbot deposited 385,000 eggs; roach, 48,000; mackerel, 86,000; jack, 42,800; brill, 239,000; smelt, 36,000; soles, 134,000; perch, 120,000; and the codfish no less than 4,000,000.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Annual.]	Philosophical Institution, Bristol.	Thursday, June 18, 4.30 P.M.
East Anglian. [Annual.]	Yarmouth.	Friday, June 26th, 3 P.M.
West Somerset. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

The seventh annual meeting of this Branch was held at the Hull Infirmary on May 14, 1863, at 1 P.M.; F. B. Anderson, Esq., President, in the chair. Sixteen members and one visitor were present.

Mr. Hardey, on retiring as president, spoke of the pleasure it had afforded him to preside over a meeting composed of his colleagues, with whom he had lived so long on terms of intimacy and friendship. On resigning the office to his friend Mr. Anderson, who with himself were the oldest members of the Branch, he felt convinced that that gentleman would sustain the duties of that office with credit to himself and gratification to the members generally. He himself had to thank the members of this meeting for their attention and many kindnesses he had received at their hands during the past year.

New Members. It was resolved that S. B. Denton, M.D., Hornsea; J. W. Dadley, Esq., Patrington; S. N. Harrison, Esq., Patrington; E. S. Roberts, Esq., Hull; John Armingson, Esq., Hull; and A. O. Arden, Esq., Hull; be admitted members of the Branch.

Officers for 1863-4. The officers appointed for the ensuing year are as follows:—*President:* F. B. Anderson, Esq. (Hessle). *President-Elect:* O. Daly, M.D. *Representatives in General Council:* Sir H. Cooper, M.D. (Hull); W. J. Lunn, M.D. (Hull). *Honorary Secretary:* H. Munroe, M.D., F.L.S. (Hull). *Committee:* Sir H. Cooper, M.D. (Hull); R. M. Craven, Esq. (Hull); O. Daly, M.D. (Hull); K. King, M.D. (Hull); R. Hardey, Esq. (Hull); W. J. Lunn, M.D. (Hull); J. P. Bell, M.D. (Hull).

Notice of Alteration of Law. Dr. Munroe gave notice that at the next general meeting he should propose an alteration of Law 3:—"That four members of the Committee of Management instead of five should form a quorum."

Next General Meeting. It was resolved that the next general meeting should be held at Howden.

Papers. The following papers and communications were made:—

1. Modern Treatment of Glaucoma. By K. King, M.D.
2. Case of Intestinal Calculus. By W. H. Eddie, Esq.
3. Notes on Revaccination. By J. P. Bell, M.D.
4. Preternatural Labour; Rare Presentation. By H. Munroe, M.D.
5. Case. By R. M. Craven, Esq.

On account of the long and interesting discussion which took place on the paper on Revaccination by Dr. Bell, Dr. Munroe's and Mr. Craven's papers were obliged to be postponed.

The papers read at the meeting will be forwarded for publication in the JOURNAL.

Dinner. At four o'clock, an excellent dinner was provided at the George Hotel. F. B. Anderson, Esq., the President (Hessle), occupied the chair; and Dr. Daly the vice-chair.

The PRESIDENT spoke warmly of the advantages arising from meetings of this character, which brought members from all parts of the district to exchange ideas and offer suggestions as to the best means of keeping up the status of the profession. He himself had been a member of the Association from its formation, and considered it a duty to be always present at these reunions of his medical brethren.

Dr. BELL made some very appropriate allusions to the prospects of the British Medical Association compared with a few years ago. The Association was increasing in numbers and influence every year; and the time would soon arrive when from necessity it must become one of the most important bodies of the profession.

Dr. DALY made some remarks on the increase of members and importance of the Association. He, at one time, thought that the JOURNAL was too expensive an item to be carried on with the income of the Association, and that its publication did not meet the views of many of the members; but now he attributed the increase of members and increased usefulness of the Association to be due to the great improvement of the JOURNAL under the present able editorship.

Dr. MUNROE, honorary secretary and treasurer, showed the financial position of the Branch to be in a very flourishing condition, he having a large surplus in hand. The number of members for the last few years had been gradually increasing; and this year he had to record the largest number since the formation of the Branch. He also spoke of the value and advantages of these prandial gatherings, as the means of bringing together in social conversation professional brethren living at a distance with but few opportunities of meeting each other—as being the foundation of many true and lasting friendships, and the cementing of those already formed. He also referred to the great necessity, now-a-days, of medical men being united in heart and mind to defend themselves against prosecution from the public; and he especially condemned the practice of medical men appearing in the witness-box to impugn the mode of treatment of disease by a brother practitioner.

Many members spoke in sympathy with those who had suffered in the late disgraceful prosecutions of members of our profession.

ACTION OF CHLORIDE OF ZINC ON SILK. M. J. Persoz, junr., states that solution of chloride of zinc of 60° will dissolve, after some time in the cold, but in a few moments when heated, silk in sufficient quantity to render the solution quite viscous, and to form a thick syrup. This solution diluted with acidulated water may be dialysed; the metallic salt passes through the dialyser, and the silk remains in a mass, having the appearance of starch, retaining, however, a little zinc; desiccation yields it as an insoluble vitreous residue. The solution might, therefore, be employed in place of albumen for fixing colours on fabrics, and might also be useful as a varnish. One of its peculiarities is worthy of remark—it is not decomposed below a red heat. Under the influence of heat it yields a red colouring matter something like murexide, which has not yet been thoroughly investigated. The chloride of zinc solution, rendered basic by oxide of zinc, does not dissolve wool or vegetable fibres, and may therefore serve as a reagent for the separation of mixed tissues. (*Pharmaceutical Journal.*)

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

THE *Medical Institution* has just concluded a very successful session. The excellent reports of the proceedings, regularly furnished to the JOURNAL by our indefatigable Secretary, Mr. Lowndes, renders it unnecessary for me to add more than that the average attendance at the meetings was good, and the papers and cases, as well as the discussions, interesting and instructive. The profession of Liverpool are peculiarly fortunate in possessing, as their own property, a noble building so admirably adapted for the purposes of a library, and for scientific meetings, or for assembling their members on any of those occasions which call for united action or for a public expression of professional opinion. Notwithstanding the manifest advantage and importance to the medical community of the town in thus having as it were "a local habitation and a name", unfortunately a large proportion of our brethren here, by withholding their support, deprive themselves of those benefits of professional intercourse and cooperation which it was the special object of the founders of the Institution to place within the reach of every practitioner in the locality, and at the same time impose unnecessary burdens upon those who are left to maintain the establishment in a state of efficiency. These remarks may appear inapplicable and uninteresting to general readers unconnected with this neighbourhood; but I may remind them that, although the incidents of my story are local, the moral has a wide and almost unlimited application; so that, while giving my neighbours a hint, I am calling the attention of the profession at large to a prevailing delinquency, of which, indeed, our own Association forms a notable illustration. Notwithstanding its recent rapid growth and its present respectable muster-roll, what a small percentage it includes of the names which fill nearly five hundred pages of the *Medical Register!* The great facilities afforded by institutions of this kind for prompt and united action on important emergencies have recently been well shown by the energetic and instantaneous movement of the profession of Liverpool in reference to the late *cause célèbre* at Chester, in which they gave precedence only to that city itself, and set an example which many here think might with propriety have been more generally followed in other large towns.

The subscriptions towards the Waters fund emanating from the Liverpool Medical Institution already amount to upwards of £70. Our friends on the opposite shores of the Mersey have held a meeting at Birkenhead, and have commenced a subscription. Our Manchester brethren do not as yet appear to have come out in great force in this matter; but this, I feel sure, is attributable to no want of sympathy for Dr. Waters, or to a disapproval in the object of the movement; but I understand some unforeseen obstacles arose in the organisation of a general meeting of the practitioners of the town, which seem to have ended in their taking refuge in the Council

of the Branch. We may, however, confidently anticipate that in due course a well filled subscription-list from Manchester will show that the medical men of that important town are as earnestly and as heartily desirous of cooperating in the good work as the rest of their professional brethren in the district.

In connexion with this subject, it is a pleasant duty to record the following noble example of disinterested attachment to the profession, and of a desire to be practically useful in supporting its institutions. Mr. James Dawson, of Wray Castle, Windermere, formerly an eminent surgeon in this town, withdrew from practice, twenty years ago, to the peaceful seclusion of the Lakes; but in his retirement he has never forgotten or flagged in his interest in the welfare of the Liverpool Medical Institution, of which he was an original founder. He has ever since held the office of President, and has regularly paid his subscription year by year; and, on all occasions when special claims have been made upon the members for extraordinary expenses, he has invariably contributed his full quota, and even within the last two or three years the Treasurer has received from him donations to the amount of about £200 for the benefit of the Institution. His name, I may add, appears on the list of subscribers to the Waters fund for five guineas. So striking an instance of a due regard for the duties as well as for the privileges of professional reputation and success is worthy of all imitation.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 28TH, 1863.

RICHARD PARTRIDGE, ESQ., F.R.S., President, in the Chair.

REMARKABLE CASE OF INJURY OF THE HEAD, IN WHICH THE RIGHT RESTIFORM BODY AND THE RIGHT POSTERIOR COLUMN OF THE SPINAL CORD WERE DIVIDED TRANSVERSELY; WITH REMARKS. BY A. T. H. WATERS, M.D.

JOHN M'BRIDE, a sailor, aged 23, was admitted into the Liverpool Northern Hospital about noon on the 19th of of February, 1863. He had received a blow on the side of the face on the previous day from a capstan bar, which stunned him for a short time. On presenting himself at the hospital he was able to walk with assistance. When seen by the author he was in bed. He was quite conscious, understood everything, and spoke rationally and distinctly, although articulation was not quite perfect. He complained of slight dizziness of the head, and slight numbness of the right side of the face and of the right arm and leg. He was unable to swallow, and had constant hiccough. The face was dusky; the breathing quiet; the pulse 100, and regular; the tongue was protruded in a straight line; the uvula was drawn to the right side. There was partial loss of power over the right side of the face, and right arm and leg; both these limbs could, however, be readily raised. He could open and shut both eyes. The pupils were rather dilated; the eyeballs constantly rolling about. No affection of vision or of hearing was complained of. The right side of the face and the right arm and leg were of higher temperature than the corresponding parts of the opposite side. The patient said he could distinctly feel when touched on either side of the face, on either foot, leg, or arm. Sensation appeared slightly less perfect on the right side than on the left, *but on both sides it was good*. The patient died, somewhat suddenly, at five p.m. on the day of admission, after an ineffectual attempt to swallow. He had survived the accident about twenty-four hours.

After death the cranial bones and the vertebræ were found unfractured. The cerebrum was healthy. There was a considerable quantity of slightly coloured fluid at the base of the skull and in the spinal canal; the venous sinuses were very full of blood; the right hemisphere of the cerebellum was slightly and very superficially lacerated on its under surface, close by the side of the right restiform body. The medulla oblongata at its posterior aspect and right side was the seat of an extravasation of blood lying beneath the pia mater. This extravasation was into the nervous substance, and was connected with lacerations of that structure. The parts having been hardened in spirit, two transverse lacerations were found connected by a vertical one. The first or superior laceration involved the right restiform body about its middle; the laceration extended to within a very short distance of the median furrow of the fourth ventricle behind: to the outer side and in front the laceration extended as far as the line of origin of the eighth pair of nerves. Blood was effused between the lacerated parts, and separated them from each other. The nervous substance in the adjacent parts was also infiltrated with blood. The median furrow of the fourth ventricle was pushed a little towards the left side. As far as it was possible to judge, this laceration involved the whole, or very nearly the whole, of the fibres of the right restiform body, and a portion of the grey matter spread out on the floor of the fourth ventricle. None of the roots of the eighth pair of nerves were torn; but the laceration extended close to the superficial origin of the glosso-pharyngeal and par vagum, and no doubt involved their deep fibres. The second or lower laceration was situated just below and to the right of the nib of the calamus scriptorius. It had divided that part which is known as the posterior pyramid and the tract outside of it, which is the continuation of the posterior column of the spinal cord. The laceration extended about two lines into the nervous substance; it stopped behind at the median fissure, and externally it did not extend beyond the line of attachment of the posterior roots of the spinal nerves. Blood was effused as at the upper laceration. These two lacerations were connected by a vertical one, which ran down along the inner side of the restiform body, and terminated below by joining the inner part of the lower laceration. The lungs were loaded with black blood. The heart was healthy.

The author remarked that the importance of the case was in the fact that the parts which were formerly supposed by most physiologists, and still are by some, to be the sensitive tracts, were divided on one side without loss of sensation ensuing. The case was remarkable as presenting us with a repetition in a healthy man of those experiments so often performed on the lower animals by the physiologist—namely, division of certain portions of the cord or medulla.

The results of the case tended to confirm the views recently advanced by some physiologists, that the posterior columns of the cord and the restiform bodies are not the channels by which the posterior roots of the spinal nerves communicate with the sensorium; and to refute the opinion that those structures are concerned in that function.

With regard to the minor symptoms, they for the most part agreed in a remarkable manner with the lesion which was found. So severe a laceration of the restiform body could scarcely happen without involving the deep origin of the facial, the glosso-pharyngeal, and the pneumogastric nerves. Hence the symptoms of paralysis about the face, etc., which had been referred to. The

immediate cause of death appeared to have been a sudden arrest of the function of breathing.

A CONTRIBUTION TO THE PATHOLOGY OF THE CRURA CEREBRI. BY HERMANN WEBER, M.D., F.R.C.P.

After some preliminary remarks on the rare occurrence of diseases of the crura cerebri uncomplicated with other affections of the brain, Dr. WEBER related the following case :—

A man, aged 52, affected with disease of the aortic valves, hypertrophy of the left ventricle, and rigidity of the larger arteries, had, during the last years of life, frequent tinnitus aurium, a dull, but moderate headache, disturbed sleep, and anxious dreams. Two months before death, he had sudden paralysis of the right side of the body (limbs, trunk, and face) as to motion and sensation, and of the muscles of the left eye supplied by the third nerve, with dilatation of the left pupil. Disturbance of vision was only slight; viz., imperfect double vision in using both eyes combined, and impaired accommodation in using the left eye alone. The other special senses and the intellectual faculties were unaffected. The pulse was slow and irregular. He had obstinate constipation. There was increased temperature in the paralysed limbs. The paralysis of the right side of the face, the soft palate, the tongue and the trunk, had been from the beginning less complete, and became gradually much diminished, as well with regard to motion as to sensation; that of the limbs, on the contrary, remained almost complete with respect to motion, while the sensation gradually improved. The paralysed muscles of the left eye regained their function only very imperfectly; and the left pupil, too, remained much dilated. The obstinate constipation continued. About eight days before death, symptoms of bronchopneumonia and pleuritis, especially of the right side, came on. Death occurred two months after the seizure.

POST MORTEM EXAMINATION. Phenomena of recent bronchopneumonia and pleuritis occupied the greater portion of the right lung, and existed in a very limited manner in the lower lobe of the left lung. There was hypertrophy of the left ventricle of the heart with disease of the aortic valves (rigidity through atheromatous deposit, stenosis, and insufficient closure); also, extensive atheromatous affection of the arterial system, especially of the cerebral arteries. Hæmorrhage had taken place into the inferior and internal portion of the left crus cerebri; the cavity being about three-fifths of an inch long, and a quarter of an inch broad, and as deep, was situated close to the surface, and in immediate contact with the third nerve, the nerve-fibres of which were degenerated. The tissue of the crus round the cavity was hardened in the thickness of about one fifteenth of an inch. The remainder of the left crus and the other portions of the brain were normal.

Dr. Weber remarked that the diagnosis in this case had been comparatively easy. The sudden paralysis of the right side of the body, with paralysis of the third nerve of the left side, and with immunity of the mental faculties and special senses, pointed unmistakably to an affection near the base of the left hemisphere, and in immediate connection with the origin of the third nerve, therefore also the crus cerebri. The fact that none of the other cranial nerves was affected indicated that the morbid condition was confined to a small spot, and the existence of the disease of the arterial system recognised during life rendered hæmorrhage more probable than any other alteration. Dr. Weber thought, under similar circumstances, an almost accurate diagnosis might be always ventured.

The author then gave an account of the two only cases of an analogous nature which he had met with in the medical literature; the one related by Andral (*Clinique Médicale*, tome v, p. 339, 1834), the other by P. H. Green (*Med.-Chir. Transactions*, vol. xxv, p. 195); the main symptoms of both cases being in accordance with those observed by himself. He then touched upon the symptoms produced by section of the crura cerebri in animals, especially the circus movements described by Magendie, Lafargue, Longet, Schiff, and other physiologists, the absence of hemiplegia and the occurrence of hyperæsthesia on the side of the lesion noted by Schiff. Dr. Weber did not endeavour to explain the discrepancy between the results of vivisections, and the symptoms of disease in man. He alluded, however, to the differences in the pathological and experimental lesions themselves, and also in the connection of the different portions of the brain between themselves in man and animals. He wished, by no means, to disregard the results of the physiological experiments; but, on the contrary, thought that whenever any discrepancy existed, we ought to be very cautious in drawing inferences from pathological observations. He, therefore, did not consider as certain, but only as probable, results of lesions of the centre, the internal and lower portions of the crura cerebri in man (the only parts which were diseased in the three cases related) :—1. Almost perfect paralysis of the limbs of the opposite side as to motion, and great impairment as to sensation; 2. Less complete and more transitory paralysis of the opposite side of the trunk, of the face, soft palate, and tongue, as to motion and sensation (leaving the muscles of the eye intact); 3. A similar, but perhaps more permanent, impairment of the pneumogastric and sympathetic nerves of the opposite side; 4. A great retardation in the functions of the intestinal canal; 5. Immunity of the intellectual faculties and special senses; 6. Paralysis of the third nerve on the side of the lesion, if the latter affects the nerve substance adjacent to the point of issue of that nerve.

With regard to prognosis, Dr. H. Weber remarked that the cases related proved, that hæmorrhage of limited extent into the crus cerebri need not be necessarily fatal; but that they demonstrated also that the organs deprived of their unimpaired nervous influence (as, for instance, the opposite lung and pleura) are more liable to inflammation; a fact which ought to be taken into consideration, not only in the prognosis, but also in the management of such and similar morbid conditions.

Dr. Weber added that, after having finished his paper, he received, from Dr. F. J. Stiebel at Frankfort, a dissertation, in which a remarkable case of disease of a crus cerebri was described with symptoms differing considerably from those mentioned in the three other cases.

A girl, aged 11 years, habitually subject to attacks of bronchial catarrh, dyspnœa, and disturbed circulation, was attacked on June 21st, with severe headache, nausea, great weakness, and frequency of pulse (140), without either paralysis, or loss of consciousness; on June 25th, paralysis of the third cranial nerve of the left side came on, with hanging of the left angle of the mouth; on 26th, turning of the head towards the right side and obstinate constipation were noted; on 28th, rigors towards the evening and some degree of anæsthesia of the left side of the face; on June 30th, death, preceded by trismus and tetanic convulsions. No paralysis of the limbs had been observed during the whole illness. On *post mortem* examination, the left crus cerebri was found enlarged (it was more than twice the size of the right crus) and softened; it contained in its inferior portion, close in front of the pons, an oblong abscess or "ulcus" filled with good-looking pus, a small clot of grumous blood being situated at the posterior end of the ulcus. The remainder of the brain was normal, as were also the other organs of the body, except the heart, which offered the appearance of concentric hypertrophy.

Dr. Weber remarked that neither the depth of the "ulcus" was mentioned, nor the microscopic appearance of the remaining substance of the crus; but that the

great increase in its size indicated some kind of alteration of its structure. Extensive alteration of the crus, therefore, does not, it seems, necessarily cause paralysis of the opposite side; and the first inference drawn as probable, from the three former cases described in the paper, ought scarcely to be accepted, except with great reserve. He then pointed out the importance of the symptom of turning the head to the side opposite to the lesion, noticed in Dr. Stiebel's case, as being in accordance with the results of Schiff's experiments on animals; and concluded with a remark on the necessity of guarding against hasty conclusions, from a few pathological observations, especially in cerebral affections.

CONTRIBUTION TO THE THERAPEUTICS OF CONTINUED FEVER. BY THOMAS K. CHAMBERS, M.D.

Analysis of 214 cases of continued fever:—

108 treated on "general principles;"

106 treated on a uniform plan of continuous nutriment and hydrochloric acid.

The first series occurred during the six years ending September, 1857; the second series during the five and a half years ending March 31st, 1863.

Reasons for the cases being fairly comparable:—1. They are each a consecutive series. 2. They are spread over a considerable period of years. 3. All treated by the same physician, and under similar circumstances. 4. Diagnosed and recorded by independent registrars. 5. The equality of the cases is shown by the equality of the mean duration of their convalescence.

Of the first series:—

of 13 entered as typhus, 3 died;
of 39 entered as typhoid, 16 died;
of 56 of doubtful type, 3 died.
Of 108, total of continued fever, 22 died.

Of the second series:—

of 19 entered as typhus, none died;
of 48 entered as typhoid, 2 died;
of 39 of doubtful type, 2 died.
Of 106, total of continued fever, 4 died.

Excluding from the first series 2, and from the second 1, who died within two days of admission, and gave therefore little scope for judging of the effects of treatment, there remains less than 1 in 5 as the death-rate under the first treatment, and less than 1 in 35 as the death-rate under the second treatment. Therefore the second method of treatment is a powerful means of preserving life.

Details of treatment were given, and some remarks made on the action of emetics.

Dr. MURCHISON had listened with much interest to Dr. Chambers's communication, inasmuch as the treatment recommended closely resembled what he had followed at the Fever Hospital, during the last 18 months. The treatment of typhus and allied fevers by the mineral acids was a very old one; it had long been the favourite treatment in many parts of Europe, particularly in Germany and Sweden. At the same time, he had not that implicit faith in it, which Dr. Chambers appeared to have, and he must protest against Dr. Chambers's inference that his treatment was calculated to prevent 15 out of every 18 deaths from fever. Dr. Murchison had employed the mineral acids, in conjunction with wine and abundance of fluid nutriment, in upwards of 1500 cases, and although he had often seen the most marked improvement (cleaning of the tongue etc.), follow the use of the acids, his statistical results had been much less favourable than those now announced to the Society. He was convinced that with more extended experience, Dr. Chambers would be compelled to modify his opinion. Dr. Chambers's statistics were open to several fallacies. 1. The cases selected for comparing the results of different plans of treatment had occurred at different periods, instead of at the same time. 2. In both series, the form of fever had not been determined in a large proportion of the cases, and no details had been given to enable any one to judge of their nature or severity. Many of the cases "of doubtful type" had probably been examples of simple fever, which was rarely fatal under any method of treatment. The results would be materially affected by the proportion of cases of simple fever or febricula in either series. 3. The rate of mortality in the first series, treated "on general principles" was far above the average mortality from fever in general hospitals, and hence it was not a fair standard of comparison. The total mortality in this series (including febricula) had been 20 per cent., for typhus alone 23 per cent., and for enteric fever, no less than 41 per cent. 4. The ages of the patients suffering from the different forms of fever had not been given. Age exercised little or no influence over the rate of mortality of enteric fever; but in the case of typhus, the results of different methods of treatment could never be satisfactorily compared without taking the ages of the patient into consideration. Under twenty years of age, typhus was rarely fatal; above fifty, the mortality was nearly 60 per cent. 5. The number of cases was too small to warrant any decided opinion as to the advantages of the treatment recommended. The second series included only 19 cases of typhus and 48 of enteric fever, diagnosed as such. A practitioner, with extensive experience in fever, might often have 20 cases of typhus in succession under his care, without losing a single case, but then if he lost 5 cases, the total mortality would be 20 per cent. During last autumn, of 41 successive cases of enteric fever, under Dr. Murchison's care, only 2 died, one from perforation of the bowels, and the other from acute tuberculosis—lesions not likely to have been cured by any treatment, yet the rate of mortality for the entire year had been considerably greater. Most of the 41 cases had been severe, but in none had a drop of hydrochloric acid been administered. Dr. Murchison doubted if hydrochloric acids possessed advantages over the other mineral acids. Although he believed that the treatment of continued fevers by the mineral acids, together with an uniform system of nourishment, was justified by our knowledge of the pathology of fever, as well as by experience, he was confident that Dr. Chambers's statements were calculated to make those who heard them, too sanguine as to the results to be obtained from it.

SENSELESS WEIGHTS AND MADDENING MEASURES. A gallon isn't a gallon. It's a wine gallon, or one of three different sorts of ale gallon, or a corn gallon, or a gallon of oil; and the gallon of oil means 7½lbs. for train oil, and 8lbs for some other oils. If you buy a pipe of wine how much do you get? Ninety-three gallons if the wine be Marsala, 92 if Madeira, 117 if Bucellas, 103 if Port, 100 if Teneriffe. What is a stone? 14lbs. if a living man, 8 if a slaughtered bullock, 16 of cheese, 5 of glass, 32 of hemp, 16¾ of flax at Belfast, 24 of flax at Downpatrick. It is 14lbs. of wool as sold by the growers, 15lbs. of wool as sold by the wool-staplers to each other. There are seven measures in use to define an acre. A hundredweight may contain 100lbs., 112lbs., or 120lbs. A hundredweight of pork is 8lbs. heavier at Belfast than at Cork. A man might live by selling coal at a less price per ton than he paid for it at the pit mouth. A ton of coal at the pit mouth varies from 22cwt. to 28cwt. of 120lbs. each; a ton to the householder means 20cwt. of 112lbs each. Of cheese 32 cloves (of 8lbs. each) make a wey in Essex, 42 in Suffolk. We walk in this United Kingdom by the measure of four sorts of miles, an English mile being 217 yards shorter than a Scotch mile, 480 yards shorter than an Irish mile, and the geographical mile being another measure differing from all three. Our very sailors do not mean the same thing when they talk of fathoms. On board a man-of-war it means six feet, on board a merchantman five feet and a half, on board a fishing-vessel, five feet. (*All the Year Round.*)

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 8th :—

Bateman, William Adolphus Fredk., L.S.A., Richmond, Surrey
Brockwell, John, Cleator, Cumberland
Compson, John Charles, Stourbridge, Worcestershire
Francis, Alfred Ollivant, Derby
Hinds, Charles, Barbadoes
Holyoake, Thomas, Kinver, Staffordshire
Hunt, Henry John, Melksham, Wilts
Hurlstone, Martin de Galway, Chester Street, Hyde Park Corner
Jones, William, Llangorse, Brecon
McBride, James, Rathfriand, co. Down, Ireland
Miles, Thomas, Totnes, Devon
Peatfield, Thomas John, Edwinstowe, Notts.
Pyle, Charles John, Amesbury
Pyle, George Edward, Amesbury
Soffe, William Edward, L.F.P. & S.Glasg., Bungay, Suffolk
Steward, Joseph S., L.R.C.P.Lond., Usemore Hill, Cumberland
Summerhayes, Henry, Crewkerne, Somerset
Swabey, Samuel, Prince Edward Island
Turner, James Smith, Margaret Street, Cavendish Square
Vallance, Edmund, Brighton
Whipple, John Henry Connell, M.D.St. And., Plymouth
Wintle, Richard Prior, Earls Court Terrace, Kensington
Wood, Francis Henry, New Romney

APOTHECARIES' HALL. On May 14th, the following Licentiates were admitted :—

Clapperton, George, Lower Broughton, Manchester
Dykes, William Astly Sherratt, Londesborough, Yorkshire
Elliott, George Hurlstone, Chichester
Hall, Samuel, Belper, Derbyshire
Norris, George Robert, Charmouth, Dorset
Perks, Charles, Queen's College, Birmingham
Poulton, Albert Edward, Horncastle
Rudyard, Alfred Thomas, Bexhill
Spence, James Atkinson West, Bedale, Yorkshire
Woolley, Thomas Starbuck, Codnor, Derbyshire

At the same Court, the following passed the first examination :—

Armstrong, Henry Edward

APPOINTMENTS.

COWELL, George, Esq., appointed Medical Officer to the Royal Pimlico Dispensary.
DOBBIE, Robt., M.D., appointed Surgeon to the County Prison, Ayr.
EDWARDS, Alexander M., Esq., appointed Assistant-Surgeon to the Edinburgh Royal Infirmary.
FREEMAN, John H., Esq., elected Medical Officer of Health for the Parish of St. George-in-the-East.
GRIFFITH, Gorrequer, Esq., appointed House-Surgeon to the London Surgical Home.
ORD, George R., Esq., appointed Surgeon to the Royal Asylum of St. Ann's Society.
PADLEY, G., M.D., elected Physician to the Swansea Infirmary.
STARLING, John, Esq., appointed Medical Officer to the Chelsea, Brompton, and Belgrave Dispensary.
WATSON, Patrick H., M.D., appointed Third Acting Surgeon to the Edinburgh Royal Infirmary.
WILLEY, H., Esq., elected House-Surgeon to the Poplar Hospital.

POOR-LAW MEDICAL SERVICE.

AYRE, Edwin S., Esq., to the High Hoyland District of the Penistone Union.
BURKE, John P., M.D., to the Louisburgh District of the Westport Union, co. Mayo.
CANDLER, John, Esq., to the Mendham District of the Hoxne Union, Suffolk.
CLARKE, Alexander C., M.D., Resident Medical Officer to the New Workhouse, Crumpsall, Manchester.
EARLE, John, Esq., to the Workhouse of the Altrincham Union.
EDWARDS, John, Esq., to the East Bampton District of the Tiverton Union.
FARMER, J., Esq., to the Cottesford District of the Bicester Union.
GILMORE, Samuel, L.R.C.P.Edin., to the Workhouse Infirmary and Fever Hospital of the Castleblayney Union, co. Monaghan.
MACKRETH, John F., L.R.C.P.Ed., to the Danby District of the Guisborough Union.
MUTCH, William, Esq, to the Orton District of the East Ward Union, Appleby, Westmoreland.
STEPHENSON, William H., M.D., to the Mellor District of the Blackburn Union.
TROTTER, Charles John, Esq., to the District of Holme, Huddersfield Union.

ROYAL NAVY.

BAIRD, William J., Esq., Surgeon, to the *Cossack*.
BELL, William H., Esq., Assistant-Surgeon. to the *Cossack*.
DUIRS, William, M.D., Surgeon, to the *Marlborough*.

MILITIA.

GRAY, J., Esq., to be Assistant-Surgeon Northamptonshire and Rutland Militia.

YEOMANRY CAVALRY.

MORETON, J. C., Esq., to be Assistant-Surgeon Earl of Chester's Yeomanry Cavalry.
SICARD, A., M.D., to be Surgeon Royal East Kent Yeomanry Cavalry.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

BENNETT, C. H., M.D., to be Assistant-Surgeon 4th Middlesex R.V.

To be Honorary Assistant-Surgeons :—

BYRNE, W. A., Esq., 1st Glamorganshire Engineer Volunteers.

BIRTHS.

OSBORN. On May 16th, at Northampton, the wife of Ashby G. Osborn, Esq., Surgeon, of a daughter.
POUND. On May 18th, at Odiham, the wife of *George Pound, Esq, Surgeon, of a son.

DEATHS.

ADAMS. On May 14th, at 37, Harrington Square, aged 6, Henry Clements, second son of William Adams, Esq., Surgeon.
*COUCH, Richard Q., Esq., at Penzance, aged 46, on May 8.
CUTFIELD, Alfred B., M.D, at Deal, aged 46 on May 11.
ELLIS. On May 10th, at Bristol, aged 2 years and 5 months, Robert Valentine, eldest son of Robert W. Ellis, Esq.
FIELD, Edward, M.D., at Framlingham, on May 10.
GRIFFITH. On March 9th, near Bathurst, New South Wales, aged 40, Richard Clewin Griffith, Esq, eldest son of Richard C. Griffith, Esq, Surgeon, of Gower Street.

VACCINATION (IRELAND) BILL. This Bill has been read and passed in the House of Commons.

ALLEGED NARCOTISM FROM SUBCUTANEOUS INJECTION. It is stated that a patient lately died in the Middlesex Hospital from narcotism induced by the subcutaneous injection of morphia.

THE ARMY IN INDIA. Meetings of the Royal Commission to inquire into the Sanitary State of the Army in India, Lord Stanley, M.P., in the chair, were held at the War-office on Saturday the 9th, Wednesday the 13th, Saturday the 16th, and Tuesday the 19th inst.

UNIVERSITY OF ST. ANDREW'S. A vacancy has occurred in the chair of chemistry and anatomy in the United College, St. Andrew's, by the resignation of Dr. George Edward Day, owing to ill health. The patronage is vested in the University Court.

ST. MARY'S HOSPITAL. At the annual dinner of this hospital, held at the Albion on the 5th inst., the receipt of nearly £700 in donations, etc., was announced. A legacy of £200 has also been lately left to the hospital by Mr. Charles Maccabe of Wimpole Street; and Mr. B. B. Cabbell has lately obtained for the hospital, as a gift from the Society for the Discharge and Relief of Persons imprisoned for Small Debts, £300, being the fourth donation from that Society.

THE QUEEN AND THE WINDSOR INFIRMARY. A short time ago, her Majesty visited the Windsor Infirmary. Since then a letter has been received in which is expressed—"Her Majesty's great satisfaction at all her Majesty saw on her late visit, and the approbation with which her Majesty noted the care and attention bestowed on the patients, and the cleanliness and the order that prevail in an institution which has the Queen's best wishes." The following letter was also received by the treasurer :—"Dr. Becker presents his compliments to the treasurer of the Windsor Infirmary. He has received the commands of her Royal Highness the Princess Louis of Hesse to forward the enclosed cheque for £20, as a contribution from her Royal Highness towards the funds of the infirmary. Her Royal Highness knows

that she is thus contributing towards one of the best directed undertakings for the benefit of the poorer classes of the town and neighbourhood of Windsor; and it is a satisfaction to her Royal Highness, before returning to Germany, thus to leave some token of affectionate remembrance of the scenes where so large a portion of her childhood and youth has been happily passed."

The Small-Pox. In the House of Commons, a few days ago, General Buckley asked the President of the Poor Law Board whether he was aware that fresh cases of small-pox were brought into the workhouse of St. George's, Hanover Square parish, and other workhouses in London, and whether some arrangement could not be made to prevent fresh cases of small-pox being brought into the populous part of London? Mr. Villiers had not heard of any fresh cases of small-pox in the workhouse of St. George's or in any other of the workhouses of the metropolis; but he had heard that the malady generally was on the decline. Some weeks ago the Privy Council issued a circular to all the metropolitan unions, urging them to take precautionary measures with a view to the extension of accommodation for patients suffering from small-pox, and the Privy Council further issued a circular to the Poor Law Board, requesting them to urge upon Boards of Guardians to take such measures. Since that time answers had been received from no less than twenty-five out of the forty metropolitan unions, stating that their accommodation was more than adequate for the number of patients. With respect to the workhouse of St. George's, it might be satisfactory to the hon. and gallant General to hear a report had been made with respect to that workhouse within the last few days, from which it appeared that a wing of the building had been set aside for small-pox patients; that the said wing was capable of accommodating forty patients; that the greatest number in at any one time had been thirty; that the total numbers admitted since the outbreak of the malady was fifty-eight; and that at present there were only fifteen in it, the major part of whom were convalescent.

The Russell *v.* Adams Case. Court of Bankruptcy, May 15th. The bankrupt, Annie Russell, who described herself as "a professor of music, and spinster," applied for her release. She was the unsuccessful plaintiff in the cause of "Russell *v.* Adams", and had been arrested for £315 costs incurred by Mr. Adams in defending the action. Mr. Wild, for Mr. Adams, opposed the application. He said the total expense incurred by Mr. Adams in his defence would be £1000. The defendant had been obliged to bring a vast amount of evidence from Holyhead and elsewhere, with a view to showing that on former occasions the bankrupt had fixed charges of breaches of promise of marriage upon clergymen and other persons, in order to extort money.—The bankrupt, who gave her evidence in a somewhat confident tone, said: It is quite true that the verdict was not exactly for me; but my solicitor applied to Messrs. Wild and Barber for leave to examine Mr. Adams and myself as witnesses upon the trial, in order that the truth might be established; but they refused to give permission, otherwise the verdict would, in my opinion, have been very different.—The Commissioner: The verdict was against you?—The Bankrupt: Yes; but if Mr. Adams had not placed himself in the position, he would not have incurred the expense. From experience he might have known that it was rather dangerous to trifle with the affections of a lady.—The Commissioner: I see that in the declaration the damages are laid at £3000.—Mr. Wild: Yes, and the defendant a married man with a large family.—The Commissioner: I do not think I can release the bankrupt until she has been four months in prison. It is a monstrous case.—The Bankrupt: Very well. I was informed yesterday that you would prejudge the case.—The Commissioner: I do not know how I could prejudge the case. Until to-day I never saw either plaintiff, defendant, judge, or jury. I cannot release the bankrupt until she has suffered four months imprisonment.—The bankrupt was then removed, his honour adding (with a smile): "I hope she will not sue me." [*A laugh.*]

University College, London. The distribution of prizes to the students of the Faculty of Medicine in University College, London, took place on Tuesday, Dr. Parkes, F.R.S., Fellow of the College, former Professor of Clinical Medicine, in the chair. *Atkinson Morley Surgical Scholarship*: William J. Smith, of Basingstoke. *Longridge Prize* (£40) *for General Proficiency*: William H. Griffin, of Banbury.—*Filliter Exhibition in Pathological Anatomy* (£30): Thomas Griffiths, of Carmarthenshire.—*Fellowes's Clinical Medals*: *Gold Medal:* Talford Jones, of Brecon. *Extra Gold Medal:* Frederick T. Roberts, of Carmarthen. *Silver Medal*: Richard Dawson, of Brighton. *Anatomy and Physiology: Gold Medal:* Bryan H. Allan, of London. *First Silver Medal:* William Snow, of Barnstaple. *Second Silver Medal* (Equal) John Morrison, of Stirling, and John Williams, of Llangudock. *Certificates of Honour:* 5. (Equal) James J. Coxeter, of London; George Jackson, of Tavistock; 7. Thomas H. Green, of Saffron Walden; 8. (Equal) Frederick B. Nunneley, of Burton-on-Trent; Julian A. M. Evans, of London; 11. (Equal) Edward F. Willoughby, of Brighton; William Akerman, of Islington; 13. Charles J. H. Smith, of Kentish Town; 14. (Equal) Frank Howard, of Harrow; Marshall Hooper, of Sevenoaks.—*Anatomy: Senior Class: Gold Medal*: Charles Bradley, of Nottingham. *First Silver Medal:* William Snow. *Second Silver Medal:* Philip B. Mason, of Burton-on-Trent. *Certificates of Honour:* 4. Thomas H. Green; 5. Bryan H. Allan; 6. George Jackson; 7. Henry G. Walker, of London; 8. William Akerman; 9. Charles J. H. Smith. *Junior Class: Silver Medal:* George O. Spencer, of London. *Certificates of Honour:* 2. Frederick Barton, of Bedford; 3. James J. Cluff, of London; 4. Francis J. Buckell, of Romsey; 5. Frederick B. Nunneley; 6. Francis J. Grose, of Dinapore, Bengal.—*Chemistry: Gold Medal:* J. Pearson Hughes, of Llandovery. *First Silver Medal:* Percy J. Harding, of London. *Second Silver Medal*: John M. Whitwell, of Kendal. *Certificates of Honour:* 4. (Equal) George O. Spencer, John D. Thomas, of Swansea; 5. William Hoffmeister, of Cowes; 6. Russell Swanwick, of Chesterfield; 7. (Equal) Francis J. Buckell; William C. Cass, of Cowes; R. Ramsay Morton; William R. Davies, of Carmarthen; Henry Carter Wigg, of Geelong, Australia; Robert Colman, of London; 8. (Equal) G. Vivian Poore, of Andover; George Crow, of London; 9. J. W. Langmore, of London.—*Comparative Anatomy: Gold Medal:* John C. Leach, of Crediton. *Certificates of Honour:* 2. William Hoffmeister: 3. G. Vivian Poore; 4. James J. Coxeter.—*Practical Physiology and Histology: Silver Medal*: Philip B. Mason.—*Certificates of Honour:* 2. James J. Coxeter; 3. Frederick B. Nunneley; 4. Henry C. Wigg; 5. John M. Whitwell.—*Medicine: Gold Medal:* Palemon Best, of St. Ives, Cornwall. *First Silver Medal:* John Harman, of Canterbury. *Second Silver Medal:* Athenedore De Negri, of London. *Certificates of Honour:* 4. (Equal) Edmund Nash, of Royston; Alexander Bruce, of London; 9. John Roberts, of Kidwelly—*Surgery: Gold Medal:* Herbert Everett, of Norwich. *First Silver Medal*: Alexander Bruce. *Second Silver Medal:* Samuel Mills, of Huddersfield. *Certificates of Honour:* 4. (Equal) John Hackney, of London; John B. Grewcock; 5. William Gill, of Truro; 6. Charles S. A. Atkinson, of Norwich; 7. Thomas Evans, of Llandussyl, South Wales.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Geographical (Anniversary).—Linnæan (Anniversary).

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. John Wood, "Deformity of the Neck from a Burn: Taliacotian Operation"; Mr. Spencer Wells, "Ovariotomy twice performed on the same Patient"; Dr. Robert Lee, "On Induction of Premature Labour in Complicated Cases."—Zoological.

WEDNESDAY. Society of Arts.

FRIDAY. Royal Institution.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 16, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 919 / Girls.. 956	1875	1459
Average of corresponding weeks 1853-62		1881	1214

Barometer:
Highest (Mon.) 29.90; lowest (Tu.) 29.45; mean, 29.693.

Thermometer:
Highest in sun—extremes (Sun.) 105.0 degs.; (Tu.) 70.6 degs.
In shade—highest (Wed. & Th.) 64.5 degs.; lowest (Mon.) 42.2 degs.
Mean—52.8 degrees; difference from mean of 43 yrs. +1.1 deg.
Range—during week, 22.3 degrees; mean daily, 16.5 degrees.
Mean humidity of air (*saturation*=100), 79.
Mean direction of wind, S.W.—Rain in inches, .5.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CLAY *v.* ROBERTS.—A correspondent, referring to the case of Clay *v.* Roberts, truly says:—

"It is quite clear that unless we make a difference between breaches of medical etiquette and libellous matter, we shall be quite unable to uphold the etiquette of the profession; inasmuch as every charge or complaint on such questions would be libel, and render the complainant open to an action for libel—a consequence which would make every man hold his tongue, however gross the violation of etiquette might be."

Happily, however, in this case—and we trust it may be always so—the law does not see libel in an accusation of an alleged breach of professional discipline.

COMMUNICATIONS have been received from:—SIR HENRY COOPER; Dr. HABERSHON; Mr. THOMAS JONES; Dr. WILLIAM BUDD; Mr. GEORGE POUND; Dr. J. O. FLETCHER; Mr. THOMAS BRYANT; Mr. J. JONES; Mr. WALKER; Mr. STEELE; Dr. WILLIAM KELLY; Dr. J. B. PITT; Mr. T. H. SMITH; Dr. MURCHISON; Dr. SANDFORD; Dr. MITCHELL; Mr. S. A. PARKER; Mr. REDFERN DAVIES; Dr. PARKES; Dr. HARLEY; Mr. J. VOSE SOLOMON; THE HON. SECRETARIES OF THE OBSTETRICAL SOCIETY; Dr. HYDE SALTER; Mr. OLIVER PEMBERTON; Mr. W. TREVOR; Mr. ASHBY G. OSBORN; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. R. W. ELLIS; Mr. T. M. STONE; Dr. MUNROE; and Dr. CHUCKERBUTTY.

Surgical Instruments.—Arnold

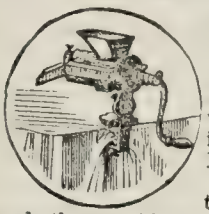
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(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

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Professor of Surgery at University College, and Surgeon to the Hospital.

From W. FERGUSSON, Esq.

Professor of Surgery at King's College and Surgeon to the Hospital.

16, George Street, Hanover Square, Oct. 14th, 1861.

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BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VI.—On Capillary Bronchitis.

Comparative Rarity.—History of Case.—Peculiar Sputum.—Post-Mortem Appearances.—Points of Diagnosis from Ordinary Bronchitis.—Rapidity of Respiration.—Pulse-Respiration Ratio.—Relation of Moist Sounds to Sputum.—Resemblance of the Condition to the State of Animals Drowned.—Treatment: the Question of Alcohol and of Bleeding.

[*Concluded from page* 497.]

In relation to the cough and expectoration, there are one or two points worthy of note—one in especial. Up to two days before his death our patient's cough was dry, hacking, and ceaseless; and he spat nothing whatever. Two days before his death the cough became less uninterrupted, and the expectoration just commenced; the day before his death the cough was paroxysmal, with considerable intervals between the fits, and attended with free expectoration on each occasion; the day that he died there was neither cough nor sputum,—both entirely ceased. Now, all this is easy of comprehension:—the character of the cough changed with the appearance of the secretion; and the day that he died the spitting ceased because all power of coughing ceased. But there is one thing that perhaps is not so easily comprehensible,—that moist sound should have existed three or four days before the appearance of the expectoration. There was fluid *in* the tubes, but none came *from* them; and that in spite of constant cough.

Now you all know that commonly moist sound accompanies expectoration, and expectoration accompanies moist sound. But I would have you distinctly bear in mind that this is not always so—that the two are sometimes divorced—that you may have expectoration without moist sound, or any sound whatever; and, on the other hand, moist sound without expectoration. The patient's case is an example of the last. You have expectoration without mucous sound when the largest tubes are exclusively the seat of the secretion—tubes so large that the mucus adhering to their sides is insufficient to produce a constriction, or a stoppage adequate to generate a rhonchus or crepitus. Tubes of such a size may have a considerable amount of mucus adhering to them, and yet the stream of air passing through them shall be so little affected that no sound whatever is generated. I have frequently, in cases of large bronchitis, been shown day by day a spittoon with an abundance of mucus in it; and yet, day by day, close auscultation has failed to detect any morbid sound whatever—all was dry and clear. On the other hand, and this case is an example of it, I have frequently heard a sound asserting the existence of fluid in the air-tubes, and yet sputum there has been none. But, whenever this has been the case, two other things have also been the case; the *seat* of the exudation has been in the remotest bronchial tubes, and the *amount* of exudation has been small. When these two conditions are present, I believe—nay, I am sure—that no expectoration need take place first or last, although moist sounds are constantly heard. The reason is this:—the exudation, having its seat in the most distant recesses of the bronchial system, has to travel over a great length of surface ere it reaches the orifice; and being small in quantity, and gradually reduced in its passage partly by the desiccating action of the air flowing to and fro over it, and partly by absorption, it ceases to be recognisable, and indeed is entirely removed before it has reached the orifice. We know how common a thing it is, in cases of pneumonia, to hear its characteristic crepitation twenty-four or forty-eight hours before any expectoration appears. We have in this interval a measure of the time it takes for the exudation to travel from one end of the bronchial system to the other. The sputum in most cases of pneumonia, being sufficient in quantity, does at length appear; but it need not, and if very small in quantity it *does* not, and I have known several cases in which it *has* not—cases of undoubted pneumonia, cases in which the physical signs could not be misinterpreted; and yet the crepitation has receded, and the patient recovered without any expectoration from first to last. Now this case was at first exactly of this nature, as far as the non-appearance of expectoration associated with moist sounds went: the exudation was scanty and remote, and therefore did not appear for three or four days; but, increasing in quantity and travelling upwards, on the third day it appeared, and on the fourth day was abundant.

In contemplating this case, I could not help being struck by the resemblance of the condition and the method of death to that of animals asphyxiated by drowning. In animals so killed, a large quantity of water enters the lungs; and they die with their smaller air-tubes impassably choked up with a froth, the result of the churning together of the respired air with the water and bronchial mucus. There seems something essentially lethal in this state of things; animals in whom it is induced invariably die. In the forty-fifth volume of the *Medico-Chirurgical Transactions*, you will find the details of some experiments on drowning, etc., in which I with others was engaged, with the view of ascertaining the best method of treatment of cases of suspended animation. We found that dogs deprived of air in a dry way for four minutes almost invariably recovered, whilst those deprived of air by immersion in water for one minute and a half invariably died. If the dogs asphyxiated in the dry method made, on their release, but a single gasp, they were safe to recover; while the submerged dogs, although when taken out of the water apparently but little affected, soon began to gasp; their breathing became more and more laborious; they staggered, fell over, and in a few minutes were dead. This difference puzzled us at first; but, when we came to examine the lungs, its cause was at once manifest. The lungs of the drowned dogs were found full of water, quite sodden, and incapable of collapsing; on cutting them, the water flowed from the cut surface abundantly, and the tubes were found in the state I have just mentioned—choked up with an impassable froth:

o that on removal of the dog from the water the ource of the asphyxia was not removed—it had been transferred from without him to within him; and instead of being at a single point, at the orifice of the main air-passage, as in the dogs deprived of air by the dry method, it existed at a hundred points—in fact, in every air-tube of the lungs. Just such was the state of this patient's lungs; cut them where you would, out oozed, on pressure, from every bronchial tube, a froth consisting of air and mucus churned up by the respiratory efforts. The immediate mechanism of death from capillary bronchitis is exactly similar to that in a drowned animal.

And now a word or two about *Treatment*.

When we first saw this man, the mischief was done—the pathological condition was established; the smaller tubes of the entire bronchial tree were already choked up with secretion; and the man ultimately died, just as we not unfrequently see children die from a similar affection, suffocated by universal bronchial infarction. What did we do to avert this catastrophe? And what *could* we have done?

What we *did* do I have already told you. We administered chloric ether, ammonia, squill, and senega in frequent doses; applied large turpentine fomentations to the front and back of the chest; ordered as erect a position as possible to be maintained; the warmth of the external surface to be well kept up; and, latterly, wine to be freely administered.

But could we have done more? I have no doubt many would answer this question in the affirmative, and say we could. And *what* more could we have done? Besides direct depressants, and mercury, and blisters, and leeches, *cum multis aliis, quæ nunc prescribere longum est*, each of which, I have no doubt, would have its advocates, there are two things which I can conceive intelligent and thinking men telling me I ought not to have omitted. One will tell me that I ought to have given wine or brandy more abundantly and earlier; and the other, that this is exactly one of those cases of urgent embarrassment of the respiratory function in which great and possibly essential relief might have been obtained by an early and smart reduction of the volume of the blood, which, by diminishing the quantity of the fluid upon which the function is exercised, would lower the functional demands upon the injured organ to the level of its powers, and thus temporarily disembarrass it.

Now, with regard to the alcohol, I think the early pushing it in such a case as this would have been a mere routine application of the general principle of treatment by stimulation, and, like most routine applications, a *mis*-application. I suppose it will be generally conceded that the indications for alcohol are proportionate to the development of the condition that it antagonizes. Now, in the early part of this case, there was very little development either of exhaustion, or its more pronounced phase, depression, except on the day when the patient first came to the hospital. But I think there is a special objection to the large administration of alcohol in all cases where the respiratory function is gravely interfered with, especially if attended with cyanosis. In administering alcohol we are introducing into the blood a material mainly hydrocarbonaceous, and which, if metamorphosed at all, if in any degree a food, must be a calorifacient food, and contribute to the formation of carbonic acid. Now carbonic acid is exactly what the blood is, in such a case, struggling with—what it cannot get rid of; and to throw an additional source of it into the circulation is to aggravate the condition in its gravest particular. I am quite sure I have seen cyanosis increased by the administration of alcohol. But, besides this, the respiratory membrane is the principal emunctory of alcohol, *as alcohol*; we know how much is thrown off through this channel by the strong fumes of alcohol in the breath of those who have been drinking wine or spirits. Now, to tax with extra and supererogatory work an organ not capable of doing its ordinary duty—to throw the elimination of carbonic acid *plus* alcohol upon a respiratory membrane unequal to the elimination of the carbonic acid alone—is not exactly what one would do by choice, or what would commend itself to one's reason.

And now for the bleeding. I am one of those who, repudiating the abstraction of blood for almost all the purposes for which it was formerly resorted to, believe that, in certain embarrassed states of circulation and respiration, the prompt abstraction of blood may give immense relief, partly as reducing the functional demands on the injured organ, and partly as relieving that condition of stasis to which any grave embarrassment of either of these functions leads. But, in estimating the probable utility of any given treatment in any given case, we must realise the exact state of things in that case, and precisely how far it is modifiable in a favourable sense, as well as the physiological tendencies of the remedy. Now here we find ourselves in the presence of an intense inflammation of the entire respiratory membrane, already established, and threatening life by the exudation it had given rise to. It is manifest, then, that nothing would snatch this patient from death but something that would either strike at the inflammation, or else keep the patient alive till it had subsided. Would any amount of bleeding do either of these? I think no one will venture to say that it would. I think no one will venture to say that it would have arrested an intense inflammation already established from one end of the bronchial system to the other, or have prevented that inflammation from issuing in its natural results: that it would have had *any tendency* to do so, I do not for a moment believe. But would it, from the relief that it might have given to the respiration by the reduction of the volume of the blood, have tided the patient over the time of danger, and averted the asphyxia till the inflammation had spent itself? Before we say it would not have done this, let us see what it would have done. It would for the moment, possibly, have given great relief. But in a few hours the blood would, by the imbibition of water, have again acquired its original volume (and how rapidly this would take place we know from an experiment of Valentin's, who showed that, even in the short space of time during which the blood is flowing from the arm in venæsection, it will, from the absorption of water, undergo an appreciable diminution in specific gravity). The patient would then be in exactly the same state as he was in before the blood was withdrawn, except that the blood in him would be so much the poorer in red particles. To regain the relief another bleeding must be performed, which would give another hour or two's benefit, at the price of a further impoverishment of the blood. Now what is such a transient relief, so soon self-

prohibiting, to meet a condition jeopardising life for at least some days in succession? The fatal condition holds out, but the relief does not. And it is this essentially transient nature of this kind of relief that makes this treatment worthless except for circulatory and respiratory embarrassment of an equally transient nature. But, independent of this, it would, from the very nature of the condition, utterly fall short of averting the danger. The danger arises from a material choking up all the air-tubes and making respiration impossible. Now, to hope to maintain life by any palliation that left the tubes still occupied by the obstructing material—by anything, in fact, short of the removal of that material—would be like giving an expectorant to a drowning or hanging man. The material being there, the man must die, just as certainly as if he had a rope round his neck or his head under water, only not so quickly; it is merely a question of time.

As I have already stated, I think the man's fate was settled when he was first admitted. He had within him a bronchitis universal and intense, and no power on earth could prevent universal bronchial infarction; universal bronchial infarction supervened, and no power on earth could prevent fatal asphyxia. Still, even in a hopeless case, one likes one's treatment to be theoretically correct; and I think, in the discussion of the questions I have raised, we have not wasted the hour we have given to it.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM DENTAL DISPENSARY.

CONTRIBUTIONS TO DENTAL SURGERY.

By Samuel Adams Parker, Esq., Licentiate in Dental Surgery of the Royal College of Surgeons of England; Surgeon-Dentist to the Queen's Hospital, and to the Birmingham Dental Dispensary; Member of the Odontological Society; etc.

Case I. *Deafness and Singing Noises in the Head and Ears, cured by the Removal of Diseased Teeth and Stumps.* Mary C., aged 37, applied to the Dispensary on December 6th, 1861, for relief of toothache, and requested that the tooth might be removed. It was not without the greatest difficulty that I could make her hear, even when speaking in the loudest tone. She had been deaf for more than three years; and her deafness was accompanied with singing noises in the ear, and a loud knocking sensation in the head, which was always more violent when in bed.

As far as I could learn from her, she was attacked with violent pains in the teeth, about the same time that she became deaf, the pains in the teeth occurring at different periods of time. This state of things led me to suppose that her deafness was in some way connected with her teeth.

Her general health was very good, but her appearance was dull and heavy, such as is usually met with in persons suffering from deafness. Blisters behind the ears and numerous other remedies had been resorted to, from time to time, with but little success.

Upon examining her mouth, it presented a complete wreck of what was once a fine set of teeth; most of them were decayed to the edge of the gum, but none of them were painful at the time of her visit to the Dispensary, with the exception of the one which she came to have extracted.

Bearing in mind the fact, that the deafness and pains in the teeth commenced very nearly at the same period of time, and the amount of irritation that was being set up, it occurred to me that the affection complained of might have been produced by the diseased condition of the dental organs. I therefore made her understand, as well as I could, that, by the removal of such teeth as could not be rendered serviceable, and particularly the stumps, there was a very great probability that her hearing would be materially improved, if not altogether restored. To the proposed operations, she immediately consented. They were commenced forthwith; and, after four sittings had been given, the whole of the decayed useless teeth were removed. Little, if any, improvement resulted from the first operation; the noises in the head continued as violent as ever; but these diminished gradually as the operations succeeded each other. In the course of three weeks, a perceptible difference in the hearing had taken place; and, after six decayed teeth and stumps had been extracted, it was, if not altogether restored, so much improved, that it required very little more than the ordinary voice to make her understand all that was said. The knocking sensation so much complained of, and which was a source of far greater annoyance to her than the deafness, had entirely disappeared.

The results of this case were altogether of a most satisfactory character.

Case II. *Fistulous Opening under the Chin of Seven Years Standing, with other Complicated Affections, caused by a Diseased Condition of the Teeth; Removal of the Teeth; Recovery.* Harriet M., aged 18, was admitted to the Dispensary under the following circumstances. She complained of pains in the temples and ears, of indigestion, of being very weak, and excessively nervous. Underneath the chin was a discharging fistulous opening, which had existed seven years; but, during the last two years, it had not been so annoying as upon former occasions. I made a careful examination of the mouth, and found it in a very bad condition.

As for the patient being able to masticate the slightest substances, the thing was utterly impossible. The whole dental apparatus was the subject of extensive caries; and, with the exception of the inferior incisors, there was not one tooth that was not more or less decayed. The gums were much inflamed and spongy; the breath very offensive; and a discharge of pus was constant from the necks of those teeth which were decayed and loose. Such was the state of her mouth when she consulted me in December 1861.

The patient, from her exhausted condition, was unable to undergo any lengthened operation, which must have been the case had I removed several of the stumps at one sitting. I commenced, therefore, to restore as far as possible, all that could be rendered serviceable by stopping; and at the same time recommended the removal of all that were too far gone to be so treated.

These operations were performed by degrees, extending over a period of six weeks, at the expiration of which time twelve decayed teeth and stumps were removed. Formidable as this number may appear, they were all so hopelessly decayed that anything short of absolute removal must have been attended with results of an unsatisfactory nature.

Astringent lotions were ordered for her gums, and her general health was carefully attended to.

The progress of her recovery was very rapid; at the end of three months every painful symptom had subsided. The patient had gradually recovered her strength; the fistulous opening had entirely closed up; and the gums and mouth in general had resumed their natural healthy condition.

Case III. *Facial Neuralgia of Eight Years Standing; Cured by the Removal of several Decayed Stumps.* A young woman, aged 27, attended the Dispensary for relief of neuralgic pains in the right side of the face, which she supposed must have had their origin in a number of decayed stumps.

She informed me that, six months previously to my seeing her, she had not had one night's rest, so continual and violent were the pains; and she characterised them as if the bones of the head were opening and closing.

Several abscesses had from time to time appeared in the neck and face, which had discharged, and had finally closed up. Her sight was at times much affected, so that she was almost blind; and her hearing was likewise affected to a similar extent.

The patient had been under skilful medical treatment for a long period of time, with partial benefit; but the pains always returned in damp cold weather. Her bowels were seldom moved without the administration of aperients, and her digestion was so much impaired that little or nothing could be taken without creating a considerable amount of disturbance.

Without attempting to enumerate which particular tooth or teeth were affected, I will content myself by saying that the mouth was in as bad a condition as it possibly could be, and so much so, that I was some time before I made up my mind where I should commence my treatment.

Discharge was issuing from the gums at several points, causing a most unpleasant odour of the breath; and the gums were in a state of inflammation and sponginess, so frequently found in cases of this nature.

After having examined the mouth, I came to the opinion that much of her suffering might be relieved by some trifling dental operations. She willingly consented to have anything done that would in the slightest degree relieve her.

During the months of June and August 1862, I removed several decayed teeth and loose stumps, such as could not otherwise be treated, and filled up some few that I thought might be rendered useful.

While the operations were from time to time being performed, a gradual improvement was perceptible; and at the expiration of four months, her health was completely restored; and every painful affection had entirely disappeared.

Case IV. *Serious Affection of the Eyes, produced by a Diseased Superior Bicuspid Tooth; Removal of the Tooth; Recovery.* Alfred B., aged 20, attended the Dispensary in September 1862, respecting a painful tooth which had annoyed him for more than twelve months, and had caused him great suffering. He also attributed a painful affection of his eyes in some degree to this tooth.

He was by trade a compositor, generally working small type, and seldom during the winter months for more than a couple of hours per day by gaslight; so that he did not suffer as some do from the heat and glare of artificial light. He said that for nearly six months he had been quite incapacitated from following his employment, on account of his eyes having become so dim. The dimness came on regularly about 5 P.M.; or, I should rather say, at the time mentioned, the dimness complained of became more distressing than at any other.

He also suffered much pain on the top of his head and in the temples; his nights were restless; his appetite was bad, and his general health much deranged on account of the continual pain. I examined the mouth, and found several spaces where teeth had been extracted; the first right superior bicuspid was much decayed, elongated from its socket, slightly loose, with a single rim of inflammation round the gum. The tooth was also very tender when touched. This tooth I immediately removed; an operation which at the moment caused pain in the right eye, and a considerable flow of tears.

I found also several loose stumps setting up irritation in the gums, which I removed; and I was rewarded by finding that the operations performed produced results of a gratifying nature.

The patient's eyes have become very much stronger, and the sight much clearer. The pain on the top of the head disappeared after the removal of the bicuspid; and I believe the patient has been able to resume his usual employment.

Remarks. There can be but little doubt that a diseased condition of the dental organs produces at times symptoms in other parts of the human frame of a most painful character—symptoms that may go on from month to month, and from year to year, without any perceptible variation in intensity, even after the application of every kind of remedy by our most skilful medical practitioners.

The most frequent complaints arising from such a state of things, is facial neuralgia; of this, every dental practitioner must meet with numerous cases, more particularly those who are connected with large medical charities. This disease may arise when connected with the teeth from different sources: such as exposure of the pulp-cavity, dental exostosis, and irritation produced by dead and loose teeth. The pain produced may vary in its character, according to the temperament of the patient. At one time the pain referred to may be continuous, and at another time it may come on at certain times of the day or night, assuming thus an intermittent character.

It varies from toothache in several striking ways. Toothache proper is confined in the vast majority of cases to the part from which it originates, while neuralgia may be situated at some distant point, and may move about from place to place, first in the ears and temples, again on the top of the head, and frequently in the neck and shoulders.

It may come on, as I have known it to do, with intense severity for about half an hour at a time, leaving the patient quite exhausted from pain, whilst toothache is generally continuous.

Under such circumstances, it becomes a very difficult task to persuade patients that all their sufferings may have their origin in the teeth, and that the pain will be entirely removed by some judicious dental operation.

The great difficulty experienced by the dental practitioner is that the vast majority of patients who suffer from facial neuralgia do not suffer from toothache, although several teeth may be decayed, and the mouth may be in a similar condition to that mentioned in the above cases. Headache, earache, neuralgia, and tic, are the more common results of carious teeth; but it by no means follows, because a patient has a number of decayed teeth and stumps which happen not to be painful, that secondary symptoms, like those alluded to, may not result from such a state of things.

Since the above cases came under my notice at the Dispensary, it will have been seen that two others of an interesting and similar nature have been brought before the Odontological Society at their meeting in February last. The one was introduced by Mr. Catlin, who read a paper on "Local Neuralgia Dependent on Diseased Teeth," in which a lady had suffered neuralgic pains in the ear and side of the neck. The inferior right molar tooth was diseased, and in this case painful. These pains she had suffered for about three months, when she became quite deaf. Mr. Catlin removed the diseased tooth, and the hearing was restored within an hour after the operation.

The other case was mentioned by Mr. Tomes, and was very similar, and differed only in the duration of time the disease lasted. It was the case of a young gentleman who had been deaf for nearly four years, and

which was associated with toothache. A decayed tooth was removed, and the hearing completely restored. Two teeth have since been removed under similar circumstances and with precisely similar results.

Mr. Tomes remarked, in the discussion upon the paper, that "it seemed a rational conclusion that the deafness was the immediate result of the diseased teeth, inasmuch as that condition occurred on three separate occasions, and the operation was attended in each case with the same results." (*British Journal of Dental Science*, Feb. 1863.)

My object in contributing to this journal cases of dental pathology, is to show how essential it is in all cases of facial neuralgia, etc., that the mouth should be carefully examined, although, as I have before stated, no teeth may be actually painful, yet by their presence in a diseased condition they may be acting as the sole cause of the mischief. It is the province of the dentist to carry out his profession upon the principles of conservatism; but even this treatment may be carried too far.

"How far," asks Mr. Catlin, "should dental conservative surgery be carried? To preserve teeth as long as they can be made subservient to the uses of mastication and appearance is undoubtedly the first duty of the dentist; but when they have become sufficiently diseased to affect the general health, or so painful as to interrupt the ordinary duties and comfort of life, the prevalent conservative dental surgery of the present day becomes mischievous." (*British Journal of Dental Science*, February 1863.)

Original Communications.

ADDITIONAL NOTE ON THE OCCURRENCE OF MALIGNANT PUSTULE IN ENGLAND.

By William Budd, M.D., Clifton.

In the paper on Malignant Pustule which I had the honour to read at the last annual meeting of the Association, I ventured on the opinion that the reason why this disease has remained hitherto almost unnoticed in England is, not that it does not occur, but that, except by one or two observers, its real nature has not been recognised.

In confirmation of this opinion I may state that, during and since the publication of the paper in the Journal, I have been favoured by medical men living in various parts of England with numerous histories of characteristic cases of this peculiar and striking malady. Two of the number, on account of their special interest, may be fitly recorded here, by way of appendix to those related in the paper itself.

For my knowledge of the first of the two, I am indebted to the kindness of Mr. Nunneley of Leeds. The data which Mr. Nunneley has placed in my hands consist of two drawings with memoranda attached. One of the drawings represents the head of the patient. The appearances are in the highest degree characteristic. It is very remarkable that, although the disease began in the hand, the head and face present precisely the same aspect as that which is observed when it begins in these parts. There are the same enormous swelling, the same black discoloration, and, in particular, the same thickening and negro-like protuberance of the lips, which were such striking features of the cases which came under my own observation, and in all of which the disease began in the mouth or in the immediate neighhood of it.

The subject of Mr. Nunneley's case was a young man, 19 years old, and a *plasterer* by trade. His illness occurred in April 1856. About a month before, he was bitten on the knuckle of the left forefinger by a young dog. The dog was quite well. The wound, which was small, festered, and was still open at the time of death. It did not, however, prevent the man from continuing his work. The disease began in the injured hand.

"When I first saw him," Mr. Nunneley says, "the arm was enormously swollen and greatly discoloured, as were also the face and head." These last parts were nearly twice their natural size.

The whole of the body and limbs, but more particularly the lower limbs, were covered with purple blotches. When these first appeared, they were of a brownish-red; but they afterwards became violet, and showed a tendency to spread. In some of these blotches, vesicles containing a dark-coloured serum formed around a central patch of a somewhat lighter shade. (These appearances are represented in the second drawing.)

The patient died six days after the onset of the malady. The mind continued unimpaired to the last.

On examination of the body, the lungs were found much congested, and there was dark coloured serum in both pleuræ. The blood was diffluent.

This case occurred at the time when the poisoning cases of Dove and Palmer were so much canvassed by the public, and it was in consequence of Mr. Nunneley's connection with them that he was called in to the patient. The fact is worth recording, as showing two things: first, that the disease was of a very uncommon character; and secondly, that the friends of the patient associated the idea of *poisoning* with it.

Mr. Nunneley himself says: "The appearance of the young man was so peculiar that I never saw anything like it before"; and several other eminent surgeons who visited the patient with him made the same remark.

The aspect of the case, as exhibited in the drawing, was equally strange to the medical gentlemen who gave evidence for the defence on Palmer's trial, and not one of the number could form even a guess as to the cause of the malady.

Mr. Nunneley rightly supposed that it was a case of "the malignant pustule of the continent."

A clue to its probable origin, apparently overlooked by these gentlemen, seems to me to be furnished by the *calling* of the patient. Two points in the history may be taken to be pretty sure. The first is, that the man was not inoculated with malignant pustule by the dog; the second, that, as the disease began in the injured part, its virus must have been subsequently received through the open wound. To complete the chain of evidence, we must remember that, in spite of the sore on his finger, the patient continued to work as usual. Now, plasterers are constantly handling *bullock's hair*, which is a large ingredient of mortar; and as bullock's hair is known to be a very common vehicle of the charbon virus, it seems to me to be highly probable that the wounded finger received the contagion from this source.

For the particulars of the second case, I am indebted to the kindness of Dr. Milner Barry of Tunbridge Wells; and I give them in his own words:—

"Mr. J. E., aged 47, a respectable *butcher* of this town, was apparently in perfect health on the morning of Sunday, July 14th, 1861. In the evening, as he was sitting with his family, he was observed to be picking at a little sore on his upper lip, a little below his right nostril. He had only then noticed its presence, having had his attention directed to the lip by a peculiar itching and tingling sensation, which compelled him to keep rubbing the sore spot.

"On Monday, July 15th, there was no change, and he did not complain of feeling ill.

"On the 16th, he went to Tunbridge market, a distance of five miles; and having returned home early, he went to the hay-field to see how his haymaking was get-

ting on. Thinking that his haymakers were working rather sluggishly, he scolded them for their idleness, threw off his coat, and set to work lustily, to show them a good example. It was a warm and rather moist day, the temperature in the shade being 73°. One of the men who was working next to Mr. E. remarked that he did not seem to get hot, or to perspire, from his exertions, although the sweat was pouring down his own face profusely. In the afternoon, Mr. E. felt ill, and went home and lay down, but was well enough to come down to tea. The lip continued to be itchy, and to tease him, but did not swell. He allayed the itching by bathing it repeatedly with warm water. He had a restless, uncomfortable night; but got up early next morning (July 17), and went off to the hay-field. After working there vigorously for an hour, he was compelled to give up and return home; and immediately went to his bedroom and called to his wife to help him to bed, for he felt very ill. When in bed, he said that he should never leave that bed again, and he proceeded to give directions respecting his affairs. His usual medical attendant was sent for, and noticed that he looked pale, and that there was apparently a little gathering in the lip.

"On Thursday morning, July 18th, the swelling of the lip had increased, and appeared to contain matter. It was lanced, but only a little reddish serum was discharged from the wound. The swelling increased rapidly during the day, and spread over the face; and by evening, the right eye was closed.

"On Friday, July 19, the lip was considerably swollen, and the swelling and discoloration extended completely over the face. The left eye was closed.

"On Saturday morning, July 20th, at ten o'clock, I saw him for the first time, in consultation with his regular medical attendant, an experienced surgeon.

"Mr. E. had been a handsome, well-featured man. He was now so frightfully disfigured that I could not recognise him. The face seemed featureless, swollen out of all shape and comeliness, and of a livid, purple hue. The upper lip was frightfully enlarged; the eyes were closed tightly; the eyelids were puffy, discoloured, and œdematous, and their edges crusted over with a gummy exudation. The swelling and discoloration affected the whole of the face, and all the anterior region of the head. He was propped up in bed, muttering deliriously; his hands trembling, his breathing hurried, the skin perspiring, the belly tympanitic, and the pulse so feeble and so frequent that it could not be accurately counted.

"Brandy and stimulants were freely administered; but he continued to sink, and he died about three hours after my first visit. The disease ran its course in seven days."

Three other cases, of which the particulars have been communicated to me, may be mentioned here as interesting in relation to the question of cause. The subject of one was a *tanner*; of another a *shepherd*, who had been engaged in tending diseased sheep; while a third was seized with malignant pustule in the *hand* immediately after being employed *in unloading hides*. In all three the disease was fatal. In the five cases which form the subject of this note, therefore, the circumstances not only pointed strongly to an animal origin, but brought the sufferers into actual contact with things which are recognised as common sources of the malady of which they died.

Of the cases related in the body of the paper, there were two in which the contagion was implanted by flies (a well known mode of communication), and one in which it was derived from contact with the carcase of a sheep that had died in a field. The callings of four other subjects were equally suggestive, one being a bullock jobber in a large way, another a great flock master, a third a provision dealer, and a fourth a shepherd. That is to say, in twelve out of thirty cases, *without any inquiry being once directed to the point*, the disease was ascertained to occur, under the circumstances, or in the conditions of life, in which the malignant pustule of the continent is known most to happen.

As it is impossible to suppose this to have been the work of chance, the only rational explanation of the fact is that these conditions and circumstances operated in developing malignant pustule in these twelve persons, merely by exposing them to the specific cause of the malady. Had the real nature and origin of the affection been suspected by the observer, contact with this cause would probably have been actually traced in many of these as well as in other instances.

As regards the probable intervention of flies in the propagation of the disease, it is worthy of mention that, with the exception of one case which occurred in the latter end of March, all the cases of malignant pustule of the face that have come to my knowledge have happened either in the summer or early autumn, and for the most part in dry, hot weather. The cases in which it has occurred in the hands (presumably from direct contact with the virus) have happened at various seasons of the year.

Lastly, it should be remarked that in the five cases which form the subject of this note, as in the twenty-five before related, the disease occurred in the only parts of the body which are habitually uncovered.

PUERPERAL ECLAMPSIA: BRIGHT'S DISEASE: AUTOPSY.

By Paul Belcher, Esq., Burton-on-Trent.

On January 1st, 1863, I was sent for to see Mrs. C. (a multipara), who was expecting her confinement daily; and had just had an epileptic fit. She had been taken quite suddenly; the fit had lasted about a quarter of an hour; and she was now recovering. The power of vision was quite lost; her pupils were natural but sluggish. She had violent pain in the head with throbbing. She had passed very little urine to-day.

She was ordered ten grains of calomel immediately; some jalap mixture every four hours; and twelve leeches to the head immediately.

The first fit was at about ten o'clock. At four o'clock, she had a second fit lasting a quarter of an hour; and was bled from the arm to faintness, losing about twelve ounces. At nine o'clock, she had a third fit, lasting twenty minutes. Shortly afterwards she had a turpentine enema, which acted well. Her head was ordered to be shaved, and cold bladders were applied. Her pulse was now 110, and she expressed herself as better, and had recovered her sight. The blood was highly buffed and cupped. Her urine was scanty, and highly albuminous. There were no signs of labour.

Jan. 2nd. She had had some sleep. Pulse 108. She complained of her tongue, which was much bitten. Her urine was scanty, and brandy-coloured. She was ordered to repeat the calomel at bedtime, and to have added to the mixture bitartrate of potash in half-drachm and spirits of nitrous ether in drachm doses.

Jan. 3rd. She had slept well. The bowels acted well, and she passed rather more urine, which was still highly albuminous, and showed casts of various sizes, some granular, others containing atrophied and fatty epithelium. Her pulse was 100. She was perfectly free from labour-pain, and thought she had a week to go.

Jan. 4th. She had slept well. The pulse was more thrilling and somewhat quicker. She complained of uneasiness as if labour were going to supervene. At 4 P.M., she was seized with another fit, lasting a quarter of an hour, followed by coma for a few minutes, and then by another paroxysm, again succeeded by coma. She was immediately bled to fainting, losing fifteen ounces in a

large stream. The bleeding seemed somewhat to have relieved the coma; but half an hour later a still stronger paroxysm occurred. During the fits, which were now incessant, I examined and found the os uteri soft and dilating, and could feel the membranes and shortly afterwards the head presenting. A sinapism was applied across the loins and along the spine. The pains, and synchronously the convulsions, became stronger and stronger; and, in a few hours from the commencement of labour, a fine female child was born alive. During this time I had tried chloroform fairly; it seemed to have no effect in controlling the convulsions, while I thought it rendered the pulse and respiration worse. More benefit appeared to follow the frequent splashing of ice-cold water on the face and breast, as recommended by Dr. Denman.

After the completion of labour she remained comatose, and within half an hour had the most violent convulsive paroxysm it has ever been my lot to witness. I again administered chloroform, and under its influence the paroxysm subsided, and she sank into a pleasant trance. As she came round, however, the fits returned, and I kept her gently under chloroform for two hours. She was now partially sensible; but in a few hours became lethargic and gradually comatose, while the pulse was fluttering and unsteady. She had a blister to the back of the neck, and was fed, as she could swallow, with beef-tea and brandy. Her pupils were neither contracted nor dilated, but they were insensible to light.

Jan. 10th. She remained much as in last report till to-day, when she was worse and evidently sinking. At times there would appear to be some improvement; but it was only temporary. She had taken beef-tea and brandy well till this morning; now she could not swallow. She died comatose and exhausted at 6 P.M.

Autopsy, twenty hours after death. There was very little subcutaneous fat; but the muscles appeared firm and healthy.

Head. There was slight adhesion of the dura mater to the frontal bone; no vascularity nor other sign of inflammation of the membrane. The brain was anæmic; its sulci were shrunken and grey matter pale. There was no effusion, and its consistence was natural everywhere.

Thorax. Both lungs were emphysematous, and there were adhesions on both sides. There was a slight excess of fluid in the pericardium. There was considerable hypertrophy of the left ventricle. The mitral valve was opaque and thickened; its free edges were roughened and granular. In other respects, the structure of the heart was healthy. Extending from the right auricle into the left ventricle and into the aorta was a firm decolorised clot as thick as an index finger, and six inches long.

Abdomen. The large intestines were much distended by flatus; the small contained fæces. The liver was enlarged, but not greatly; it was of natural appearance and not congested. The other organs were healthy, with the exception of the kidneys. The right kidney was atrophied; it weighed three ounces five drachms. The capsule was adherent, the surface mottled and granulated. The atrophy appeared equally in both the cortical and tubular portions. The left kidney weighed two ounces; it was lobulated like a fœtal one. Its capsule was adherent; its surface much granulated; its cortical structure almost and its tubular entirely obliterated. Under the microscope, the tubes of the right kidney contained atrophied and fatty epithelium with granular *débris*, while in the left neither tubes nor Malpighian corpuscles were fairly recognisable.

Pelvis. The uterus was normal in appearance; it contained a small coagulum. The plugging of the uterine sinuses was well shown. In the walls of the left ovary there was a small rudimentary cyst. The bladder was healthy, and contained urine.

Remarks. What is the value of albuminuria as a symptom in puerperal eclampsia? By itself, I believe, of very little; but if taken in connection with, and leading to, microscopical investigation, of very great value. It tells us that there is certainly deranged circulation in the kidney, and that there may be perhaps structural and permanent change there. Which of these two states is present is an important question; and if there be structural change, of what kind and to what degree are important questions; and though the test-tube cannot solve these matters, the microscope probably may. In the class of cases where the premonitory symptoms are more marked and come earlier under observation, the microscope is especially useful; for by its aid I believe a skilful pathologist may mark as surely the hidden changes of the kidney as he can by sight and touch follow the dropsy. This was, however, a somewhat sudden case, and one in which the urgency of symptoms, and the necessity of taking prompt action to meet them, lead one away from the slow but sure use of the microscope. There had been no dropsy, more than the ordinary œdema in pregnant women; no unusual degree of *malaise*, no vomiting, no sopor; a little pain in the loins, and a little frequency of micturition, but not more than usual towards the close of gestation. Yet this woman is suddenly taken with vertigo and blindness; has an epileptic fit; passes albuminous urine, and probably has passed it for months; and her autopsy shows an extensive and fatal amount of renal degeneration, which would never have been suspected but for the microscope, and which was not appreciated as it ought to have been, in consequence of the difficulty in obtaining urine for examination.

The case does not seem to elucidate the question of treatment much. Indeed, in the essence of the case, palliation was all that was possible; but it does seem to teach a very important practical lesson; namely, how important it is to differentiate cases of puerperal eclampsia; to find out the meaning of the albuminuria; and, in fatal cases, to ascertain, by inspection, the kind and degree and stage of kidney disease. Having done this, we place our cases on a basis which has something of the certainty of science, and we are in a position to be able—by comparing appearances during life and after death; by contrasting plans of treatment in similar cases and by distinguishing cases which are of necessity irremediable—to arrive at sure and logical deductions as to general treatment. I conceive that a given series of cases, where albuminuria has been simply noted, and no microscopical or *post mortem* details are given, is absolutely useless as proving the utility of a given plan of treatment. For instance, take bloodletting. Most persons would grant that if albuminuria is merely a result of congestion, and if it is not expedient to remove the cause of this (by delivery), bleeding would be an appropriate and logical remedy; but if, on the other hand, albuminuria is an indication of serious degenerative mischief, is this then so logical a remedy? For my own part, had I detected earlier the nature of the case, I should have been more sparing of the lancet. Again, supposing this case put into a series (reported in that loose way and without *post mortem* examination which we too often see) illustrative of the effects of a particular plan of treatment, say bleeding in puerperal convulsions, it would tell statistically against that plan, and most unfairly so, because it was a case the result of which could not have been altered by any remedial measures. It is probably not common for albuminuria in puerperal eclampsia to mean degeneration of kidney structures; but this one case proves that this may be its meaning; and I fear we must admit that, if the degree of degeneration is excessive, whatever plan we adopt—whether we are of the Todd school, whose theories are said by some to exert so baneful an influence, and whose *bête noir* is said (unjustly) to be bleeding; or whether we are of

that other school, whose antiquity at least makes it respectable—whether we bleed or whether we forbear—our result must be the same.

NOTES ON CROUP.

By W. H. Day, M.D., L.R.C.P.Lond., Newmarket.

Case I. *Recovery.* H. H., aged 8 years, with light hair and eyes, was first seen by me on the night of the 30th of March, 1861, at 10 o'clock P.M. According to the parents' account, he had a bad affection of the chest two years previously, from which he made a poor recovery. Any exposure to damp weather always brought on cough and cold. He was in his usual health till 4 o'clock on the day named, when he came in from his play complaining of an uncomfortable feeling in his throat. I found the boy sitting on his mother's knee, having an anxious and terror-stricken countenance, with characteristic breathing, and a barking, ringing cough. The inspiratory effort was long and difficult, and the pomum Adami rose and fell with respiration; the lips were dusky; the eyes swollen and bloodshot; and the alæ nasi active. The skin was hot and dry; and the pulse small, hard, and rapid. He repeatedly put his hand to his throat, and, in a deep hoarse voice, said he could not fetch his breath. The respiratory murmur was much diminished throughout the chest, and a loud sonorous *râle* attended it. No moist sounds were heard, and the child did not expectorate. He was put into a bed surrounded at the top and sides by curtains; and two pans of boiling water, into which heated bricks had been thrown, so as to generate a large quantity of steam, and literally to give the patient a vapour-bath, were included within the curtains. Similar pans were also scattered about the room, as there was no fireplace.* A mustard emetic was given, and a mustard poultice applied to the throat. A messenger was despatched for a mixture containing four grains of tartar emetic in an ounce and a half of water, one teaspoonful of which he was to take in a little water every ten minutes till free vomiting set in.

3 A.M. After two doses of the medicine he was excessively sick, and his breathing much improved. He had coughed up some shreds of false membrane and glairy mucus. The bowels had copiously responded to four grains of calomel given at 1 o'clock A.M. The skin was sweating, and the face was much more calm, and the pulse softer. He was very thirsty. He was ordered to be allowed to drink milk and water *ad libitum.* The antimony mixture was to be resorted to only in the event of a recurrence of difficult breathing.

6 A.M. The cough was still characteristic; and, once or twice since last report, the difficulty in breathing had returned; but a dose of the mixture excited vomiting. He threw up a long shred of false membrane, which afforded immediate relief. He was ordered to have strong beef-tea, and the vapour to be unceasingly kept up.

March 31st. He was doing well. He vomited occasionally, when he brought up "thick stuff", which clung to his mouth. He had had no medicine since last report.

April 1st. He was better. He had not expectorated to-day, and said he breathed much more easily. The tongue was clean, and the cough was less and looser; pulse 120. Sonorous and mucous *râles* were heard in the chest. The bowels were active. He was ordered to take two grains of calomel and six of jalap directly; and to have one tablespoonful of the following mixture every four hours.

℞ Vini ipecacuan. ℥ij; tincturæ hyoscyami ℥j; oxymellis scillæ ʒj; aquæ ad ʒvj. M.

* This admirable plan I first saw adopted by Dr. Wm. Budd of Clifton. Vide *Medical Times and Gazette*, June 19th, 1862.

On the 3rd, his pulse had fallen to 100 per minute, and he breathed and expectorated freely. On the 15th, hooping-cough set in, with a good deal of expectoration. On the 25th, he had much improved; but the congestion of the lungs, which had increased on the 15th, necessitated his keeping in the house for some weeks.

Case II. *Death on the Fourth Day.* A. R., aged 4 years, a fair and healthy-looking child, though very nervous and excitable, was seized with cough, hoarse voice, and dyspnœa, on the night of the 21st of February, 1862. He lived in a well ventilated cottage, and in a dry situation. The next day his mother requested me to see him. At my visit, he was reported to be better than he had been. His face was flushed, and there was great alarm in his manner and expression; the skin was hot and perspiring, and the pulse 120 per minute. The inspiratory effort was prolonged, and performed with some difficulty. In the chest, there were sonorous *râles;* and the air entered the lungs more sparingly than in health. Febrile excitement was well marked. He was put to bed; and a vapour-bath was constructed in the way just described. One-sixth of a grain of tartarised antimony, in a tablespoonful of water, was ordered to be given at once, and repeated every quarter of an hour till vomiting set in. He was sick after the first dose, and breathed easier. He continued calm through the day, having a brassy, distinctive cough. He was thirsty, and swallowed well, but refused all food. A mustard poultice was applied to the throat in the evening, and his mother was urged to get down beef-tea and milk and water. The mixture was to be given only in the event of the breathing getting worse. His bowels were well relieved after the vomiting.

February 23rd, 9 A.M. A messenger came to say that they supposed he was better, as he made no noise in breathing. I therefore deferred my visit till 2 o'clock, when I found him breathing much more croupal; his cough being more frequent and ringing, and his respiration laborious and painful. There was great activity about the larynx, and the carotids beat strongly. A mustard poultice was applied to the throat, and one grain of calomel given every four hours. He had been very sick during the night.

8 P.M. He was sleeping soundly, but made a great noise at every inspiration. The cough was frequent, brassy, and choking; pulse 140. There was slight stringy expectoration. The skin not being red from the mustard poultice, another was applied. He was ordered to take the mixture until he was again sick.

11 P.M. The breathing had much improved since the vomiting. The bowels being sluggish, three grains of calomel were given; which not having the desired effect, an enema of gruel with beef-tea was used. Nourishment was ordered to be given at short intervals.

February 24th. Since 4 A.M. he had become worse; the pulse was 160 per minute, very small and weak; the crowing and hissing sound in respiration were increased. There were great pallor of the face and lividity of the lips.

8 P.M. He had varied through the day, one hour improving, and the next becoming worse. The cough was very brassy and incessant, but nothing was dislodged. The countenance betrayed the most painful anxiety; pulse 120, feeble; respiration 48 per minute. He was constantly turning about, and threw his head back towards the spine, as if in dread of impending suffocation. There were no moist sounds in the chest. He became gradually worse, and died at 12.30 P.M., having drunk a large cup of milk half an hour previously.

Post Mortem Examination, twelve hours after death. On opening the larynx and trachea, three long and narrow pieces of lymph, one upwards of two inches in length, and the other nearly as long, were found between the lower border of the cricoid cartilage and the last rings of the trachea. Near the upper border of the

cricoid cartilage, some small fragments of lymph were deposited. The mucous membrane was every where red, and in places vividly so; but there was no evidence of submucous effusion. The morbid appearances were mostly characterised by the false membrane that existed in the tube, and especially near the upper border of the cricoid cartilage.

Case III. *Death on the Eighth Day.* E. A. S., aged 3 years, a lively and intelligent child, was ailing with feverish symptoms some few days before the 18th of May, 1862, when she complained of a sore throat, for which an alterative and aperient dose was prescribed. On the 19th, she was no better. On the 20th, her breathing was harsh and suspicious of croup. On the 21st, at 8 A.M., she was flushed and disturbed; inspiration was prolonged and sonorous; expiration was short, and unaccompanied with perceptible noise; the bowels had well acted, but the motion was dark and offensive; the skin was hot and perspiring; and the pulse rapid and thrilling. The vapour-bath was ordered immediately, and one-sixth of a grain of tartarised antimony was administered in a tablespoonful of water. This was followed by great vomiting, and the rejection of a long piece of false membrane at least two inches in length, and a good deal of muco-serous matter. The child was much relieved, and breathed easier. At 9 P.M., she breathed tranquilly; the bowels had again acted. She was ordered to take one grain of calomel and two grains of compound ipecacuanha powder every four hours. Chicken-broth frequently, milk and barley-water to allay thirst, were allowed.

May 22nd. She slept noiselessly during the night, and was certainly improved this morning; but the breathing was still croupal, and the face was flushed and somewhat distressed. The bowels had acted once during the night. There was much restlessness. Sponges wrung out with hot water were ordered to be applied to the throat; the powders to be omitted; and the nourishment persevered with.

May 23rd. There was decided improvement in breathing, but the cough was characteristic; the pulse was quick and small.

May 24th. Since last report, she had much improved, and this afternoon she played with her toys, and breathed tranquilly. I expressed a belief that she would recover.

May 25th. She became worse during the night, and at 7 A.M. her breathing was most embarrassed. The face grew dusky, and depicted agony; the muscles and veins of the neck became very prominent; the larynx rapidly rose and fell with respiration; and the pulse, small and flickering, soon ceased to beat. The little sufferer died asphyxiated at 4 P.M.

Post Mortem Examination, seventeen hours after death. The body was very livid throughout, and the veins in the neck were much distended. As soon as an incision was made in the trachea, a large quantity of thick purulent matter escaped. Beneath the thyroid cartilage was a long thin piece of croupal exudation. The mucous membrane was not very red, except in isolated patches, without a trace of ecchymosis. At the lowest part of the trachea, pus oozed out; and especially was this the case when pressure was exerted on the thorax. This unmistakably proved the extension of the disease into the lungs. From the *post mortem* examination, there can be no doubt that the morbid appearances mainly took place within twenty-four hours, as the child was playing and amusing herself on the previous day.

Case IV. *Recovery.* C. H., aged 6 years, a thin and pallid child, woke up with symptoms of croup at 10 P.M. on November 17th, 1862, having gone to bed apparently well. He was thought to be out of order for a day or two before, but had not been heard to cough; nor did this trifling derangement awaken any anxiety, as he frequently ailed. He had gone to church in the morning. I found the little fellow sitting up in bed in a cold room, without any fire, his breathing decidedly croupy. His voice was hoarse, and he cried and sobbed immoderately. His countenance was flushed, and betrayed alarm; his pulse sharp and accelerated; and his general state feverish. The larynx rapidly ascended and descended with respiration; and there was a small amount of air entering the lungs, as revealed by auscultation. A fire was at once kindled, and the vapour-bath employed. One quarter of a grain of the potassio-tartrate of antimony was given in a tablespoonful of water, to be repeated in ten minutes, if necessary. After the first dose, he vomited; but, as the vomiting was not free, and his face was much flushed, the dose was repeated. He soon coughed up thin adhesive glairy mucus, without a trace of pus. His skin became moist and cooler, and his breathing much easier. His friends thought all danger had departed. The bowels had not acted for two days. He was ordered milk diet, a mustard poultice to the throat, and a powder containing two grains of calomel and two of antimonial powder every four hours, till the bowels well acted.

Nov. 18th, 10 A.M. He continued to breathe better, but there was still a croupy sound, and the brassy metallic cough. He had raised a good deal of mucus and glairy matter during the night. He slept at intervals of an hour or two. Pulse 140.

8 P.M. The bowels had copiously acted, the motion being dark and offensive (he had had four powders). When the temperature in the room accidentally became lowered, or the air dry, the embarrassed breathing returned. Pulse 120. He was ordered to have strong beef-tea, and no medicine.

Nov. 19th. He was still improving. He slept six hours, and breathed tranquilly during the night. The expression was more calm, and the voice clearer. There still existed the peculiar cough, and some slight bronchial irritation.

℞ Oxymellis scillæ ʒj; vini ipecacuan. ʒss; aquæ ad ʒij. M. One spoonful to be taken every four hours.

Nov. 20th. He was doing well, and had no return of the bad symptoms.

Nov. 22nd. He looked very pale and exhausted; and the motions were dark, scanty, and scybalous. The appetite was good; the tongue was coated with a creamy fur; and the pulse was weak. The cough had vanished. He was ordered boiled mutton and a light pudding daily; and to have three times a day five grains of bicarbonate of soda and five minims of aromatic spirit of ammonia in water; and twice a week a powder containing six grains of rhubarb and two of hydrargyrum cum cretâ.

He continued to improve, and soon took the syrup of the iodide of iron, which rapidly got up his strength.

Case V. *Recovery.* S. W., aged 2¼ years, strong and healthy, with dark eyes and hair, was seized on the morning of February 16th, 1863, at 11 A.M., with croupal symptoms. She became worse during the day; and at 8 P.M., I was sent for. I found the child flushed and excited, with a quick and hard pulse, hot skin, and hurried breathing. She frequently put her hand to her throat, pointing to the larynx as the seat of uneasiness, tossed about her head, and was very restless. She had a short, dry, and brassy cough, and her voice was deep and hoarse. A vapour bath was kept up, as in the previous cases, and the sixth of a grain of the antimony was given in two teaspoonfuls of water at once, and ordered to be repeated every quarter of an hour till vomiting set in. The first dose was effectual.

February 17th, at 7 A.M., I was summoned to find my little patient much worse; the cough was more frequent and brassy, and the dyspnœa was urgent. The countenance was bloated and distressed, the lips dusky, and the surface of the body bathed in sweat. Another dose of the antimony was at once given; and as the bowels had not acted lately, it was to be followed with three

grains of calomel. The vapour was to be assiduously kept up.

4 P.M. There was no improvement. An hour since her parents thought her dying. When apparently convulsed in a paroxysm of cough, she threw up a large layer of false membrane, of considerable thickness, after which she breathed tranquilly for about an hour, when the bad symptoms returned. The bowels had acted five times. The mixture was ordered to be repeated only if difficult breathing returned. Beef-tea and strong broth were allowed frequently.

11 P.M. She had coughed up croupal exudation three times since my last visit at 4 P.M. She now breathed quietly, and her cough was less.

February 18th. She had slept well, and woke up once only during the night with cough. She made a good recovery from this time.

REMARKS. The foregoing cases with others not now recorded, appear to me to establish the following conclusions.

1. The vapour-bath is indispensable in the treatment of croup, and should be used at the commencement in every case, and continued unremittingly until all fear of a relapse has departed.

2. All cases of croup, no matter at what stage seen, are invariably relieved by the vapour-bath.

3. The earlier that a case comes under treatment, the greater the probability of a successful termination, by preventing the tracheal secretion becoming organised.

4. The most trying difficulty we have to contend with in the management of croup is a relapse, because with it comes exhaustion; and the weaker the patient, the less probable chance of recovery.

5. Tartarised antimony is our sheet-anchor as a medicinal agent; not so much from any specific effect it exerts on the tracheal membrane, as from its certainty in effecting free and speedy vomiting.

6. Tartarised antimony should only be given for the purpose of procuring vomiting; that failing, it is comparatively useless; because, if continued in small doses at intervals, its depressing effect is too great, and its emetic effect is not always certain.

7. When the emetic has fully operated, if there be much febrile excitement and disordered primæ viæ, which aggravate the laryngeal symptoms, a grain of calomel every four hours, or one full dose for the purpose of emptying the bowels and controlling the fever, will be found necessary.

8. When in a case of croup, seen at an early stage and satisfactorily progressing, forty-eight hours have elapsed, we may generally augur a favourable termination, and we should then begin, if not before, to support our patients with good beef-tea, milk, and arrowroot, and (it may be) a little wine and water.

9. A great number of cases of croup terminate fatally by sheer exhaustion, or by severe spasmodic action of the trachea and larynx, with very trifling morbid change in the parts affected.

10. The operation of tracheotomy is seldom admissible, and only in those cases that threaten death by asphyxia; because fatal symptoms often supervene when scarcely any false membranes exist in the tracheal tube, and it is in proportion to their extent that the operation is most warrantable.

PREPARATION OF NITRIC ETHER. M. Persoz (*Comptes Rendus*) uses two parts of the strongest and purest nitric acid and one part of absolute alcohol, both cooled by the application of ice. The alcohol is slowly added to the acid, and the two are continually shaken. The ether is produced immediately. He operates on small quantities at a time, and when the reaction is finished adds a small piece of ice. The ether is purified in the ordinary way. (*Chemical News.*)

Reviews and Notices.

ON RUPTURE, INGUINAL, CRURAL, AND UMBILICAL; the Anatomy, Pathology, Diagnosis, Cause, and Prevention; with New Methods of Effecting a Radical and Permanent Cure. Embodying the Jacksonian Prize Essay of the Royal College of Surgeons for 1861. With Numerous Illustrations. By JOHN WOOD, F.R.C.S.Eng.(Exam.); Demonstrator of Anatomy at King's College; Assistant-Surgeon to King's College Hospital; etc. Pp. 326. London: 1863.

THE appearance of this book may be regarded as an event of note in the history of hernia. For it is a new thing in surgical literature to meet with a volume of goodly size, having hernia as its subject, and written by a surgeon of ability and experience, in which the author, after describing the anatomy of the parts concerned in hernia and the mode of its production, does not straightway lead the reader to the consideration of strangulation and all its perils, and of the necessary operations. Mr. WOOD's object lies quite in a different direction; it is to show how the physical conditions favouring the production of hernia may be removed, and how, consequently, the possibility of its reaching that dangerous stage which has hitherto formed the main point of attention for surgeons may be obviated. He is not, indeed, the inventor of the radical cure of hernia; nor is he the first surgeon who has written on it; but to him is due the merit of putting into shape our present knowledge of the subject, as derived from all sources, while at the same time, from his own practical experience, he has in no trifling degree contributed his share towards endeavouring to make the proceeding safe and successful.

The book is, as its title-page implies, divided into three parts, in which Inguinal, Crural, and Umbilical Hernia, are respectively treated of. In the several sections into which each part is divided, the subjects described are, in general terms, the anatomy of the parts concerned, the causes, pathology, and diagnosis of the kind of hernia under notice, and the various means adopted and advisable for the radical cure or prevention of the rupture.

The principal feature of the work is, of course, the description of the operations for radical cure; but, before noticing what Mr. Wood has to say on this matter, we must not omit to commend his preliminary remarks—on anatomy, causes, and pathology—for their fulness of information. The section on the Causes and Pathology of Inguinal Hernia, especially, contains important remarks on the different forms which the hernial sac assumes, and on the various conditions of bodily conformation under which hernia occurs, and which are likely to modify the success of operations undertaken for its cure.

Mr. Wood begins his remarks on the radical cure of inguinal hernia by an historical notice of the proceedings which have, even from the times of Celsus and Galen, been followed in order to fulfil this object. He shows how, for many centuries, attempts to cure hernia radically have been made both by recognised practitioners and by charlatans; the operations devised, however, being generally inefficient or dangerous. Among modern surgeons, the plans adopted may be classed under two heads:

"*First*, those which deal with the interior of the sac only, with a view of causing adhesion of its opposed surfaces to each other. This has been attempted in various ways—viz., by a simple seton of threads, candlewick, or sponge, passed through the sac by a needle or other instrument. Such are, briefly, the methods practised by Schuh of Vienna and Riggs of New York. Belmas of Paris passed into the interior of the sac a bag of gold-beater's skin, which was then distended by jelly, with the same object; proceeding upon the principle of the radical cure of hydrocele. M. Velpeau in Paris, and Professor Pancoast in New York, injected into the sac a solution of tincture of iodine or cantharides." (P. 80.)

"The *second* class of operations are those which follow the method of invagination of the skin and fascia of the scrotum, to plug up the hernial canal. Upon this principle are founded two operations; one, practised by Signoroni and Gerdy, and followed considerably of late years by different surgeons in this country, with various unimportant modifications; and another, originated by Wurtzer of Bonn, and followed by Rothemund in Munich, Sigmund in Vienna, and by Spencer Wells, Redfern Davies, and others, in this country." (P. 81.)

To both these plans Mr. Wood points out objections, which at least should be carefully considered by surgeons. The first method—that of producing adhesion of the surfaces of the sac—does not narrow or close the canal through which the sac has been protruded; and hence it "will not prevent the formation of another sac from the abundant and loose peritoneum at the internal opening". The second plan—that of plugging the canal by invagination of the skin—is also liable to failure from two principal causes. If, on the one hand, simple invagination be performed (as in Gerdy's plan), and adhesion be simply obtained at the anterior part of the inguinal canal, a fold or *cul-de-sac* is left posteriorly, into which a portion of bowel may at some time find its way. On the other hand, the attempt to produce adhesion around the entire circumference of the neck of the sac (as by the plug in Wurtzer's operation) is also regarded by the author as futile, unless nothing less than severe inflammation and sloughing be produced; and he holds further, that the plug, so far from doing good, actually dilates the inguinal canal, so that, when the hernia returns, a larger protrusion than before takes place.

Having stated his objections to the operative procedures commonly adopted, Mr. Wood next proceeds to describe the operations which he has practised, and the principles on which they are based. He aims at closing, or at least narrowing, the inguinal openings and canal, by drawing together and producing adhesions of its tendinous walls as far as the inner opening; of course without producing undue pressure on the spermatic cord. For a full description of the operations followed by the author, we must refer to the book itself. They are all performed subcutaneously; and

"In all, the main principle of securing the conjoined tendon with the posterior and superior boundaries of the canal on the one hand, and the anterior and inferior walls up to Poupart's ligament on the other, is adhered to."

In his operations on ordinary inguinal hernia, Mr. Wood at first used hempen thread, by which the parts were drawn together; the ends of the thread being fastened over a compress laid along the inguinal canal. Subsequently, however, he has substituted stout silvered copper wire for the ligature, and has dispensed with the compress; merely placing a piece of lint between the skin and the arch formed by the twisting together of the ends of the wires. In congenital hernia, and in certain cases of hernia in children and young bodies, Mr. Wood uses rectangular pins, such as are employed in the treatment of varicose veins and varicocele. The pins are applied in such a manner as to produce the effects desired; their action being favoured by the circumstances that, in the cases in which their use is indicated, "the hernial canal is usually narrow; the internal opening often contracted; and the sides elongated so as to retain much of their valve-like action, and so flexible and yielding as to admit of approximation in their entire length."

Mr. Wood proceeds next to consider the *Modus Operandi* of the Operations practised by him; and also the Causes of Failure and Danger. The latter are candidly put forth; and many of them are shown to be capable of being obviated or avoided by the exercise of care and judgment on the part of the surgeon. The danger to life is very small. In sixty cases described in the appendix to Mr. Wood's book as having been operated on by him, one death only occurred; and that was from pyæmia—a disease which may follow even the simplest surgical operation.

As to the success of the operation, Mr. Wood estimates that, putting aside doubtful and imperfect cases, and making allowance for future casualties and imperfect records, the proportion of successful cases in his hands has amounted to sixty-five or seventy per cent. Even in the cases where he has failed in effecting a complete cure,

"In none has the rupture returned to the full size which it had attained before the operation. In none has the rupture been rendered irreducible or become strangulated; and all can wear a truss with more comfort than before the operation." (P. 164.)

The author's observations on Inguinal Hernia are concluded with a chapter on Trusses.

Our space does not permit us to analyse Mr. Wood's instructive remarks on Crural and Umbilical Herniæ, contained in the second and third parts of his book. One hint which he throws out we must, however, quote, as deserving consideration.

"It is, I think, a question which may be fairly entertained, whether, after an early operation for strangulated hernia of both the inguinal and crural varieties, where there is little expectation of inflammatory action in the bowel released, wire sutures may not be advantageously employed in drawing together the edges of the tendinous opening, denuded and severed by the incisions, and so accomplishing a radical cure by the same operation. This might be done with still less risk in cases where the operation is accomplished without opening the sac; since in these instances the small chance of mischief which may be expected to result from an implication of this offset of the peritoneum may be taken away by returning the sac within the abdominal parietes. This may usually be done with great ease in cases of crural rupture of moderate size and duration. It need hardly be said that the advantage of obtaining a radical cure, which so rarely, if ever, follows from the operation for strangulated hernia as usually completed, is, in favourable conditions of the patient, amply worth so small an increase of risk as might ensue from symptoms so slight as those produced by the application of wire sutures in this way in the great majority of the cases." (Pp. 222-3.)

The "radical cure of hernia" is now fairly on its

trial; and, while we must not be over-sanguine in pronouncing a positive opinion of the success of the means which have lately been adopted with this object, we must acknowledge that these means promise very encouraging results. Among the methods adopted, Mr. Wood's plan seems specially founded on common sense; but time and observation will be required to determine its positive merits, great as these even now appear to be. His book has been honoured by receiving the Jacksonian prize of the Royal College of Surgeons; but, even though it had not received this mark of professional approbation, it would not have been the less worthy of a welcome reception by every surgeon. It is, in fact, a book which at once must take its place by the side of the works of Lawrence and other writers on hernia; with this advantage in his favour, that it shows how to prevent those evils and dangers, the remedying of which has generally formed the chief features in treatises on the same subject.

Transactions of the Obstetrical Society of London. Vol. iv. For the Year 1862. With a List of Officers, Fellows, etc. Pp. 338. London: 1863.

This volume contains forty-one contributions of various length and importance, interspersed among which are eight plates and six woodcuts. The regular appearance of the reports of the Obstetrical Society in this Journal renders it unnecessary for us to analyse the book: we will therefore merely say, that we think the members get a very fair return for their subscription. If a judgment may be formed from the number of Fellows admitted at each monthly meeting, the Society is in a very prosperous condition.

A Manual of Human Physiology, for the Use of Non-Medical Students; with an Appendix of Questions from various Examination Papers, including those for the B.A. London for the last ten Years. By John Shea, M.D. Pp. 240. London: 1863.

This is a popular work on Physiology; and, as such, we can recommend it to attention, both for the good intention with which it has been undertaken, and for the general correctness of its details. The leading facts with which non-medical persons should be acquainted, in regard to the structure and functions of the body, are expressed in sufficiently clear language.

Prevalence of Small-Pox. Several registrars, both in England and Scotland, note the prevalence of small-pox. A person died of it in Edinburgh, and his clothes were sent to Dunbar to be washed; at this latter place vaccination had been greatly neglected, and the result was that small-pox spread over the district. On the other hand, the registrar of Sandwick (Orkney) has reported that small-pox was introduced there in the winter by a family of immigrants, but the infection did not spread; the minister has for thirty years vaccinated all the children, and in that period no native of Sandwick is known to have had small-pox either at home or abroad, except (if it can be called an exception) the child of a stranger which brought small-pox into the world with it.

British Medical Journal.

SATURDAY, MAY 30th, 1863.

MEDICO-CLERICAL PROSECUTIONS.

The Rev. E. Harston, vicar of Poole, having constituted himself judge and accuser of Mr. White, Poor-law medical officer of the Sherborne district, writes to the Board of Guardians, complaining of Mr. White's treatment of the case of a pauper who died. The Board decide, after hearing the matter, that there are no grounds for further investigation on their part. The reverend and pertinacious gentleman, however, is not to be done out of his desires. He, therefore, next tries his luck with the Poor-law Board; and in a letter of complaint to that Board boldly states, amongst other things, that the pauper's death was the result of Mr. White's neglect. This letter, we may observe incidentally, has been judged libellous by Mr. White, who has very properly brought an action against his reverence, which action is to be tried in London. In the meantime, the Poor-law Board send down their inspector, Mr. Cane, to investigate the affair; and the report of the inquiry conducted by him makes it perfectly clear that Mr. White is in no way whatever to blame in this matter; and that the Rev. E. Harston had been all along—we must suppose conscientiously—engaged in doing an injury to an innocent man. The case is shortly as follows:—

"A poor patient is under Mr. White's charge for one week only. In that period, according to the evidence both for the prosecution and defence, the medical man sees the patient at his surgery once, his wife twice; supplies him with medicines, visits him at his house on Tuesday afternoon, on Friday evening, and on Saturday morning as early as half-past six, and yet is charged, not simply with inattention and negligence, but with having caused the death of his patient."

We sincerely trust that in the forthcoming action no legal manœuvres may prevent good and effectual damages being given to Mr. White for this unwarrantable attack. Our chief reason, however, in referring so especially to the matter, is because here again, as usual, we find a "medical brother" ready and willing to come forward and hit his "brother" in distress. The vicar had no difficulty, it appears, in finding a medical backer. We read in the report of the inquiry that one

"Dr. Highmore here came into the room, and was asked if he was a witness. He said he didn't know. 'Because, if you are,' said Mr. Melmoth, 'you must retire.'"

Unlike the stupid and prejudiced coroner of whose doings in a midland district we sometime since had occasion to speak, Mr. Cane very wisely refused to permit any unseemly medical squabbling about methods of treatment to be dealt out in the court to

the prejudice of Mr. White; and thus effectually closed the expression of any learned opinions by Dr. Highmore aforesaid.

The words of Mr. Cane are well worth recording; and we trust the lesson they inculcate will not be lost on all medical men of a prosecuting turn of mind:—

"The Inspector said the main issue in this inquiry was not whether there was, professionally, proper or improper treatment; but whether the man was attended duly, punctually, and carefully, and to the best of his skill and ability, by Mr. White. He was not going into the question whether proper medicines were given, because these were questions which he was not competent to deal with. He did not want the opinion of a physician. He apprehended it would be very difficult for any one who never saw the man Crocker to say whether the medicine was proper or not. What he wished to find out was, whether Mr. White discharged his duty to the best of his ability.

"Mr. Harston said: Mr. White said in his letter to the Board, 'I sent him four croton-oil pills.' That appeared an extraordinary medicine for a man in an extreme state of weakness and exhaustion.

"The Inspector: I think I should at once say I shall not take evidence on that point. It would be a vague, and I believe an unprofitable, inquiry. Therefore, if this gentleman wishes to stay he may, but I don't propose to take his evidence. [Dr. Highmore remained; on one or two occasions prompting the vicar.]"

From this it appears that Dr. Highmore had no opportunity of being openly demonstrative against his brother in distress. His talents were reduced to the prompting of, we suppose, his patron or friend the vicar. Nevertheless, from Inspector Cane's remarks, we must infer that the doctor was ready to pick holes in the treatment of Mr. White; and no doubt to exhibit to the world of Sherborne his superior knowledge and scientific qualities. Even the pretty significant hint of Inspector Cane that "he did not want the opinion of a physician", was not sufficient to bring this gentleman to a sense of the figure he was cutting in this court of inquiry. The case, however—the promptings of the vicar by Dr. Highmore notwithstanding—against Mr. White utterly broke down; and so left the prompting doctor without a shadow of an excuse. We are really astounded, after the late universal expressions of medical opinion, that members of the profession should still be found ready and willing to appear in such a character as that of medical prosecutors. What must be the state of the conscience—we will not say of the heart—of men who thus come forward to assist, by the aid and light of their medical knowledge, a non-professional public, and a malevolent (it may be) prosecution, in inflicting an irreparable injury on an innocent man?

We have no hesitation in saying that Mr. White is utterly without blame in the matter brought against him. We have known better men than even Dr. Highmore can be, overlook for weeks together the existence of diabetes; and for any one to blame Mr. White for having done so during one week is simply to commit a gross injustice and to be guilty of gross presumption. What makes this persecution of a medical practitioner still more cruel, is the fact (if we are rightly informed) that Mr. White is an old man, and one on whom the gifts of fortune have not been bountifully bestowed. It would seem that Mr. White was, nevertheless, an independent man, and had the courage to resist the petty overbearing even of this vicar; and this was, we believe, his unpardonable offence.

We cannot close these lines without reproducing some excellent remarks on the subject from the *Sherborne Journal*. We strongly recommend their perusal to all members of the profession who are inclined to earn for themselves the unenviable distinction of assisting in "hitting an innocent brother in distress":—

"Are medical men prepared to submit their every act, both of the hand and the mind, to the scrutiny of adverse investigation? Is, for instance, a union surgeon, with seventy or eighty patients on hand, or a physician in large practice, content that every one of his cases shall be sharply scrutinised, his mode of treatment stated, and, if necessary, justified; his medicines collected by some busybody, and sent off for analysis; and his reputation be left dependent upon the adverse circumstances that thus might be collected against him? Where is the practitioner who claims that he is free from error? Where is the mortal that never made a mistake? Let us see him—the greatest prodigy of any age. This inquiry disclosed a very remarkable rebuke to those gentlemen who insist on setting up for others a higher standard of duty than they attain unto themselves. One of the imputations, and to our minds the gravest, cast upon the medical officer, was that his medicines were not medicines but nauseous draughts. His accuser came armed with a great charge against him, that he had dispensed garlic water to the poor; but it turned out that the accuser himself was ignorant of the composition of the very stuff that he held in his hand. Now, ought not this simple fact to be a caution? Here was the vicar of a parish—the head and chief of the national school—a gentleman who must be supposed to be well educated, and who, standing as an accuser, ought to have been especially careful and well-informed upon the subjects that he had chosen to concern himself with—who is yet ignorant that garlic and assafœtida are not the same thing! No one would desire to throw the shield of favouritism over men entrusted with the lives of the poor; but we claim for them, in the discharge of their onerous and too often unthankful duties, a freedom from petty annoyances and hinderances, and that they shall be fairly and reasonably judged. A Poor-law surgeon has much to contend with. Sometimes, on the one hand, he has the screwy guardian, whose only care is the rate, to deal with; at another, the crafty and never contented pauper, who has beaten them in and out of the house and at the hospital, and has defied every medical man to say whether he was 'shamming' or not. Occasionally he is pestered with some well-intentioned but troublesome old maid, who will insist on knowing more about medicines than modern doctors. He may happen to be so unfortunate as to draw down the wrath of the parson or the squire, because he has not paid special attention to a favourite domestic; and if he be too attentive to a particular patient, he may rely on being the subject of tattle and insinuation from her neighbours. His responsibilities are great; but in proportion to his responsibilities and his trials should be the measure of Christian charity dealt out to him."

"WHO TO CONSULT": ITS ETIOLOGY.

A book lies before us, bearing on its frontispiece the ungrammatical title, "*Who to Consult*," etc. It is a novelty in its way—"the last new thing of the season". We find in it a .publisher's address, an author's preface, and an editor's remarks. "Publishers of medical literature in many shapes", they (the firm) are often asked by anxious invalids, not *whom*, but "*who* they should consult". Hence, say they, is demonstrated the want of such a book as this. To supply the want, the philanthropic publishers apply to "a highly distinguished member of the medical profession, well qualified, etc.", for getting up the article required; and we hope they paid him well, notwithstanding his ignorance of grammar. The author, of course, in his preface, "lets on" about the use of such a guide to "suffering humanity"; but, notwithstanding the philanthropic character of his work, he does not care to put his name to it. He is too modest. At all events, here is a great opening, capable of considerable development in the advertising way. The right man can here be set down in the right place. Future editions of the list of consulting men, etc., are promised; and it may be a worthy ambition with those who like to occupy a prominent position before the public in the advertising columns of public prints, to secure for themselves their proper place in this authentic document of the Rights of Doctors. No doubt the publishers and the author are reasonable individuals, and will give to each such ambitious man an opportunity of showing his claims to a prominent position as a curer of disease. Thus, for instance, if Dr. F. thinks himself aggrieved that his name should be placed after Dr. S. as a curer of obstetrical diseases, let him lay his claims before this court of appeal—the publishers and their "distinguished author"; and he will doubtless get justice. We expect, indeed, to find the list considerably altered in the next edition. Indeed, any gentleman, whose name has been accidentally omitted, is requested to communicate with Mr. Blank, the editor, and he shall have justice done him in the next edition. We cannot, indeed, understand the object of the thing, unless we regard it as a homage paid to the medical advertising tendency of the age. That a lot of vagabond touters, who seize on "suffering humanity" on its ascent from a Boulogne steamer after a rough passage across the Channel, are of some sort of service in conducting the sick cockney to the Lion d'Or, etc., we can readily understand; but we certainly have yet to learn that patients require the aid of publishing touters to put them in the way of ascertaining whom they should consult in London.

All of us can, no doubt, appreciate at their true value the philanthropic sentiments of medical publishers when displayed in the pursuit of their special business. Such displays are so common and notorious; and we can equally reckon up the value of the philanthropic sentiments of the "highly distinguished member" of our profession, who places his pen at the service of the publishers. We understand all this well enough. But there is, we apprehend, a moral to be drawn from the fact. Wherever there is a supply, in this commercial country, there is generally a demand. And we would, therefore, venture to suggest that a book of this nature is in no small degree an actual reflection of the moral tendencies of the profession itself. It is all very well for high and successful men of medicine to cry out in virtuous indignation at any specially outrageous and overt act committed against professional decorum; but we would suggest that they would play a much higher part on the stage of virtue, if they would cry out against those less marked, but equally indecorous, professional acts daily committed in the advertising line by what the publishers of this book would call "highly distinguished members of the profession." Our belief is that when keen medical publishers, in the way of trade, produce an article of this kind, they consider they are supplying an article for which there is a demand. If, therefore, there be any dirty linen which requires washing in such a matter as this, we would recommend that the bleaching process should be commenced within the profession itself. The virtuous indignation of an outraged profession should be directed, not so much against those who satisfy the abnormal tendencies of the profession, as against those members of it who create the abnormal tendencies. We suggest this view of the case to our brethren, as being a reasonable explanation of the etiology of this last medical abnormity. Need we add to medical practitioners, that "*sublatâ causâ, tollitur effectus?*"

THE MEDICAL COUNCIL.

The Medical Council commenced its meetings for the present year on Monday last. The only change which has taken place in its members is, the substitution, as representative of the Glasgow Faculty of Physicians and Surgeons, of Dr. J. G. Fleming in place of Mr. Watt, who resigns in consequence of long continued indisposition.

On Monday, various committees were reappointed; after which Dr. Andrew Wood proposed, and Dr. Alexander Wood seconded, a motion for the admission of reporters to the meetings. To this two amendments were proposed; one, by Dr. Allen Thomson, to appoint a committee to draw up a plan for the publication of reports of the proceedings; and the other by Sir C. Hastings, that reporters from the press should be admitted when the General Council exercises functions as a court of judi-

cature relative to the admission of persons to, or their rejection from, the *Register*. On being put to the vote, the question that the original motion be amended was negatived by 12 to 11; and the original motion itself was then also negatived by a similar numerical majority.

A letter from the Home Office was read, stating that the Lords Commissioners of the Treasury approved of the distribution of 2000 copies of the *Medical Register* to certain public offices, at a cost not exceeding £300 *per annum*.

The president was requested to propose to the Council a design for a common seal.

On Tuesday, the Council exercised its judicial functions with regard to the admission of certain persons to the *Register*, or their removal therefrom. Among other things, the Society of Apothecaries was recommended, in answer to a question submitted by them to the Council, not to admit Richard Organ to examination, as "his name was erased from the *Medical Register* on the ground that he had endeavoured to procure a license from Edinburgh by personation." The Registrar was also directed to remove from the *Register* the qualification of Mr. Robert J. Jordan, of George Street, Hanover Square, as a member of the Royal College of Surgeons of England. The name of Samuel La'Mert was also erased *in toto* from the *Register* on the ground,

"That it has been proved to the satisfaction of the Council, that Samuel La'Mert, a registered medical practitioner, has been guilty of infamous conduct in a professional respect: 1. In publishing, or causing to be published, an indecent and unprofessional treatise entitled 'Self Preservation; a popular Treatise on the Cure of Nervous and Physical Debility, Spermatorrhœa, Impotence, and Sterility, resulting from the Secret Habits of Youth; the Excesses of Mature Age, and the Debilitating Effects of Tropical Climates.' 2. In having falsely pretended, both on the title-page of the said treatise and by advertisements in the public newspapers, that his son Lima Abraham La'Mert, a Licentiate of the Royal College of Physicians of Edinburgh, was a joint author and publisher of the said treatise."

A Report was received from the *Pharmacopœia* Committee: and with it were laid before the Council proof sheets of the whole *Pharmacopœia*, with the exception of the preface and appendix. The Committee concluded their report by stating that they could confidently predict that the National *Pharmacopœia* will be published not later than October next.

THE WEEK.

Between five and six years ago, seventeen persons were poisoned at Bradford by eating peppermint lozenges in which arsenic had been mixed by mistake, instead of plaster of Paris, with which the maker had intended to adulterate them. In the same town, arsenical poisoning by misadventure has again taken place, but, it is to be hoped, not with fatal results. A chemist, it would appear, sold cream of tartar with which arsenic was accidentally mixed. A family, who took some of this cream of tartar with magnesia, were seized with signs of arsenical poisoning. Arsenic was discovered in their vomit, and in the powders taken by them. No less than seven pounds of this adulterated article appears to have been sold. A second family also were sickened by the compound, but not seriously injured.

"The cream of tartar", we read, "in which the arsenic has been found, was from a stock supplied by a large wholesale house in a distant town; and on Saturday, as soon as it was clearly established that the poison must have been in the cream of tartar when sold by Mr. Potter, steps were taken to apprise the wholesale house of what had happened, so that they might examine their stock of the latter article, with a view to prevent further mischief. At the same time placards were distributed throughout Bradford and other West Riding towns, cautioning persons against using any cream of tartar they might have bought at Mr. Potter's shop since the 25th of April last, and requesting them to forward it to the chief constable of Bradford, as arsenic had been accidentally mixed with it."

Mr. Cosmo Logie, surgeon-major to the Royal Horse Guards (Blue), not being able, we suppose, to obtain through the medical press all the credit for sarracenia purpurea as a remedy in small-pox, which, in his opinion, it deserves, blows the trumpet of that same in the *Times*. This process of widely recommending to the ignorance and credulity of the public infallible remedies in specific and incurable diseases is a most objectionable one, and deserves reprobation. It will be in the memory of our readers that it was chiefly through the columns of the *Times* that a few years ago a quack remedy for cancer was pressed upon the notice of the public, to the great injury and torture of the unfortunate; and indeed it is a very notorious fact that in matters of science and in matters of medicine that journal chiefly purveys nourishment of a kind fitted only for the minds of the credulous and the ignorant. Mr. Cosmo Logie ought by this time to have known that the only persons who can decide upon the value of a remedy are his professional brethren; and that to them he ought to have been modest enough to appeal, as the fervent prescriber of a new drug-herb. He ought also to have known that the very objectionable course which he has taken is one which is likely to be followed by much injury to the public and annoyance to the profession. His experience of twenty years' practice ought also to have taught him that the eleven cases of small-pox which have recovered in his hands under the peculiar influence of this pseudo-drug might and probably would have recovered equally well under the influence of barley-water or mint-tea. He ought also to have known that his reason for considering the sarracenia a boon is a very weak one. "I consider the remedy," he writes, "a boon to the public; for this reason—it is so easily

managed ; any one can make a decoction or infusion of the root, like tea, etc." If some credulous old wife from the back settlements of Somersetshire had proposed such a remedy as this, in such a form and on the strength of similar proofs of its efficacy, we should have felt no surprise, nor made any remark thereon ; but we certainly cannot allow a letter of this kind, which, as we have said, is calculated to do a great deal of mischief by inspiring false hopes in the minds of the public, to pass by without rebuke. Twenty years of experience in practice should have taught Mr. Logie, as it has taught most men who have been twenty years in practice, that there is a *post hoc* as well as a *propter hoc* in the matter of the effects of remedies ; and that he displays very little attention to the rules of medical logic, who, on the strength of the recovery of eleven men from small pox, proclaims the surpassingly wonderful effects of an infusion which they had swallowed during their sickness. One could hardly have believed that, on the strength of such experience of the thing as this, a medical man in Mr. Logie's position would have put the climax to his credulity by stating: "So impressed am I with the efficacy of this treatment over the old method, that I hope to hear of it in every country gentleman's medicine-chest." Mr. Logie would have done better had he read that page of the history of therapeutics, where is inscribed the history of a thousand infallible remedies for incurable diseases. Experience teaches us that it is the part of wisdom to have the gravest suspicion of the virtue of all newly-proposed and invented remedies ; and to have strong proof before accepting them into our catalogue ; but, above all, does it teach us to receive with the deepest distrust—*i. e.*, only on the surest evidence—infallible cures for specific fevers and incurable diseases.

We some weeks since pointed out what we consider to be unanswerable arguments in favour of commencing the London winter medical session in November instead of October. Our arguments were, of course, directed to the main fact, that the alteration would greatly benefit the student ; the whole question hanging on this particular. Incidentally, also, it was observed that, as October is often a charming month for country life, and not a very attractive or, professionally speaking, profitable one in London, the postponement would be agreeable to the London teacher also. We hear, from good authority, that the proposition is favourably received by the majority of London teachers, but that a few of the elder sort, as usual, shake their heads ominously at the thought of any change. We do not find, however, that any practical attempt has been made to put the question to the proof. What is everybody's business is nobody's ; and it is a very remarkable fact that nothing is more rare than to see some member of our profession, who is high in position and rich in practice, do a bit of volunteering in the way of professional philanthropy. We recur to the subject, nevertheless, to remind medical lecturers that, if they desire the change suggested, they have now an opportunity of having it brought under the notice of the Medical Council. The Council of Education could not refuse to consider the proposition of a large body of London lecturers ; and the opinion of the Council on the subject would necessarily determine the views of examining boards. If, therefore, there really be any wish on the part of lecturers, we would take the liberty of recommending them at once to attack the Medical Council now assembled. They may safely depend, we should surmise, upon the concurrence of the Irish and Scotch members of Council, who would surely not object to start equal (in time) with their London *confrères* in lecturing.

It is not very long since we noticed the fact that the French Academy had awarded 2,000 *francs* to M. Kœberle of Strasbourg, for two successful cases of ovariotomy. In singular contrast to this illustration of the state of operative surgery on the other side of the Straits of Dover, it is worthy of note that, at the last meeting of the Pathological Society, Mr. Spencer Wells exhibited eight ovarian tumours which he has removed within as many weeks, six of the cases proving successful ; and that, in giving his experience of the operation during the present session of the Society, he said that he had operated during the session on twenty-seven cases, with a result of twenty-three recoveries and four deaths. His total experience he stated to be sixty-three cases, with a result of twenty deaths and forty-three recoveries. The greater success of late he attributed to the greater knowledge acquired by increasing experience. It would be rather an expensive undertaking for the French Academy to reward our successful ovariotomists at the same rate as M. Kœberle.

The Council of the Medical and Chirurgical Society have determined to take steps for the removal of the name of Mr. Evan Thomas of Manchester from the list of their Fellows.

M. Ricord has made a new confession of faith in the Academy. He now admits the reality of the possible transmission of syphilis through vaccination. He also admits that facts lately observed seem to demonstrate the possibility of the inoculation of syphilis by means of the blood of the infected. These facts being admitted, it seems not unreasonable to conclude that, in cases in which syphilis has resulted from vaccination, the blood of the infected person from whom the vaccine matter has been taken has

been mixed with the vaccine matter. At all events, the facts indicate that great care should always be taken in collecting vaccine matter, to prevent any admixture of blood with it.

On Saturday last, a testimonial, consisting of a massive silver candelabrum, with three branches and moveable top to receive a flower-vase, was presented by a number of his former pupils to Dr. George Budd, on the occasion of his retiring from the Chair of Medicine in King's College. The meeting, which was numerously attended, was held in the large hall of the College, and was presided over by the Rev. the Principal (Dr. Jelf). The duty of presenting the gift was performed by Dr. Lavies, who eulogised Dr. Budd in his fourfold character of lecturer, hospital teacher, consulting practitioner, and friend. An elegant blotting-book and envelope-case were also presented to Mrs. Budd.

The meeting of the Fellows of the Royal College of Surgeons for the election of members of Council will be held on July 2nd. There will be three vacancies, caused by the retirement in rotation of Mr. Cæsar Hawkins and Mr. Tatum (both of whom are eligible for re-election), and the resignation of Mr. Coulson. Fellows of the College, who are desirous of seats in the Council, must lodge the requisite documents with the Secretary not later than Wednesday next. Among the gentlemen spoken of as probable candidates are Mr. Thomas Turner of Manchester, Mr. Bishop, Mr. S. Lane, Mr. Curling, and Mr. Hancock.

The following general order has been issued in reference to the Queen's late visit to the Netley Hospital:—

"General Order, No. 825. Horse Guards, S.W., 14th May 1863. His Royal Highness the Field-Marshal Commanding in Chief has received the Queen's commands to express the satisfaction Her Majesty derived from her visit to the Royal Victoria Hospital at Netley, on the 8th instant; when Her Majesty was highly pleased to observe how carefully and amply the comfort and requisite attendance upon the sick soldiers were provided for. Her Majesty was particularly gratified by the order, cleanliness, and regularity that pervaded the establishment throughout.—By command. (Signed) J. Yorke Scarlett, Adjutant-General."

We have for some time past observed in the lists of naval appointments a comparative absence of the names of medical men. We suppose, and sincerely hope, that the cause of this is, in the main, the want of applicants. Our medical brethren in the navy still labour under great injustice. In fact, the orders which have been from time to time issued for the purposes of improving the position of naval medical officers have not been carried out; so that, in fact, their grievances still remain unredressed. The army medical men have, by perseverance and the assistance of the press, in great part obtained their rights; and we have no doubt that if equal pressure be exercised upon the Admiralty, naval medical men will soon be placed in an equally favourable position. Nothing will sooner effect this object than an absence of applicants for naval medical appointments.

The Congrès Scientifique de France will this year hold its session at Chambèry, from the 10th to the 20th of August. The programme of medical questions is as follows:—*Cretinism:* What is the use of hospitals for cretins? *Cemeteries:* Has experience shown that any influence has been produced as regards epidemics, etc., through the neighbourhood of cemeteries? *Marshes:* Do the marshes of Savoy produce pathogenic effects, etc.? *Medical Education:* Is medical science in France advanced by the multiplication of centres of instruction? *Hydrology General. Special Hydrology. Judicial Payments to Medical Experts, etc.*

By an imperial decree, a prize of 50,000 *francs* was offered in 1858, by the Emperor Napoleon, for the most useful application of the voltaic pile. The period of five years having expired, the Minister has appointed a commission to examine the discoveries of the different competitors, and see if they fulfil the required conditions. The commission is formed of M. Dumas, MM. Pelouze, Regnault, Rayer, Serres, Becquerel, Baron Dupin, Baron Séguier, Général Morin, Général Probert, and M. Deville. M. Jamin, Professor at the Polytechnic, will act as secretary.

Dr. Aymini of Turin, the journals tell us, having for his *collaborateur* the President of the Sub-Mediterranean Telegraph Company, has constructed an electrical apparatus by the application of which he can reduce to a fine powder vesical calculi in the bladder, a special fluid being previously injected. The success was complete in three cases operated upon in the presence of several medical men, after three sittings each of twenty minutes duration. The inventor threatens Paris and London with a visit, in order to exhibit his apparatus.

M. Devergie lately presented to the French Academy a child in whom syphilis had been developed as a consequence of vaccination. The case was very imperfect and unsatisfactory.

Sensitive Barometer and Thermometer. At a recent meeting of the Manchester Literary and Scientific Society, Dr. Joule exhibited a thermometer of remarkably delicate construction. It shows a variation of temperature amounting to no more than a few ten-thousandths of a degree. He has also exhibited a barometer, by which he states that he is enabled to observe the effect of a variation in elevation of "less than one inch."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Annual.]	Philosophical Institution, Bristol.	Thursday, June 18, 4.30 P.M.
LANCASH. & CHESHIRE. [Annual.]	Medical Institution, Liverpool.	Wednesday, June 24th, 12 noon.
EAST ANGLIAN. [Annual.]	Yarmouth.	Friday, June 26th, 3 P.M.
WEST SOMERSET. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 12TH, 1863.

RICHARD PARTRIDGE, ESQ., F.R.S., President, in the Chair.

ON THE PHYSIOLOGICAL ANATOMY OF THE LUNGS.

BY J. NEWTON HEALE, M.D.

THE following points in connection with the physiological anatomy of the lungs were described as the result of investigations made by the author.

1. Longitudinal channels are to be found in the pleura. These are pervious to air, and are connected with the minutest air-passages in the substance of the lungs by tubular passages in the subpleural cellular tissue. They are surrounded by a vascular plexus, derived from the pulmonary system of blood-vessels.

2. As relates to the manner in which the air is distributed throughout the lungs, a remarkable difference is to be noticed in what is ordinarily called the bifurcation of the trachea in the human subject and in other mammalia. In the latter a large trunk is given off from the windpipe before it reaches the spot which is usually called its bifurcation. This trunk goes to the upper of the right lung. The left bronchus is, therefore, in those animals, the second alternate branch which proceeds from the main air-pipe. Each bronchial tube, instead of splitting up equally into lesser tubes, passes towards the margins of the lobes in a continuous direction, though diminishing in size. It gives off its branches in an alternate manner, and each of the subordinate tubes pursues a similar course. When they have arrived at a certain degree of diminution, a set of membranous tubes, differing in some respects from the bronchial tubes, and also from the air-cells, but intermediate in character between the two, are sent off from the terminal bronchial tubes. To these membranous tubes the author attached the name of pedicles. The true pulmonary tissue is quite distinct in its anatomical peculiarities from those of the bronchial tubes, however small these may be. The ultimate parenchyma of the lungs is made up of little bodies, to which the author gave the name of "leaflets." The pedicles connect the terminal bronchial tubes with the leaflets; and many pedicles from different terminal tubes enter each leaflet. This peculiarity in the leaflet causes a very minute anastomosis to take place between the different terminal bronchial tubes, which could not occur if the ordinary description were correct.

3. The author did not profess to have contributed any fresh facts relating to the lymphatics or to the nerves as to their purely anatomical characters.

4. The author preferred to give the name of sustinent arteries and veins to the blood-vessels usually denominated bronchial. He considered that the latter word implies that they have some peculiar relation to the bronchial tubes, and more especially to the bronchial membrane. Every sort of vascular action throughout every part of the lungs, by which any damage to its tissue is remedied, is accomplished through the sustinent vessels exclusively; although the peculiar plexus by which the whole of the mucous surface is covered, and by which the bronchial mucus is supplied, is not contributed by the so-called bronchial arteries. While the duty of repairing the tissue of every part of the lungs devolves upon the sustinent vessels, that of bringing the venous blood furnished by the right side of the heart into contact with the air is entrusted solely to the pulmonary vessels. The purpose for which the vascular plexus is spread out in the mucous membrane is entirely connected with the atmospheric influences, and the large surface which that membrane affords is thus turned to account, and the plexus itself is consequently in exclusive relation with the pulmonary system of blood-vessels. Modern authors, with the exception of Dr. Harrison, of Dublin, concur in believing that there is some kind of anastomosis between the minute branches of the pulmonary and the sustinent vessels. That gentleman, with great truthfulness and candour, acknowledges that he has not been able to satisfy himself that the presumed anastomosis has not been the result of the rupture of one or both sets of vessels in the act of injecting them.

Dr. HEALE had found that the vasa vasorum of the pulmonary vessels are supplied entirely by the sustinent arteries; and that when the latter have been fully distended, and some degree of violence has afterwards been used, the minute capillaries in connection with the sustinent arteries which are spread over the interior of the walls of the larger pulmonary vessels have sometimes been made to burst, and a false communication into the canal of one of the pulmonary vessels has thus been made. A channel for the injection having been once established by an accident of this nature, it becomes gradually enlarged in proportion as the injection is afterwards made to flow through the rent, and an unlimited quantity of injection may then be made to flow through the artificial passage. The pulmonary and sustinent vessels cannot be made to communicate with one another by any other means than this.

Sustinent veins accompany the bronchial tubes, returning the residual blood supplied by the sustinent arteries to the internal parts of the lungs; and other sustinent veins ramify in the subpleural tissue, and collect the blood from the exterior of those organs.

The sustinent veins are furnished with valves, and with branches of anastomosis. These last facts are of some importance, not with regard to the lungs only, but also with reference to the blood-vessels which discharge in other viscera a function similar to that of the sustinent arteries.

5. Modern authors describe the *pulmonary arteries* as accompanying the bronchial tubes; as dividing again and again, becoming more numerous than the tubes; as giving off branches of supply to the various tissues; as anastomising with the so-called bronchial arteries; and their residue as being ultimately distributed to the air-cells. But, according to Dr. Heale, the pulmonary

arteries never give off branches of supply to *any* tissue. They never form any anastomosis either among themselves or with any other blood-vessel. They do not become more numerous than the bronchial tubes, since each of these is accompanied by one, and never more than one, pulmonary artery, which pursues in relation to it a definite and invariable course; and the final distribution of every portion of the pulmonary artery, down to the minutest fragment, is precisely and entirely alike. The whole of it is split up so as to form the remarkable anastomosing plexus in the leaflets. The pulmonary *veins* commence in the interior of the leaflets by *tufts* of capillaries. The veins formed from these commencements are placed, in the first instance, at some distance from the bronchial tubes; but as they increase in size they come into contact with them. A remarkably vascular plexus, composed exclusively of pulmonary vessels, occupies the whole surface of the mucous membrane. This is derived as an offshoot from the plexus in the leaflets, and is reinforced in the larger tubes by blood-vessels furnished from the leaflets which cling to the tubes externally, and send perforating branches to the plexus in the membrane. Some *ramusculi* are also placed externally to the tubes. They collect the blood from the plexus in the membrane, and convey it to the larger pulmonary veins. There are, therefore, in the first instance, two distinct sets of minute pulmonary veins. One of these, after leaving the leaflets, makes its way at once towards the left auricle, without undergoing any further exposure to the air. The other is spread over the mucous membrane, and derives the benefit of the atmospheric influence which the surface of that membrane affords, and ultimately joins the other portion. The anatomical distribution of the pulmonary vessels indisputably proves that their physiological function is exclusively in relation with the air supplied by the bronchial tubes, and that it is totally independent of any purpose having relation to the construction or repair of any part of the *tissue* of the lungs.

(The paper was accompanied by numerous drawings and diagrams).

Dr. HEALE, at the request of the President, drew attention to the apparatus which he employed. In injecting the pulmonary arteries and veins with different colours, both should be injected simultaneously, so that the two fluids should meet in the capillaries. If the arteries by themselves were injected first, the fluid passing through the capillaries into the larger vessels beyond would prevent the proper injection afterwards of the veins, and *vice versâ*. No anastomosis existed between the so-called bronchial vessels and those of the pulmonary system, as the capillaries of the first could be injected in every part of the lungs without any of the injection reaching any of the other vessels.

DESCRIPTION OF A FŒTUS BORN WITHOUT HEART, BRAIN, LUNGS, OR LIVER. BY W. H. DICKINSON, M.D.CANTAB.

This being, like all others of the same character, was a twin. Both umbilical cords were attached to a single elongated placenta. The imperfect fœtus was devoid of any vestige of head or neck. The upper extremities were present, but were in some respects imperfect. On the anterior surface was a small prominence, which appeared to represent the tip of the tongue. The umbilical cord was surrounded at its fœtal extremity by a small membranous bag, which contained a coil of intestine. The lower extremities were only slightly different from their usual state. The body was generally swollen and œdematous. The spinal column was deficient from the second cervical vertebra upwards. No trace of any cranial bones could be discovered. The clavicles were absent. The integuments were of unusual thickness, owing to a general infiltration of serous fluid. In the cavity of the trunk lay the lower two feet of the intestine, which commenced by a cæcal extremity, and two large kidneys. The ureters, the bladder, the urachus, and a pair of undescended testicles were found in their normal relations. The other viscera were absent. The umbilical cord contained a large vein and artery. The artery divided on entering the belly into two large branches, one of which passed into the right thigh and side of the pelvis. The other division served for all the rest of the body. It swept upwards to the position due to the aorta on the left side of the spine, and gave off vessels for the left thigh, for the left side of the pelvis, and for the kidneys. It terminated between the shoulders by dividing abruptly into two large branches, which went to each upper extremity. The veins were arranged in an almost parallel manner. There was no communication between the two sets of vessels corresponding to the foramen ovale. The entire encephalon and the upper part of the spinal cord were wanting. The sympathetic ganglia were large, but not numerous. A chain of eight lay along the side of the vertebral column. Numerous filaments maintained the connection between the sympathetic ganglia and the spinal nerves.

Since there was no communication between the veins and arteries of the fœtus answering to the foramen ovale, but the veins throughout the body were simply continuous with the umbilical vein, and the arteries with the umbilical artery, it was inferred that either in the cord or in the body of the monstrosity the usual direction of the blood must have been inverted. If it passed, as usual, from the mother down the umbilical vein, then it must have been continued into the tissues by the veins of the fœtus. On the other hand, if the course of the circulation were not thus reversed in the fœtus, the artery of the cord must have brought the supply from the placenta.

This question was discussed, and the author finally adopted a suggestion of the late Dr. Young, which had been worked out by Sir Astley Cooper, that the circulation in such monstrosities is due to the impulse of the heart of the healthy fœtus, which always accompanies them, and which is conveyed through anastomising vessels between the two cords upon the surface of the common placenta. The blood thus reaches the imperfect fœtus through its umbilical artery, and is thence distributed to its tissues.

WESTERN MEDICAL AND SURGICAL SOCIETY.

SEVENTEENTH ANNUAL MEETING, FRIDAY, MAY 1, 1863.

A. W. BARCLAY, M.D., President, in the Chair.

New Officers. The reports of the Council and auditors having been read, the following officers were elected for the ensuing year:—*President:* A. W. Barclay, M.D. *Vice-Presidents:* L. T. Cumberbatch, Esq.; M. Baines, M.D.; J. Lane, Esq.; Prescott Hewett, Esq. *Treasurer:* M. Baines, M.D. *Honorary Secretaries:* W. Milner, Esq.; C. Hunter, Esq. *Honorary Librarian:* Thos. Dickinson, Esq. *Members of Council:* T. Cahill, M.D.; F. E. Anstie, M.D.; H. P. Bannister, Esq.; A. Godwin, M.D.; G. Pollock, Esq.; T. Keen, Esq.; H. W. Fuller, M.D.; J. Rouse, Esq.; P. Martyn, M.D.; C. Vasey, Esq.; and J. Way, M.D. *Auditors:* W. Marcet, M.D.; and J. Whitmore, Esq.

Empyema: Paracentesis: Death. By P. MARTYN, M.D. The patient, a boy aged 6 years, had from his infancy been subject to cough. The present illness commenced with feverish symptoms of a typhoid character, without any apparent chest-symptoms, beyond the cough, till the fourteenth day, when the breathing became quick, and he first complained of pain in the chest. There were now signs of much effusion in the left pleura, complete dulness existing over the greater part of the side, with almost entire absence of vocal resonance. The left side now measured half an inch more than the

other; but there was no bulging between the ribs. On the 16th of March, no improvement resulting from diuretic medicines or blistering, and the breathing getting more rapid and difficult, with orthopnœa, Mr. Pollock concurring, the trocar was inserted a hand's breadth below the axilla; a teacupful of thick pus escaped, and the breathing was easier the next day. Two days after, a larger trocar gave vent to about twelve ounces of matter; and the symptoms were again relieved till the 24th, when more fever set in, and the matter had become more offensive. Death took place on the 26th. No *post mortem* examination could be obtained.

Perforation of the Stomach: Sudden Death. By P. Martyn, M.D. This was in a young female, aged 19, who suddenly at her tea was seized with pains in her stomach and attempts to vomit. The pulse, half an hour after, was rapid; the face flushed; the belly excessively tender; and there was great pain all over the abdomen. She died in thirteen hours. The stomach, which was shown to the Society, had a large opening in it, more like a rent than a rounded ulcer, in the posterior wall. The mucous coat at other parts was thickened and inflamed. This patient had been under treatment for ulcers of the stomach during some months.

Oxalic Acid Poisoning. Dr. Martyn exhibited the stomach of a case of oxalic acid poisoning. The patient, a female, aged 44, who had been addicted to spirits, had taken the poison in solution. The stomach had the usual black appearance, and the duodenum was highly inflamed.

Ptyalism from the Use of Toys coloured with Red Pigment. By J. Way, M.D. A small unglazed cup, coloured with red paint, was exhibited by Dr. Way, from the use of which a child eighteen months old had suffered with profuse salivation, enlargement of the submaxillary glands, sponginess of the gums, fissured tongue, ulcers and herpetic patches outside the cheek. A sister of the patient had the same symptoms to a less extent. Upon examination, the red paint on the cup gave evidence of mercury.

Case of Suppressed Small-Pox. By J. Way, M.D. Dr. Way showed a kidney and a portion of the mesentery from the patient, a child two years old, who died from the undeveloped variola. There was great engorgement of the kidneys and of the mesenteric glands. The other viscera were healthy. Four days before death, the patient was in good health. Symptoms of fever were followed by minute florid papules on the face, limbs, and trunk. These still existed on the third day, without a tendency to become either vesicles or pustules. Death was preceded by bleeding from the ears and petechiæ, and took place apparently from exhaustion. There was no coma or convulsion. Two children of the same family were simultaneously attacked with variola, which ran the ordinary course. All the children had been vaccinated in infancy.

HARVEIAN SOCIETY OF LONDON.

April 16th, 1863.

Henry W. Fuller, M.D., President, in the Chair.

Rheumatic Gout. Dr. Drysdale mentioned that he was at that moment treating two cases of the disease named rheumatic gout. In neither case was there any history of rheumatism or gout in the patients. In one case, that of a young woman aged 22, the first phalangeal joints of both hands were greatly swollen, and pain was excruciating. He had found great difficulty in alleviating her sufferings.

The President observed, that the disease called rheumatic gout had, in his experience, usually appeared in individuals of a strumous habit, and of whose families several members had died of phthisis. He thought the treatment of the disease should be the same as the treatment of scrofula.

Urinary Suppression. The President then brought before the notice of the Society a case of urinary suppression, which had lately occurred in St. George's Hospital. The patient, a healthy looking man, on declaring that he had not passed water for several days, was believed at first to be an impostor; but, on being taken into the hospital, his statement was found to be correct. The man lived some days, becoming gradually emaciated, and died poisoned by the state of the blood. *Post mortem* examination disclosed a triangular shaped calculus filling up the pelvis of each kidney; the kidneys themselves were healthy. Previous to death, he complained of pain in the loins, and was afflicted with insomnolency. The skin was parched.

Rickets. By F. Cock, M.D. The author observed, that this is especially a disease of the poor and ill-fed classes. It is due to malassimilation; the bones being arrested in growth, and their ends thickened; and there is infiltration of the lymphatic glands, liver, spleen, brain, and kidneys, with an albuminoid material which increases their bulk. The precursors of these changes are profuse perspiration of the head and chest, whilst the lower extremities are dry and hot. The whole body is tender, and the child screams when touched. Even voluntary movements produce pain: the child, therefore, remains quite quiet. Appetite is bad; the motions are frequently loose, of ash colour, and fœtid. The head is large; the fontanelle open; the vertex flat; the forehead square; the orbits large. The bones of the face are comparatively small; the scapulæ are softened; the clavicles curved. Teething is late. Cartilage-cells calcify before the matrix at the epiphyses. The spongy bone-tissue is filled with a red pulp. The periosteum is thickened and very vascular. The animal matter appears to be altered, as the bones sometimes fail to yield gelatine on boiling.

With regard to the deformity of the chest, so important to the physician, the back is flat, the ribs bent at an acute angle where the lateral and dorsal regions unite. The rickety chest is widest at this point, as from it the ribs pass forwards and inwards to the point where they unite with their cartilages. The cartilages curve outwards, before turning to unite with the sternum. Thus a groove is formed on each side of the sternum, just outside the junction of the ribs and cartilages, from the first to the tenth rib.

Let us suppose the chest-walls reduced to membrane; in such a case, the diaphragm would not act. If, again, the chest-walls were perfectly rigid, the diaphragm would not descend further than air entered the thorax. When the orifice of the larynx is normal, and the diaphragm contracts normally, whilst the chest-walls are softened, as in rickets, at each inspiration there is recession of the most yielding portions of the thoracic parietes. The softened part of the rib recedes, and the above mentioned furrows take place. In proportion as the ends of the ribs are forced inwards, the sternum is carried forwards. Atmospheric pressure causes this deformity, and vesicular emphysema and pulmonary collapse are thus produced. The emphysematous portions of the lung lie directly beneath the cartilages, and the collapsed portions under the projections of the ribs inwards, at the point where they join their cartilages. The softened ribs, instead of being drawn outwards at each inspiration, are forced inwards; and thus the lobules of the lung are not only not expanded, but compressed between the enlarged ribs and the deeper expanding tissue. This compression causes the collapse.

The emphysema is thus produced. At each inspiration, the sternum and cartilages are thrust forward by the receding ribs; and, as little or no air enters the lung-tissue beneath the enlarged ends of the ribs, so

more air than is natural enters the portion beneath the cartilages, thus producing emphysema there.

We can readily understand that such children die under an amount of chest-complaint which would not prove fatal to non-rickety children. The rickety child can scarcely breathe at ordinary times; but, when measles or bronchitis supervene, he is rapidly suffocated, thus producing a great mortality from such diseases among the children of the poor.

As to treatment: if the child be under eight months old, milk, diluted with a fourth part of lime-water, and to which a teaspoonful of cream is added, is the best food. When the child is older, beef-tea, bread, fresh eggs, and farinacea are advisable for diet. The child must be kept clean; ventilation and light of the apartment must be studied; exercise out of doors and warm clothing must be used. If the stools be offensive, croton oil, with carbonate of soda and prepared chalk, should be used. Meat, when given to a rickety child, may require to be pounded in a mortar, as the teeth are defective. Cod-liver oil, quinine, and iron are also of much service in the treatment of rickets.

A bandage over the abdomen, to prevent the descent of the diaphragm too far, was advised, with splints on the legs to prevent walking. In the catarrhs of rickety children, no antimony, bleeding, or lowering remedies, should be used; but ipecacuanha wine and cod-liver oil.

Dr. Drysdale made a few remarks on the antecedents of rickets. It was, as Dr. Cock had remarked, preeminently a disease of the poor and ill-fed classes. An eminent man had made a remark illustrative of this view. "An artisan commences to have a family whilst in receipt of good wages: his first two children are strong and healthy. The man, however, begins to be straitened in his circumstances; and the children which follow, being worse fed, are often rickety and misshapen." In the parish of St. Giles, according to Dr. Buchanan, the locality named Short's Gardens has a mortality, among children under five, annually of 166 in 10,000 inhabitants; whilst in the adjoining district round Bedford Square, there are 33 deaths out of 10,000 inhabitants—*i. e.*, five times as many in the former locality as in the latter. Of these superfluous deaths, many are no doubt owing to the supervention of rickets, and the consequent deaths from zymotics. Drunkenness, overwork, low wages, and, as strongly insisted on by Dr. Copland, general enfeeblement in the parents, are frequent antecedents of rickets.

Dr. Ballard thought the idea of many authors, that there are several distinct diatheses, such as rickets, struma, and tuberculosis, was erroneous. All these diseases, he thought, arise from malnutrition; and he contended that all these diseases might arise, and continually do arise, from fruitless sucking during infancy, which habit brings on diarrhœa and diseases of the intestinal mucous membrane, thus preventing the food taken by the child from being assimilated. He contended that any child which has more than two or three motions a day is in danger of becoming rickety, and counselled the keeping of delicate children rather constipated than relaxed. He condemned in strong terms the routine practice of giving grey powder to children, as a fruitful cause of green motions and even of rickets. As to the lime-water, recommended by the author, he considered its value to consist in its astringent quality, thus preventing diarrhœa.

The President agreed with Dr. Ballard in considering the above mentioned diseases as all referrible to one cause—namely, malnutrition. Diarrhœa is certainly injurious in weakly children; but fruitless sucking is not the only cause of this diarrhœa, by any means. What, for instance, causes it in spoon-fed children? The true explanation of rickets and scrofula is a failure in the vital powers, and is either derived from the parent, or engendered by the food. The treatment, of course, is founded on the pathology, and ought to be analeptic. He had not been able quite to agree with the author's view of the causation of collapse and vesicular emphysema in rickets.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 1st, 1863.

H. Oldham, M.D., President, in the Chair.

Tubular Fœtation with Twins. Dr. Tyler Smith presented a specimen sent to him by a medical friend.

Some discussion having arisen between Dr. Barnes, Dr. Oldham, and Dr. Tyler Smith, regarding the relative ages of the twins, it was agreed that the last named gentleman and Dr. Braxton Hicks should be asked to examine and report upon it.

Gastrotomy in Tubal Pregnancy. Dr. Oldham directed the attention of the society to the possibility of performing gastrotomy in some cases of tubal pregnancy where death was about to result from internal hæmorrhage. The main difficulty was the diagnosis; which, however, in sudden tubal rupture was well marked. The danger was so great that it justified any expedient which might have a hope of success.

Dr. Barnes had witnessed two cases in one month; both of them were diagnosed during life, and in one the expediency of gastrotomy had been discussed. In the early stages, he thought the difficulty of getting at the sac very great; but after the third or fourth month the operation would be not only feasible but expedient.

A Variety of Chronic Pain in the Back. A paper on this subject was read by Dr. Gervis.

Case of Amaurosis following Parturition. By H. E. Eastlake, L.K.Q.C.P.I. This phenomenon had occurred on seven previous occasions under the same conditions, but it did not appear after the first labour. The patient was married, and 34 years of age. The blindness, which was total, occurred in both eyes suddenly about the third day after the birth of each child, and lasted on an average from three to five weeks. The patient had never lost more than the normal quantity of blood; she had never taken ergot; there was no suppression of the milk or lochia, nor was the urine albuminous. A careful ophthalmoscopic examination had been instituted, but the evidence adduced was entirely negative. Dr. Eastlake regarded the case as unique; and concluded his paper by stating that the only author who had described any case at all similar was Beer, in his *Lehre der Augenkrankheiten.*

Case of Cæsarean Section. By J. G. Swayne, M.D. The woman operated on was a dwarf, over 40 years of age; her height was only four feet and half an inch, and the deformity of the pelvis was congenital. She was unmarried, and did not apply for medical advice until the time of labour, when she was first seen by Mr. Henry Grace, of Kingswood, near Bristol, and brought by him to the Bristol General Hospital. Here Dr. Swayne saw her, and advised the Cæsarean operation, which was accordingly performed by Mr. Coe, the senior surgeon to the hospital. The section was made in the usual manner by an incision in the linea alba. The child was extracted alive; but the mother died forty-two hours after the operation, from peritonitis. The pelvic deformity was chiefly occasioned by the very peculiar form of the sacrum, the anterior part of which, instead of being concave, projected forwards towards the symphysis pubis, and thus reduced the antero-posterior diameter of the pelvic cavity to one inch and four-fifths. The child is now living.

Mr. Spencer Wells wished to know whether the opening in the uterine wall had been left to close spontaneously, or had been closed by sutures. He was not aware whether sutures had been used in any case; but

it had struck him that the escape of blood, or of the secretions from the uterine cavity, into the peritoneal cavity, might be one cause of mortality after the Cæsarean section; and if so, that sutures might be useful. It was evident that the ordinary interrupted sutures could not be used, because they would have to be left in the spots where they were applied; but it would be easy to use the uninterrupted suture so that it might be withdrawn through the uterine cavity and vagina. It would only be necessary to leave both ends long enough, and not tie any knot. There could be no difficulty in doing this, if it were thought desirable; and it might possibly prove to be a means of lessening the mortality after the Cæsarean section.

Dr. GREENHALGH said that four cases of Cæsarean section had occurred in his own practice, besides which he had witnessed three cases in the practice of others. In two of his own patients, who had arrived at the full period of pregnancy, it was necessitated by extreme distortion of the pelvis; one patient had mollities ossium, and survived the operation three weeks, and then died from rupture of the transverse colon; the other had rickets, and lived only four days. In both cases the children were born alive, and continued to live. In all the cases the uteri contracted shortly after the removal of their contents, more rapidly in those where the incision was made in the body, and less so in one case where the opening was effected in the neck of the uterus, on which account Dr. Greenhalgh did not approve of Mr. S. Wells's suggestion of bringing the cut edges together by sutures. He (Dr. Greenhalgh) regretted that in more than one case the operation was not undertaken until much valuable time had been lost, and until after great and ineffectual attempts had been made to deliver, which placed the patients in a bad condition for any operation, more especially for the one under consideration. No practitioner was justified in performing this operation with a view of saving the child where delivery could be safely effected by craniotomy. Still, if any patient, who had had one or more children destroyed by craniotomy, desired from conscientious motives, after having had all the difficulties and dangers to herself and child from this operation placed before her by several eminent accoucheurs, to risk this operation with a view of saving her child, as in one of Dr. Greenhalgh's cases, the practitioner would be fully justified in undertaking its performance.

Dr. BARNES made some observations upon the case referred to by Dr. Greenhalgh. In the view of the case and the principle of treatment which guided Dr. Greenhalgh he quite agreed. He was, however, more disposed at first to persevere in attempts to deliver the woman by the natural passages. He was chiefly influenced in this direction by the fact that the child was premature. He hoped that if a leg could have been seized and brought down, the body and head might have been drawn through, flattened out between the tumour and the pubic bones; and that the tumour itself, which although very firm, was not osseous, might yield a little. In this they were disappointed. It was impossible to seize a leg. The course at first entertained by Dr. Greenhalgh, and ultimately adopted, was proved by the *post mortem* examination to be right. The suggestion made by Mr. Spencer Wells to sew up the wound in the uterus made in the Cæsarean section Dr. Barnes did not approve. He thought accoucheurs would prefer to rely upon the contractile property of the uterus. The blood and other matters did not escape through the wound, but found a ready outlet through the cervix and vagina.

Dr. GRAILY HEWITT remarked that there were two aspects under which it was necessary to consider this grave question—the decision as to the performance of the Cæsarean section, and what cases were likely to present themselves in actual practice. The first class of cases were those in which the delivery of a live child in the natural way was impossible, and the operation was had recourse to in order to save the child. In the second class of cases, the operation was resorted to because delivery of the child was found to be impossible under any circumstances. With regard to the first class of cases, it was quite evident that the circumstance determining the decision would be the importance attached to the life of the child compared with that of the mother, respecting which it was well known that differences of opinion existed. In respect to the second class of cases, in which the Cæsarean section was had recourse to for the reason that the fœtus could in no other way be extracted, there were doubtless some cases in which the amount of distortion and narrowing was such that no operative attempts, however well directed, would succeed in bringing away the uterine contents; but he believed that some of the cases which had been thought hopeless, except by recourse to the Cæsarean section, would be found capable of being relieved by the cephalotribe. He concurred in the observations which had fallen from Dr. Greenhalgh as to the selection of the proper time for the operation of Cæsarean section. There could be no doubt that the operation was successful in proportion as it was undertaken early; this was shown by statistics. On the Continent the Cæsarean section was more frequently undertaken. Winckel had operated in thirteen cases, of which eight recovered; this showed what might be done with the operation under favourable circumstances.

Dr. BARNES had some knowledge of the application of the cephalotribe. In the first case of Cæsarean section which he had seen, which occurred in Paris at the Clinique d'Accouchements twenty years ago, the cephalotribe had been strenuously used all night, yet the Cæsarean section had to be resorted to at last. The deformity was not greater than in this case of Dr. Swayne's, and there was more room at the sides of the aperture of the brim. In Dr. Greenhalgh's case, the application of the instrument would have been simply impossible. The cephalotribe was a bulky instrument; it took up a good deal of room where there was none to spare. He did not think the cephalotribe would prove of much service in diminishing the number of cases in which it would be necessary to resort to the Cæsarean operation.

Dr. OLDHAM considered it important to make the incision into the uterus as low down as possible, regarding wounds towards the fundus more dangerous than those towards the cervix. His experience of severe operative midwifery rather led him to think that Cæsarean section might be performed oftener than had been generally deemed right.

Dr. SWAYNE stated that no sutures were used to bring the edges of the uterine incision together, and that entire dependence was placed on the contractility of the organ for effecting that purpose. It was generally considered that sutures were not to be used on account of the danger of uterine inflammation. Mr. Coe, however, regretted that he did not give ergot of rye previous to the operation. Dr. Swayne mentioned that, just before the meeting, his attention had been directed to the particulars of a case of Cæsarean operation which had been lately performed by Dr. Dyce of Aberdeen. The woman operated on was a dwarf, and the case was in all respects similar to his own, except that the pelvis was slightly larger. In Dr. Dyce's case, unsuccessful attempts had been made to extract the child before the Cæsarean section was resorted to. Dr. Swayne said that this case justified the course he had taken in at once advising the Cæsarean section, without making any previous attempt to deliver by craniotomy.

On the Galactagogue Properties of Faradisation. By THOMAS SKINNER, M.D. He illustrated the effects by the records of eight cases, in which the secretion returned after one or two sittings. The effect was permanent, and was produced by a galvanic-coil machine, using from three to six cells of Smee's battery. The current

was applied both direct from the axilla to the nipple and intermammary, for about ten minutes for both breasts, and was of no greater intensity than bearable.

A paper by Dr. SHORTT, "On the Medical History of Women in Southern India", was also read.

Correspondence.

THE PREVALENCE OF SMALL-POX.

LETTER FROM JOHN JONES, ESQ.

SIR,—The present alarming state of the metropolis, arising from the prevalence of small-pox, demands strict inquiry into the causes which have produced such a lamentable occurrence. It is notorious that the compulsory Act, from which such great results were anticipated, has proved a failure. Dr. Watson, in his *Lectures on the Principles and Practice of Medicine*, observes: "The so-called compulsory Act was indeed passed in 1853; but, as no public officer of any kind was appointed whose duty it should be to warn or provide against offenders, the Act has become a dead letter."

In judging of the causes of failure in the compulsory Act, we must be uninfluenced by preconceived notions arising either from legislative enactments on the one hand, or individual interests on the other. The principal cause of failure has no doubt been the false economy adopted by the Poor-law Commissioners, who have, in accordance with the Act, empowered the guardians to appoint union surgeons exclusively public vaccinators, for the purpose of adding to the inadequate remuneration they receive for the performance of the onerous duties of their office. Thus, instead of the co-operation of the medical profession generally being secured in carrying out the details of such an important measure by giving them a personal interest in promoting its success, apathy and indifference have been the natural consequence; more particularly as the surgeon appointed public vaccinator is alone paid, and feels himself authorised, as directed by the guardians, to invite all persons indiscriminately to bring their children to be vaccinated on the days appointed for that purpose.

The following additional causes prevent the satisfactory working of the compulsory Act.

1. Prejudices arising from an apprehension that serious disorders might be communicated through the medium of bad matter; and the opinion very generally prevailing, that public vaccinators are not sufficiently careful to vaccinate *only* with matter that can entirely be depended upon.

2. In consequence of this prejudice, parents are backward in complying with the requirements of the compulsory Act, and in many instances will not have their children vaccinated, excepting with matter taken from parties with whom they are well acquainted.

If the privileges of public vaccinator were allowed to every legally qualified medical practitioner, parents could employ their own medical attendant, and there would be a general cooperation in the profession for effecting an object of such vital importance as that contemplated by the compulsory Act, and would afford the best security for the entire extinction of this loathsome malady, which vaccination has been abundantly proved to be capable of doing.

Although it is an acknowledged fact that security against small-pox afforded by vaccination is not so great as was anticipated by Jenner and its early supporters, yet doubtless complete protection is the *rule;* but it is certain that many exceptions to this rule have taken place, and are daily taking place amongst us. The disappointment, however, arising from this cause is very much lessened by the important fact that small-pox occurring after vaccination is much milder and of shorter duration even than the inoculated small-pox.

A question has been raised of the highest practical importance: Whether the protective influence of cow-pox diminishes by lapse of time, and at length wears out? This question involves another: Whether a repetition of the operation at some distant periods adds to the security against small-pox?

With respect to the first question, there is ample evidence that sometimes, at least, the protective influence is only of a limited continuance. So strong is the conviction on this subject, that revaccination has been generally supposed to be desirable, if not absolutely necessary to give full security against the infection of small-pox. Revaccination might not only add to the security against small-pox, but might be considered a test whether the first vaccination has been successful or not. When the punctures produced by revaccination do not observe the usual course—the vesicle, rapid in its progress, being as forward in two or three days as the proper vesicle should be on the eighth or ninth day—we may fairly infer that the first vaccination was successful. But if revaccination is followed by the usual vesicle, and observes the gradual and regular course which characterises the true vaccination vesicle, we may conclude that the first operation was *not* successful, and would not have afforded security against small-pox; and, therefore, that revaccination in such cases would be required as a test.

The following case, which occurred in my practice some years ago, is quite in accordance with the foregoing observations.

CASE. Mr. S., a farmer, between 30 and 40 years old, had been vaccinated when a child. The eschar was visible on the arm. He was seized with the usual symptoms of small-pox, after exposure to infection. The eruption was distinct, but very thick and crowded. On the decline of the eruption, secondary fever occurred, but not severe. Convalescence was gradual and uninterrupted.

Mrs. S. was vaccinated when a child—revaccinated on her husband becoming affected with the small-pox. The appearance of the vesicle was exactly as if she had not been previously vaccinated; indicating, therefore, the propriety of revaccination. She was in constant attendance on her husband, without being affected by the infection.

Two daughters, 10 and 12 years old, were removed from home during their father's illness. They had been vaccinated in infancy, and were now revaccinated. The vesicle was in each attended with diffuse and irregular inflammation, not having the usual appearance of the true vaccination vesicle; thus indicating that in them the first vaccination had been successful.

The test thus afforded by evaccination might be considered of great importance, if proved by the observation of other practitioners to be founded on fact.

I am, etc., JOHN JONES.

Derby, May 18th, 1863.

IMPORTANCE OF PROPER NOURISHMENT IN THE PURULENT OPHTHALMIA OF INFANTS.

LETTER FROM THOMAS H. SMITH, ESQ.

SIR,—In your impression of May 2nd, are some admirable Practical Observations on the Treatment of the Purulent Ophthalmia of Infants, by Mr. Wordsworth, to which I would just add one other practical hint founded on the results of a case which I attended from Nov. 3rd to Dec. 12th, 1861.

The very same remedies, in the very same proportions, as recommended by Mr. Wordsworth, were perseveringly

used, and several times my little patient seemed all but well; but again and again the affection returned.

I varied the strength of the alum and nitrate of silver lotions; I used also a lotion of one grain of corrosive sublimate, with six of sal ammoniac, in eight ounces of water, as recommended by Mackenzie; I tried sulphate of copper, etc.; and also gave quinine and iron to the mother, and half a grain of quinine two or three times a day to the child; and this failing, Battley's bark had a fair trial; but though the conjunctiva continued clear, the discharge would not cease.

I several times asked about the supply of milk, and was always assured that it was abundant.

At last, after five or six weeks, to my intense mortification, I got a note from the mother, saying she was sure everything that the ordinary method of treatment could do had been done, and that, urged by her friends, she had consulted Mr. ——, a homœopath, and that he had at once ordered a wet-nurse for the child.

The truth flashed across me in a moment: the mother was not a good nurse, and though her supply was abundant, the child was not sufficiently nourished, on account of the poor quality of the milk. Had I ordered a wet-nurse earlier, or even supplemented the child's nourishment with ass's milk, and used precisely the same remedies, I should not have lost my patient, and given the homœopath such an easy triumph; for the eyes, with better food for the child, were well in a fortnight.

The practical hint from this case is, if after carefully using the proper remedies (seeing yourself that the lotions are effectually applied), the disease do not give way, or return again and again, especially if the child continue puny, look well to its nourishment; and, even if you are assured that the mother has plenty of milk, do not be satisfied, and suspect that the quality is inferior, if the child give evidence of want of thriving; for with a really good breast of milk, the disease is in general very easily cured.

If the parents cannot afford a wet-nurse or ass's milk, goat's milk is a good substitute, or cow's milk, diluted with one half water and sweetened with sugar of milk.

I am, etc.,

THOMAS HENRY SMITH.

13, John Street, May 9th, 1863.

HYSTERICAL DECEPTION.

LETTER FROM T. R. HEYWOOD-THOMSON, M.D.

SIR,—On the evening of February 13th, 1858, I was called in great haste to see a young lady, who was supposed to have taken a poisonous dose of laudanum. She had been found in her bedroom, lying in an a state of apparent insensibility, with an almost empty phial marked "laudanum" by her side. On examining the patient, the complexion, expression of face, and pulse, were natural; there was no contraction of the pupils; no stertorous breathing; yet she seemed to be insensible, and when addressed only uttered a sort of moaning whine. Judging from the odour, taste, and colour of the small quantity left in the phial, I came to the conclusion that it was a make-believe case of poisoning, to excite sympathy in some quarter; and stated this to the family, pressing to know if any *affaire de cœur* or estrangement had caused it. Her uncle frankly admitted that he had had, a few hours before, a serious disagreement with the young lady, who was to leave the house in disgrace; stating as a reason, that he had discovered, beyond all doubt, that she had long carried on a systematic course of lying and theft to implicate other members of the family, and that several servants had been discharged on suspicion. When it was fully proven against her, she went out, procured some laudanum, and returned to her bedroom, where she was found as I have described. Certain tremulous movements of the eyelids led me at once to suspect hysterical imposture; cold water was freely used, and injections of assafœtida; and the family were impressed with the necessity for keeping a strict watch over her movements.

On the 17th, four days afterwards, no alteration had taken place; there was the same amount of insensibility; the pulse, features, and complexion, still being natural. To allay the anxiety of the family, I requested that Dr. C., a friend of the uncle, should be called in; and, after careful examination, he coincided in my view that it was a case of hysterical deception.

This state of matters continued until the 24th, when the apprehensions of the family again induced me to get Dr. C. to examine her; but her persistence in the deceit threw him off his guard, and he began to fear that possibly there might be some obscure cerebral change to account for the symptoms, and that she might be in a dangerous condition.

Notwithstanding the responsibility involved in retaining and acting on my own views, I did so on the following grounds; viz., that despite her apparent insensibility, she seemed to know very well all that was going on around her; that despite the asseverations of the attendants that she took no food except an occasional spoonful of water or gruel, she neither lost flesh nor seemed to suffer; and that she had sense enough left to shew a great aversion to cold water and assafœtida. Besides all this, it was manifest, from the statements unwillingly given by some of the servants, that food disappeared, and deposits took place in the utensils, if those in attendance happened to fall asleep at night.

On the 25th, seeing that the mistaken sympathy of those around her was keeping the case obscured, a trustworthy, strict nurse was sent for, who was ordered, on no account, to leave the room, or to sleep while with her; the day watching being kept up by the family. This change at once aroused my patient; she passed the early part of the night in continual moaning and shouting, keeping the nurse in a constant state of anxiety and alarm; when, having worn the nurse fairly out, she pretended to go to sleep, the wearied nurse no doubt following her example. The consequence was that, between the worry of the patient and the interference of the servants, who felt sure that we did not understand the case and "were killing the poor girl," the nurse begged to be sent home. I now began to fear that my hysterical patient was going to beat me by her tactics; and that some other plan must be tried.

Fifteen days had now elapsed on the 28th, during which, according to the statement of those around her, she had been in a state of insensibility; was not seen to have got out of bed; was not known to have taken any food, except an occasional spoonful of water or gruel; and yet strange to say, all admitted that by some mysterious process portions of solid food disappeared from the trays at night, and certain deposits were found in the utensils.

On the 29th, the case becoming rather trying, I requested her uncle to come to her bedside; and, as previously arranged, he expressed to me his deep regret to see her in such an alarming state, and that he quite forgave her. I then informed him, in her hearing, that I feared I had made a sad mistake in my estimate of her case; that it must be some terrible disease of the brain; that the case required the constant attendance at her bedside of two doctors and several nurses; and, as that was quite impossible in any place except a public hospital, I would make arrangements to remove her the next morning.

The *ruse* succeeded. On returning in the evening, I found my patient had most wonderfully recovered her consciousness; would answer questions; take food; and next morning, she was in her usual health, to all appearance, notwithstanding a pretended state of insensibility and abstinence, reaching to nearly sixteen days.

A few days afterwards, her uncle, at my suggestion, sent her home to N——; and I said to him, that I had made notes of her case, because I felt sure that something of an unpleasant nature would turn up, and my evidence as to her state of mind might be required to save her from disgrace.

About ten months afterwards, her relative called upon me to say, that my singular patient had died under the following circumstances. She had conducted herself well for some months after going home, but was at last found out at her former tricks, stealing and lying, and incriminating all round her; that on discovery she went to her bedroom, where she was found, some hours afterwards, dead; and that the *post mortem* examination, made by a friend of the family, did not discover any disease or cause of sudden death.

My impression will always be, and so it has been of members of the family, that she purposed to play off her former game of pretended poisoning, but unfortunately carried it further than she intended.

The subject of this sad though singular story was a well educated healthy-looking robust girl, about 23 years of age. She was surrounded with every comfort and luxury requisite to make her life happy. She had a tendency to hysteria, which evoked a morbid desire after excitement by the incriminating of others, and then calling on the sympathy of friends, when discovered in her wrong doings.

I doubt not that the lamentable scenes displayed at the trial Bromwich *v.* Waters will be the means of inducing others to lay their notes of cases of hysterical deception before the profession. I am, etc.,

THOMAS R. HEYWOOD-THOMSON.

Aigburth, Liverpool, May 11, 1863.

THE ADAMS DEFENCE FUND.

LETTER FROM J. B. WALKER, ESQ.

SIR,—In reference to the remarks in the last number of your JOURNAL, on the subject of the heavy legal expenses connected with the case of Russell *v.* Adams, I beg to state that these expenses are still going on in consequence of the bankruptcy proceedings, and until these terminate the total costs cannot be ascertained.

On the 27th April, Mr. Mackrell stated, in a letter to Mr. Adams: "The payments out of pocket will be about £500, as nearly as we can roughly estimate; and I am not able to give you any nearer calculation than that the costs will be from £900 to £1000."

This, together with Mr. Wild's statement in the Bankruptcy Court ("The total expense incurred by Mr. Adams in his defence would be £1000") is all the information we at present possess.

The committee will be summoned as soon as I have any report to make as to the progress of the subscription; and by that time I hope a detailed statement of the expenses will be rendered. I am, etc.,

J. B. WALKER,
Hon. Sec. to the Committee.

17, Clifton Gardens, Maida Hill, W., May 27, 1863.

EXTRAORDINARY LONGEVITY. The obituary of *The Times* of the 20th inst., contains some rare instances of very advanced age, as among others the deaths of five gentlemen and three ladies are recorded whose united ages amounted to 686 years, giving an average of 85 years and nine months to each, the youngest being a male aged 79 years, and the eldest, of the opposite sex, being 95 years of age.

INFANTICIDE. If the "wilful murders" and "found dead" in ditches, ponds, etc., are added together, it will be found that 297 children in London, and 624 children in England and Wales, under two years of age, were murdered in the eighteen months ending June 1862.

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 19th:—

Burford, Henry Hummerston, Hamilton Terrace, St. John's Wood
Clarke, John Chaundy, Brill, Bucks
Gee, Samuel Jones, M.B.Lond., Oxford Street
Goss, Tregenna Biddulph, Newington Place
Henderson, Roderick William, Lower Halliford, Middlesex
Hyatt, Brownlow North, Shepton Mallet
Johnson, Robert Maxwell, Kaffraria
Jones, David, Bala, North Wales
Jones, William, Carmarthen
Jones, William, Pwllheli, Carnarvonshire
Mahony, Edward, L.S.A., Richmond Road, Dalston
Mathews, John, Brecon, South Wales
Miles, George, Gillingham, Dorset
Myers, Charles John, Tottenham
Nichols, Robert Thomas, M.D.St. And. and L.S.A., Greenwich
Norgate, Louis Augustus, East Dereham, Norfolk
Sheen, Alfred, M.D.St. And., Leicester
Smirthwaite, Sagar Veevers, Burnley, Lancashire
Thomas, Evan, Liverpool
White, Charles, Newbury, Berkshire
Williams, David Thomas, Llangeitho, Cardiganshire
Wright, Joseph Brampton, Great Yarmouth

Admitted on May 20th:—

Adamson, Arthur Ernest, Dublin
Battersby, Charles Henry, Dublin
Butt, William Frederick, Gloucester
Davis, Henry Robert, Addison Road, Notting Hill
Dukes, William Profit, Brixton
Evans, David, Barmouth, North Wales
Goodsir, Thomas Henry, Hull
Hawkes, Anthony Mann, Gloucester Street, Queen Square
Kempthorne, Henry Law, Wedmore, Somerset
Kiernander, William Coleridge, Calcutta
Langston, Thomas, Manchester
Lawton, Frederick, Chiddingfold, Surrey
Lawrie, John Douglas, Bradford
Matthews, Alfred John, London Road, St. John's Wood
Mence, William Henry Dison, Cambridge
Nicholson, John, Silloth, Cumberland
Price, Charles Richard, Bayswater
Rogers, Maurice Cohen, New Burlington Street
Thomas, William Robert, Manchester
White, Thomas Charters, Upper Eccleston Place, Belgravia

LICENTIATES IN MIDWIFERY. The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwery at a meeting of the Board, on May 27th:—

Allkin, William John, Denton, near Manchester: diploma of membership dated May 6, 1863
Bateman, Wm. Adolphus Fredk., Richmond, Surrey: May 8, 1863
Dermott, Fitzherbert, Melbourne, Australia: April 24, 1863
Ellerton, John, Wakefield, Yorkshire: January 28, 1862
Fox, Cornelius Benjamin, Truro, Cornwall: May 7, 1863
GreatRex, Adolphus Burnell, Holborn Hill: April 24, 1863
Johnson, Robert, Bellaghey, co. Derry: June 28, 1833
Jordison, Robert Lloyd, South Ockenden, Essex: Nov. 18, 1862
Lawrence, Frederick George, Malmsbury, Wilts: April 30, 1861
Lumley, Bartholomus, Corbridge, Northumberland: June 4, 1861
Mackintosh, Hugh Richard Duncan, Cheltenham: April 22, 1863
Moore, John New, Moreton-in-the-Marsh: April 22, 1863
Moore, Thomas, Wilmslow, near Manchester: Nov. 13, 1862
Reynalds, John, Truro, Cornwall: April 21, 1863
Tily, James, Hitchin, Herts: April 25, 1862
Ward, Henry Seekamp, Horncastle, Lincolnshire: July 31, 1862
Watts, Arthur John, Harrow Road: November 18, 1862

APOTHECARIES' HALL. On May 21st, the following Licentiates were admitted:—

Alderson, Frederick Henry, Ipswich
Ideson, Joseph James, Colne, Lancashire
Jordison, Robert Lloyd, South Ockendon, Essex
Maurice, Benjamin, Redlands, near Bristol
Sanderson, Marwood, Rochester Street, Vincent Square
Shrapnel, Joseph Needham Scrope, Ventnor, Isle of Wight

APPOINTMENTS.

*BEALES, Robert, M.D., appointed Justice of the Peace for the Borough of Congleton, Cheshire.

BROWN, David D., M.D., appointed Assistant-House-Surgeon to the South Staffordshire General Hospital.

BURNIE, Thomas, L.R.C.P.Ed., appointed Junior Resident Surgeon to the Birmingham General Dispensary.

CHATER, Sidney, Esq., appointed Surgeon to the Metropolitan Dispensary.
*COE, Robert W., Esq., re-elected Surgeon to the Bristol General Hospital.
COWAN, John B., M.D., appointed Professor of the Practice of Medicine in Anderson's University, Glasgow.
HASLEWOOD, John A., Esq., elected House-Surgeon to the Morpeth Dispensary.
*KEMP, Charles G., Esq., appointed Dentist to the Leicester Infirmary.
PENTLAND, Robert, L.K.Q.C.P.I., appointed Medical Attendant to the Constabulary, Drogheda.
PURVIS, John P., Esq., appointed Surgeon to the West Herts Infirmary.
ROBERTS, William R., Esq., appointed House-Surgeon to the Birmingham and Midland Hospital for Children.
*WILLIAMS, A. Wynn, M.D., elected Physician-Accoucheur to the St. George's and St. James's Dispensary.

POOR-LAW MEDICAL SERVICE.

ASHE, Isaac, A.B., M.B., to the Castleblayney Dispensary District of the Castleblayney Union, co. Monaghan.
COLEBROOKE, Henry, M.D., to the Southborough District of the Tonbridge Union.
COOKE, Richard E., Esq., to the Workhouse of the Southwell Union, Nottinghamshire.
CRESSWELL, Nathaniel E., Esq., to District No. 4 of the Ashford West Union, Kent.
JOY, William, Esq., to the Igburgh District of the Swaffham Union, Norfolk.
ORR, John A., Esq., to the Fleetwood District of the Fylde Union, Lancashire.
TUKE, Joseph S., Esq., to the Week St. Mary District of the Stratton Union, Cornwall.

ARMY.

CLARKE, Assistant-Surgeon J., M.D., 10th Foot, to be Staff-Surgeon, *vice* D. R. Rennie.
DOUGLAS, Staff-Assistant-Surgeon C. M., M.D., to be Assistant-Surgeon 24th Foot, *vice* R. Sutherland.
REED, Staff-Assistant-Surgeon B., to be Assistant-Surgeon 10th Foot, *vice* J. Clarke, M.D.
RENNIE, Surgeon D. F., M.D., 31st Foot, to be Staff-Surgeon.
RENNIE, Staff-Surgeon D. R., to be Surgeon 31st Foot, *vice* D. F. Rennie, M.D.
SUTHERLAND, Assistant-Surgeon R., 24th Foot, to be Assistant-Surgeon 5th Lancers.

ROYAL NAVY.

BREEN, T. J., Esq., Surgeon (additional), to the *President*, for the Naval Reserve.
CHRISTY, W. C. B., Esq., Surgeon, to the *Esk*.
COATES, Matthew, Esq., Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
MANNING, F. N., Esq., Acting Assistant-Surgeon, to the *Esk*.
MOORE, G., M.D., Surgeon (additional), to the *President*, for the Naval Reserve.

YEOMANRY CAVALRY.

MARTIN, A. R., Esq., to be Surgeon West Kent Yeomanry Cavalry.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BROWNE, C., Esq., to be Assistant-Surgeon 1st Administrative Battalion Surrey R.V.

DEATHS.

McNAB, Wm., Esq., Surgeon, at Ware, Herts, aged 81, on May 23..
RAWBONE. On May 24th, at King's Road, Chelsea, Maria, wife of George Rawbone, Esq., Surgeon.

WESTMINSTER HOSPITAL. All opposition being withdrawn, Dr. Gibb walks over the course as candidate for the appointment of assistant-physician to this hospital.

WESTERN MEDICAL AND SURGICAL SOCIETY. Dr. A. W. Barclay has been elected President of this Society for the ensuing year.

WEIGHTS AND MEASURES. Mr. Ewart has obtained leave to bring in a bill for decimalising our existing system of weights and measures, and for establishing an accordance between them and those of foreign countries.

POLITICAL PRISONERS. Amongst the numerous political prisoners now undergoing a trial (as it is called) at Rome, we find the names of Balthasar Ferri, a Roman, aged 30 years, surgeon at the St. Jacques Hospital; and of Stanislas di Mauro, a Roman, aged 23 years, surgeon at the Consolation Hospital.

DEVON AND EXETER MEDICAL BENEVOLENT SOCIETY. Dr. W. H. Ackland, of Bideford, has been elected President of this Society for 1863-4.

NON (?) COMBATANT SOLDIERS. We read in the accounts of the late battles on the Rappahannock, that "Dr. Foot, of the 82nd Pennsylvania, left a wounded man he was dressing, snatched a musket, and rallied several of the men. These pickets, or skirmishers, kept up a fire on the rebels until all our wounded and stores were got across the river."

DONATIONS. The Marquis of Westminster has given a further donation of £200 to the funds of the Royal Orthopædic Hospital. The funds of the Royal Hospital for Incurables have been augmented by the contribution of the sum of 500 guineas by Mr. and Madame Goldschmidt, this sum being the proceeds of the grand concert recently given by them at St. James's Hall.

ROYAL COLLEGE OF SURGEONS OF IRELAND. A large number of the members of the medical profession and other visitors assembled at the Royal College of Surgeons on the 21st inst., to witness the inauguration by the Lord-Lieutenant of the bust of the late Prince Consort, which has been placed in the Examination-hall, redecorated and furnished for that special object, and to be henceforth called "The Albert-hall." Dr. Mackesy, president of the college, addressed the Lord-Lieutenant, who replied in suitable terms, and publicly declared that the hall be thenceforward called "The Albert Hall."

UNQUALIFIED MEDICAL PRACTITIONERS. An inquiry has been opened in Spitalfields respecting the deaths of Emma Fitchett, aged 37 years, and her newly-born male offspring, who it was alleged had died from the unskilful treatment (during her confinement) of a man named Forde. Forde admitted that he had given a certificate that the child was still-born. Mr. Blackwell, the parish surgeon, who made a *post mortem* examination of the body, said the lungs were diseased. There were two ruptures of the bladder, which might have been caused by violence; the ruptures were the cause of death. The deceased was in a very weak state of health. The coroner said the case was of such importance that he should adjourn the inquiry till Friday morning.

SURREY COUNTY HOSPITAL. The committee of the Surrey County Memorial Hospital have at length determined upon proceeding without delay with the building which is to be erected on a plot of ground close to the town of Guildford. In answer to the advertisements for tenders no fewer than thirty-three large building firms competed, the highest offer being £15,254, and the lowest £10,629. The committee have accepted the lowest tender but one —for £11,303. At present the committee have only money in hand and promises to the extent of about £7,300, which includes £500 offered by a gentleman on condition that two like sums should be contributed. It is now determined to make the hospital much more complete and perfect than was at first contemplated, and hence the original estimate, which was something under £8,000, has been much exceeded. The plans were submitted to Miss Nightingale, at whose suggestion numerous useful and practical improvements have been adopted, The committee have resolved, they say, upon "constructing a building which shall be at once as good and perfect in itself as human foresight can provide."

THE PAST WINTER. The registrars' returns which have now been issued for Scotland as well as for England, show that the lowest temperature recorded in the returns collected by the Registrar-General were, as far as England and Wales are concerned, 16·2° at Lampeter, Cardiganshire, and in Scotland 9·9° at Drumlanrig, Dumfriesshire. Both were in November. The cold of that month fell with severity on and near the south coast, for though at Ventnor the thermometer last winter went but one degree below freezing point, it

marked 23° at Worthing, 21° at Bournemouth, and 19.8° at Hurtspierpoint. Further north many of the returns show the cold not so great; the lowest temperature in the whole winter at the Royal Observatory, Greenwich, was but 24·8°, at Barnstaple 27°, Aldershott camp 23·8°, Leyton 24·1°, Grantham 24·4°, Royston 24·2°, Diss 25·5°, Norwich, 27°; Llandudno, 26·3°; Scarborough 28°. The variation in the mean daily range of temperature may be seen from a few instances. In the first quarter of 1863 it was but 7·5° at Torquay; at Ventnor, 8·1°; Worthing, 10·1°; Royal Observatory, 14·1°; Downside College (near Bath), 12·1°; Grantham, 9·9°; Derby, 14·6°; Bedford, 16·3°; Aspley (Woburn), 7·1. At Scarborough it was but 8·8°, and at Bournemouth 16·2°, which, with the exception of Bedford, is the greatest range in all the 62 returns. Still greater were the variations in the amount of ozone. At Cockermouth the mean amount in the first quarter of 1863 was only 0·8, at Carlisle it was 4·6, and at St. Paul's Parsonage, near Silloth, 7·9. It was 4·3 at Torquay, 5·1 at Worthing, 5·6 at Bournemouth, 6·7 at Osborne. It was only 0·9 at the Royal Observatory and at Aldershott, and 0·6 at Gloucester, but 4·7 at Nottingham, and 5·1 at Wisbech.

Dublin Hospitals Report. The sixth report of the Board of Superintendence of Dublin Hospitals has just been printed. The hospitals are nine in number, which receive grants from Parliament. The Westmorland Lock Hospital, for the reception of women of an unfortunate class, is described as much improved. The average daily number of beds occupied throughout the year was 86¾, and the patients remained in hospital an average of 34 days. The House of Industry Hospitals are the Hardwicke, the Whitworth, and the Richmond, which accommodate respectively the following average number of patients throughout the year, 55½, 64, and 96½. In Stevens's Hospital the average number was 184, and 2,414 cases were treated to a termination during the year. The average number of beds daily occupied in the Meath Hospital was 65 in the infirmary, and 15 in the fever wards. The Cork Street Fever Hospital provided for 90 daily. The management of the Rotunda Lying-in Hospital is favourably mentioned; 978 labour cases and 178 chronic patients were received during the year; the average daily number of beds occupied by the former was 26; the number of lying-in cases was less last year than any year since 1778, which is ascribed to the prevalence of fever in the hospital. In the Coombe Lying-in Hospital 389 labour cases and 35 chronic were admitted during the year; and in a populous and very poor district of the metropolis 1,199 cases have been attended to during the year. St. Mark's Ophthalmic Hospital received 223 patients during the year. The Governors observe in their last report that this hospital is at present one of the most perfect sanitary institutions of its kind, and the Board states that the admirable arrangements made for internal and external patients fully warrant this testimony. The last is the Hospital of Incurables, into which 24 were admitted during the year. The rate of mortality in the several hospitals is as follows:—Lock Hospital, 0·86 per cent.; Hardwicke, 8·5; Whitworth, 6·14; Richmond, 3·52; Stevens, 2·81; Meath Infirmary, 3·74—fever, 7·66; Cork Street, 5·70; Rotunda Lying-in Hospital, 8·13—unusually great, in consequence of fever; Coombe Lying-in Hospital, 2·7.

A Sad Affair. The *Levant Herald* of May 6, contains the report of a disastrous fire which occurred at the house of Dr. Galati, a Greek physician at Pera. The fire was first perceived by Dr. Galati himself. The native servants escaped by the roof, without assisting the others, but before Dr. Galati himself, his wife, an English nursery-governess, and two sisters-in-law, who all slept on the third floor, could do so the flames had reached the lobby and prevented egress to the roof. In this emergency the nursery-governess caught up the child that slept with her, and, wrapping a counterpane round it and herself, she jumped out of the window into the crowd, which had by this time gathered in the paved court below. An Ionian attempted to catch her, but his arm was broken by the shock, and the poor girl and her burden fell with nearly the full momentum of their weight upon the flags. Her arm and skull were both fractured, and the child was killed on the spot. In the meantime, Dr. Galati endeavoured to induce his wife to escape with a second child—an infant three months old—by being lowered out of the window by means of a rope of bed-sheets. She, however, appears to have induced him to precede her by this means of escape, but he had hardly got clear of the window-sill when, either she proving unable to bear the weight, or he to hold on—his hands, face, and feet having been already greatly burnt—he fell head foremost to the ground. The child was killed instantly, and the skull and both arms of Dr. Galati himself terribly fractured. Seeing this from the window, and driven by the flames—which were now visible behind her even to the crowd below—Mrs. Galati threw herself into the court, and, falling without break of any kind on the stones, was, like her children, killed on the spot. The charred remains of the two sisters-in-law were afterwards found in the ruins.

Varieties.

A very Sensible Remark. That there is a tendency in this country as well as abroad, to multiply unnecessarily the number of preparations used in medicine, cannot, we think, be denied, and we have on previous occasions referred to this as a great and growing evil. The composition and mode of production of many of these medicines are known only to those who introduce them. They are nostrums in the strict sense of the word, sometimes with what appear to be scientific names, but which are often very inapplicable. In other cases the names may correctly represent the nature of the preparations, but the mode of production may be doubtful, or the preparation at any rate is redundant, and calculated only to complicate, and not to advance, according to any rational system, the practice of medicine. Are we not thus tending to a system of quackery, which is calculated to produce a most injurious effect, alike upon the state of pharmacy and pharmaceutists, and upon the science of medicine? We are not to ascribe this result to improved education, or the manner in which the qualification of pharmaceutists is provided for. It is not the nature or amount of the knowledge possessed by our members that is at fault, but the practical application which is made of it, each individual endeavouring to establish a set of formulæ of his own, and making these a means of advertisement, instead of contributing to a common stock of knowledge, from which a general Pharmacopœia may be constructed, comprising all that is necessary, but avoiding needless complications or additions." (*Phar. Journal.*)

French and English Pharmaceutists. In France they have a system of pharmaceutical education, more complete, perhaps more perfect, and certainly more general than we have in this country. The student there before entering upon the study of pharmacy, must have previously taken a degree in Arts. Besides a term of apprenticeship, he is required to devote two or three years to systematic, scientific study, and his knowledge is tested from time to time by strict examinations. The French pharmaceutist is in these respects fully educated for his position, and no one is allowed to occupy the position without having what is considered to be the requisite qualification. Then there are strict laws against the adulteration of drugs, and for regulating generally

the mode of conducting a pharmaceutical establishment, so as to secure the safety of the public. Some of these laws even aim at the suppression of quackery. They have been referred to in illustration of what has been thought to be required in this country. In commenting upon the low state of pharmaceutical knowledge and education here, and the imperfect state of our laws affecting adulteration, the sale of poisons, and the supply of patent medicines, it has not unfrequently been said, "They manage these things better in France." (*Phar. Journal.*)

The New Metal Thallium. In 1861 Mr. Crookes, of London, was occupied in examining a seleniferous deposit from a sulphuric acid chamber at Tilkerode, in the Harz mountains; and, availing himself of the new method of spectrum analysis, he found that this matter contained something which gave a totally distinct spectrum from any then known, and he consequently inferred the presence of a new element. He had only a very small quantity of material to operate on, and yet, by the exercise of skill and perseverance, he succeeded in extracting from it a metal hitherto unknown, which he exhibited at the International Exhibition last year, labelled as follows:—"Thallium, a new metallic element, discovered by means of spectrum analysis." Of the metal itself there was about five or six grains in the state of powder; but various compounds of it were also exhibited. At first Mr. Crookes was doubtful whether it belonged to the metals proper; but in September, 1861, he had become convinced of its metallic nature, and showed it to several persons as a new metal. The first publication of this fact was at the opening of the Exhibition, May 1. Of that there is no doubt. On May 16th, 1862, M. Lamy exhibited to a society at Lisle, in Belgium, a specimen of thallium in the form of a small fused ingot, weighing about seventy or eighty grains. M. Lamy had at his disposal ample means of investigation and a copious supply of raw material from the sulphuric acid chambers of his father-in-law, and he availed himself of these opportunities in a manner very creditable to himself. He adopted Mr. Crookes's original name of thallium, and thus acknowledged the claim of that gentleman as the discoverer. Thallium receives its name from the Greek word θαλλὸς, a green leaf, as it produces a remarkable green band on the spectrum, suggestive of the colour of young vegetation. It has a bright metallic lustre, which it speedily loses in the atmosphere from oxidation. In colour it closely resembles cadmium, and it produces a fleeting mark on paper similar in appearance to that of black lead. It is much softer than lead, and is, indeed, the softest heavy metallic body yet discovered. It may be easily cut with a knife, and even indented with the finger-nail. It melts at a somewhat lower temperature than lead. It is volatile at a bright red heat, and burns with an intensely brilliant green light. Its specific gravity is 11·9, or a little higher than that of lead. Its atomic weight is about 203, or nearly double that of lead. It is one of the most diamagnetic bodies known. In electric conductivity it is a little inferior to lead. It readily oxidises by exposure to the air, but not in water, deprived of air. It forms two, and perhaps three, basic oxides and an acid oxide. The protoxide is yellowish, easily fusible, volatile, soluble in water, and strongly alkaline to test paper. Many of its salts are beautifully crystallised, especially the sesquichloride, sulphate, nitrate, and chlorate. Mr. Crookes maintains that thallium belongs to the lead and silver group of metals; whereas Lamy regards it as one of the alkaline metals. This metal appears to be very widely distributed over the world, though in relatively small proportion. It chiefly occurs in the common mineral, iron-pyrites, and in no ore has Mr. Crookes succeeded in finding more than ten ounces to the ton. It has been also met with in native sulphur, and in certain sulphretted ores of mercury, zinc, cadmium, and bismuth. Many specimens of commercial copper contain it in very sensible quantity; and this is a point well deserving the attention of our great copper smelters, as thallium renders the copper brittle and otherwise deteriorates its quality.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday.....Westminster Ophthalmic, 1·30 P.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross 2 P.M.—Lock, Clinical Demonstration and Operat 1 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Epidemiological Society, 8 P.M. Dr. E. R. Harvey, "On an Epidemic of Typhoid Fever at Wing, Bucks"; Mr. J. F. Marson, "On the Use of Sarracenia Purpurea in Small-Pox."—Entomological.—Asiatic.

Tuesday, Photographical.—Ethnological.

Wednesday. Obstetrical Society of London, 8 P.M. Mr. J. Marshall and Dr. Graily Hewitt, "Case of Tubal Pregnancy"; Mr. L. R. Cooke, "Case of Simultaneous Uterine and Intra-Uterine Pregnancy"; Mr. I. Baker Brown, "Sequel to a Case."—Geological.

Thursday. Antiquarian.—Linnæan.—Chemical.—Royal (Anniversary).

Friday. Royal Institution.—Archæological Institute.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

P. T.—Dr. Farr declares small-pox to exist now almost by sufferance; and he suggests the holding of coroners' inquests in cases of death from small-pox, in order to fix on the proper persons the blame of a criminal negligence as fatal in its consequences as the ordinary offences of manslaughter.

S. T.—It is a well admitted fact, that the greater the number of remedies (so-called) which we have in the treatment of the disease, the more reasonably may we conclude that our art is proportionably defective in the cure of such disease. Such an abundant materia medica indicates clearly enough that we know not what effectual remedy to lay our hands upon.

Erratum in Dr. Murchison's Work on Continued Fever.—Sir: My attention has been directed to a misprint in my work *On Fever*. At page 471, where the characters of the eruptions of typhus and enteric fever are contrasted in a tabular form, the distinguishing characters under the head of No. 8 have been accidentally printed in the wrong columns. It is the eruption of typhus which appears on the fourth or fifth day of the fever, and that of enteric fever which rarely appears before the seventh day. Although these facts are clearly indicated at pages 117, 131, 457, and 470 of the work, a casual reader, who merely referred to the table in question, might carry away an erroneous impression. As the point is of some importance, I beg those of your readers who possess the book, to make the necessary correction. A note, pointing out the error, will be inserted in all copies of the book sold after this date. I am, etc.,

London, May 18th, 1863. Charles Murchison.

Rapid Delivery.—Sir: A few weeks ago, you published a case of Dr. Blakely Brown's, of very "Rapid Delivery". It reminds me of one I attended a few years ago, which is perhaps worth appending, as such cases are not without interest in a medico-legal point of view.

On October 25th, 1852, I was summoned in haste to the next street, and being at home, and the house almost within stone's throw of my residence, I was there in a minute or two. I was immediately ushered down to the W.C.; but, before I could arrive there, from the lusty cries proceeding from the spot, I knew what had happened. And sure enough, in the pan, hanging by the umbilical cord, a full-grown male infant was expanding its lungs most vigorously. It was the mother's second pregnancy. She had fallen in the family-way whilst nursing, and thought she was only about seven months gone. She was on a visit to London, and quite unprovided with any baby-linen. She had taken in the morning a dose of castor oil, thought the bowels were only going to act, and in a pain or two the child was born.

Now, had this not been a W.C., but one of the old fashioned "Temples" still often met with in the country, the child would very probably have been lost, either by the umbilical cord breaking, or the entire ovum with the placenta being precipitated into the gulf below, and then an accusation of infanticide might have been brought against the poor mother; and the fact of being unprovided with baby-linen would have rendered it more difficult to convince a jury of her innocence. I am, etc.,

May 1863. THOMAS HENRY SMITH, M.R.C.S.

PUBLIC GRATUITOUS MEDICAL SERVICE.—SIR: As no steps have yet been taken by the Association to abate this monster professional evil, not even the steps which, on my suggestion, were approved by the Council and Metropolitan Counties Branch, I am induced to forward you an illustration of the fourth method I suggested for discountenancing this system. It is my reply to several requests, lately received, for assistance in canvassing, etc., for gratuitous appointments. I am, etc.,

SEPTIMUS GIBBON.

[COPY.] "3, Finsbury Square, E.C., May 9th, 1863.

"My dear ——: Personally, I should have pleasure in canvassing to secure your election at —— Hospital; but, as I hear it is a *gratuitous* appointment, I am reluctantly obliged to withhold any little assistance I could have rendered. In order to discourage the acceptance of unpaid medical labour, which I hold to be as unprofitable, if not actually injurious, to the poor as it is to the profession, I have made it a rule not to canvass, give testimonials, etc., for such posts. I have also recommended the like course of action to the members of the British Medical Association. If this were done, and other measures taken by the majority of the profession to discountenance the so-called charity of public gratuitous medical service, the benefit to every grade of the profession would be immense.

"Yours very truly, "SEPTIMUS GIBBON."

RE-VACCINATION.—Mr. N. B. Ward, who has had much experience as a vaccinator, thus gives his opinion on the subject of re-vaccination:—

"Having been a vaccinator of the National Vaccine Establishment for forty years, and having during that period vaccinated above 43,000 persons, I feel justified in expressing my entire conviction that vaccination *properly performed* is as effective a preventive of small-pox as small-pox itself is.

"Two points of inquiry have always engaged my attention—the one, as to the occurrence of small-pox after vaccination; and the other, as to the number of persons re-vaccinated. The information given me can, of course, only be considered as approximative to the truth; but I believe that less than a hundred cases of secondary small-pox (none of them fatal) have taken place, and that not more than 3,000 out of the 43,000 have been re-vaccinated, proving to my mind most satisfactorily the delusion of the idea that the protective powers of vaccination are diminished or worn out in the course of time.

"I have no faith in limited protection, or in limited liability, and have always imagined that one perfect vaccination was sufficient; but, inasmuch as one cannot always be aware of disturbing causes which might interfere with its efficiency, it is, I think, desirable to have a second vaccination to test the security of the first. But it is of no moment whether such second vaccination takes place after the lapse of a fortnight, or of any given number of years.

"Should the second vaccination present the usual modified conditions observable after successful vaccination, the patient, I believe, never requires the operation to be again performed, but is safe for life."

COMMUNICATIONS have been received from:—Mr. HENRY LEE; Mr. PAUL BELCHER; THE HONORARY SECRETARY OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. J. R. LANE; Mr. SAMUEL A. PARKER: THE HON. SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Dr. W. H. DAY; THE REGISTRAR OF THE MEDICAL COUNCIL; Mr. C. F. MAUNDER; Mr. R. O'CONOR; Dr. MAYO; Dr. PARKES; Dr. KIDD; Mr. WALKER; Mr. J. C. ROOPE; Dr. T. BUZZARD; Mr. C. WILLIAMS; and Mr. STONE.

BOOKS RECEIVED.

1. On Imperfect Digestion. By A. Leared, M.D. London: 1863.
2. Excessive Infant Mortality. By M. A. Baines.
3. Practical Lithotomy and Lithotrity. By Henry Thompson, F.R.C.S. London: 1863.
4. The Progress of Ophthalmic Surgery. By J. Z. Laurence, F.R.C.S., M.B.

ADVERTISEMENTS.

Bath and Bristol Branch.—The ANNUAL MEETING of the above Branch will be held at the Philosophical Institution, Bristol, on Thursday, June 18th, at 4.30 p.m.

The Annual Dinner will be at the Volunteer Club, at 6.30 p.m. Dinner Tickets, 5s. each, exclusive of wine.

HENRY MARSHALL, M.D.,
Hon. Sec. to the Bristol District.

8, The Mall, Clifton, May 20th, 1863.

Lancashire & Cheshire Branch.—The Twenty-seventh ANNUAL MEETING of this Branch will take place at the Medical Institution, Liverpool, on Wednesday, the 24th of June next, at Twelve o'clock, noon. President-elect, J. R. W. VOSE, M.D.

Notices of Papers or other Communications to be sent to the Honorary Secretary, as early as possible.

A. T. H. WATERS, M.D., Hon. Sec.

27, Hope Street, Liverpool, 27th May, 1863.

West Somerset Branch.—The ANNUAL MEETING will be held at The Squirrel Hotel, Wellington, on Wednesday, July 1st, at 2 p.m.: C. P. COLLYNS, Esq., President-elect, in the Chair. Gentlemen who intend to read Papers or communicate Cases, are requested to send notice to the Honorary Secretary. W. M. KELLY, M.D., Hon. Sec.

Taunton, May 19th, 1863.

Classical and Mathematical.—Dr. STEGGALL prepares Gentlemen for their Examinations in Classics and Mathematics at all the Medical Boards, viz., the Preliminary Examination at Apothecaries' Hall; the Matriculation Examination of the London University; Preliminary and Fellowship Examination at the Royal College of Surgeons, etc.

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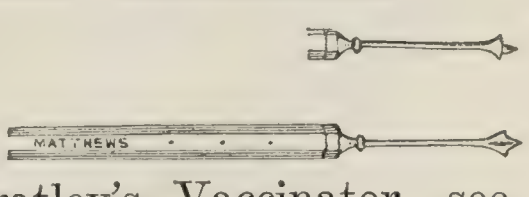
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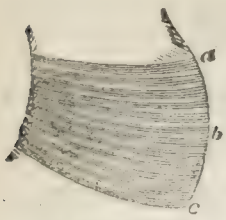
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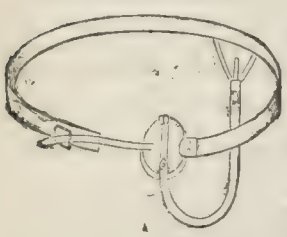
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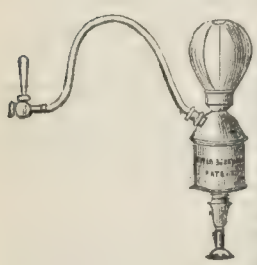


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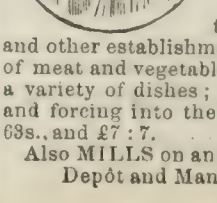
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Remarks
ON
EXTREMES IN PRACTICE.

BY
THOMAS MAYO, M.D., F.R.S.

THE tendency in medical practice to adopt extreme views in favour of methods of treatment—extreme, I mean in the sense of being in advance of our actual knowledge, whether inductive or deductive—is a well known fact, and must be an obstacle to sound medical progress. Now, a very important instance of the varying extent to which medical practice runs at different epochs, with no adequate difference of concomitant circumstances, is offered us at the present day, by the exclusion from practice or diminished use in practice of depletory measures, and principally abstraction of blood.

Without endeavouring to bring back the mischievous excesses in depletion of a former day, I think I may do some service in cooperating with others, who, I know, are anxious to steer a middle course in regard to this class of measures; and this I shall endeavour to do by pointing out or investigating the instances in which the total absence of depletion in illness is questionable or the performance of it desirable.

That a procedure involving *primâ facie* some diminution of vital force, is *primâ facie* undesirable under disease which is itself a depressing agent, must be admitted; and it is equally unquestionable, that this principle has been amply borne out by mischievous debility ensuing in unnumbered cases on depletion. Let us see what, if any, are the special instances in which the veto on depletion thereby suggested would be questionable or confessedly undesirable. "I do not bleed in pneumonia," was said to me by a very deserving physician of the present day. The remark was unguarded in its unconditional extent; for there are cases, such as in the number of this JOURNAL for April 25 is given by Dr. Newman, in which free venesection was performed with a result which could scarcely be impugned.

"I admitted," says Dr. Newman, "into the physicians' wards in the Salop Infirmary, a man, aged 30. He was suffering from most intense dyspnœa; the face was almost livid; the heart acting violently, and pulse hard and rapid; the skin burning. Not a sound could be heard in the lower half of either lung; there was vesicular murmur above. The history was that of exposure to extreme cold, with resulting shivering and fever, two days before admission, and extreme pain in the lumbar region. The immediate abstraction of thirty ounces of blood relieved him immensely; the breathing became much less difficult; the lividity disappeared; and the condition of the man at once improved. It then became evident that he had double pneumonia with partial consolidation of each base, and a tedious convalescence ensued."

This case (and I could adduce many more) tells us that full depletion is sometimes required, and borne, in pneumonia; and I would advise any one who wishes to estimate the possible advantage, as well as the mischievousness, of sanguineous depletion in pneumonia, to examine with this view the cases of the disorder reported in the *Clinique Médicale* of Andral. I was myself formerly surprised to find how little notice this diversity of results obtained from that great physician.

Pneumonia is not *cured* by blood-letting, and it may be rendered fatal by excess of it. But a moderate loss of blood early in the disease has sometimes the power of determining favourably both its type and its duration. In bronchitis, a small early abstraction of blood is sometimes advisable; and many an old man who would have borne with advantage a very moderate loss of blood by leeches at the outset of this disease, dies for want of it, or from its infliction when its performance is too late. Head-disease is open to very important distinctions, suggestive of the occasional use of the lancet or cupping-glass, distinctions which, in the present day, are liable to be neglected in favour of a stimulating practice; with which, I may observe, the removal of some blood may often be advantageously combined.

A young lady was sent down to me, when resident at Tunbridge Wells, as a fit subject for the chalybeate waters of that place. She had intense neuralgia in a limited space over the longitudinal sinus; a full person, a florid face, and a very small pulse. I thought the chalybeate treatment appropriate to this case, and was surprised to find it totally unsuccessful. Finding some heat on the affected surface, I then applied some leeches to it, with no immediate effect. I next resumed the chalybeate waters, under the use of which she now promptly and entirely lost her neuralgic pain.

The following case occurred in the infirmary of St. Marylebone while I was physician there. I will give it in the statement made to me by Dr. Allen, the resident medical officer. It is instructive, both in relation to the large amount of blood taken and the apparent successfulness of the practice.

"I was sent for," Dr. Allen observes, "in the night of the 11th of November, 184—, to Joseph Taylor, in the workhouse. I found him quite insensible; pupils much contracted, pulse about 60 and very low, the extremities cold. The right side of the body was affected by convulsive movements, which occurred at intervals of three or four minutes, and lasted the same length of time. I could not easily ascertain how long he had been in that state. For the last three or four days, he had been complaining to those about him of pain in the head. I gave directions for his removal to the Infirmary. When he arrived there, he was in a state of partial collapse; the face and extremities of the pallid blue colour; the pupils still contracted and insensible to light; the contractions of his limbs were recurring with much force. As he appeared a strong muscular man, a vein was opened. The pulse, which I have described as low and feeble, improving under this measure, the bleeding was continued until he had lost about fifty ounces; a considerable quantity being also spilled on the floor in consequence of the spasms, on which this loss of blood seemed to take no effect. As soon as the pulse began to give way, the vein was closed. The symptoms, however, continued in

every respect the same, except that the natural heat of the body had been in some degree restored. Recourse was then had to cupping on the temples. When he had lost about six ounces (when the brain was depleted), the convulsions suddenly ceased, and the pupils began to contract irregularly. In a short time, he started up in bed, endeavoured to mutter something, and looked about him in a bewildered way. The cupping was continued until he had lost about twenty ounces ; he was then sensible, but could not give a collected answer."

These symptoms did not recur. The patient was brought under the influence of mercury by one of my colleagues, whose patient he was, and in the space of a month had entirely recovered. This man, I ought to observe, had recently lived well, and drank rather freely.

The above case is, as I have said, instructive from the boldness and apparent successfulness of the practice. Those who would (reasonably) object to this practice, as somewhat too heroic, may be led to apply the principle without its exaggeration where some depletion seems requisite. Such seemed to me the requirement of the following case, which I extract from my own note-book.

" In June 182—, I was sent for, early in the morning, to the Hon. Mrs. P—, a lady of a nervous temperament, and of a habit neither full nor spare. She was described as subject to head-attacks, which were sometimes removed by stimulants ; but in their severest forms required depletion. She had, in the preceding night, been much frightened by the sudden death of a servant. Some pain at the vertex came on, and gradually increased through the night to an excruciating degree, accompanied by a sense of weight and by sickness. When I saw her, she complained of these sensations and of extreme coldness, which appeared to be creeping and increasing upon her. The pulse was small, the visage contracted, the legs and thighs moved spasmodically. I first relieved her and somewhat lessened the coldness by a little brandy and water. Then, as the other symptoms were rather increasing than decreasing, I directed that fourteen ounces of blood should be taken. The blood flowed at first unwillingly, afterwards freely ; and as it flowed, she expressed a sense of diminished pain and returning warmth. Soon after, the spasms and pain somewhat returning, I allowed about eight ounces more to flow. All the symptoms were from this moment relieved. In about thirty-six hours from the time at which I first saw her, this lady was perfectly well, without any other additional measure than a mild aperient."

There is a large class of cases in which the prominent symptoms are heaviness, tightness, and often a sense of fulness in the head, a deficient secretion of bile, and some depression of the animal spirits. In these cases, the treatment formerly adopted was often aided by the abstraction of a small quantity of blood. Men of good appetites and sedentary employments were frequently benefited by it, in addition to some purgative and alterative treatment.

The supply of deficient energy in the circulation of these cases would now be trusted too frequently to stimulants alone. Surely, if the dynamics of life, both in health and disease, depend upon depositions and absorptions, analogy seems to suggest that the medical art may proceed to the restoration of health through removals from the organic structure, as well as through additions made to it. It is the fashion of a large school in the present day to depend almost exclusively upon the latter class of measures. Let them remember that if one thing more than another distinguishes the practice, which we are agreed to call quackery, it is the exclusiveness, and therefore narrowness, of the views on which it is based. The homœopath knows no remedy for a disease, unless it be something that would produce it in a healthy person.

I have given some weight to the arguments against venesection, in reference to the presumed diminution of vital power implied by disease. According to this view of the subject, it is not irrelevant to suggest that a state not amounting to disease, but tending to it, is perhaps more open to this remedy than disease itself. Many years ago, I was consulted by a lady, aged 30, in excellent apparent health, who complained of and exhibited symptoms of a very slight amount of pyrexia ; which, however, had this condition—that it was continuous, and had existed some time. There was some appearance of excess in the circulating system ; and I was induced to advise her to lose ten ounces of blood. She assented, and after this relief expressed herself and continued much relieved. But another fact presented itself in this lady's case. She was a married woman, and had given birth to two children ; and then three years had elapsed with no further increase of family. But shortly after the bloodletting she became pregnant, and in rapid succession became the mother of a large family. Certainly, the lancet has in many instances seemed to relieve habitual constipation, and rendered aperients unnecessary after its use.

I have not advanced hypothetical grounds for a theory, on which depletion by bloodletting may be defended or antagonised. The contest between depletory and stimulant practice is, and has long been, much too heated for deductive reasoning. Attentive reference to the annals of experience—in fact, empirical enumeration of reported and observed cases, must precede such a theory as may place us in a safe position as to the respective claims of these two agents. The question, whether the horses are to be whipped or the dirt shovelled out in order that vital dynamics should be successfully maintained, is at present unsettled, as to the conditions in which one or both of these measures may be wanted. I have offered a few hints.

A Common Cause of Baldness. A writer in the *Boston Medical Journal* suggests that the compression, by means of the hat, of the veins which return the blood from the scalp, is a common cause of baldness. He refers, in proof of this, to the much greater proportionate number of persons exhibiting baldness among the class who wear hats, compared with the lower orders who do so more rarely. Again, if we compress the frontal vein of a bald-headed person moderately with the finger, the scalp becomes speedily swollen and turgid : and, on inquiry, we shall find that he experiences an uncomfortable sense of fulness and constriction about the head whenever he wears a hat, especially in hot weather. It is true the hat does not induce baldness in all its wearers, those most liable to it being men of soft and pliable tissues, with large, superficial, and easily compressed veins. A large proportion of them have a long occipito-frontal compared with the bi-temporal diameter of the head—favouring the compression of the frontal and occipital veins.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

REPORT OF A CASE OF CATALEPSY; WITH OBSERVATIONS.

By Thomas Jones, Esq., Assistant Resident Medical Officer to the Hospital.

Many persons who have not had the opportunity of witnessing an attack of catalepsy, incline to doubt this disease as ever occurring. A report of a well-marked case, however, I conceive, will tend to remove this incredulity; and it will also contribute towards rectifying the discrepancies in the description as given by different authors; for it is from a series of well recorded cases of true and uncomplicated attacks alone, we can hope to give a correct account of this disease.

Case. *Male, aged 60, suffered from the effects of strong mental shock for a fortnight; altered vision and hearing three days; sudden tetanic rigidity of all the muscles, which caused him to be fixed in the position in which he happened to be at the time of seizure; subsequently the limbs retained any position in which they were placed; partial loss of consciousness; duration of fit twenty-two hours; no recurrence; good recovery.* Wm. G., aged 60, is of strong bony frame; about six feet in height, with well-formed muscles; complexion ruddy. He is of a melancholy disposition. His passions are readily excited. He says "the least thing excites him, and causes him afterwards great annoyance and pain over the top of the head." His previous health was remarkably good; he was strong and hearty until a fortnight before admission, when he unexpectedly received intelligence of the sudden death of his wife; this caused him considerable mental depression. On two or three days before the present attack he was considerably annoyed by hallucinations of vision and hearing. He saw varieties of colours, and heard various sounds, sometimes the firing of guns. On these days he was noticed by his fellow workmen to be very "absent in his mind" on two or three occasions, remaining in this state two minutes.

While suffering from the above premonitory symptoms, he was suddenly seized, while in the act of plastering, with the trowel in one hand and the brush in the other, about 11 A.M. on May 2nd, with a fit. He stood erect on the scaffold on which he happened to be standing at the time, with his arms outstretched, his legs fixed, the whole body rigid and immovable; his eyes were widely open; he appeared to be quite insensible to all external objects. His arms were found to be so rigidly fixed in the elevated position that it was found impossible to pull them down; and the trowel and the brush were so tightly grasped in the hands that they could not be removed. On two or three occasions, however, while in this state, he deliberately removed the trowel from one hand into the other in order to have it free to get his handkerchief out of his pocket to wipe his nose; having done this, he resumed his statue-like position. He remained in this state for two hours, when he was seen by Mr. Chappell of George Street, who succeeded, after considerable difficulty in bringing down his arms. Notwithstanding a mustard poultice applied to the nape of the neck, and cold cloths to the head, as ordered by Mr. Chappell, he continued in the same condition until 4 P.M., when he was removed into the hospital.

On admission, he was able to walk if pulled along, otherwise he would not advance a single step. He seemed tolerably firm on his feet; for, on pushing him so as to try to put him off his balance, he would make sufficient exertion to regain his equilibrium. The expression of countenance was most indifferent; the eyes were wide open, but his eyelids would remain in any position in which they were placed. He stared fixedly at vacancy. His attention could not be directed towards any object. His eyelids were sensible to the touch; the pupils were widely dilated, but acted readily under the stimulus of light. His skin was warm. The respiration was very superficial. Occasionally he would take a deep sigh. The pulse was 90; full, intermitting every eight or ten beats. When raised into the erect posture, he would remain so. On raising his arms they dropped. There was some slight rigidity on flexion and extension. The jaws were clenched; but he swallowed water without any difficulty when it was poured into his mouth. He was apparently quite insensible; for in vain we endeavoured to rouse him by calling loudly in his ears; and pinching him did not produce the slightest indication of discomfort.

I galvanised him at once pretty severely; and the muscles electrified contracted firmly. This seemed to cause him some pain; for he made a loud noise, and, on one or two occasions, he stood erect. Galvanism was persisted in for a quarter of an hour; as soon as it was discontinued, he relapsed into the same passive state. But the bystanders thought he seemed somewhat "livelier," and that he required less assistance to walk. Certainly, all the rigidity of the muscles had now passed off.

The cold douche was now tried. The water was directed from some height on his face and head. He did not offer much, if any, resistance. He closed his eyes firmly, and swallowed the water that entered his mouth; otherwise the treatment made but little impression upon him.

The above means having failed to effect much good, he was sent to bed. He walked up the stairs (with assistance) with a firm, steady step, without once making a false one. When in bed, in whatever position he was placed, however uncomfortable, he would remain unmoved. The arms were raised, and they remained elevated; I next raised his head off the pillow, and in that position it remained. At the same time I raised his trunk, and placed it at an obtuse angle with his legs; there it remained with his head in the position previously placed, turned to either side, with his eyes closed or opened just as they were placed. Now he presented a most curious spectacle, in the half-sitting posture, with the head thrown forwards, eyes open, but still appearing lifeless, and his arms outstretched. I can compare him to nothing better than to a tinted statue. He remained in this position, perfectly immoveable, several minutes, until his position was again changed. He seemed to have perfect control over his sphincters; for when an utensil was conveniently placed he immediately passed urine, which was high-coloured and free from albumen. I ordered an enema of turpentine, with half an ounce of tincture of assafœtida, to be given immediately; and the following draught every four hours:—

℞ Tinct. valerianæ ammoniatæ ʒj; spirit. ætheris chlorici ʒss; decoct. aloes comp. ʒiv; infusi valerianæ ʒvij.

9.30 P.M. There was considerable rigidity of the muscles. His head could not now be raised off the pillow, nor the body into the sitting posture; otherwise he was much in the same condition. He retained the enema.

May 3rd, 10 A.M. He seemed much better. He spoke for the first time since the attack, about eight o'clock this morning, when he replied in answer to a question asked by the nurse as to whether he wanted the night-stool. From this time, he continued to talk, but still very reluctantly, and did whatever he was asked. He got out of bed without assistance. His bowels had acted

freely. He took his medicine regularly during the night. He had about three hours sound sleep. At present, his aspect was very gloomy. He answered questions slowly; it was with difficulty that anything could be elicited from him. He had perfect power of, and control over, all his muscles. His face was somewhat flushed; pupils dilated, still active; the right was a little larger than the left. Pulse 90, now regular.

On being questioned closely as to his consciousness during the fit, he said that he had a confused recollection of almost everything that occurred. At the first onset of the attack he remembered being immoveably fixed to the plank on which he stood; he felt his arms fixed in an elevated position, and his mouth firmly clenched. He could hear distinctly those who talked to him, and he could see them; he felt, however, confused, and mistook one person for another. He remembered the treatment adopted before and after his admission into the hospital. He complained very much of the cold douche and the galvanism; and that the latter caused him great pain, in consequence of which he remembered crying out. He felt that, however unpleasant this treatment was, he could not acquaint us of the fact by speech or any other means. He felt himself better after the galvanism; he fancied he could walk with much greater freedom. He seemed much annoyed that his body, during the attack, was placed in the different uncomfortable and ridiculous positions.

9.30 P.M. He had been less communicative during the day than he was this morning; he had taken his food well, and fed himself. The tongue was clean. The bowels had not been open since the morning. He was now seen by Dr. Fuller, under whose care he was admitted, who ordered the medicine to be continued, and a senna draught to be given the next morning.

May 4th. He complained of headache and depression of spirits. He was able to get out of bed without any difficulty, and walk about the ward. The treatment was continued, and he was ordered to have ordinary diet and a pint of porter.

May 6th. He complained of weakness and occasional pain on the top of the head, which he generally felt after any excitement. With this exception he felt quite well. The tongue was clean; bowels open. There was scarcely any difference in the size of the pupils. The heart's sounds were normal.

May 13th. He had no symptoms indicating a recurrence of an attack. He looked much more cheerful. He left the hospital to-day feeling quite well.

REMARKS. This case suggests various points of interest for consideration.

1. The *cause* could be very distinctly traced. Evidently the highly excitable nervous temperament, of which he exhibited a good example, strongly predisposed to the attack; but the more efficient cause was doubtless the depressing effects of the mental shock brought on by the unexpected intelligence of the death of his wife. This seems to be the prevailing cause; for in three very well marked cases, which I have been able to find recorded during the last fourteen years, the attack was caused by violent mental impression occurring in persons of well marked nervous temperament.

2. The symptoms which *precede* cataleptic seizures are not constant in their occurrence or character. In the three cases above referred to, there did not appear to have been any very evident premonitory indications of the approaching attack. In the present case, however, there existed precursory symptoms of very decided character; these were headache, the appearance of different kinds of colours before the eyes, and various sounds in the ears. These symptoms continued off and on for two or three days; therefore, timely and judicious treatment might have been the means of averting the attack.

3. Dr. Copland maintains that *tetanic rigidity* of the muscles seldom occurs; and, when this phenomenon is observed, he thinks the disease is allied to ecstasy. (*Dict. of Practical Medicine.* Art. Catalepsy.) Dr. Watson also seems to ignore the existence of this symptom in catalepsy, for he observes on this point, "but the limbs are not tied down by spasms." (*Principles and Practice of Physic.* Fourth edition, p. 715.) Now, I believe the description as given by these eminent authors is not borne out by actual observed facts. In the present case, all the muscles of the extremities and other parts were so rigid that they could not be moved for two or three hours; and this state of things recurred once after a period of comparative relaxation of two hours duration. I find this altered motility to be the rule; on referring to the cases, already alluded to, this symptom is mentioned *in all.* In one, recorded by Dr. Coldstream, there was extreme rigidity—when any attempt was made to move the patient, her muscles instantly became rigid. (*Edinburgh Medical Journal*, April 1854.) In another case, recorded by Dr. Ringland, there were forcible supinations of the hand on the forearm (*Dublin Quarterly Journal of Medical Science*, August 1855); and in the other, described by Dr. Buchanan, he states, "I found the muscles of the arm firm as iron, and the hands clutched tight as in cadaveric rigidity. I felt every part of his body, the muscles of the legs, abdomen, neck, and arms; all were equally fixed, tight, hard, and cold." (*Glasgow Medical Journal*, July 1857.) Thus, in all the cases I have been able to find recorded of pure catalepsy during the last fourteen years, this symptom was well marked in each. The extreme degree of rigidity generally exists about the commencement of the attack, and passes off before the termination. It was interesting to observe in the present case the effect of galvanism in diminishing this rigidity; immediately after this agent was applied, his arms became comparatively relaxed. This tends to substantiate the theory recently propounded, viz., that rigidity depends upon a *diminished* supply of nervous stimulus.

4. Considering the intensity of the rigidity, and the subsequent condition of the muscles, with the long duration of the attack, it is fair to infer that this was a case of *complete* attack of catalepsy. But there did not exist *total* abolition of consciousness; even at the first onset of the attack, he could see, hear, and understand (confusedly) what was being said to him, although he was speechless, and the power of volition was suspended. It is interesting, however, to note that the latter function partially returned before the termination of the attack, for he could walk up the stairs with firmness and a degree of certainty; but still he did not seem to have sufficient control over his muscles to resist his limbs being placed in the different attitudes, however fatiguing. In the three cases to which I have already referred, consciousness was but *partially* abolished; it is incorrect therefore, to state, as is generally done in treatises on medicine, that *complete* unconsciousness is the condition of intelligence which is observed in true attacks of catalepsy. Probably, this error was committed from inferences induced from cases mistaken for true catalepsy, such as those suffering from the effects of extreme cold, hysteria, or feigned attacks. It is not unfrequent for me to be called to cases brought in—picked up from the streets—who appear to be quite rigid, the limbs retaining any attitude in which they are placed, and cold; but the application of the cold douche or galvanism invariably effects instantaneous cure, therefore leaving in my mind little doubt as to the nature of the attack. When these persons are questioned, however, after recovery, they generally declare that they were quite unconscious during the seizure.

5. Possibly, the flushed face, the inequality in the size of the pupils, which were observed in this case, would have been sufficient indications for some to adopt the antiphlogistic plan of treatment—in the shape of depletion, blistering, etc. But, considering the depressing

effects of the cause which had been in operation to determine the attack, with the very compressible and intermittent pulse, the case was treated by stimulating enemata, diffusable stimulants, antispasmodics, and nourishing diet. In fact, it was treated on the same principle as any other nervous affection of depressing nature would have been. The utility of the cold douche was very doubtful in this instance; it is a remedy I should not use in another. From what I observed of the effects of the galvanism, I conceive this agent to be of great use in these cases; if it did not shorten the attack, it would certainly have the effect of diminishing the rigid state of the muscles

Original Communications.

DEATH AFTER EATING RAW RICE.

By T. Ogier Ward, M.D., Cowbridge.

Independently of its interest as a narrative of a rather unusual form of disease, I think the following is worthy of record and of the attention of the profession, as disclosing a widely spread and dangerous habit, originating in the promptings of female vanity.

On March 21st, I was requested to attend E. T., aged 15, a nursemaid, a fine, handsome, well grown girl, who had been seized, while walking with the children, with severe pain in the stomach and left shoulder, shooting through to her back. The attack was so severe that she reached a cottage with difficulty; and thence she was carried home. She vomited some brandy that was given to her, and continued to do so occasionally till I saw her, six hours after the attack of pain. The vomited matter was thrown away, except the last, which consisted of bile, with mucus and a white grain or two. Her face was rather pale, skin warm, though at first she had had rigors, and her feet had been very cold. The tongue was whitish, but clean; pulse moderate in fulness and frequency. She had great thirst and restlessness, with quick breathing, apparently from the severe pain; which, however, was not much increased by pressure over the stomach. Upon inquiring the cause of the attack, I was told she had been eating some grains of raw rice in the morning; and that, though usually very healthy, she had had a somewhat similar attack on the 12th, after her return from festivities at Cowbridge on the 10th. As the stomach seemed empty, with much flatulence, and as her bowels had acted that morning, I gave her some tincture of opium with chloric ether, and aromatic spirits of ammonia, which I repeated every hour. After two doses, the pain and vomiting ceased, and I returned home.

March 22nd. I was called at an early hour to visit her, the vomiting having returned soon after I left, and having continued all night at intervals. I now found her with flushed face, quick pulse, furred tongue, which was not dry, nor was her skin. She was very thirsty, but vomited all she took, as well as quantities of green bile. The pain had now removed to the right side and shoulder, though it still remained in the stomach. She had passed urine once, but no stool since the attack. I now learnt that she had bought half a pound of rice the day before the attack, most of which she had eaten—indeed, she was eating it just before she was taken ill; and that her former illness was caused by eating a pound of raw rice she had bought on the 10th. She had acquired this habit from a former servant, who practised it for the purpose of improving her complexion; and she continued it from choice, her natural tint being very fair. Conceiving the case to be one of obstruction, I gave a dose of calomel and croton oil, and an enema of castor oil and turpentine, which emptied the rectum of a few scybala. A second enema, after an interval of two hours, returned unchanged; but the vomiting seemed allayed by this and mustard poultices to the stomach.

March 23rd. I found her much the same; but there was some tympanitis with pain and tenderness in the left flank, which felt full, but soft. She had passed urine, but no fæces; so I continued the enemata at intervals, with saline effervescing draughts and mercurial frictions over the abdomen, and two five-grain doses of calomel, to allay the vomiting and arrest the impending inflammatory action in the abdomen.

March 24th. I was called to see her at 1 A.M., as she was thought to be sinking. The vomiting had continued till she was quite exhausted. Everything she took by the mouth, except in very minute quantities, was immediately rejected; and the pain and tympanites were much increased. As the castor oil and turpentine injections had had no effect, except to produce irritation of the rectum, I determined to try tobacco enemata, after having revived her a little with minute quantities of brandy and water and yolk of egg. The enemata were given every three hours; after the third application, she passed a quantity of flatus; and there was a slight appearance of fæces, followed in an hour by a spontaneous evacuation, which gave considerable relief, and enabled me to return home.

March 26th. The bowels had acted several times; but, as the fæces had been thrown away, I could not examine them. The pain and tympanitis were less, but the thirst continued intense; and the tongue was very dry, red, and sore; but the gums were unaffected, though she had taken several doses of calomel. The vomiting continued on taking liquids, which she persisted in drinking in large quantities whenever she could procure them; so that it was necessary to restrict her allowance. She had some honey and borax for the mouth, and the salines were continued.

March 30th. Menstruation had occurred before its time, and she had been better the last four days, the sickness having abated, though still brought on by large quantities of liquids. The tongue, red and sore, was scattered over with a thick aphthous coating. The thirst continued urgent. The abdomen was less painful. The bowels were rather relaxed, not distended. The fever had abated. The medicines were continued.

April 1st. She had taken cold from getting out of bed and going into the next room undressed, and she had a cough. The treatment was continued.

April 18th. From the time she took cold there was no further improvement in her general state, though the vomiting and purging were less urgent. The fever and thirst continued, with profuse perspirations and hectic flushes. The pulse became extremely rapid, and the cough very severe and frequent, with mucous expectoration, but with no pain in the chest, or any physical signs of tubercular deposit. On the 11th, the mouth was quite well, the mucous membrane being of its natural pale pink colour; but, three days before her death, the aphthæ returned as bad as ever, attended with diarrhœa and pain and tenderness of the bowels. She died on the 17th, presenting every symptom of acute phthisis.

On further inquiry, I find that the habit of eating raw rice and wheat is widely diffused and extensively practised, not only in this part of the kingdom, but even in London, for the purpose of improving the complexion by giving it a more delicate tint. That it has any such power, except indirectly by producing indigestion, I very much doubt; and that it had this effect in the present instance, I ascertained from the girl's mistress, who informed me she was continually making ginger-tea to correct the flatulence from which she suffered. Though new to myself, probably some of the readers of the Journal may have met with instances of the prevalence of this practice, and may be willing to give their experience of its results.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON THE ACTION OF MEDICINES, SINGLY AND COMBINED.

By David Nelson, M.D.Edin., formerly Physician to the Queen's Hospital; and Professor of Clinical Medicine, Queen's College.

[*Read April 9th, 1863. This paper has also been read before the Midland Medical Society.*]

Before entering upon the immediate subject-matter of this paper, it may be as well to premise, that there is no intention of analysing all the articles of the materia medica; but only of touching upon certain points of practical interest, such as may excite reflection, and draw forth such information as the experience and inclination of our fellow members may be pleased to impart.

Including under the designation of medicines everything that is applicable to the healing or reparation of the animal frame, in which light I propose to view them, they are then divisible into two grand orders; namely, the *homologous* and the *heterologous*. The homologous may be said to include all those materials that are either entirely similar to the chemical constituents of the body, or comprise the natural elements thereof; such as water, the atmosphere, and other gases, simple or combined, the solids and fluids of animals, the protein compounds of vegetables, and those metals or other simples that are natural to the framework, as iron, manganese, calcium, silicium, aluminium, potassium, and sodium, with phosphorus, sulphur, carbon, and iodine. The heterologous class, again, consists of all others that are not natural to the body, such as mercury, silver, zinc, arsenic, copper, and other foreign metals; certain mineral and other acids; the various animal and vegetable essences that are not protein compounds, such as the poison fluids of such animals or vegetables; prussic acid, quinine, digitaline, atropine, aconitine, and such others of a like kind, whether separated, like the above, from their coarser adjuncts, or remaining in natural combination with albumen, extractive matter, or woody fibre.

As to the homologous agents, I apprehend that no doubt whatever can exist as to their action as substitutes for wasted material that has either passed or is passing out of the system. Thus, water is absorbed by the veins, either through the mucous membrane or through the skin, and at once takes its place in the circulation as water, or as a simple replacement of the same material that has already exuded from the body but loaded with those excrementitial salts, etc., which it had held in solution. Air has a similarly direct action in oxidising the elements of the blood, and replacing that same oxygen which has just been eliminated from the lungs, etc., but charged with the waste carbon and hydrogen of the body at large. Such a blood-salt as phosphate of soda finds itself forthwith at home, as it were; oils and fats will pass almost unchanged into the organism, to replace their worn-out analogues; and as little doubt can attend the more or less complex assimilation of albumen, fibrine, gelatine, gluten, starch, and other such organic compounds. But sometimes we meet with disputants of a certain school who will insist upon casting doubts as to other materials the entrance of which is a little less obvious, and who will question the direct efficacy of iron, lime, phosphorus, and iodine, and even of the more elaborated and ready made combinations, such as bile, or choleate of soda, blood, kreatine, and the peptic and other natural fluids.

Water, with certain salts and oxygen, have been just spoken of as matters of direct absorption; the latter, however, having more of a chemical character about its action than the simple imbibition of water. Albumen, oil, fibrine, gelatine, gluten, starch, sugar, kreatine, blood, etc., enter the body through the process of digestion; though the latter, of course, while alive, may be injected directly into the vessels, there to act as in its former channels, as oils and fats also will pass unaltered through the pores of the skin. Iron, lime, phosphorus, iodine, sulphur, and the like, enter partly by digestion, and partly through chemico-vital action; while the biliary and peptic fluids at once take their place in the stomach and intestines as such, and in as direct a manner as water itself; though not so simple in their elementary constitution, nor destined to pass through and out of the system in the unaltered manner that water does.

Now, the objections that we hear stated by sceptics as to iron, lime, and so forth are, that, in the first place, many such preparations as used are quite insoluble; or, if they happen to be in solution, that they are at once decomposed by the acids or alkalies, etc., within the stomach, and so rendered inert; inasmuch as no such coarse materials could permeate the finer membranes and find their way into the blood. Here, however, I would wish to remark, that the facts of medicine are rather to be judged by experience than by theory. We are perfectly aware that there are many substances nearly or even quite insoluble in water, that yet are soluble in albumen, etc.; but, even if we did not know that, we yet have sufficient evidence of substances apparently insoluble finding their way to the recesses of the system, and there producing effects that stare us in the face, and refuse to be disloged by any twist of syllogism whatever. While employing such agents as carbonate or phosphate of iron, or phosphate of lime, it has been put to the practitioner whether he conceived such matters could be of any efficiency, considering their insoluble nature. Now it is not that one uses invariably these preparations rather than the sulphate, muriate, or citrate of iron, or the phosphate of lime instead of the phosphate of soda; still there are many occasions when they are preferred for certain reasons of convenience, such as the avoidance of disagreeable flavours, etc.; and the answer has been to point to the practical results of their employment, as seen in the blanched pasty cheeks and white gums turned to red, the bending bones to a state of solidity, and the general cachectic and strumous aspect to one of health and vigour. But, again, such sceptics remark, that perhaps those beneficial changes are more owing to the well regulated dietary and clothing, and pure air and exercise, ordered by the physician, than to the medicinal agents above spoken of. However, if a doubt might arise here in consequence of the results being the same as might be expected from good diet and pure air, it cannot accord with results such as do never arise except from the action of the particular agent employed; and, with this view, we must refer the doubter to such materials as mercurialised chalk, white lead, calomel, and other such insolubles, and to their invariable and unmistakable effects. Whosoever could doubt in these latter instances would be resisting the mandates of the plainest logic, and denying inferences almost as clear as mathematical demonstrations. He would be refusing to acknowledge obvious results, merely because he could not trace the operation of the primary cause through all its stages on the last effects—a kind of perception, indeed, which is beyond the range of the human intellect; so that the man who declines to accept a sequence, only because he cannot see the link which binds it to its efficient cause, must be content to stand still and do nothing. It is sufficient for all practical purposes for us to see that one order of facts almost invariably follows or precedes another, be the bond of

connexion between them what it may. If we can perceive the bond, it is to us a visible entity; but if we do not, it is not the less an entity on that account, nor the less real and efficacious in its operations. Why two and four make six, or why oxygen turns inert sulphur into corrosive sulphuric acid, we do not know in the slightest degree; but we feel that the human mind is so constituted as to be bound to accept such facts as facts; and we can only end as the little fellow did when he was pestered for occult reasons, and declare that so or so is, *because it is;* and so or so does so or so, *because it does.* These are very simple declarations, amounting, indeed, to axioms; but the truth is, that this morbid spirit of scepticism and affected love of severest simplicity, such as has prevailed a good deal of late years (especially amongst those of the mechanical school of physiology, as represented by such as Majendie), is so liable to be carried into intricate labyrinths and dead-locks of reasoning, that we require at times to bring it back to that true natural simplicity which accepts things as they reasonably appear to be, until they are demonstrated to be something else; and which, while it refuses to acknowledge fancies, though they be made to appear plausible, equally declines to reject realities because they happen to be incomprehensible. Such, indeed, is the one broad distinction between solid experience and baseless hypothesis—between the school of fancy and the school of fact; though it is sometimes made to appear as if it were absolutely the contrary, by affecting, on the one hand, to require reasons for that for which no reason can be assigned, and, on the other, so dovetailing a number of hypothetical suppositions into each other, that the whole shall appear a good and perfect theory of the truth.

With regard to the employment of such a natural agent as bile or choleate of soda, it has sometimes been said that it would be decomposed by the action of the peptic liquids; but this I believe not to be the case, judging from the effects produced by its exhibition; or, at any rate, the reaction that occurs between them is not of a destructive character. I believe that these fluids coalesce with each other, and act in concert, as they do within the intestines naturally. I further believe that the foreign bile acts as an excitant to the secretion of fresh bile, and as a real cholagogue; just as urea is admitted to act as a diuretic. The small quantity taken as a dose, and its marked effects, point to this conclusion. At all events, and at least, it certainly helps the inactive liver, and reinvigorates it.

The peptic liquor, another natural agent, I also believe to act not merely as a solvent of the food to the bare extent to which it is taken, but as a gastric stimulant, by allowing the glands of the stomach to rest for a time, and so restoring their vigour of secretion. If it did not thus act, the patient would have to go on with increasing doses; but such is not the fact, for a short course of it will render the stomach independent for an indefinite period, according to circumstances. Objections have sometimes been taken to this agent, on the ground that it does not always succeed in rebuilding the wasted fabric of the sick man, because it is not capable of coping with that emaciation and general atrophy consequent upon pulmonary phthisis, mesenteric disease, and the like. But no less effectual argument could be used upon the subject; for, although the process of digestion may begin, it certainly does not end, within the stomach. To repeat the expressions on this head employed in a clinical lecture of 1849, I may add: "Digestion, in its larger acceptation, means something much more profound and extensive than what occurs merely within the involutions of the *primæ viæ* and the clusters of glands which are more immediately attached to them. These, in fact, are but the first recipients, or producers of the cruder elements of assimilation, and the primary agencies which are brought to bear upon the great hidden scheme of vital transformation; for not merely until chyle or even blood is formed, but until the more complex structures of the body are actually perfected, can we say that the true and ultimate transformation has been effected. For, even after the first assimilation has been completed by the conversion of the dead elements into nutritive chyle, that chyle has yet to be converted into blood by the lungs; nor would the blood itself be qualified to create or repair the various tissues of the body, unless a peculiar power of appropriative metamorphosis resided within each individual organ and tissue, by which the elements of this common source of nutrition are so reacted upon that an almost endless variety of processes is made to conduce to an almost endless variety of productions throughout the animal economy."

A brief reflection, therefore, upon the above facts, will suffice to determine the limits of the utility of such an agent as the gastric liquor, and to distinguish its judicious exhibition in the hands of the regular physician, from its indiscriminate employment by ignorance and empiricism. Many a valuable remedy has been brought into disrepute by the pretentious vauntings of persons who have sought to represent it as a panacea; and who have quite overstepped the bounds laid down by the reason and experience of those who first commended it to the notice of the world. This prepared peptic liquor, or medicinal gastric juice, will certainly, in conjunction with soda, aid in converting food into chyle; provided the stomach be not so irritable as to reject all food, or even water, or its own secretions; but it is not calculated to do more. The expectation, therefore, that it should nourish the wasted body when the gastro-enteric mucous follicles, the lacteals, and the air-cells, have been disintegrated, is a simple absurdity, such as never could be proposed by any rational being. To exhibit it under such conditions, and report the result, or rather non-result, as a failure of the agent, is, therefore, manifestly erroneous, and altogether beside the question.

The corrective action of potassa and soda is also direct and palpable in acidities of the blood, urine, and gastric, biliary, or enteric juices. Witness the alterations brought about in the acid perspirations of rheumatism, and the acid deposits of the urine, and the vitiated contents of the alimentary canal and liver from excess of choleic, butyric, and other acids, and witness also the speedy subsidence of cardialgia, primary rheumatic pains, and bilious headaches; when they are early enough traced to such acid and acrid secretions within the system. Such effects, indeed, are so obvious that they require no comment; but yet they too are limited by the bounds of reason. No one could expect the cardialgia of stomach cancer, or the pain of an inflamed joint loaded with solid rheumatic concretions, to vanish under the simple exhibition of an alkali such as potassa.

Before proceeding to consider the heterologous class, I would desire, at this stage, to take notice of the combined action of nutrients and of homologous medicines, in order to show that that excessive simplicity in their exhibition which is aimed at by some modern prescribers—chiefly sceptics and panaceists—is no real simplicity in the proper acceptation of that word; but rather an artificial device, imitating the aspect of rigid purity and truth; yet wanting accordance with the general processes of animated nature. For we have to consider, in the first place, that this bodily frame itself is no simple matter, either in its chemical composition, its organisation, or its vital functions, faculties, and feelings; and that, in keeping with such highly complicated form and action, the food destined for its support is equally complicated in its composition, even to the ultimate molecules or atoms thereof; so much so as to defy all the researches of chemistry, in its endeavours to unravel the thousand and one varying combinations of the primary elements which produce the endless variety of juices, and tissues, and odours, and essences, just as the ten

numeral figures, or the few primary notes of music, can be so endlessly combined as they are. Even the animal flesh diet of the most primitive savages, flesh to flesh as it may seem to be, is yet a very complicated matter—a matter, in fact, all the more complicated to our minds the more we consider it; and no more a simple process than the opposite series of changes from dust to dust. And, as man advances in civilisation—a condition which we must hold to be natural to our race—how much more complicated become the sources of nutrition, which were all clearly provided for the sustenance of populations! What with the pulses, and bread-stuffs, the juices and fibres of quadrupeds, fowls, and fishes, etc., the green vegetables, and fruits, and spices, and beer, wines, and aromatised spirits, all of them containing multitudes of compound atoms, we have an array of dietary certainly very far from simple, yet also certainly much more conducive to health and longevity, when judiciously used, than anything attempted under theories of restrictive living, such as we see built within the narrow inclosures of some crotchety sections of mankind, and not upon this broad basis of nature; and if our grand exemplar Nature thus set us a lesson in regard to food, why should we not follow it especially with respect to those homologous medicinal agents which are, in fact, usually contained within the composite materials of such food; but, from some cause or other, have failed to have been supplied or assimilated, and so led to a condition of disease?

It must be understood as of course, that I am very far from advocating the use of that meaningless medley of agents such as we so often meet with in the old editions of the *Pharmacopœia*, and which must have been devised, either under the impression that when so many matters were jumbled together, some one or more of them might do good; or else for the purpose of concealing from the vulgar ken the real active ingredient for curative purposes. At least, we can but think it something monstrous, and highly indicative of the clinging spirit, or rather dead-weight, or shell of old routine, that upwards of fifty articles should be mingled together, many of them being not only the most disgusting animals, such as skunks, scorpions, earth-worms, and millipedes; but also the most disgusting evacuations of such animals, and that at a period when such names as those of Glisson, Scarburgh, Petty, Morton, and even the philosophical Sydenham himself, appear upon the roll of the College. But when we of the present time, under our recent advances in chemistry, have fairly ascertained the modes of action of this and that individual material, and arrived at the conclusion that they are not only chemically, but vitally, compatible in their reactions within the body, I can see no reason for not combining them in such form as the nature of the case may demand, or for doubting which results are attributable to one agent, and which to another. Thus, for example, if we met with a child whose bones were deficient in earthy matter; but who was otherwise in good condition, as to colour, solidity, and plumpness; we might confine ourselves to the use of the phosphate of lime alone, or let it have the soluble supercarbonate of lime and phosphate of soda in its food; but if it were decidedly deficient in colour and firmness, the carbonate, phosphate, muriate, or sulphate of iron, might certainly be added with advantage; and, if emaciated, as well as pale and soft, the further addition of an extra albuminous and oleaginous diet would be desirable. In strumous habits, with glandular swellings, iodine might also be taken at the same time, either as iodide of iron or iodide of sodium; and, complicated as all this might seem to an inexpert, I conceive that no experienced practitioner could fail to apprehend which results were due to one part of the treatment, and which to another. As such cases are seldom of a simple kind, but usually accompanied with a general degeneration of structure and function, I have commonly employed such a combination of remedies as the above, exhibiting the phosphate of lime and iron in powder or in biscuits, the phosphate of soda in the food, and, in addition to the ordinary food, allowances of an extra quantity of cream and sugar, with pure albumen, diastase, and liquor of kreatine, or juice of flesh, all constituting a purely reparative or substitutive method of procedure, and the one most consistent with safety.

In albuminuria, as already recorded in the British Medical Journal of 1860, I have certainly found this substitutive mode of treatment of the greatest efficacy, and have accordingly called it distinctively the Ferro-albuminous Treatment of Albuminuria. It may, at the first blush, appear theoretical, and, according to my own views just expressed, too simple to be true; but the conclusions are founded upon cases too distinct and unmistakeable to admit of doubt, and here, at least, very little question can arise as to which element of the treatment performs its respective part; the steel effecting a beneficial change, through the blood, upon the pale degenerate tissues, and the albumen simply replacing that extraordinary waste of a material which is meant by nature to repair the frame, but which, under this morbid condition, is cast forth after the manner of an useless excretion. In the more remarkable cases of Emma Harris, treated thus in 1850; of Emma Rose in 1857; and of Master Pendleton in 1858, as reported in the British Medical Journal, and who are still living to attest the issue, we see decided idiopathic specimens of this formidable and usually mortal malady, and of apparent recovery, altogether referrible to the above-named agents, even though others had to be occasionally used under occasional symptoms. But, here again, resistance is to be given to any such empirical dogma as is contained in the phrase, "Given the name of the disease, here is the remedy." For the mere name of a disease is very far from comprising all the particulars of such disease, as existing in the persons of A, B, C, and D, down to Z. Each case must be viewed largely and rationally, and according to its individual features; otherwise the judgment of a physician were of no use at all. One adjunct must be used here, and another there; but still, throughout the whole treatment, the essential purpose remains firm and consistent; and, as already observed, in concluding the report of those cases, "whereas the bodily frame is formed of certain elements, or of compound radicals acting after the manner of elements, in their attractions, repulsions, and combinations; and, whereas such bodily frame is impaired if one or more such elements or compound radicals be not duly supplied, it follows, as a matter of necessity, that, when they are found wanting or deficient, they ought to be supplied, if possible. It may happen, in some cases, that the very organisation itself is incapable of appropriating such pabulum after being furnished with it; but these come under the head of exceptions, and do not constitute the rule, unless such organisation be worn out by protracted disease or extreme old age. In this special matter of albuminuria, as we see that, in most, if not all, cases, the dreaded characteristic symptom is preceded by actual hæmorrhage, or other causes of drainage of the red particles of the blood, and is, when it takes place, itself a drainage of the albumen; so an extra supply of steel and albumen appears the readiest and most rational method of meeting those evils; and the following deductions, based upon practice as well as reason, may, therefore, be advanced with safety:—

1. When the premonitory symptoms of debility and anæmia have not as yet produced actual renal degeneration, the supply of the deficient elements affords a fair prospect of averting the threatened malady of albuminuria.

2. If the renal disorganisation be commencing, the improvement of the mass of the blood by such means may yet give the constitution the power of arresting the

dire changes that precede, accompany, or supervene, upon the albuminuria.

3. Even if the disorganisation be considerably advanced, such supplies may postpone the fatal issue for a period indefinite.

4. The cases of absolute and complete disorganisation or disglanding, are, of course, beyond the scope of this or any other therapeutic paper, and belong exclusively to the province of morbid anatomy.

This distinctive ferro-albuminous plan of treatment I endeavoured to inculcate, and practised in the Queen's Hospital in 1850, subjected it to further trial for ten years, and the results were published in 1860. Now, in 1863, you may perceive some of our medical periodicals quoting from recent continental experience, what they designate "news", as relating to this very combination. So far there is extracorporeal evidence now afforded to us, that salts of iron, in the presence of albumen and soda, instantly form a chemical union, such as may be designated either an albuminate of iron and soda, or a ferro-albuminate of soda, quite soluble. These continentals assert that physicians have long been puzzled, and are still at a loss how to administer so valuable a remedy as iron in the manner most suitable to the internal organism. Some, they say, have objected to its insoluble forms; some to its combination with this acid; and others to its combination with that; while the more scrupulous have sought to unite it with such an animal acid as the lactic. In this albuminate of iron, however, they hail a combination such as actually exists within the living system itself, and which is, in fact, one of the products on which our life essentially depends. On the other hand, Liebig and others declare that the iron of the blood exists as a carbonate, a lactate, or an oxide, according to its position in the venous or the arterial currents, or in the capillaries; but we, as physicians, however naturally inquisitive on such points, are less interested in determining the precise accuracy of chemical theories, than in settling therapeutical facts. Therefore, whether the steel and albumen play their parts separately, or conjoin to form a sort of animal salt, or compound organic radical within the body; or whether the primary elements of each combine in this or that proportion to produce one or other of the many plesiomorphic constituents of the animal frame—is so far unimportant as compared with the alleviation of disease, and certainly subordinate to that purpose of curation which is the special end of all our studies in the allied sciences.

As regards this custom of reference to foreigners for so-called novelties, to the exclusion of any acknowledgment of the labours of one's nearer neighbours, the matter reminds me of the fact, amongst many others, that certain journals, while they are silent as to some long standing improvements in the treatment of syphilis by our brother Mr. Langston Parker, such as his mercurial vapour-baths, etc., are lavish in recognition of French and German followers of the self-same mode of procedure. But it will always be the same. The poet expresses the ever-recurring truth as regards the masses of mankind when he says, "'Tis distance lends enchantment to the view."

Now, in addition to any other remedies of a reparative or substitutive character in albuminuria, scrofula, or any other disease, the peptic liquor may also be employed when there is evidence of a failure in the primary assimilation; but, in all cases whatever, its efficacy is strictly limited to this, its one sphere of action; and even in controlling the symptoms of diabetes, its utility altogether depends on the success with which, in conjunction with the salivary elements or soda, it may transform the amylaceous constituents of the food into natural chyle, and convert free sugar into lactic acid. It works here as a special remedy in concert with others; but not at all as a specific in the ordinary sense of that word; that is to say, its action is of a clearly known, and not of a vague and mysterious character.

[*To be continued.*]

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

CASE OF RENAL CALCULUS.

By John Dan Brown, M.D., Rochester.

[*Read April 24th*, 1863.]

William R., aged 49, a tailor, was first seen by me on March 23rd, 1863. He was suffering from vomiting, constipation, pain in the abdomen and back, frequent pulse, furred tongue, and suppression of urine. Calomel and opium pills, and nitro-muriatic acid with hydrocyanic acid and taraxacum, were ordered, and leeches applied. This treatment, with but slight variation, was continued till the 28th, when lemon-juice was ordered, in the dose of half an ounce every hour.

On the 29th, a warm bath was used, and two blisters were applied to the loins. A diuretic mixture was prescribed. He died on April 1st, without coma.

He was seen on March 28th by Dr. Fredk. J. Brown, and on the 29th by Dr. Drawbridge. The amount of urine passed from March 23rd to April 1st did not exceed one tumblerful—one or two tablespoonsful being voided daily. The urgent vomiting and pain in the abdomen ceased in four days, and the bowels acted, but the pain in the back became aggravated, and hiccup and coldness of surface set in, accompanied by some degree of tumefaction of the abdomen.

The patient stated that a calculus was cut out of his urethra, near the meatus, when he was fourteen years old; and that he had never been troubled since that period with urinary disorder. The present illness commenced a week before he sent for me; but the symptoms were not violent until the date of my visit.

A *post mortem* examination was made. Rigor mortis was present. There was much adipose tissue. There was also deformity of the left lower extremity; viz., dislocation from morbus coxarius when a child.

The *abdomen* showed no signs of inflammation. The right kidney had a cyst on it equal in size to a cherry, and was hyperæmic. The left kidney was greatly enlarged, and contained several ounces of thin pus in different cavities. Four calculi were embedded in the kidney, weighing altogether 566 grains. One calculus was very large and branched, and weighed 508 grains. The composition of the calculi was phosphate of lime. The substance of the kidney was thickened to a great degree by hypertrophy, and extremely indurated. There was no other abdominal disease, except that the descending colon was lacerable, where it was in proximity to the suppurated kidney.

The *thoracic organs* were healthy; except that the right ventricle was thin and somewhat fatty, but not lacerable.

The certificate of death was as follows:—"Calculus of the kidney, several years; Abscess of the kidney, fourteen days."

The British Association. The approaching meeting of the British Association in Newcastle is attracting much attention. One of the most important features of the meeting will be a series of papers which are in course of preparation, on the chief branches of local industry. Another feature of the meeting will be excursions to the various mines, ironworks, etc. The committee are desirous of receiving contributions of works of art, pictures, models, and other matters of interest for exhibition from private gentlemen and others disposed to furnish them, and request those willing to aid them to communicate with the secretaries at Newcastle. (*Mining Journal.*)

Reviews and Notices.

On Malaria and Miasmata, and their Influence in the Production of Typhus and Typhoid Fevers, Cholera, and the Exanthemata. Founded on the Fothergillian Prize Essay for 1859. By Thomas Herbert Barker, M.D., F.R.S.Edin., etc. Pp. 251. London: 1863.

The Medical Society of London, in proposing the action of malaria and miasma as the subject of a prize essay, certainly placed a most difficult topic before competitors for the exercise of diligence in investigation and of skill in unravelling mysteries and removing difficulties. To have undertaken such a task as Dr. Barker has here attempted would be then, under any circumstances, creditable; and it adds to the author's merit, that he, having the disposition, has found the opportunities to make this as well as other contributions to medical science while engaged in the arduous duties of a country practice.

In entering on his subject, Dr. Barker adverts to the existence of a distinction between malaria and miasma, if each word be taken in its correct meaning; but, finding the impracticability of applying such a distinction throughout his work, he proposes to use on all occasions the word malaria, not as denoting a special agent, but

"Taking it in its true and broad sense as signifying 'bad air', that is to say, air, or a gas, or a compound of gases, which, being absorbed by the lungs, gives rise to certain specific effects or symptoms, which grouped together constitute a disease."

Having briefly noticed the ideas held by the ancients respecting malaria, Dr. Barker proceeds to examine the principal hypotheses which have been put forward in later times. These hypotheses, he observes, may be divided into two classes: those which have arisen from attempts to isolate gaseous poisons presumed to be present in the atmosphere, and to test their effects; and those which have been founded merely on the assumption of the existence of malaria and of certain properties possessed by it. He cannot, however, recognise any other mode of investigating the nature and action of malaria than that which recognises it as a substantive thing, organic or inorganic, and examines rigidly its supposed relation to the effects produced.

The modern hypotheses regarding malaria, which Dr. Barker examines, are classed by him as those which assert

"That malaria exist as inorganic poisons; or as organic poisons; or as modifications of the common atmospheric air under the influences of meteorological conditions, such as season, climate, barometrical pressure, hygrometrical state, temperature, and elasticity; or, lastly, as modifications dependent on geological peculiarities."

The hypotheses that malarious poison is of an inorganic or quasi-organic kind have recognised, as the noxious agent, carbonic acid, according to Dr. S. Metcalfe; and the products of the decomposition of organic matter, according to Vauquelin, Dr. Joseph Browne, etc. Here we see evidence of great diversity of opinion, as well as of indecision as to the precise nature of the poison; and the same remark is applicable to those hypotheses which have attributed an organic source to the malarious poison. Among these hypotheses may be mentioned that of organic cells or germs, as maintained by Drs. Brittan and Swayne, Snow, R. D. Thomson, and Mr. Grove; that of specific organic excitors of disease, as proposed by Dr. W. Farr; and those which recognise the poison which gives rise to disease, *e.g.* cholera, as a miasm produced by the fermentation of excreted matter. Others, again, as Sir R. Martin, M. Boudin, etc., look for the cause of the development of epidemic diseases in certain physical —*i. e.*, geological, meteorological, and climatic—influences.

Having classified and given an outline of the chief opinions which have been held as to the nature of the disease-producing poison, Dr. Barker proceeds to put forward the conclusions to which his own observations and reflections have led him. In doing this, he does not altogether reject previous hypotheses, but adopts to a certain extent some of them, and endeavours to reconcile those which have been placed in antagonism. This creed is summed up in the following sentences.

"1. Specific epidemic diseases are derived from specific poisons, poisons reproductive in the animal economy, and reproductive possibly out of the animal economy, under conditions favourable to reproduction.

"2. Such specific poisons received into the blood, whether by a wound in the skin, or by absorption from mucous surface, produce the same specific effects.

"3. The amount of poison is of little moment, when taken into consideration with the force of reproduction.

"4. The poisons are diffusible only to a limited extent; for, if they be gases, the diffusion-process in the atmosphere disperses them; while, if they be organic particles, they float but for small distances, and remain active or inactive according to the medium with which they come into contact.

"5. Meteorological influences do not assist in the diffusion of these poisons, but rather in the reproduction of them; inasmuch as those conditions of a meteorological kind which are evidently connected with the prevalence of epidemics, such as high temperature, would rather favour the dispersion and removal of volatile poisons than their concentration and intensity.

"6. As a consequence of the last named position, matters on the earth, exclusive of man, may be a constant storehouse of these poisonous agencies; the poisons may lie dormant for a time, like the seeds of a plant; at favourable seasons they may rise into full activity, and man, subjected to their influence, may become the vehicle of their reproduction and of their further transmission." (Pp. 86-7.)

At this point of the book there are given the results of observations on the relations of various meteorological states to particular diseases; and a series of illustrations, collected by Dr. Barker himself and furnished to him by several professional friends, of the origin and propagation of diseases by infected air. In commenting on the facts here presented, he observes that there seem to be four distinct modes in which the poisons of communicable diseases originate and spread. In some instances, as in typhus and typhoid fevers, the "poisons may arise in decompositions taking place outside the body, which poisons, carried to the body, excite disorders specific in kind, and afterwards perhaps communicable." In other cases, the disease spreads by the transmission of one particular poison from one

person to another, as in scarlet-fever and small-pox. A third class of communicable diseases may be apparently traced to the absorption of matters secreted in the course of common diseases; as exemplified in the development of puerperal fever through the operation of a poisonous secretion infecting the hands in making a *post mortem* examination of a case of simple peritonitis; and in another class, of which erysipelas is an example, it would seem as if the poison lay stored up in dried vegetable products until set at liberty. These ideas as to the mode of the origin and distribution of spreading diseases are doubtless susceptible of criticism and to future rearrangement and simplification: this Dr. Barker admits, but deems it safest, at present, to use the facts as they are presented.

The author next relates a series of interesting experiments which he has made on the action of cesspool air, sulphuretted hydrogen, sulphide of ammonium, and carbonic acid gas. These experiments, at least most of them, were laid by him before the profession some years ago, and an account of them has been published in one of the previous numbers of this JOURNAL. Regarding these, he observes that

"In filthy localities, in cesspools, in sewers, in decomposing organic remains, poisons organic in character are generated. These poisons are capable of producing certain specific symptoms analogous in many points to symptoms caused by the organic poisons. Thus sulphuretted hydrogen produces intestinal disorder and prostration; while sulphide of ammonium sets up a class of symptoms closely resembling those of typhoid fever.

"These inorganic poisons are not competent for the production of communicable disease; the symptoms they produce being confined to the body in which they (the symptoms) are demonstrated.

"While the specific actions of these two classes of poisons must not be confounded together, their possible connection must not be overlooked. The presence of the inorganic poison in the person of the sufferer may materially intensify the action of the organic poison, and even dictate the type of the disorder. As 0.051 per cent. of sulphuretted hydrogen diffused through the air—a proportion imperceptible to the senses—will affect a healthy animal, and sicken it, and prostrate it; it is a self-evident proposition that the same agent present in the air, and breathed by the fever-stricken person, will intensify his symptoms and influence their course." (Pp. 226-7.)

In concluding this notice, we thank Dr. Barker for the attempt which he has made to elucidate the difficult question of the mode of origin and action of the poisons which give rise to communicable diseases. Whether the conclusions to which he has been led will, one or all, ultimately bear the test of further inquiry, will be a matter for others—and, we hope, for himself also—to determine; but the merit is certainly due to him of attaching himself to no mere hypothetical speculation, but of endeavouring to draw his inferences from the observation of facts. While he still leaves the matter, as regards some points, in sufficient obscurity to demand further attempts for its elucidation, he has followed throughout the only path in which such attempts can be safely carried out. His work will, we have no doubt, be extensively and carefully studied with advantage by all inquirers into the phenomena of malaria and miasmata, and their influence in the production of communicable diseases.

CATALOGUE OF THE PATHOLOGICAL PREPARATIONS IN THE MUSEUM OF GUY'S HOSPITAL. Revised and edited by SAMUEL WILKS, M.D.Lond., F.R.C.P., Assistant-Physician to Guy's Hospital, etc. Two Vols. London: 1863.

MORE than thirty years ago, Dr. Hodgkin published a descriptive catalogue of the preparations contained in the Museum of Guy's Hospital, which was then first formed—and at least considerably enriched by the labours of that distinguished pathologist. The subsequent multiplication of specimens, and the immense advances in pathological science, have rendered a new catalogue necessary; and this task has been undertaken by Dr. WILKS, with the aid of his able colleague Dr. Habershon.

Throughout the work, the original catalogue of Dr. Hodgkin has formed the basis, and has been revised and added to by the authors of the several divisions of the present work.

The first volume opens with a catalogue of the preparations illustrating diseases and injuries of Bones, Joints, Muscles, Tendons, Bursæ, etc.; this has fallen to the share of Dr. Wilks, who has also taken in hand the next division, that on Diseases of the Heart and Circulatory System, as well as that which follows, on the Diseases of the Nervous System, Integument, and Organs of the Senses. The volume is concluded with a list of the specimens illustrating Diseases of the Vocal and Respiratory Organs, revised by Dr. Habershon.

The second volume begins with a Catalogue of Diseases of the Organs of Digestion, revised and enlarged by Dr. Habershon. Dr. Wilks next describes the specimens illustrating Diseases of the Suprarenal Capsules, and of the Urinary and Male Genital Organs; and, in the following section, the Diseases of the Female Genital Organs, including the Mamma and Utero-Gestation; and Diseases of the Peritoneum, including Hernia. The volume is concluded with an Appendix of the preparations added since the remaining portions of the catalogue were published.

In order to render the *Catalogue* more useful to those who wish to refer to it and to examine the specimens, an analytical index is prefixed to each part, where the various forms of disease to which the organs are liable are classified. In the case of the Bones, the index is double; being arranged in one part according to the separate bones, and in the other according to the diseases.

The editor, in his preface, takes occasion to combat an erroneous opinion which seems to be entertained by some as to the object of such a collection as a hospital museum. "We have", he says, "repeatedly seen investigators pass through the museums of London, in order to discover the frequency of the occurrence of a particular form of disease." Now, as Dr. Wilks shows, it is not the purpose of a museum to collect all specimens of every disease, but to exhibit such merely as are fairly sufficient for illustration. An absence of specimens of a disease or injury may generally be taken as evidence of its rarity; but even here it is probable that much often depends on the ease or difficulty of procuring specimens; as in the case referred to by Dr. Wilks, of united fracture of the base of the skull, of which (as he believes) there is no specimen in the London museums.

After a careful study of the preface, and with due

attention to the cautions therein laid down, students of pathology will find this Catalogue of the Pathological Preparations in the Museum of Guy's Hospital exceedingly useful to them in their researches.

Reports in Operative Surgery. By R. G. H. Butcher. Series the Eighth. Dublin: 1863.

These contributions to practical surgery include the histories of five cases; and for the most part the subjects are those that have already occupied the attention of that able surgeon, Mr. Butcher.

The first case is new—Elephantiasis Arabum, affecting in the most formidable way the lower extremity, successfully treated by ligature of the femoral artery. The remedy applied here appears to have had a most satisfactory effect, confirming in a marked manner the experience of Professor Carnochan of New York, who first suggested this mode of treating an almost irremediable disease. Mr. Butcher met with unusual difficulties in isolating the femoral artery, deeply buried in hypertrophied structures. The vein, an inch in width, obscured everything. The artery was, however, by dint of careful surgery, tied without injury to the vein—the graphic narration of the difficulties that attend on the separation of the artery from its accompanying vessel in ligature of the femoral, and the mode in which they should be overcome, being well worthy of consideration.

The second case is a Successful Case of Excision of the Knee-Joint. Here, after stating that which we believe, in reference to this proceeding, will be found to be thoroughly correct—"that the operation has been far too confidently adopted, and that the general proportion of its failures arises from operating on diseases or on patients unfitting for its use"—an onslaught is made on the writer of the article "Resection", in the *System of Surgery*, where the "Butcher's" saw is described as "rather liable to bend, and the blade is apt to get loose". We confess to sympathising with Mr. Butcher when he describes this article as "feeble" and "meagre". Indeed, it seemed to us, when we read the *System*, that the author of the article in question possessed as little actual experience in the great surgery of resection of joints as he did in the usefulness of an instrument that, beyond all question, is one of the simplest, most elegant and facile of modern invention.

The succeeding cases refer to Extirpations of the Upper Maxillæ on account of vast tumours, and are especially interesting from the successful use of the actual cautery in arresting the immediate and subsequent hæmorrhages that took place.

The series terminates by the narration of one of those complicated cases of hare-lip in which all the resources of surgery were satisfactorily brought to bear.

It is impossible to peruse Mr. Butcher's writings without being struck with the eminently practical character of his mind. As a surgeon, in a difficult case, mainly depending for the successful issue on the after treatment, we see him doing everything himself, and eminently abundant in resources in the face of difficulties. The reader is carried along with him in his love of surgery, increased by a command of language at once suggestive and picturesque, and which is so characteristic of those men who have made and who yet maintain the reputation of the Irish school of surgery.

British Medical Journal.

SATURDAY, JUNE 6TH, 1863.

OUR LUNATICS IN FOREIGN ASYLUMS.

Many of our readers will doubtless be surprised to hear that English lunatic patients are not unfrequently sent from England and consigned to the lunatic asylums of Belgium, France, and Germany, out of reach of English commissioners of lunacy. Dr. Robertson, in the *Journal of Mental Science*, calls attention to this subject. He tells us that, according to information which has reached him from different quarters, this practice is on the increase. The fact itself was referred to in the Parliamentary Committee of 1859; and it was then stated by Lord Shaftesbury, that there was no legal check to prevent such a transportation of lunatics out of England. He also added, with regard to the superintendence exercised over foreign asylums, that

"There is very considerable nominal inspection and authority exercised over them. All those things appear upon paper, and, if you read the accounts of the system under which lunacy is governed in France, you would think that nothing could be more perfect; but when one comes to examine into the matter, I think it is very doubtful whether it is so. I had heard a great deal about foreign asylums; but, when I examined into them, I thought them wonderfully inferior to our own, and very deficient in things that we in this country consider to be absolutely necessary."

The chief inducement for sending insane patients abroad is, it would seem, the comparatively low charges of the Belgium and German private asylums; and there is also another inducement, Dr. Robertson adds—viz., "the vain hope of thus keeping the presence of mental disease in the family a secret". From £40 to £50 is considered a high rate of charge in the middle-class Belgian asylums. In Germany, £100 is considered high.

We think this matter should be known to the profession; for it really would appear as if the patients thus transported are often consigned to an inevitable doom, and always to great misery. Dr. Robertson says that he has known instances in which one *life-payment* has been made for the perpetual incarceration of the patient, and asks, What chance of a cure in such a case as this? Some of the restraints which the wisdom of our legislature has placed over the management of the unfortunates in this country do not exist in Belgium and Germany. Lunacy commissioners here, for instance, have the power of inquiring as to payments made for the care of lunatics; and the Court of Chancery requires that a fixed

portion of its ward's income shall be expended on him; but there appears to be no regulation of this kind abroad. Dr. Robertson says that he has heard of cases where false accounts have been rendered to the friends, and receipts given for sums greatly in excess of those paid; and he also points to the miserable life which the poor lunatic must pass in an asylum where no one speaks his language and understands his habits, and where he is subjected to no proper supervision. He suggests that, by negotiation through the Foreign Office, a visitation of English patients in foreign asylums might be arranged, and would enable the commissioners to lessen the evils attending the system of foreign lunacy treatment of English subjects.

We cannot doubt that Dr. Robertson has good grounds for the statements which he makes; and that he does not throw out certain dark hints to be found in his paper without a reason for doing so. He hints that a doubtful case of mental disease might be more readily dealt with abroad than in this country; and states, on "undoubted authority", that "the present French government occasionally send noisy political adversaries for temporary treatment in the Bicêtre". He also believes that certificates signed in England are valid for France; and that thus a patient may unknowingly be kidnapped and consigned to a French private asylum—"not a pleasant abode, or one from which escape or release is readily got". Dr. Robertson refers to a fashionable novel of the day as if the details in it touching this matter were not mere matter of fiction, but actual facts. He writes:

"The plot of *Lady Audley's Secret*, as all the world knows, ends by consigning 'my lady' to a private asylum in Belgium, where she finally dies. Considerable skill is shown in the manner in which Lady Audley's moral guilt is so far subordinated to her mental type as to leave the impression that while, doubtless, the wisdom of a British jury would at any hour have found her guilty, there is yet enough in the case to enable the specially retained psychologist to counsel this transfer of the offender—the would-be murderess and incendiary—to the living death of a foreign private asylum. The specialist thus consulted concludes his visit to Lady Audley by writing a letter to his friend M. Val, the proprietor and medical superintendent of a very excellent *maison de santé* in the town of Villebrumeuse. 'We have known each other', he adds, 'many years; and he will no doubt willingly receive Lady Audley into his establishment, and charge himself with the full responsibility of her future life; it will not be a very eventful one. From the moment in which Lady Audley enters that house, her life, so far as life is made up of action and variety, will be finished. Whatever secrets she may have will be secrets for ever. Whatever crimes she may have committed she will be able to commit no more. If you were to dig a grave for her in the nearest churchyard, and bury her alive in it, you could not more safely shut her from the world and all worldly associations. But as a physiologist and an honest man, I believe you could do no better service to society than by doing this; for physiology is a lie if the woman I saw ten minutes ago is a woman to be trusted at large.' I must refer to the chapter 'Buried Alive' for a capital description of the journey to and arrival at the Belgian *maison de santé*; my present object being not a critical review of this clever novel, but the more serious inquiry, *Can such things be?* Is it possible thus to kidnap and consign to a living tomb in a foreign land a patient with, let us assume, partial mental disease of a curable form?"

One special practical conclusion must present itself to the mind of every one who peruses these lines, and it is this; viz., the great want, so often pointed out, of middle-class lunatic asylums in this country. It appears that it is just the very class of persons who require the cheaper kind of accommodation who are consigned to these foreign abodes.

DISEASED MEAT AND ITS EFFECTS.

We have more than once objected to the sweeping assertions which are often made concerning the injurious effects produced on the body of man by "diseased meat." We have asked for proofs of the fact. We fully subscribe to the propriety and necessity of authority interfering in the sale of corrupted food; and it is evident that in a matter of this kind there is no fear of authority interfering beyond what is required. But science must be cautious, for the sake of her reputation, in making assertions which she has it not in her hand to prove. We apprehend that at this present moment a medical witness would cut a very poor figure in the witness-box if he attempted, under cross-examination, to maintain as a positive fact all the assertions above alluded to. Put to the test of proof, his position would be found very faulty. Professor Gamgee, who has paid great attention to this subject, in a late number of the *Veterinary Review*, complains "That the greatest difficulty we have had to contend with has been to convince those who have been informed as to the mass of diseased meat that has been sold, that such food is really poisonous." He goes on to say, that it is only of late that attention has been paid to the subject. "It is but recently that it has been pointed out that anthrax is far from unknown in the United Kingdom, and malignant pustule ranks amongst the diseases of man in Britain." He also insists on the "unwholesomeness of the milk of epizootic aphtha." He refers to a case in which pigs had "contracted epizootic aphtha from taking boiled milk"; and, though once sceptical of the fact, now finds it confirmed by the following incident:

"On a farm near Edinburgh, a cow was suffering severely from epizootic aphtha. The dairy-maid took the milk of this animal into the kitchen, and a custard pudding was made with it. Every person that partook of the pudding suffered from colic and diarrhœa precisely like the children referred to by Mr. Watson in our impression for August last. Two new cases are reported this month amongst our 'Original Communications.'" (*Veterinary Review.*)

Again, Edinburgh students have told him of beefsteaks and other meats which have produced in them

severe colic, diarrhœa, etc. He has known "students change their lodgings entirely from the repeated symptoms of sickness that followed after each meal cooked for them by their landladies." Dr. Douglas Maclagan, again, had been often, as analyst to the crown, requested to analyse meat and meat-pies suspected to have contained poison; but in no instance did he find poison. He also tells us of a beefsteak which caused violent colic and purging in two persons who had ate of it, and in the servant also who ate of it on the following day.

Professor Gamgee adds in conclusion:

"It must be admitted that there is some ground for alarm. We do not preach what we do not believe, and have excluded from our 'bills of fare' pork, unless fed on a friend's farm; we have carefully watched the quality of meat brought in, and made it a standing rule never to eat any food at all underdone. The state of our meat trade is a disgrace to any civilised country, and we still believe that it was injudicious for a medical journalist to declare that diseased meat did not hurt those who could 'get enough of it.' As time rolls on, it will be rendered very evident that such a conclusion was not warranted by facts."

Great credit, and the thanks of the community are due to Professor Gamgee for the earnestness with which he has for so long pursued the subject. Our only desire is, in referring to the subject, that it should not be spoiled by an overstatement of the case.

THE MEDICAL COUNCIL.

At the meeting of the Council on May 27th, after the appointment of a Committee to decide what farther steps should be taken with regard to the *British Pharmacopœia*, and the reception of the Registers of Students, the following letter from the Royal College of Surgeons of England was read.

"Royal College of Surgeons of England, 4th May, 1863.

"Sir,—I am desired to acquaint you, for the information of the General Council of Medical Education and Registration, that the Council of this College, on the 13th June last, appointed a Committee to consider

'Whether any, and if so, what alterations it would be proper to make in the Regulations of this Council relating to the education and examination of candidates for the diploma of Member of the College, so as to bring them more in accordance with the recommendations of the General Medical Council in reference to general and professional education.'

"That this Committee addressed letters to the Fellows and Members of the College holding appointments in the hospitals, infirmaries, and other charitable institutions of England and Wales, and to those engaged in large general practice, in order to ascertain what opportunities are available throughout the country for practical instruction in medicine and surgery, and what is their opinion on the best mode of commencing professional education. The whole subject of the College Regulations was examined carefully at repeated meetings of the Committee and of the Council. As the circumstances of those who intend to adopt the medical profession, and the opportunities of instruction within their reach, are extremely various, the Council are of opinion that the course of education cannot be subjected to any absolute and inflexible rule without great disadvantage, and even much unnecessary hardship in particular cases.

"In the opinion of the Council, the leading principle in the education of those whose life will be devoted to the treatment of accidents and diseases should be to make it as practical as possible, especially at its outset. The minor duties of surgery, especially in the manipulative department, and the usual course of injuries, diseases, and their treatment, can be understood in great measure without previous theoretic training; they are matters of great interest in themselves, calculated to excite and keep up the attention of the student, and to make him feel the advantage, or rather the necessity, of that clearer insight which is to be derived subsequently from scientific teaching in the schools. He thus becomes acquainted with those ordinary duties of his profession with which he will be principally occupied from the very commencement of his active career, although in plain truth they cannot be learned in a great school. The Council would think favourably of the arrangement, if the early portion of the medical education could be carried on at home, under the influence of domestic life and associations, or in the house of a competent master, so that the danger of sending an inexperienced youth into the world without guidance, and especially into a great metropolitan medical school, should be reduced to the smallest possible amount.

"The Council, therefore, are of opinion that an option should be left to parents and guardians as to the time and manner in which that portion of study not spent in medical schools should be employed, and accordingly propose to continue their Regulations on the subject.

"They have at the same time introduced modifications into their rules, calculated to provide against irregularities and abuses, and to insure the continued and efficient prosecution of the studies now required.

"Copies of the Regulations, as thus amended, are herewith inclosed.

"I have the honour to be, sir, your obedient servant,

"Edmund Belfour, *Secretary*."

The letter was ordered to be referred to the Education Committee; as was also one from the President of the Royal College of Surgeons of Edinburgh. This letter set forth that the College had at first adopted the whole of the recommendations issued by the Medical Council; but, seeing that other licensing bodies did not adopt that part of the recommendations which required the preliminary examination to be passed before the commencement of professional studies, and that the Council took no steps to enforce the adoption of this recommendation, the College had suspended its regulation on this matter until further notice. The President of the College went on to say:

"In regard to requiring the examination in general education to be passed before commencing attendance at a medical school, the College, without expressing any opinion upon the merits of the question, is ready to enforce such a regulation, in the event of all the Colleges, Universities, and other licensing bodies engaging to do the same, from and after a certain date, and in such a manner as shall leave no room for doubt.

"In regard to professional study, the College has avoided ambiguity, by simply fixing the number of sessions of attendance at a regularly constituted medical school, as not less than four winter sessions, or the alternative of three winter and two summer sessions; and I have to suggest to you that, by adopting a similar formula, the General Medical Council would avoid the difficulty which—as experience has shown—arises from

the use of a phrase so ambiguous, and so liable to evasion, as that of 'professional study'.

"I may be permitted to add, that the proceedings of the Medical Council above referred to have occasioned not only embarrassment to the College, but disappointment of the hopes entertained in the College of an improvement in medical education through the influence of the Medical Council. Unless the Council will confine its recommendations (as distinguished from the mere expression of what it considers desirable) to what it is able to enforce, and will show its intention to enforce them without fail or delay on any of the bodies which shall have failed to adopt them at the specified time, it is obvious that the influence of the Medical Council for good to the profession must be seriously impaired."

A letter was also read from the Registrar of the Royal College of Physicians of London, stating that an additional examiner in surgery had been appointed; and that it had been resolved to admit graduates of the University of Athens to the College examination, and to receive certain certificates from Codrington College in Barbadoes, and from the Cape of Good Hope, as evidence of general education. This letter was also referred to the Education Committee.

A letter was then read, which had been addressed to the Registrar by the Director-General of the Army Medical Department. The object of the communication (dated March 14th, 1863) was to acquaint the Registrar that Dr. Gibson had been directed by Sir G. C. Lewis to refer the question, whether the Fellows and Licentiates of the College of Surgeons in Ireland were entitled to practise medicine as well as surgery, to the Medical Council. A motion in the affirmative was proposed by Mr. Hargrave and seconded by Mr. Syme; but, on the debate on the motion being resumed the next day, it fell to the ground, Mr. Syme, by permission of the Council, withdrawing his name as seconder. On the motion of Dr. Corrigan, seconded by Dr. A. Smith, a reply was agreed on to be forwarded to the Director-General, stating that the question had already been before the Medical Council and before the law-officers of the Crown for Ireland; and that the decision on each occasion had been against the power of the College to license in medicine.

"If the opinion of the law-officers of the Crown in Ireland be correct, the Royal College of Surgeons of Ireland has not power, and is not competent, to grant a diploma or degree in medicine."

A long report was read from a committee of the King and Queen's College of Physicians in Ireland, "on the communication of the General Council relative to Preliminary and Professional Education." We give the principal portions of it.

"They" (the President and Fellows of the College) "consider that the mere 'opinion' or 'recommendation' of the General Medical Council—as to what should be required in education and examination—will be of no avail to insure competent education and efficient examination in the present circumstances of the numerous qualifying or licensing bodies in the United Kingdom; for, as the incomes of many of them are dependent more or less on the fees received for licences and degrees, each licensing body is deterred from raising its standard of education and examination to what it may consider adequate, by the apprehension that, in so doing, such standard may exceed the requirement of some other licensing body; and that thus candidates may desert the body requiring the higher standard to obtain a qualification elsewhere on easier terms. This apprehension has not only prevented improvements in education and examination, but it has led to a downward competition, that has of late years caused a progressive deterioration in the standard of preliminary and professional education and examination.

"The College is of opinion that this great fundamental defect can only be met, in the present state of the law, by the General Medical Council laying down a definite scheme of preliminary and professional examination for the several medical licensing bodies; and in the event of any of those bodies not adopting such scale, that then the General Council should have recourse to the powers vested in them under clause 20 of the Medical Act, and apply to the Secretary of State to have such college or corporation removed from the list of recognised licensing bodies."

After some further objections to the recommendations of the Council, on the ground of the want of a guarantee of efficiency and uniformity in the examinations of the various bodies whose testimonials are received, the College suggested that the Medical Council should originate a scheme of what they considered to be a sufficient preliminary education and examination.

"The College would suggest the following as the subjects of preliminary or general education and examination; viz., English composition; French or German, translated into English; Latin, ditto; Greek, ditto; logic; physics, including elementary mechanics; optics, hydrostatics, pneumatics; mathematics, including arithmetic, to end of decimal fractions; algebra, to end of simple equations, involving one unknown quantity; Euclid, first three books.

"There still remains a class of students, though it is hoped their number will rapidly diminish, who may not have gone through a sufficient portion of an university arts' course, or undergone any other examination, for whom it will be necessary to provide a preliminary examination.

"With regard to these, the following plans are submitted for consideration:—

"I. That examiners, to be appointed by the respective Branch Councils of England, Ireland, and Scotland, which severally represent the licensing bodies of their respective divisions of the United Kingdom, should, at certain stated periods, forward, with due notice, to an authorised person in the several cities or towns in which recognised medical schools are established, printed examination papers, under regulations such as are now adopted in examinations in the Civil Service Department; or

"II. That at stated periods the students of this class should attend at London, Dublin, or Edinburgh, to undergo a like examination as in the Civil Service.

"The College desires to express its preference for the first of these plans.

"Before quitting the subject of preliminary or general education, the College desires to draw the attention of the General Medical Council to an inconsistency in the list of bodies proposed to be recognised in Ireland as competent to grant 'testimonials of proficiency' by their ordinary examinations. The matriculation examinations of the three Colleges of the Queen's University; viz., the Queen's Colleges of Belfast, Cork, and Galway, and of the Apothecaries' Hall of Ireland, are excluded, al-

though comparatively extended, and with a very moderate fee annexed; while the entrance examination of the Dublin University is the only testimonial recognised, which is not so extended as the others, and for which the fee is so heavy as almost to amount to a prohibition."

The College further recommended that the preliminary examination should be divided into two parts: "the first, comprising English, Latin, Greek, and arithmetic, previously to the student's beginning any professional study; and the second, containing a modern language, logic, mathematics, algebra, and physics, at the end of the first and second year's professional study, to be undergone previously to his admission to the first professional examination."

They also thought it desirable that the professional examination should be divided into two parts; and that the General Council should lay down a course of professional, as well as of general education and examination; and, after advising that a portion of the second part of the examination should be strictly practical, the report stated that

"The College attaches much more value to efficient examination than to any code of education or courses of attendance on lectures or hospital practice; for they believe it will be admitted, that under the present system the required certificates can frequently be obtained without any sufficient evidence of regular attendance on the part of the student, or any proof whatever of his having acquired any professional knowledge during such attendance."

The report also pointed out the circumstances which, in the opinion of the College, rendered competition as to fees between the licensing bodies in Ireland unfair.

"In Ireland, there are at present four public bodies granting degrees or diplomas in medicine and surgery; viz., the University of Dublin, the Queen's University, the King and Queen's College of Physicians, and the Royal College of Surgeons. Of these, the two former —viz., the Dublin University and the Queen's University—are in possession of large endowments granted by the state in former years, or of a large annual parliamentary grant; while the other two—viz., the King and Queen's College of Physicians and the Royal College of Surgeons—receive no aid from the state, and are wholly dependent on the fees received from candidates for examination."

A memorial was next read from the Company of the Apothecaries' Hall of Dublin, in which it was stated that the doubts raised by the Council as to the sufficiency of the Company's license to enable its holders to practise medicine, had prevented it from being recognised by the Army Medical Department. The memorial also cited the opinions of the Right. Hon. Joseph Napier and of Sir R. Bethell in favour of the Company; and concluded by stating

"That the Company are induced thus briefly to restate their case, and from it to make another appeal to the General Council, with the hope that they will be led to see that it is a matter not of favour, but of simple justice, to recognise the license of the Company as a 'qualification in medicine,' and that having accepted the course of study and examination to be gone through in order to obtain this qualification, and having finally admitted the licentiates of the Apothecaries' Hall of Ireland to the *Medical Register*, the Council cannot judicially deny to them the title which is common to all other persons similarly circumstanced, to present themselves at the competitive examination for the appointment of assistant-surgeon in Her Majesty's Service.

It having been agreed to enter the memorial on the minutes, a motion was made by Dr. Leet, and seconded by Mr. Syme, in favour of the admission of licentiates of the Apothecaries' Hall of Ireland to registration as practitioners in medicine; but the debate was adjourned to another day.

On Friday, May 29, the following documents were brought up and received: The Report of the Finance Committee; and a Tabular Statement shewing the conformity or nonconformity of the regulations of the Bodies in Schedule A with the recommendations of the Medical Council, and the reasons for nonconformity given by the respective bodies.

Two memorials were received from the medical officers of the Devon and Exeter Hospital and of the West of England Eye Infirmary, the object of which was to induce the Council to recognise the value of the practical instruction available throughout the provinces under the guidance of country practitioners and of the medical officers of provincial hospitals. We shall give these documents in full in our next number; but in the meantime we may say, that the memorialists have made out a very good case in favour of utilising the means of practical instruction which undoubtedly exist to a large extent in the provinces.

On Saturday, May 30, the Council commenced business by appointing a committee to consider the legality of a requirement of the Poor-law Commissioners of Ireland, "that every candidate for medical employment under them shall produce a licence in midwifery, in addition to licences in medicine and surgery."

The Council then, having resolved itself into a Committee on Education, resumed a debate on a motion which had been brought forward on the previous day by Dr. Andrew Wood—

"That, inasmuch as the regulations of the Royal College of Surgeons of England do not require the commencement of medical study to be at a medical school, they are not in accordance with the recommendations of the Medical Council, and not such as to secure the possession of the requisite knowledge and skill for the efficient practice of surgery."

To this the following amendments were proposed:

1. "That this Council do submit a case to Her Majesty's Attorney-General and Solicitor-General, with the view of ascertaining whether, under the provisions of the Medical Act, this Council possesses the power of issuing regulations in relation to the general and professional education of medical students, the enforcement of which will be mandatory upon the different Licensing Bodies enumerated in Schedule (A) of said Act."

2. "That the second recommendation of the Report on Education be reconsidered, viz.: That the time of commencing professional studies shall be understood to be the time of commencing studies at a medical school,

and that no qualifying body be held to have complied with the recommendation of the Council, which shall allow the examination in general education to be passed after the commencement of professional study."

Both amendments, and the original motion, were negatived: so that nothing was done in reference to the conduct of the College of Surgeons.

The Council passed the following resolution, in reference apparently to the memorial of the medical officers of the Devon and Exeter Hospital.

"That the Medical Council, whilst appreciating the great value of the practical opportunities afforded to the student, who is a pupil to a regular member of the profession holding the appointment of surgeon to an hospital, general dispensary, or union workhouse; and whilst considering that a year spent in such pupilage might be regarded as one of the four years of professional study recommended by the Council, is of opinion that such year of pupilage, apart from the practical and systematic study of the elementary and ancillary sciences of medicine, should not be conducted during the first year, but at some period during the subsequent years of professional study."

The Council negatived two resolutions which were proposed, to the effect

1. "That all students pass an examination in general education, if possible, before they commence their professional studies.

2. "That students may in particular cases be registered for the first time who have passed only a part of their examination in general education, but that that examination must in all cases have been completed previously to the commencement of the second Winter Session."

At the meeting on Monday, we understand that a copy of proposed amendments to the Medical Act, and other important documents, were brought up and received. As, however, we have not been able to obtain an authenticated report of the proceedings of the Council subsequently to Saturday, further accounts must be postponed.

THE WEEK.

A CORRESPONDENT calls our attention to the fact that Dr. Clay of Manchester, in a letter to a Manchester paper (which has appeared in our pages), appends the letters M.D. to his signature. We find, on referring to the last edition of the *Medical Register*, that Dr. Clay does not possess a diploma of Doctor of Medicine; or, at least, that he did not possess one at the time of its publication. We have already freely expressed our opinion on this subject of titles; and we have, we believe, given the general feeling of the profession in stating that the assumption of the title of Doctor of Medicine, in other words, the addition of M.D. to his name by any person who does not possess a diploma in medicine from an university, is a most unwarrantable act. We sincerely trust that Dr. Clay has obtained a diploma since the last edition of the *Medical Register* was published. The wrongful assumption of titles is, indeed, an offence against the laws of the country. We beg, in fact, to call the attention of all offenders in this way to the 40th clause of the Medical Act. We there read:—

"Any person who shall wilfully and falsely pretend to be, or take, or use, the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner or apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds."

The words of the Act are clear and explicit enough; and we have no hesitation in saying, that if the Medical Council do not take cognisance of offences of this nature, when properly brought under their notice, it is neglectful of one of its most important duties. Who is to enforce the obligations of the Act, if not the Medical Council? It is not to be supposed that any single member of the profession will play the Quixotic part of prosecuting, for the benefit of the profession at large, offenders against the Medical Act and against professional morality. Much rather, however, would we have it, that no member of the profession should put himself in the way of being liable to any of the penal clauses of the Medical Act. It is impossible that the appending of M.D. to his name by any one not possessing the degree of Doctor of Medicine can in any way add to his respectability or credit.

A PROPOSAL made by several medical gentlemen of Oldham to the Board of Guardians, which was noticed in the JOURNAL of the 23rd ult., has been rejected. The proposition had for its object the more effectual carrying out of vaccination. They suggested, says the Oldham paper, that the

"Powers at present entrusted to a limited number of medical men in the union, of performing the operation at the public expense, should be extended to themselves and to any resident medical men who might desire to be so authorised. By this plan, instead of being at the trouble, which, little as it is, many people will not take, of going direct to certain appointed medical officers, they would find themselves solicited, and in a manner compelled, to subject their children to the operation by the very medical man who might attend the family on the occasion of the birth of a child, and who would, to a great extent, possess their confidence and friendly regard. They offered to undertake the responsibility at the same sum per case as that received by the existing public vaccinators. But the memorial was not favourably received. The memorialists, it was said, 'only wanted to extend their business'; and the further consideration of the matter was deferred to another day. What appeared to be a very efficacious plan for insuring vaccination has been rejected for no better apparent reasons than those indicated; and the proposers of it allowed to retire without thanks for their trouble."

THE expenditure of the Medical Council during the past year, 1862, was £4822. Its income was £4661. The excess of expenditure over income was, there-

fore, £160. This bad balance-sheet is attributed to the fact of £600 advanced to the *Pharmacopœia* Committee. The estimated accounts for the present year, 1863, of course, show a balance in favour of the Medical Council.

We are glad to find, from the following paragraph in the *Chester Courant*, that Dr. Waters has received a most solid and satisfactory testimonial from the general public in his neighbourhood :—

"Expression of Sympathy with Dr. Waters. On Monday last, a sum exceeding £300 (exclusive of the medical subscription), collected to defray the expenses at the late trial, was presented to Dr. Waters, with the following address, beautifully engrossed on vellum, and signed by nearly 700 residents of the city and neighbourhood :—'We, the undersigned, concurring in the justice of the verdict pronounced by a jury of his country, desire to express our warmest sympathy with Dr. Waters, and our undiminished confidence in his high moral and professional character.'"

We believe that this is the first medical trial in which the general public have so come forward. We understand that their aid was completely unsolicited, and that no person canvassed either for the subscriptions or signatures. Amongst the names attached to the address are those of the bishop, the dean, the two members, Lord Grosvenor, clergy of all denominations, and persons of all classes. The whole profession will rejoice to hear of this sunshine which has fallen on Dr. Waters.

The *Lancet* is angry and perturbed because the Medical Council will not accept its urgent demand for the admission of reporters, and *therefore* once again exercises its speciality of abuse upon this Journal. We ventured lately to offer suggestions why the admission of reporters to the Medical Council might be injudicious, and we have reason to believe that those suggestions were not without influence on the minds of some members of the Council. Here is the way, consequently, in which they are received by our defeated contemporary. "The presence of Dr. Burrows's name on the side of exclusion explains the tone recently adopted in this matter by his very humble servant and toady of the press." We repeat these lines, because we think it is right the profession at large should on such occasions have prominently brought under their notice the kind of mind, the measure of honourable sentiment, the level of morality, and the decency of language which are, for its purposes, adopted by a journal which boasts that it regulates the honour of the medical art. We ask the gentlemen of our profession to meditate upon the real character of a journal which, pretending to be guided by members of an honourable profession, condescends—recklessly and wilfully, for its purposes, and without a shadow of reason or proof—to the fabrication of imputations utterly false and groundless, and delivered in the language of this raffism. The profession can judge whether such things as these are more consistent with honourable professional conduct, or with the arts of a mere trade.

The *éloge* on Professor Adelon is to be pronounced in the Faculty of Medicine by Professor Tardieu.

M. Legouest, army surgeon, professor at the Val de Grace, gives us an account of suicides committed in the army. They are, he says, almost invariably effected by gunshot ; soldiers "blow their brains out". This attempt at suicide frequently fails ; the pistol or gun introduced into the mouth or under the chin, or pointed at the head, often causes only mutilation. And it is remarkable that, when the failure occurs, the patient becomes most anxious to preserve his life, and will bear long and painful operations in order to attain a cure. M. Legouest never met with a case in which, however disfigured, the suicide attempted a second time to destroy his own life. The men generally kill themselves in a standing or in a lying position, rarely while seated. They use a gun or a pistol, according as they are foot or horse soldiers. When standing, they generally place the weapon under the chin, and throw the head back ; the consequence of which is, that the bullet often passes through the face, instead of entering the cranium. When lying down, the head is less reversed, and so the shot is generally more effectual. The pistol more often fails than the gun. To use the gun, the head is thrown forwards, in order to look for the trigger, which is pressed by the toe, or pulled by a string, etc. Even those who put the muzzle of the gun into their mouths sometimes fail, either through drunkenness or haste, or want of skill in directing it. Then, again, the bullet may be deviated from its course by impinging against bones, etc. Sometimes, and especially with the pistol, it happens that the ball has rolled out, and the powder only been exploded in the mouth. M. Legouest gives details of the different effects produced by these gun and pistol shots.

The following is a *résumé* of the views of M. Magne, Director of the Alfort Veterinary School, concerning the effects of consanguinity, and on the necessity for crossing the breed in families. The effects of consanguinity are more marked and more rapidly exercised in man than in animals. Affections common to the human race and to domestic animals, which appear in man after marriages of consanguinity, also appear in animals after similar connexion of consanguinity. We cannot yet tell whether consanguinity acts by altering the constitution, or whether by facilitating the transmission of diseases and natural deformities. In consequence of the numerous and various causes of diseases to which man and animals are subjected, crosses in union are

always necessary for the maintenance of health. Such crosses are often useful for the preservation in animals of qualities produced by domesticity. And, again, as consanguinity propagates and aggravates diseases, even if it do not produce them, the crossing of families offers a security which parents anxious for the happiness and interests of their children will not neglect, even though it be demonstrated that union between parents has *in itself* nothing injurious.

MM. Chauveau and Marey have, as is well known, experimented extensively on the living horse. They assure us that, notwithstanding the complicated character of their operations on the living heart of the animal, the organ during the experiments performed its functions naturally. *L'Union Médicale* doubts this. It asks: "Can a horse thus fixed for experiment be in a physiological state? MM. Chauveau and Marey assure us that the poor horse, who has a catheter in his jugular vein, another in his carotid, a caoutchouc ball in his right auricle, another in his right ventricle, and a third one in his left ventricle —in whom the chest has been opened for the introduction of a fourth ball in the fourth intercostal space—that the poor beast is quiet, eats his corn cheerfully and with appetite, and shows no signs of pain nor disturbance arising from the presence of all these foreign bodies in his heart! This is rather much. We know that, of all the animals devoted to the cruel experiments of vivisections, the horse is the most patient and the most resigned; but are we to believe in his insensibility under the knife of the vivisector? What! This animal, who is rendered furious by a fly, who is excited by the touch of a spur, and maddened by the whip, is without organic and moral reaction under the tortures of vivisection! What is set down as resignation and insensibility is, in truth, terror. The animal is frightened; and the proof is, that he almost always trembles."

The *Wiener Medizin. Wochenschrift* gives a summary of an interesting Report of the Vienna Lying-in and Foundling Hospital for the year 1861, which has just been published. Puerperal fever is, it appears, still rife in the hospital. It has been distinctly proved, we are told, that the washing of the clothes in chloride of lime is unavailing to prevent the spread of the disease; and that there is no truth in the assertion that puerperal fever results indirectly from handling by those engaged in dissections of the dead body. The highest mortality, it appears, coincided with the presence of other epidemics. Neither the prevention of examinations by the students, nor the use of chemical disinfectants, etc., put an end to the epidemic of puerperal fever. It was shown, moreover, that puerperal diseases were frequently present in women before their admission into the hospital. The epidemic of 1861, after that of 1854, is the most severe which has been observed in the decennial period. In 1861, there were admitted into the Lying-in Hospital 8,731 pregnant women, who gave birth to 4,332 males and 4,112 females—in all, to 8,450 living children, and 306 dead children. Of these, 103 were twins. 366 mothers died (4.2 per cent.); 791 were attacked with puerperal diseases (9.1 per cent.), of whom died 321 (40.5 per cent.) Of the children, 453 died (5.3 per cent.) The Foundling Hospital in 1861 received 9,656 children, 3,078 of whom were sickly when admitted. The number of deaths in the establishment was 10.02 per cent. of those nursed, and 53.48 per cent. of the sickly. Of the children, 155 died with ophthalmia, 46 of inflammation of the lungs, 85 of diarrhœa, 32 of measles, and 33 of syphilis. The statistical tables further tell us that the Maternity, since its establishment in 1784, has received 292,205 mothers and 279,915 children; and that the Foundling Hospital attached has received 356,895 children, of whom 78.25 per cent. died. At the close of the year 1861, there were 293 children in the Foundling Hospital, and 15,935 under superintendence outside the hospital. The expense of the Maternity in 1861 was 99,278 florins, being at the rate of 66.48 kreutzer per day per person. The expense of the Foundling was 690,629 florins, each child in the hospital costing 69.09 kreutzer, and outside the hospital 11.46 kreutzer.

The death of M. Renault has been announced to the Academy. M. Renault had received a commission to investigate the typhus attacking the cattle in the Pontine Marshes. He there contracted a deadly fever, and died at Bologna. It is said that he died of disease contracted from the cattle. M. Renault was born in 1805. He was Inspector of Veterinary Schools, and formerly professor at the Alfort School.

California Vegetables. Cabbages weighing 15lbs. are wonders in New York market; in San Francisco they are common. Whole fields of cabbage heads weighing 20lbs. each have been grown. One cabbage, which did not make a head, grew to be seven feet wide, throwing out leaves three feet and a half long on each side. In many cases the cabbage has been converted into a perennial evergreen, tree-like plant, by preventing it from ever going to seed. Several of these are growing in that State with stalks from two feet to six feet high, and a foliage that grows through winter and summer. In 1857 one squash vine on the ranch of James Simmons, in Yuba County, produced 130 squashes weighing in all 2,604lbs. In the same year J. Q. A. Ballon, at San Jose, grew two squashes weighing 210lbs and 204lbs. respectively. The largest California onion weighed 47oz. avoirdupois, and measured twenty-two inches in circumference. The largest red beet weighed 118lbs, was five feet long and one foot in diameter. It was three years old. The first year it grew to weigh 48lbs., and because of its large size was reserved for seed; but it disappointed its owner, and instead of producing seed the next year, merely kept on growing, and reached the size of 86lbs, and following year got to 118lbs. Such beets can be grown in abundance. (*California Farmer.*)

Progress of Medical Science.

THE CALABAR BEAN AND ITS EFFECTS ON THE EYE. Dr. D. Argyll Robertson, from some experiments on this newly introduced agent, finds that the local application of the Calabar bean to the eye induces,—1. A condition of short-sightedness. That this is present, and the cause of the indistinctness of distant vision cannot be doubted, as it is relieved by the use of concave glasses. The fact that objects appear larger and nearer than natural may be attributed to the induced myopia. 2. It occasions contraction of the pupil, and sympathetically dilatation of the pupil of the other eye. We further observe that atropine possesses the power of counteracting its effects; and, *vice versâ*, that it is capable of overcoming the effects produced by atropine. The first symptom noticed is dimness of distant vision, and shortly after the pupil becomes contracted; the symptoms also subside in the same order, first the derangement of accommodation, and then the affection of the pupil. The effects of the Calabar bean on the pupil might be produced either by causing contraction of the circular fibres of the iris, or by paralysing its radiating fibres. Dr. Robertson believes that the contraction of the pupil is due to increased action of the sphincter pupillæ; chiefly on the ground that the other effects produced by the Calabar bean can only be explained by an induced contraction of the ciliary muscle; and as the sphincter pupillæ and ciliary muscle are both supplied by the ciliary nerves, he regards it as a stimulant to the ciliary nerves. In favour of this view we have the feeling of straining in the eye shortly after the physiological effects are produced. The alteration, too, in the accommodation of the eye exhibits much of the character of a spasmodic action. It has also been observed that the accommodation of the eye is not usually affected in cases where contraction of the pupil is due to lesion of the sympathetic. This substance is applicable in all instances where atropine is used to render the examination of the eye more perfect or more simple. This includes two classes of cases; those in which dilatation of the pupil is either necessary or desirable to aid ophthalmoscopic examination, and those in which paralysis of the ciliary muscle is necessary, in order to ascertain the state of the accommodation of the eye. In cases of retinitis, with photophobia, Dr. Robertson thinks it might be advantageously employed to diminish by contraction of the pupil the access of light to the retina; more especially in cases of this disease where the pupil has been dilated for the purpose of ophthalmic examination. The cases, however, in which he expects this remedy to produce the most beneficial effects, are those in which paralysis of the ciliary muscle occurs as a consequence of long continued debilitating disease. Cases of this kind are occasionally reported as following attacks of typhus or other fevers. The dimness of vision that forms a frequent sequela of diphtheria appears also to be due to this cause, judging from the symptoms detailed by Dr. Begbie, in an admirable paper on diphtheria, recently published in the *Edinburgh Medical Journal*; therefore, in these cases, good effects may be expected from the use of the Calabar bean. In cases of ulceration at the margin of the cornea, leading to perforation, or even when prolapsus of the iris has just occurred, as well as in cases where the iris has a tendency to protrude through a corneal wound, the contraction of the pupil induced by this agent might prove serviceable by drawing the iris away from the circumference. (*Edinburgh Medical Journal*, March 1863.)

STATISTICS OF SYPHILIS. The following statistics are taken from a review of Professor Boeck's analysis of cases of syphilis treated in the hospitals of Christiania in Norway:—

"By Hahnemann's soluble mercury have been treated 348 males and 110 females for the *first* primary affection; average time of treatment, males 58 days, females 68 days. Total number of individuals treated by same remedy for *first* primary attack is therefore 449, rendering the average time, disregarding sex, 60 days. For *second* primary affection by the same remedy 24 individuals have been treated 1247 days, which gives mean time of 51 days. Total number of primary cases treated by Hahnemann's soluble mercury is consequently 473; average time of treatment 59 days.

"Have been treated by calomel for *first* primary affection 385 males, mean time 59 days; and 81 females, time 71 days. Total number by calomel for *first* primary 466; mean time of treatment, 61 days. Have been treated by calomel for *second* primary attack, 33 cases; mean time, 53 days. Total number of primary affections treated by calomel, 499; mean time of treatment, 60 days.

"Have been treated by protiodide of mercury for *first* primary, 46 males; mean time, 60 days; and 20 females; mean time, 85 days. Total number of individuals treated for *first* primary affection by protiodide of mercury, 66; mean time of treatment, 66 days. For *second* primary attack, 10 have been treated by same remedy; mean time, 54 days. Total number of primary cases treated by protiodide of mercury, 76; mean time of treatment, 66 days.

"*La cure de Dzondi* has been used in 19 cases of *first* primary, necessitating 329 days of treatment; mean time, 69 days. Same remedy applied to 8 individuals for *second* primary needed 480 days; mean time, therefore, 60 days. Total number of primary affections treated *par la cure de Dzondi*, 27; mean time of treatment, 67 days.

"It will be seen from this *exposé* that in every instance where mercury has been employed, against the *second* primary affection, the average time of treatment has been much shorter than when used for *first* primary. and therefore it may be taken as a rule that, where mercury has been adopted in treating the *first* primary affection, the time of treatment for the *second* primary affection when equally treated by mercury will be shorter. Now, let us see how the disease can be managed without mercury.

"149 cases under sulphate of magnesia, jointly with some external remedies for *first* primary, have given 49 days as mean time of treatment. Have been treated by the same agent 26 cases; mean time, 31 days. Total number of cases treated by sulphate of magnesia, 175; average duration of treatment, 35 days.

"Iodide of potassium for *first* primary has been used in 20 cases; mean time, 74 days. The same remedy for a second primary attack has been employed in two individuals only; mean time, 28 days. Total number of primary cases subjected to iodide of potassium, 22; average duration of treatment, 42 days.

"344 have been confined solely to the application of external remedies, giving 42 days as the average time. 72 cases treated in this way for *second* primary; mean time, 31 days. Whole number of primary affections submitted to external remedies, 416; mean time of treatment, 40 days.

"But M. Boeck has not been bound in his industrious research to merely computing the respective durations of treatments. Another question of high importance impressed him, which was to know if any treatment whatever is capable of preventing constitutional syphilis, and if so, what is it? Here following are the statistics on this point:—Among 1008 treated by mercury, 242 became affected constitutionally (24 per cent.); in 522 treated without mercury, 77 affected, *i.e.* 14 per cent. had secondary syphilis.

"The different mercurial preparations have given in this regard results as follows:—Of 449 under Hahnemann's soluble mercury, 112 had secondary (24 per cent.); 95 in 466 treated by calomel (20 per cent.); 25 in 66 of those put on protiodide of mercury (37 per cent.); 6 in 19 by *la cure de Dzondi* (31 per cent.); 18 in 149 by the administration of sulphate of magnesia (12 per cent.); 4 in 20 under iodide of potassium (20 per cent.); 55 in 344 treated solely by external means (16 per cent.?).

"It is to be inferred, then, from this statistical synopsis that mercury, far from doing good in primary syphilis, has been positively baneful. The time of treatment under its agency has been shown to be longer, and the influx of secondary symptoms by no means prevented, checked or modified." (*Amer. Med. Times.*)

CHLOROFORM AND COMA. M. Flourens has lately been experimenting with a view to determine the distinction between the coma produced in an animal by a meningitis, and the sleep produced in an animal by means of chloroform; and at a late meeting of the Académie des Sciences, he communicated a paper giving the results of his experiments. He remarked that in the comatose state from meningitis, the animal was under the influence of complete prostration, but did not sleep; that it kept its eyes shut, yet would open them on the slightest occasion; that it was able to see, hear, and feel, and was moreover constantly shivering; whereas an animal under the influence of chloroform really slept; it snored, and did not open its eyes; it could neither see, hear, nor feel. The brain of an animal which has died of coma is covered with red spots, denoting congestion; the brain of the animal that dies from the effect of chloroform presents no such red spots, the vessels of the dura mater alone being gorged with blood. Hence, in the case of coma, the congestion is intracerebral; in death from chloroform, the congestion is extracerebral. This should, therefore, M. Flourens remarks, serve as a caution to those who may administer chloroform, since there is but a step from extracerebral to intracerebral congestion.

TREATMENT OF CHAPS AND CHILBLAINS. *The Bulletin Médicale du Nord de la France* registers the following formula, which M. Testelin has found useful in cases of chilblains uncomplicated by ulceration:—Tincture of iodine, ʒij; chlorinated solution of soda, ʒvj. This liniment should be laid over the seat of the disease, and afterwards dried by exposure to the fire. M. Testelin states that the remedy effects a cure in three or four days. For the treatment of chapped hands the same practitioner has frequently resorted to the application of honey heated in an oven, and deprived of its viscidity by the removal of the froth formed under the influence of heat. It should be applied over the hands whenever they are washed, and spread with gentle friction. The author asserts that he has thus succeeded in curing chaps, and in preventing their return, in servant maids whose hands are frequently exposed to the contact of water, and who usually suffered from this inconvenient affection throughout the winter. He prescribed the same remedy with entire success in Brussels to a clear-starcher, although this person did not for a single day discontinue her employment.

INFLUENCE OF OZONISED AIR UPON ANIMALS. Dr. Ireland gives the following conclusions:—1. Ozonised air accelerates the respiration, and, we may infer, the circulation. 2. Ozonised air excites the nervous system. 3. Ozonised air promotes the coagulability of the blood, probably by increasing its fibrine. In the blood, however, ozone loses its peculiar properties, probably entering into combination with some of the constituents of the circulating fluid. 4. Animals can be subjected to the influence of a considerable proportion of ozone in the air for hours without permanent injury; but in the end ozone produces effects which may continue after its withdrawal, and destroy life. (*Edinburgh Medical Journal.*)

CINCHONINE AS A SUBSTIUTE FOR QUININE. Dr. W. F. Daniell says that, so far as his experience extends with reference to the employment of cinchonine in the treatment of febrile and other miasmatic diseases of Western Africa, it has proved a decided failure, owing to the headache which has uniformly attended its administration. When he was in medical charge of the troops in Sierra Leone, a large quantity of cinchonine was furnished to the hospital with the view of testing its remedial properties, and also of ascertaining whether it would answer as an economical substitute for quinine. It was, therefore, given to both European and negro patients, who were suffering under the milder forms of remittent and intermittent fevers, and free from any local congestions, in the ordinary doses in which the sulphate of quinine was used. The results of the trial were, however, of such an unsatisfactory character, from the pain and cerebral congestion induced, that the medicine had to be discontinued. It was subsequently combined with calomel and morphia, but without any sensible diminution of the cerebral disturbance. When conjoined with the latter, delirium sometimes set in, which was only relieved by the application of blisters to the neck. (*Phar. Journal.*)

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Annual.]	Philosophical Institution, Bristol.	Thursday, June 18, 4.30 P.M.
LANCASH. & CHESHIRE. [Annual.]	Medical Institution, Liverpool.	Wednesday, June 24th, 12 noon.
SOUTH-EASTERN. [Annual.]	Bull Inn, Rochester.	Wednesday, June 24.
MIDLAND. [Annual.]	Board Room of the Infirmary, Derby.	Thursday, June 25th, 2 P.M.
EAST ANGLIAN. [Annual.]	Yarmouth.	Friday, June 26th, 3 P.M.
WEST SOMERSET. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.
NORTH WALES. [Annual.]	Royal Hotel, Rhyl.	Tuesday, July 7, 1 P.M.
SOUTH MIDLAND. [Annual.]	Infirmary, Peterborough.	Thursday, July 9th, 1 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-Seventh Annual Meeting of this Branch will take place at the Medical Institution, Liverpool, on Wednesday, June 24th, at 12 o'clock, noon. President-elect, J. R. W. Vose, M.D.

Notices of papers or other communications to be sent to the Honorary Secretary, as early as possible.

A. T. H. WATERS, M.D., *Hon. Sec.*

27, Hope Street, Liverpool, May 27th, 1863.

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

THE profession, and I may add the public also, have sustained a great loss by the death of our esteemed associate, Dr. Duncan, Medical Officer of Health for the borough of Liverpool. His health had been failing for some time, obliging him frequently to transfer the active duties of his office to his substitute Dr. Cameron. At the time of his decease, which occurred suddenly on the 23rd of May, he was on a visit to some relatives at Elgin, in the north of Scotland; and so little was any immediate danger apprehended, that the day before he was making preparations for his return to Liverpool to resume his duties. Dr. Duncan graduated at Edinburgh in 1829, and settled in practice in Liverpool about a year afterwards, having been elected physician to the dispensaries, an appointment which afforded abundant opportunities for the pursuit of sanitary inquiries, to which he devoted himself with unceasing industry and perseverance. The result of his labours in this important and useful department of medical science was first made public in an elaborate and highly meritorious essay *On the Physical Causes of the High Rate of Mortality in Liverpool*, which was read before the Literary and Philosophical Society, and published by them in 1843. This pamphlet attracted so much attention, and comprised so many forcible and convincing proofs of the importance of sanitary reform; that to it may be mainly traced the origin of the sanitary movement which has taken place in this country. In his own words, taken from his Report of the Health of Liverpool for 1858,

"Liverpool was the first town in the kingdom to set the example of sanitary improvement, taking precedence even of the government measure in this respect; and that on this account, as well as in regard to the peculiar difficulties to be overcome and the large sacrifices which have been made for the purpose, it is justly entitled to a generous consideration."

The chairman of the Health Committee, in paying a tribute to the memory of the deceased, said that it was chiefly through his exertions previously to the year 1846 that the sanitary act of that year was passed. The effect of the operations of that act under his able direction has been to reduce the annual rate of mortality in this borough from thirty-nine to twenty-seven in a thousand; and to him, therefore, is due the credit of having been mainly instrumental in rescuing Liverpool from the unenviable notoriety of being the unhealthiest town in the kingdom; and it may be truly affirmed that the public have seldom lost a more talented and faithful servant than Dr. Duncan.

In addition to the dispensaries, Dr. Duncan was for a short time connected with the Northern Hospital, and was subsequently elected physician to the Royal Infirmary, which office he resigned in 1847, on his appointment as Medical Officer of Health by the Home Secretary, on the recommendation of the local authorities. He was the first medical officer appointed in this country under the new act, being thus officially confirmed in his position as the pioneer of sanitary improvement. His salary was originally fixed by the Health Committee at £300 *per annum*, with the privilege of private practice; but on a remonstrance from the Home Secretary, it was raised to £750, with the understanding that his whole time should be given to his official duties.

Although beyond his special acquirements in sanitary science, Dr. Duncan was a well-informed and accomplished physician, he was not at any time very extensively engaged in private practice; yet he was by no means wanting in attachment to his profession as a scientific pursuit; and until recently, when his health failed him, and his official duties absorbed so much of his time, he took a prominent and active part as a member of the Medical Institution, as well as of the Lancashire and Cheshire Branch of the Association. During life he enjoyed the respect and esteem of his professional brethren, and his death has caused universal regret.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 26TH, 1863.

RICHARD PARTRIDGE, ESQ., F.R.S., President, in the Chair.

EXTREME DEFORMITY OF THE NECK AND ARMS, TREATED SUCCESSFULLY BY GRADUAL EXTENSION, EXCISION, AND ADJACENT AND REMOTE TRANSPLANTATION. BY JOHN WOOD, ESQ.

THE subject of the case was a little girl, aged nearly 9 years. In consequence of an extensive burn, the chin was drawn down to within an inch of the sternum by a broad and prominent band of hard, tough cicatrix, the mouth distorted, and the head drawn a little towards the left shoulder. The right arm was contracted at the elbow to somewhat more than a right angle. The left wrist was extremely contorted, the hand being turned back upon the forearm, so that the fourth and little finger nearly touched its back surface, and the joints of the carpus and metacarpus were inverted by a very prominent, tense, falciform cicatrix, placed opposite the fourth finger, and extending along the lower third of the forearm. A large sore still remained at the upper half of the back of the forearm; this had been stationary in healing, on account of the great tension of the skin around, which was seamed with cicatrices, and very inelastic.

The case was treated by Mr. WOOD in King's College Hospital, towards the end of the year 1862. The right arm was first extended gradually by the use of a straight splint and graduated pads. On October 4th, an operation of transplantation was performed on the neck. A quadrangular flap of skin was taken from the right side of the cicatrix, where the integuments were hollow, loose, and puckered. It was then turned across, and placed in the site of the cicatrix, which had been previously divided by a V-shaped incision, separating the band close to its attachment on the breast-bone. The flap was held in its place by wire sutures. None of the hardened cicatrix was removed by the operation, but was dissected up freely towards the chin, and left to unite to the upper part of the flap. At the lower part of the neck, in the site whence the flap was derived, an open sore remained to heal by granulation. The head was kept well thrown back, and the wound dressed with water-

dressing. By the end of a month the wounds had nearly healed, the chin remaining elevated, and the motions of the head free.

The condition of the left forearm, the small quantity of healthy skin remaining, the persistent and extensive sore, the extreme contraction of the lunated cicatrix, and the great retroversion of the carpal and metacarpal joints rendering all efforts at extension fruitless, and precluding any attempt at transplantation of adjacent parts, Mr. Wood resolved to attempt the removal and transplantation of a portion of skin from the abdomen to the arm to supply the want of tegumentary tissue. The part of the abdominal surface chosen for the operation was that on the left side of the navel, in the direction of the superficial epigastric vessels. Upon this region the limb could be comfortably placed, and kept immovable for a sufficient length of time to permit of adhesion, the arm and belly rising and falling together in the movements of respiration, so that relative immobility was secured. A cuirass-splint was first moulded in gutta-percha over the chest and upper part of the belly; to its left border was fixed a scroll splint of the same substance, passing round the upper arm. A flat, straight splint for the forearm was attached to the lower border of the breast-plate. This was perforated freely with holes, covered by wash-leather, well padded with cotton wool, and worn comfortably by the patient for twenty-four hours before the operation.

On November 5th, the patient being under the influence of chloroform, the lunated cicatrix was divided transversely opposite the wrist-joint, and freed by extension and dissection from the subjacent fascia and tendinous sheaths, which were found uninjured. A lancet-shaped flap, about two inches and three quarters long and two inches and a half wide at its base, with its attached margin or base directed towards the groin in the course of the superficial epigastric artery, was then raised from the abdomen with a good portion of subcutaneous fat adherent to it. The edges of the wound left by its separation were brought together by pins and wire sutures, supported by adhesive plaster and thick dressing. The forearm was then placed upon it, so that the gaping wound produced by straightening the wrist after the transverse incision, was placed opposite to the lancet-shaped flap, the point of which fitted exactly into the angle of the cross cut. The flap was then secured by wire sutures to the edge of the arm incision. Through the middle of the flap and the upper part of the integuments of the arm were passed two rectangular pins in opposite directions, about an inch apart from each other. The pins were then locked into each other's loops, so as to form a wire parallelogram, the ends of which acted upon the middle of the flap through a pad of lint, thus exercising a lever-like pressure which could be regulated to the degree of swelling ensuing in the flap. The cuirass-splint was then adjusted and fixed to the body by broad strips of plaster, and to the forearm by means of long narrow strips, with a bandage placed over all in such a manner that the wound could be examined without deranging the fastenings.

On November 6th, the flap was uncovered and found in capital position, with evidences of adhesion at the edge nearest the fingers; the pad of lint under the pins was readjusted. On the 8th, three of the wire sutures at the upper margin of the flap were removed by the house-surgeon, who thought that they were dragging somewhat. The flap was firm in its place, and evidently adherent by its deep surface, though it had slightly retracted where the sutures were removed. On November 10th, the silk thread was removed from the pins; cicatrisation was completed for about an inch near the fingers. On the 14th, the cuirass-splint was raised for the first time since the operation for the purpose of examining and cleansing the sore on the body. All the pins and sutures were at the same time carefully removed. The wound was found filled with healthy granulations, no primary adhesions having formed at the edges. The wound was dressed with a thick layer of simple dressing; the splint was readjusted. Two or three fresh points of cicatrisation were observed at the upper edge of the flap. On the 21st, the splint had been lifted, and all the wounds dressed daily; all the sores were cicatrising rapidly; the flap was firmly adherent. By the 27th the whole margin of the flap had become cicatrised to the arm, close up to the root.

On the 29th, the first step towards the division of the flap from the belly was taken. An incision, about half an inch in extent, was made on each side of the base, in an oblique direction towards the surface of the abdomen, so as to include as much integument as possible on the arm side of the incision, and to indicate the lozenge-shape which the patch was intended to assume when totally severed from the body. Lint was then placed between the cut edges to prevent readhesion to the body. The splint was then altogether removed, and the arm kept in its place (removed a little nearer to the navel than before) by straps and bandage. After three more partial sections of the base of the flap on alternate sides at intervals of a week, during which time the hand had been gradually more and more flexed upon the forearm, so as to draw from the abdomen as much skin as possible on to the wrist, and the whole arm also shifted more over towards the median line, so as to leave the sore on the abdomen free from pressure, the flap being found partially sensible to the contact of the point of a pin, and in a satisfactory condition of vascularity, the final severance of its remaining attachment to the body (about half an inch in extent) was accomplished on January 3rd, 1863. There was free bleeding from the arm side of the cut surface, showing complete vascularity. At this time the sores on the arm and belly were reduced to small proportions, covered with florid granulations, and cicatrising nicely. The arm was now placed on a splint with a hand-piece bent almost double, and flexed freely every day to restore the pliability of the tendons and their sheaths, so long bent backwards and contracted. The small sores which remained healed up speedily and without check.

In the meantime, that portion of the scar in the neck in which the old contracting cicatrix had been left in the former operation had begun again to contract. An attempt to stretch it gradually, resulted in a partial return of the ulceration. On January 31st, Mr. Wood removed the whole of this contracting portion of the cicatrix by two vertical incisions, meeting above and below, carried so deep as to include the whole of the contracting substance, and leaving two opposed even surfaces of healthy tissue. These surfaces were then drawn together by three points of quilled suture composed of wire and two pieces of flexible catheter, the wire being carried deep into the wound and emerging an inch from its margins. The immediate edges of the incision were united by points of interrupted suture of thin silver wire. The whole was supported by long narrow strips of adhesive plaster. Union by adhesion to the extent of two inches was the result, a small sore remaining above and below it. The quilled and other sutures were withdrawn at the end of a week. The sores were dressed with water and simple dressing, and supported by plaster; and a gorget or collar of gutta-percha was worn to support the chin, and to keep off friction from the sores. These soon healed up, leaving a long linear cicatrix of an inverted L shape, which gradually became an equable curve when the chin was raised to its full extent.

The case was illustrated by drawings of the neck and arm taken before and during the several stages of the foregoing operations. The little patient was also exhibited to the Fellows of the Society, as a practical illustration of the benefit derived from the treatment, more satisfactory than casts or drawings, however truthful.

The present condition of the parts operated on is as follows. The chin can be thrown backwards quite to the normal extent, and the head bent freely from side to side. The linear cicatrix left by the operations describes a regular curve, rendered more open and a little more prominent by extreme extension. All deformity of the mouth is removed, and when viewed in profile from the side opposite to the cicatrix, the neck and chin have a regular and normal curve. On the left side of the neck and front of the breast-bone the cicatrices resulting from the burn and operations are visible, but not prominent or irregular at the surface. The right arm can be extended to a straight line, without any rising of the cicatrix at the elbow. The left arm presents, on the back surface of the wrist, a lozenge shaped patch of skin, rather paler, yellower, and more elevated than that of the surrounding parts. The patch is about three inches long, and an inch and three-quarters wide. The cicatrix enclosing it is linear and small. All the sores are completely healed, the arm being covered with cicatrices except a small portion over the radius. The fingers can be closed upon the palm by the action of the flexor muscles, and the wrist bent well forwards. A little tendency of the third and fourth fingers to spring backwards still exists. The furrows and grooves on the palm and front of the wrist are restored, and the knuckles are normally prominent. The patient can grasp and hold things with great power and facility.

Medical News.

APOTHECARIES' HALL. On May 28th, the following Licentiates were admitted:—

Houseman, Edward Cooke, Clint, Ripley, Yorkshire
Lumley, Bartholomew, Corbridge, Northumberland
Pigg, Thomas, Newcastle-upon-Tyne
Somerville, James Harmer, Bloxwich, Staffordshire

APPOINTMENTS.

EARLE, E. S., Esq., elected Honorary Surgeon to the Western General Dispensary.

*GIBB, George D., M.D., appointed Assistant-Physician to the Westminster Hospital.

HARDWICKE, William, M.D, appointed, by Dr. Lankester, Deputy Coroner for Central Middlesex.

*MURRAY, Gustavus, M.D., elected Physician-Accoucheur to the Great Northern Hospital.

ROYAL NAVY.

COATES, Matthew, Esq., Assistant-Surgeon, to Haslar Hospital.

MOORE, Francis H., Esq., Assistant-Surgeon, to the *Victory*, for service with the Royal Marines.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BROWNE, H., Esq., to be Surgeon 14th Kent A.V.
GIBSON, H., Esq., to be Surgeon 1st East York R.V.
PAYNE, E., Esq., to be Surgeon 2nd Surrey A.V.

To be Honorary Assistant-Surgeons:—

HARDING, G. D., Esq., 14th Kent A.V.
HULME, H., Esq., 1st Lancashire A.V.
LLEWELLYN, W. P. J., Esq., 2nd Surrey A.V.
MOULD, G. W., Esq., 26th Cheshire R.V.

DEATHS.

ANGUS, Alexander, Esq., Surgeon, of Frith Street, Soho Square, aged 58, on May 31.

BARNETT, Lysander H., Esq., Surgeon, at Limehouse, aged 35, on May 30.

BUDD, James H., Esq., Surgeon, at Wickham Market, aged 39, on May 29.

BURT. On May 29th, at Edinburgh, aged 84, Louisa, widow of Robert Burt, M.D.

DALRYMPLE, Archibald, Esq., Surgeon, late of Norwich, aged 53, on May 28.

*DUNCAN, William H., M.D., Medical Officer of Health for the Borough of Liverpool, at Elgin, on May 23.

KANE. On May 12th, at Norwood, Catherine, wife of Matthew Kane, M.D., of H.M.'s Mint, Bombay.

MURCHISON. On May 27th, at 79, Wimpole Street, aged 1 year, Amy Caroline, only child of *Charles Murchison, M.D.

*OLIVER, Richard, M.R.C.P., at Bicton, Shrewsbury, aged 63, on May 25.

SILVESTER. On May 18th, at Reading, aged 55, the widow of Charles H. Silvester, Esq., Surgeon.

SKEY, Francis W., Esq., eldest son of *F. C. Skey, Esq., of Grosvenor Street, aged 31, on May 29.

AN APOTHECARIES' BENEVOLENT FUND. A member of the profession has given £1000 to be placed in trust for the founding of an Apothecaries' Benevolent Fund in Dublin.

THALLIUM. The largest ingot yet produced of this new metal, discovered by William Crookes, Esq., has been exhibited at the Royal Institution. Its weight was 5963 grains.

INDUCTION OF PREMATURE LABOUR. Professor Giordano tells us that the best method of inducing premature labour is cauterisation of the neck of the womb with lunar caustic. This, he says, excels all other methods.

ANOTHER NEW METAL. M. Osravais, Professor of Geology at Strasbourg, has obtained a hard shining metal, of the colour of gold, but soft as lead, from the mineral waters of Alsace. The metal, not admitting of a high degree of polish, will be useful to employ in the dull or coloured goldsmiths' work so much in fashion for ornament just now. The specimens, submitted to connoisseurs in Paris, have excited the highest admiration. (*Mining Journal.*)

FEES FOR VACCINATION. The fee paid for the operation of vaccination under the Vaccination Act is on the no-cure-no-pay principle. The payment of the fee depends upon the success of the operation. Who is the judge, in case of dispute of the success of the operation, we do not know. We must confess that we do not think the arrangement is very honourable to our profession. If the fee can rightly be made dependent upon success in this case, we really cannot see why it should not be equally so in all other operations.

A WORD WITH THE VEGETARIANS. Now, to see where we really stand, let us range these armies. On one side behold—1. Universal custom. 2. The production of the most beautiful forms and highest class brain. 3. The structure of the human teeth, for cutting, tearing, and crushing—not the latter only. 4. The formation of the human stomach. 5. The presumption that, as fish of all kinds and other lower animals are created flesh devourers—nay, that without flesh they could not live—man also, the highest animal is so created, *i.e.* natural law. 6. The behests of the Bible, from Abel to Jesus Christ. 7. The New Testament after His departure, and the vision of various flesh meats offered to St. Peter. 8. The almost universal testimony of physicians and doctors, based upon scientific research and analysis. On the other side, the simple assertion of the vegetarians! If they are determined to demolish all these eight witnesses, verily they have their work to do. (*Family Herald.*)

IRON AS A TONIC IN THE VEGETABLE CREATION. A curious discovery is alleged to have just been made regarding the influence of iron on vegetation. On the chalky soils where there is an absence of iron, vegetation has a sere and blanched appearance. This is entirely removed, it is said, by the application of a solution of sulphate of iron. Haricot beans watered with this substance acquired an additional weight of sixty per cent.! Mulberries, peaches, pears, vines, and wheat derive advantage from the same treatment. It is expected that the salts of iron will be found as beneficial in farming as in horticulture, but the experiments are as yet very incomplete. In the cultivation of clover, however, wonderful advantages are declared to have been gained. The material is cheap, and the quantity applied is small.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society. 8 P.M.: Ballot. 8.30 P.M.: Mr. Spencer Wells, "Ovariotomy Twice Performed on the same Patient"; Dr. Robert Lee, "On Induction of Premature Labour"; Mr. Beaumont (of Toronto), "New Iris Forceps"; Dr. Harley, "On the Calabar Bean."—Zoological.

WEDNESDAY. Microscopical.—North London.

THURSDAY. Royal.—Antiquarian.

FRIDAY. Astronomical.—Royal Institution.

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 30, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys ..1005 / Girls.. 992	1997	1296
Average of corresponding weeks 1853-62		1770	1139

Barometer:
Highest (Wed.) 30.108; lowest (Sun.) 29.729; mean, 29.978.

Thermometer:
Highest in sun—extremes (Fri.) 114.4 degs.; (Wed.) 95 degs.
In shade—highest (Tu.) 79.7 degs.; lowest (Tu.) 35.9 degs.
Mean—55.4 degrees; difference from mean of 43 yrs.+0.4 deg.
Range—during week, 43.8 degrees; mean daily, 27. degrees.
Mean humidity of air (*saturation*=100), 76.
Mean direction of wind, N.E. & W.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MR. LOGIE AND SARRACENIA.—A correspondent writes on this subject:—

"In the letter to the *Times* by Surgeon-Major Logie, we were told by him that Assistant-Surgeon Miles wrote a paper on the Sarracenia Purpurea; that Messrs. Savory and Moore are the only importers of the plant; that he (Mr. Logie) and his colleague Mr. Agnis have used the plant beneficially; and that he (Mr. L.) hopes to hear of it in every country gentleman's medicine chest.

"These statements, together with Mr. Logie's sanguine expectations of the result to be expected from the use of the remedy, probably, have been made from benevolent motives only; nevertheless, as the statements furnish such a very excellent advertisement for a quick and extensive sale of the plant, it might have been more prudent on the part of Mr. Logie to have said that neither he nor any one but Messrs. Savory and Moore had any interest, direct or indirect, in the sale of the pitcher plant.

"I have written to ask Mr. Logie whether or not the subjects of his cases had been previously vaccinated?"

BOOKS RECEIVED.

1. The Nullity of Metaphysics as a Science among the Sciences. London: 1863.
2. The Connection of Tuberculosis and Insanity. By T. Clouston, M.D. 1863.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member rom his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, June 1863.

COMMUNICATIONS have been received from:—Dr. HENRY GOODE; Mr. RICHARD OLIVER; Dr. G. M. HUMPHRY; Dr. OGIER WARD; Dr. J. D. BROWN; Mr. THOMAS JONES; Dr. MAYO; THE HON. SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. T. SYMPSON; Dr. DAVID NELSON; Mr. RICHARD GRIFFIN; W. A. R.; Mr. A. B. STEELE; Mr. H. EWEN; Mr. W. F. MORGAN; VERITAS; Mr. A. J. MOORE; Mr. STONE; Mr. D. KENT JONES; and Dr. J. W. OGLE.

ADVERTISEMENTS.

South Midland Branch.—The next ANNUAL MEETING of this Branch will take place on Thursday, July 9th, at 1 P.M., at the Infirmary, Peterborough.

Gentlemen intending to read Papers or Cases will oblige by forwarding the titles as early as possible to

JOHN M. BRYAN, M.D., Hon. Sec.

Northampton, June 4th, 1863.

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By the same Author, Second Edition, cloth, post-free, 1s. 6d.

On ENURESIS (Incontinence of Urine) in CHILDREN and in ADULTS; its Nature, Causes, and Treatment. "We can recommend this little book to our readers."—*Med. Circular.*

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(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S.Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

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From H. J. O'DONNELL, M.R.C.S.E. & L. M. etc., etc., Albert Terrace, London Road, S.

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From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating, that after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, etc., etc.

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ÆTHER.	TINCT. CANNABIS INDICÆ.	MORPHIA.
OL MENTH. PIP.	ACID. HYDROCYAN.	THERIACA.

The proportion of Morphia—⅝ gr. in f. ʒi. Dose—Five to twenty Drops.

The Profession is respectfully referred to the various Letters that have appeared in the Medical Journals against the use of "SECRET" REMEDIES.

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The Piston or Pump, which so frequently gets out of order, is not introduced into this apparatus; there is, therefore, an absence of OILY GREASY MATTER and BLACK LEAD (which are absolutely necessary to lubricate the piston in the usual syringes), which soon become rancid and green, some portion of which inevitably passes with the fluid injected from an ordinary syringe.

TWINBERROW'S PATENT DOUBLE-ACTION SYPHON SYRINGE,

With Additional Pipes for all purposes, including the most perfect Eye Dauche and Ear Syringe.

The great advantage of this Syringe over others of a like description is its having a double action, thereby producing an uninterrupted stream, consequently discharging double the quantity of fluid in half the usual time and with much less exertion.

From J. E. ERICHSEN, Esq.

6, Cavendish Place, Cavendish Square, October 1st, 1861.

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JOHN ERICHSEN,
Professor of Surgery at University College, and Surgeon to the Hospital.

From W. FERGUSSON, Esq.

Professor of Surgery at King's College and Surgeon to the Hospital.

16, George Street, Hanover Square, Oct. 14th, 1861.

SIR,—I have seen and made use of your Double Action Syringe, and think very highly of it. Yours faithfully,

Mr. Twinberrow, Edwards Street. WM. FERGUSSON.

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THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture III.

Mr. President and Gentlemen,—In the lectures I have already had the honour of delivering, I endeavoured to bring before you the chief points of difference between the surgical affections of the child and adult, as they are observed in the nervous, respiratory, circulatory, and urino-genital systems. I propose on the present occasion to point out in what way the diseases of the bones and joints differ in the child from those in the adult, and then to pass on to consider, as far as time will allow, the subject of tumours.

Surgical Affections of the Osseous System in Children.

There is one great anatomical difference between the bones of children and of the adult, which it is important to bear constantly in mind when we are considering their pathology; and it is this—that in the *adult* a bone may be regarded as a separate thing, composed entirely of one piece; whilst in the *child* we must remember that it is made up of several parts—a central body or shaft, epiphyses or extremities, and the intervening soft and pulpy structure through which these grow and subsequently unite. In the adult, this union is supposed to have taken place, although it is well known that in some bones a perfect junction of the shafts with their epiphyses is not completed till a much later period of life than it is in others.

When considering the diseases of these structures in children, it is, therefore, always necessary to remember the fact that the bones are composed of separate portions; that these have distinct sources of nutritive supply; and that each is liable to be affected by disease as an independent part.

An epiphysis of a bone may be the subject of a disease which will not involve the shaft to which it is to be subsequently connected; and the shaft may likewise be similarly affected, and yet the epiphyses be left completely free. Disease may also attack the intervening soft and pulpy layer by which the growth of the shaft is carried on, and its subsequent union to the epiphysis is to be finally secured. In children, therefore, the diseases of the shafts and epiphyses demand a separate consideration; and the affections of the intervening pulpy layer will likewise receive an independent notice.

It may be remarked, that authors have failed to enlarge upon this great difference between the diseases of the bones of children and of the adult; and it is with some pleasure that I now bring the subject before your notice.

Inflammatory Diseases of the Shafts of the Long Bones in children are unfortunately very common; and, unless attributable to some external injury, the majority of cases are found in the cachectic and so-called strumous subjects. They are generally slow in their progress and certain in their results, the end being far too frequently a necrosis or death of the part. In idiopathic cases, the progress of this inflammation of the shafts is generally remarkably slow, and it is often marked by a torpidity and want of definiteness in the symptoms, which renders a parent careless and indifferent to the affection; and this feeling produces a dilatoriness in seeking surgical advice, which has nothing but an injurious influence upon the ultimate result of the case.

In some instances, this disease is only manifested externally by a gradual expansion or apparent dilatation of the bone, the external and soft parts around appearing pale and natural; and it is not till many months have perhaps elapsed that other external signs of mischief make their appearance. If the disease, however, be allowed to proceed unchecked, death of the bone will to a certainty take place, when inflammation of the integument and suppuration will necessarily make its appearance, ending in the formation of sinuses and cloaca communicating with the diseased bone.

The constitutional symptoms during the progress of these changes vary in their intensity in different patients. In the majority, they are very mild; little but an aching pain in the part demanding notice. If the surgeon be consulted at this second stage of the disease, he will observe a marked difference in the temperature of the part, the integument over the diseased bone feeling much hotter to the hand than the parts around; and firm pressure upon the bone will, in all probability, cause increased suffering.

On a careful examination of the bone at this time, it will be found uniformly enlarged, and apparently expanded; its external surface being smooth and uniform. At a later stage of the disorder, when the soft parts have become implicated and the bone has died or become necrotic, the external or visible symptoms are too well marked and positive in their nature to demand notice.

It must also be remarked that, in these cases of idiopathic ostitis, it is rare for one bone alone to be the subject of disease. The symmetrical bones, as a rule, sooner or later become more or less involved, and in some cases nearly all the long bones in the body; this fact tending to point to the constitutional origin of the disease. I have had under my care for some time past a girl aged 11, who has been the subject of osteal disease for four years. The humerus, ulna, and radius of both arms have been diseased; and in both ulnæ exfoliation has taken place. Both tibiæ and fibulæ are now affected, with the right femur; and it is to be remarked that the left tibia is exactly three-quarters of an inch longer than the right; one bone measuring 11¾ inches, and the other 11 inches. During the whole progress of this case, a constant aching of the bones was the only symptom; and at times this was very slight, at others being very severe. Under the influence of tonics and rest, marked benefit has been bestowed; the diseased action in many of the bones has been arrested; and their gradual restoration to their natural dimensions has been observed.

This case also illustrates another point which is

generally to be noticed in like instances; and that is, when the shafts of bones are diseased in children, the epiphyses are left sound; and that, even in such a typical case of the disease as the one I have just quoted, no epiphysis appeared to be affected to the slightest degree. This pathological point tends of itself to prove the anatomical distinction between the parts; and when we proceed to consider the diseases of the epiphyses, a like point will have to be recorded.

The *elongation of an inflamed bone* is a pathological fact of extreme interest; it has been observed before, and noticed by different authors; but cases illustrating the point are not common. In the example quoted, the difference between the two tibiæ was three-quarters of an inch, and both were inflamed; the longest bone, however, being the worst; proving that, under the influence of the inflammatory process, a long bone increases lengthways, as well as in its diameter; although it may be a question whether, on the cure of the disease, the bone will regain its normal length, as it unquestionably may its normal dimensions in all other respects.

In the *treatment* of these cases there is but one principle to follow—to improve the general health. The disease is one essentially of debility, and is to be met by good living, good air, and tonics, as quinine, iron, cod-liver oil, or any other which may best suit the peculiarity of the case. The syrup of the iodide of iron is a good preparation, and is a favourite of mine; but any, or all in order, may be given with advantage. The inflamed limb must, however be well raised and kept at rest; warm fomentations afford much relief in the early stages. I have never seen any benefit result from the local application of iodine; it causes much pain to the patient by inflaming and irritating the integument; and it appears to be quite useless. A warm fomentation gives much greater comfort, and, when combined with rest, seems the most serviceable.

When the bone is necrotic, it is to be removed; but surgeons should be careful not to interfere in these cases too soon. The powers of nature, when fairly assisted, in restoring diseased parts in children to their normal condition, are almost unlimited; and the surgeon has, therefore, only to remove diseased bone when it is evidently lying alone, separated from its matrix, and acting, therefore, as a foreign body. Too early attempts to interfere are followed by nothing but harm, and should therefore be avoided. Amputation of a limb for such an affection is rarely, if ever, to be entertained.

The necessity of an early detection of this disease is a point of primary importance. In a large proportion of cases, the surgeon is not consulted till it has existed for a lengthened period, and has progressed to an advanced condition; the mildness of the symptoms masking its true nature. Any aching of the bone, if constant, is a symptom of great value, for it is undoubtedly the earliest by which this cachectic form of ostitis is ushered in; and such a symptom should never, therefore, be treated lightly; for at this early stage of the disease, by rest and tonics, a speedy convalescence may with some certainty be predicted, and months of misery and subsequent deformity be probably saved.

I might quote many cases to illustrate every point in this paper, but it is hardly necessary; the limits of my lectures urging me to pass on to another subject no less important—namely, the inflammatory affections of the *epiphyses*.

Inflammation of the Epiphyses or the Articular Extremities of Bones. The epiphyses of the bones of children are remarkably prone to inflammatory affections; and it is due to this fact that diseases of the joints at an early age are so common and so obstinate. It may without fear be asserted that at least two-thirds of the cases of joint-disease which are found in children are due to inflammatory affection of the epiphyses; and the symptoms by which this disease is to be recognised are not obscure.

As previously stated, these epiphyses may be regarded as independent parts; they are still distinct as bony centres, and have not yet united to the shaft and become part of the body of the bone. As a result, the local symptoms which accompany these inflammatory affections are confined to the epiphyses, and seldom, even at a later stage, involve the shaft itself.

The earliest symptoms of any inflammatory affection of the epiphyses are somewhat obscure, a mere aching of the part being probably the only one which is to be observed. To external observation at this early stage of the disease, there may not be any change in the appearance of the part, although some increase in the temperature of the integument over the bone is often to be recognised, when it is compared with the temperature of the integument above and below the seat of the disease. If the nature of the affection be not recognised, and some weeks or perhaps months be allowed to pass without its detection, other changes will make their appearance; and of these the most marked is an absolute enlargement of the bone. It appears as a kind of dilatation and general expansion, and will be at once observed when a comparison is made between the corresponding epiphyses of the healthy and the diseased side. The bone at this stage will probably be somewhat more tender than natural, firm pressure over it exciting pain. The increase of heat in the part will at this period be also very palpable.

As time progresses, and if the disease be allowed to take its course, other symptoms will appear; and of these, some effusion into the articulation is the most positive, this being the result of a low form of synovitis, from the extension of the inflammation to the synovial capsule. The nature of the disease is, however, the same. The synovitis is palpably secondary to the ostitis of the head of the bone; and, if the disease in this part have not progressed too far, the synovitis will disappear when the ostitis is cured. It will be thus seen that the progress of the inflammatory affection of the epiphyses is precisely similar to the inflammation of the shaft; a gradual expansion of the bone, attended by an aching pain, forming the chief symptoms. At a later stage of the affection, also, the analogy still holds good; for, if the disease be allowed to go on unchecked, suppuration and the death of the bone will to a certainty take place; and, in the majority of cases, this suppuration will pass towards the joint, when disorganisation of the joint-cavity will then be added to the difficulties of the case. It is an affection such as this which is often described as a strumous disease of a joint, but which is really essentially an ostitis attacking the epiphysis or head of a bone in a cachectic child, and which is as free from

any strumous or tuberculous disease as any other inflammatory affection of a cachectic type.

If the nature of this affection be detected at any early stage, a complete cure may unquestionably be obtained in a large proportion of the cases which fall under observation. It is too true, however, that in the majority of cases the disease is not recognised in its primary condition; the want of positive symptoms which are capable of exciting fear in the uneducated mind being the probable cause of this neglect, as the mere aching of the bone or joint is regarded only as a "growing pain", and the enlargement of the bone and increase of heat are not positive enough to be observed. Should, however, the surgeon at this stage be consulted, he must be alive to the nature of the case. I always look upon a "growing pain" with suspicion, and, on examination, seldom fail to find its cause; osteal disease being the chief. I would, therefore, wish to impress upon all men the necessity of a careful examination of a limb the subject of such a complaint; and, in all cases of "growing pains", to fear some inflammatory affection of the osseous system. This fear may be wrong; but by carrying it into practice much benefit will be obtained, and many limbs and joints saved which would otherwise be lost. I could quote numerous cases illustrating these facts, both the evils of delay and the benefits of the practice; but no practical benefit could be obtained by doing so, if I have succeeded in convincing you of the truth of these remarks.

Treatment. In the earliest stage of this form of disease, the treatment is very simple. Like the inflammation of the shafts of the bones, it is a constitutional affection, and one of debility. It is found in weakly and cachectic subjects, and in strumous or scrofulous, if a simple cachexia signifies the same. It requires, consequently, a tonic regimen and medical treatment; good air, good living, and tonics being absolutely essential. As local remedies, rest in the horizontal position and warm fomentations are likewise most important. Under such treatment, this disease may readily be checked in its earliest stage; that is, if no further organic change in the structure of the bone has taken place, than its infiltration with inflammatory product, and its consequent expansion.

When the inflammation has extended to the synovial membrane, and an effusion into the articulation has been produced, the same treatment is to be carried out as we have recommended in the less complicated example; but the prognosis of the case is not so favourable, and greater care in the carrying out of the instructions is to be observed. A successful issue is still, however, to be anticipated; a bad result being looked for only in the extremely cachectic and unhealthy subject. Should the inflammation, however, end in partial or complete necrosis or death of the bone, suppuration and disorganisation of the joint will, in all probability, be the result; but such cases will claim our notice under another head.

It will be remarked that, although this disease is an inflammatory one, leeching, blistering, and mercurials have not been alluded to; and I do so now simply to express the opinion that they are not only useless, but absolutely injurious. Cauterisation of a joint affected with this disease is not a practice from which much benefit can be expected.

Inflammation of the Soft Pulpy Layer which exists between the Shafts of the Long Bones and their Epiphyses. It is now well known by anatomists that, at the junction of the shafts or centres of bones with their epiphyses, there exists a soft pulpy vascular layer of connective tissue, by which the growth of the body of the bone is maintained, and its subsequent union with the epiphyses secured. At an early period of life, this pulpy layer is well marked; for, as growth and development are at this time most active, the tissue is necessarily very vascular. Obediently also to the law that, in proportion to the activity of the action going on in the part, is its disposition to inflammatory disease, this tissue is unquestionably highly prone to inflammatory affections. I believe that a large proportion of the cases of acute suppuration about a joint in children have their origin at this seat; and this is often shown to be the case by an exfoliation of some portion of the surface of bone in contact with this pulpy layer. If the disease involve the whole connective tissue of the bone, a general exfoliation of the upper portion of the shaft may be produced; or, if this result do not take place, some arrest of development of the bone's growth may be the end.

The disease may make its appearance as an acute or a subacute affection. It is, however, generally acute, and is manifested by a marked swelling at the seat of the disorder, accompanied with great pain and constitutional disturbance. An abscess will then form, which may rapidly envelope the joint and upper part of the limb; and, when this has opened and discharged its contents, convalescence may result; or, what is more frequent, a piece of bone varying in extent will come away, and a cure follow.

The majority of cases such as I have described appear about the shoulder-joint, although the disease may be witnessed at any other articulation. The following cases may be given in illustration.

It must be added that, in this disease, the epiphysis itself is not often involved; this pulpy layer being more intimately connected with the shaft, the growth of which takes place through it; the epiphysis having an independent vitality and independent vascular supply. As a consequence, disease of this structure involves the shaft in preference to the epiphyses.

Case I. Mary S., aged 8, applied to me in Dec. 1860, with a large abscess completely covering the whole shoulder. It had been coming for six weeks, and had caused intense pain and some constitutional disturbance. The abscess extended over the clavicle to the middle of the arm; and the slightest movement of the extremity aggravated the pain. A free incision was made into the part posteriorly, and a pint, at least, of pus taken away. A good poultice was then applied, and tonics given.

When I saw her again, a week afterwards, the swelling had entirely subsided; the joint could be moved without pain; and no signs of mischief within the cavity could be detected. The original wound was still discharging; and a second over the bicipital groove had made its appearance. The pain also had disappeared. It was clear, from this example, that the disease was not in the shoulder-joint, although it was not far from it. A probe when introduced through the opening passed upwards upon the bone, but no exposed bone could be detected. I believed the case at this time to be a case such as I have

been describing. After the lapse of a few months, its true nature was revealed; on April 28th, 1861, a piece of bone came away, which was evidently the upper portion of the shaft of the humerus, where covered with the pulpy vascular layer. On May 23, a second piece of the same character was removed from the anterior opening, and recovery ensued. I saw the child one year afterwards, and the cure was complete.

Case II. A similar instance to the above appeared in the person of Mary B., aged 11, who came under my observation in November 1862. Exfoliation of bone, which was evidently the upper surface of the shaft where in contact with the epiphysis, took place; and recovery ensued. The natural opening in this case was also over the bicipital groove.

Case III. A third case occurred also in the person of George W., aged 14, from whom bone came away of the same nature, and recovery followed.

Case IV. In Matilda D., aged 3½, a like exfoliation was followed by a like result.

Other cases of the same nature as the preceding might readily be extracted from my note-book; but they all tell the same tale—that of an acute or subacute abscess over the joint, followed by exfoliation of the layer of bone which is covered with the pulpy vascular tissue through which the bone grows; and subsequent recovery. It is to be remarked also that the abscess, if left to open naturally, bursts over the bicipital groove; this being the same position which an abscess from a suppurating shoulder-joint generally selects. All these cases have occurred in children, when the growth of bone and the activity of this pulpy layer is most active; and they, as a rule, have a good result. I have recorded in the *Guy's Hospital Reports* of the year 1862, an example of arrest of development of the humerus following an injury to the shoulder-joint, which I believe to be allied in its nature to those I have already quoted. In it, the accident was followed by an inflammation of this pulpy connective layer, and subsequently by an arrest of the growth and development of the bone; this growth being mainly affected through this tissue.

My colleague, Mr. Birkett, has also published in the same work a like case.

I have the records also of a second case of arrest of development after suppuration and exfoliation of bone, in Emma C., aged 9 years. The abscess occurred when she was seven years old; and this was followed by exfoliation of bone, the cicatrix, when seen, being exactly over the head of the metacarpal bone of the left middle finger. This bone was also at least half an inch shorter than its neighbours. The movements of the joint were perfect, proving the integrity of the epiphysis, and indicating the probability that the original disease was situated in the soft pulpy layer, at the junction of the shaft with the epiphysis, that the upper portion of the shaft had come away, and had thus given rise to the subsequent deformity.

It is hardly necessary to dwell longer upon this subject, the few remarks which I have made being, I trust, sufficient to draw your attention to the point, and to mark the true nature of the cases which I have described, for they are all tolerably distinct.

I have thus briefly alluded to the three forms of inflammatory affections which are found to attack the bones of children: namely, of the shafts, epiphyses, and intervening epiphysial structures; all of which are of an allied nature; but in each the symptoms of disease are quite distinct and readily distinguishable. I have also dwelt upon the anatomical causes of the differences between these osteal affections of early life and of the adult; and trust that I have not, in my efforts at condensation, left you uncertain as to my meaning or as to the nature of the diseases I have described. I look upon the distinction which has been made as most important, and have, therefore, gladly seized this opportunity of bringing the subject under your notice, as I am not aware that the true nature of these cases has hitherto been described.

Fractures of Bones will now for a few minutes occupy our attention.

Congenital Fracture and Dislocation. The fact that congenital fractures of bone and dislocation occur in infants is now too well established to admit of a doubt, although the examples illustrating its truth are not abundant.

I have, however, seen but one example of intrauterine fracture, which came under my care on Feb. 10th, 1862; the case having been brought to me by an intelligent pupil, in whose practice it occurred. The particulars of the case are as follows.

Case. The mother of the child, two weeks prior to her confinement, experienced a fall, and struck her abdomen sharply against the corner of a large weighing-machine. Signs of labour at once appeared, which were arrested by rest; and, at her due period, a female child was born, after a natural labour, with a fracture of the middle of the right femur. When I saw the case two weeks subsequently, the existence of a fracture was quite clear, for it had not been fixed. The bone could also be readily bent into its natural position. I bound it up with cardboard splints well padded with cotton wool, and kept it in position by broad strips of firm plaster. The fracture rapidly repaired, and in one month convalescence was established.

The case is worthy of record for several reasons: first, from its being a congenital or intrauterine fracture, an example of an accident which is recognised, but not often observed; secondiy, to illustrate the facility with which the bone was restored to its normal position, a point which may always be observed in fractures of early life, from the fact of the bones being but partially developed, and containing more of the organic than inorganic elements; and thirdly, from the practice which was carried out, firm splints and hard appliances being rarely required in the treatment of such and allied fractures.

The limb should always be well protected from any unequal pressure by carded cotton, before the millboard splints, which answer every purpose, are applied. Good, firm, linen strapping, closely surrounding the limb, binding the splints together more firmly and more securely than any bandage, and is far less cumbersome.

Respecting congenital dislocations, I have had no experience; but must refer you with pleasure to some excellent remarks upon this subject made by Mr. Athol Johnson, in his lecture, in the British Medical Journal for 1860.

It will be hardly necessary to detain you long with the consideration of ordinary cases of fracture of the bones; but it will be inconsistent with my original design, if I fail to point out to you the differences

between the fractures of bones as found in children and in adults.

Fractures through the body of a healthy bone are not common in early life; by far the greater number of instances taking place in children who are the subject of rickets. In these cases, it is well known that the bones are readily fractured; and in the case represented by the drawing which I now hand round, the mother states that at least twenty different fractures have taken place. In such cases, repair of the fracture is, however, rapidly performed, one month or five weeks being generally amply sufficient to complete the process.

Incomplete, or so-called "green-stick" fractures, form another peculiarity of infant life; the second name of "green stick" explaining their true nature, the bone being fissured vertically into fibres, but not separated transversely, precisely in the same manner as a green stick. This form of fracture may be found in any long bone. I have seen it in the arm and forearm, and also in the thigh; but have never noticed it in the tibia or fibula.

The youngest patient that I have seen who was the subject of this injury was a boy aged one month. The fracture was in the centre of the humerus; it had taken place some time previously, and was supposed to have been produced at birth. The bone was readily restored to the right line and fixed in splints, a good recovery taking place.

Case. A very severe instance of this incomplete fracture presented itself before me in the person of a male child aged eighteen months. The right femur was really bent at a right angle, the foot and leg presenting outwards. It was produced by an attempt to catch the child when falling from the arms of its nurse. The fracture was readily restored by manipulation, and fixed with millboard splints, the limb being well padded with cotton wool, and the splints maintained *in situ* by strapping.

Fractures of the Clavicle are also very common. My colleague, Mr. Forster, in his practical work on *The Surgical Diseases of Children*, believes this fracture frequently to be one of the incomplete form; but as this bone is one of the earliest which is ossified, and at birth is, therefore, one of the strongest in the body, this opinion appears somewhat improbable. I would rather believe that these so-called fractures more often belong to the next class of cases to which I shall allude; viz., the separation of the epiphysis; the body of the bone being separated from its sternal epiphysis.

This *Separation of a Bone at its Epiphysis*, from anatomical reasons, can only take place in early life. It is, therefore, a second point of difference between the cases of fracture of bones in the child and adult. It is a commoner form of injury at this time of life than a dislocation of a joint, and is, perhaps, more frequent than an ordinary fracture.

It is the most frequently found at the upper and lower part of the humerus and carpal extremity of the radius; but it may take place in any bone. Considerable care is required to diagnose with correctness the nature of these accidents. They are too frequently looked upon as cases of dislocation, and are, therefore, maltreated; the absence of a distinct crepitus being the principal cause of this difficulty. They are to be treated in the same way as a case of fracture; the epiphyses are to be returned to their normal position by manipulation, and splints applied, great care being observed that there is no undue pressure over the parts.

This leads me to say one word on the subject of dislocations, which are unquestionably cases of some rarity; the majority of the so-called cases being a separation or dislocation of the epiphyses, to which we have just alluded. The treatment of these injuries, however, are the same in the child as in the adult.

[*To be continued.*]

Original Communications.

OBSERVATIONS ON SOME OF THE EFFECTS OF THE APPLICATION OF THE CALABAR "ORDEAL BEAN" TO THE EYE.*

By John W. Ogle, M.D., Assistant-Physician and Lecturer on Pathology at St. George's Hospital.

As the observations, first of all made by Dr. Fraser, and extended by Dr. Robertson, on the effects of the Calabar "ordeal" bean upon the eye will no doubt attract (and most deservedly so) very considerable attention, I have thought it might prove of interest to place on record the results of some of the experiments which I have been induced to make with the same agent. In the present communication, I will notice only the results which I have found to be produced by its application upon the *pupil* of the eye, not wishing to interpolate any mention of such effects upon the power of vision, the "accommodation of the eye," as were manifested at the same time.

I was, in the first place, naturally wishful to determine for myself the fact that the healthy and active pupil of the eye could be made, at will, to contract by the application of this agent; and the following experiments were therefore instituted at the onset.†

Experiment i. A young woman, aged 24; the sight of whose right eye was so far impaired that she could only distinguish light from darkness. The left pupil was of the ordinary size, and moderately active; the right one was very sluggish under the action of light, and much larger than its fellow.

I applied a single drop of my weakest solution (No. 1) of the Calabar bean between the eyelids of the right eye at 1.25 p.m. I found at 1.55 that the pupil, which before had been considerably larger than that of the other eye, had become so contracted that it was only of about half the size of the other one. How long it remained so contracted, I am unable to say.

Experiment ii. A woman, aged 51, with both pupils equal, acting but sluggishly under light, and both of them smaller than natural and healthy pupils generally are. I applied one drop of my No. 1 Calabar bean solution between the lids of the right eye at 1.40 p.m.; and at 1.55, the pupil was only half as large as that of the other eye.

Experiment iii. A man, aged 53, paraplegic; with

* These observations were completed, though not communicated to this Journal, before I had the opportunity of becoming acquainted with those which other experimenters (following Dr. Fraser and Dr. Robertson) have made, and placed on record.

† I have had four preparations of the Calabar bean made for me by Messrs. Bullock and Reynolds. First, a watery solution of a spirituous extract, of which one minim was equivalent to two grains of the bean (No. 1); secondly, a similar but stronger solution, in which one minim was equivalent to four grains of the bean (No. 2); thirdly, a strong spirituous extract, of which fifteen grains were equivalent to four hundred grains of the bean (No. 3). In the use of the former two, I dropped the solution, by means of a camel's-hair brush, between the eyelids: the latter (the extract) I used by first moistening it with water, and then smearing it over the inner surface of the lower lid. The fourth preparation of the bean which I have had made is a paper saturated with a solution, analogous to the atropine paper of Mr. Streatfeild. This Calabar bean paper I have not yet tried, or made use of.

the pupils of both eyes equal, of moderate size, acting well under light. I applied one drop of my No. 1 solution between the lids of the right eye at 1.32 P.M. No visible change in the left pupil was perceptible at 1.40. It had become slightly contracted at 1.55; and it was contracted to half the size of its fellow at 1.58. It was less than half as large as its fellow at 2 P.M.; and at 2.5 this pupil was only about equal to a pin's head in size, the pupil of the other eye having become larger than it previously had been.

Wishing to ascertain how long the contraction of the pupil produced by the Calabar bean would remain, when no means were used for again dilating it, I made the following observation.

EXPERIMENT IV. A boy, aged 5 years and 9 months, strumous, with both pupils equal, both very large and mobile under the action of light. I applied a single drop of the weakest solution (No. 1) of the bean between the lids of the right eye at 1.42 P.M. No visible change in the pupil had occurred at 1.50. At 1.62, the pupil had contracted to the size of a pin's head. I saw the boy again at 10.30 P.M., and found that the pupil was very contracted, but not to so great a degree as at the hour previously mentioned. On the following morning, at 10.30 A.M., I again examined the boy's eyes, and found that the pupil was still contracted, but only to a slight degree, and was almost as large as the pupil of the other eye.

Having thus added a proof, and as I think a satisfactory one, that we have a ready means in the Calabar bean of expeditiously, and with tolerable, but not very great, permanence, contracting the pupil, I made the following experiments, with a view of proving its power of effecting contraction of the pupil which had been previously decidedly dilated by atropine. This I was particularly desirous of doing, inasmuch as I have constantly felt the want of the means of contracting the pupil, after I have had it widened by atropine or belladonna for the purpose of ascertaining by the ophthalmoscope the state of the deep vessels of the eye in cases of albuminuria, supposed disease of the intracranial parts, etc.

EXPERIMENT V. The same patient as in the case of Experiment No. II, with naturally small pupils. Between the eyeball and the lower lid, I introduced a portion of Mr. Streatfeild's "atropine paper," equal to half a drop of the two-grains-to-the-ounce solution (*i.e.*, half of one of the squares) at 12.53 P.M. At 1.12, the pupil was very fully dilated. At 1.31, I applied a little of the strong extract of the bean (which I have before spoken of as No. 3). At 1.40, no contraction of the pupil had been produced, and I then applied some more of the strong extract. At 2.0, there was still no change in the pupil; but at 3.20, the pupil had become reduced to the same size as its fellow. Whether, and to what extent, it became still further contracted, I had no opportunity of judging.

EXPERIMENT VI. A man, aged 36, with both pupils equal, of natural size, acting well to light. I applied between the lids of the right eye one drop of the atropine solution (two grains to an ounce) at 12.7 P.M. At 12.30, the pupil was fully dilated, and I then smeared a little of the moistened extract of the bean on the lower lid. At 1.15, I found that the pupil was beginning to contract. At 1.30, as I found that contraction was not progressing at all quickly, I again applied some of the extract. At 2.0, the pupil was reduced in size to that of the opposite eye. I had no opportunity of ascertaining whether it contracted still further.

EXPERIMENT VII. A man, aged 36, whose pupils were of moderate size, and equal and acting well to light. I applied half a drop of the same atropine solution as in the former case, at 12.7, between the lids of the right eye. At 12.30, the pupil was fully dilated, and I then smeared on a little of the moistened extract of the bean. At 1.15, the pupil was beginning to contract; and at 2.0, the pupil was of the same size as its fellow. How long it so remained I know not.

EXPERIMENT VIII. A man, aged 40, with pupils equal, of moderate size, and acting well to light. I applied half a drop of the above used atropine solution at 12.10 P.M. At 12.30, the pupil was fully dilated. I then smeared on the lid some of the extract of the bean; and at 2.0 the pupil was so far contracted as to be almost, but not quite, as small as its fellow.

EXPERIMENT IX. A strumous boy, aged 19, with pupils equal, of moderate size, and acting well under light. I applied one drop of a solution of atropine of the strength of two-thirds of a grain to an ounce of water between the lids of the left eye, at 12.16 P.M. At 12.47, the pupil was considerably, but not fully, dilated, and at 12.58 it was fully dilated; I then smeared on some of the extract of the bean. At 1.25, the pupil had not become at all altered, and I then applied more of the extract. At 1.45, both pupils were equal.

EXPERIMENT X. A young man, with pupils equal, moderately large, and acting well under light. I applied one drop of the atropine solution (two-thirds of a grain to an ounce) at 12.30 P.M. At 12.47, the pupil was beginning to dilate, and at 1.25 it had become much dilated. I then applied some of the extract of the bean over the inner surface of the lower lid, and at 2.38 both pupils were quite equal again.

I was now anxious to know if it would be easy, by means of the Calabar bean, to control the pupil which had been for some time left in a state of dilatation produced by atropine, and for this purpose made the following observations.

EXPERIMENT XI. A middle-aged man, with pupils equal, moderate as to size, and acting well under light. I applied one drop of the atropine solution (two grains to an ounce) between the lids of the right eye at 1 P.M. At 1.30, the pupil was fully dilated. At the end of a week, I found that the pupil was still very greatly dilated; and at 1.5 P.M. I applied some of the extract of the bean. At 1.20 the pupil was contracted to the size of a pin's head. I then applied one drop of the atropine solution (two grains to the ounce) between the lids, and at 2.31 both pupils were again equal.

EXPERIMENT XII. A middle-aged woman, with pupils active, equal, of ordinary size. The pupil of one eye was widely dilated with one drop of the atropine solution (two grains to an ounce); and, after the lapse of a week, the pupil was found to be still freely dilated, though not so widely as in the week previously. At 1.15 P.M., some of the extract was applied between the eyelids. At 1.20, the pupil was contracted to the size of a pin's head.

EXPERIMENT XIII. A middle-aged woman, with pupils of equal size, larger than usual, and active. I fully dilated the pupil of the left eye with one drop of the stronger solution of atropine (two grains to an ounce). At the end of a week, the pupil of this eye was still about one-third more dilated than its fellow. At 1 P.M., I applied some of the extract of the Calabar bean on the inner surface of the lower lid. After the lapse of only *twenty minutes*, the pupil of this eye had become reduced in size to that of a pin's head. Possibly this effect was produeed much earlier, but I was unable to ascertain how much sooner it had followed the application of the extract, as the patient had left me and did not return earlier.

The following experiments show how readily the pupil, after being contracted by the Calabar bean, becomes again dilated on the application of the atropine solution.

EXPERIMENT XIV. A young woman, the same as mentioned in Observation No. 1, had the stronger aqueous solution of the bean, before described as No. 2, applied between the lids of the right eye at 1.53 P.M. I did not see her until 2.20, when I found the pupil of this eye reduced to the size of a pin's head. At 2.30, I applied one drop of the atropine solution (two grains to an

ounce). At 2.43, no alteration of the pupil had followed; but at 2.50, the pupil had become much dilated; and at 3.5, still more dilated. At the end of a week, the pupils were found to be equal in size.

Experiment xv. A woman, of middle age, with pupils equal, moderate in size, but rather inactive on application of light, having the arcus senilis in both eyes. Between the lids of the left eye, a drop of the weaker solution of the bean (No. 1), which was now some days old, was applied at 12.56 P.M. At 1.12, no change had occurred; and a drop of the stronger solution (No. 2), which was more recently made, was applied. At 1.16, the pupil was slightly contracted; and at 1.36, very much so. At 1.40, I applied one drop of the stronger portion of atropine (two grains to an ounce); and at 2.10, the pupil was becoming decidedly larger in size. At 2.15, it had attained the same size as its fellow.

In one or two other experiments, which I need not detail, I found that contraction of the pupil which had been dilated by atropine did not at all, or only very partially, follow the application of the Calabar bean solution. In some cases this might be explained by the fact of the iris having been at a previous occasion the subject of disease, and the muscular fibres having thus become altered in character; but I am inclined to think that it was owing to greater disproportion having existed between the strength or quantity of the solutions of atropine and Calabar bean which were used. It appeared to me that some of the Calabar solution, which was a simple watery one, was decidedly weaker in action after having been made some time.

It may then be gathered from the above experiments, that we have in the Calabar bean a ready and effective agent for producing contraction of the natural pupil; and also of neutralising the effects on the pupil produced by the applicatiou of atropine or belladonna to the eye (which generally remain for a great length of time, and frequently prove a subject of much complaint, by the resulting interference with vision and disfigurement—or, as some would say, the improvement—of countenance.) A little trouble and attention will be required in adjusting the strength of the Calabar bean solution on the one hand, and the atropine solution on the other; but when the proportionate strength of the two antagonising solutions has been determined as nearly as possible, making allowance for individual differences as regards the relative strength of the sphincters and dilators of the iris, dilatation for ophthalmoscopic and other purposes may be at any time resorted to with the certainty of a speedy return of the pupil to its natural state. I am convinced that, for ordinary ophthalmoscopic purposes, one quarter of a square of Mr. Streatfeild's atropine paper introduced beneath the lower lid is sufficient to effect the required purpose, and this should be removed as soon as dilatation commences.* But even if, from want of due adaptation, the contraction of the pupil should have been too vigorously carried out by the Calabar bean preparation as counteractive of the atropine dilatation, experiment shows me that this state of contraction is much less troublesome to the patient, and also lasts a much shorter space of time than does the dilatation from atropine or belladonna.

I hope shortly to adduce the results of further experiments concerning the effect of this agent, not only when used in reference to the eye, but also when resorted to in a more general way. Especially, I hope for the opportunity of testing its power of antagonising certain spasmodic conditions of the muscular system artificially produced.

Postscript. As I find so many inquiries made by medical friends as to what the Calabar bean really is, I will here state concisely what I find to have been made known regarding it. The papers which I have consulted have been: first, a communication by Dr. Christison to the Royal Society of Edinburgh, Feb. 5, 1855, On the Properties of the Ordeal Bean of Old Calabar (*Edinburgh Medical Journal*, March 1855, and in the *Pharmaceutical Journal and Transactions*, vol. xiv, 1854-55, p. 470); and secondly, a communication in the *Transactions* of the Royal Society of Edinburgh, read Jan. 16, 1860, entitled, a Description of the Plant which produces the Ordeal Bean of Calabar, by Dr. Balfour of Edinburgh.

In the paper by Dr. Christison, after alluding to the custom among the negro tribes of Western Africa of using the ordeal by poison as a mode of trial for heinous offences, and describing the use, as an ordeal-poison, of the bark of certain trees, he proceeds to give a notice of the "ordeal-nut," of which Dr. Daniell had given a short account in the *Edinburgh New Philosophical Journal*, 1846, p. 319. Dr. Christison, it seems, had had the opportunity of investigating the action and chemical constitution of some of the seeds, which he had obtained from a missionary and merchant trading with Old Calabar; some of the seed having been also cultivated by Professor Syme and Dr. Balfour. It proved to be a perennial creeper of the family of *Leguminosæ*. Dr. Christison found that its active properties could be concentrated in an alcoholic extract "which constitutes 2·7 per cent. of the seed; and that this extract does not yield a vegetable alkaloid by the more simple of the ordinary methods of analysis." As respects the effects of the bean on the animal body, he found them to be "energetic, and in some respects peculiar, as it seems to affect directly and violently the functions of the heart and the exercise of volition over the muscles." Dr. Christison details the effect produced by fatal doses on the lower animals, from which it is clear that it is a poison of great intensity of action; and also records the effect produced in his own person by what proved to be a dangerous quantity of the bean taken internally. Omitting the details given, the conclusion arrived at was, that "one principal action of this extraordinary poison, and the immediate cause of death in fatal cases, is depression, ending in paralysis of the heart." He goes on to observe, "I think it may also be inferred, that another action is paralysis of the voluntary muscles, attended with suspension of the influence of volition"—a peculiar torpidity, like to that which attends the action of opium or Indian hemp. During this action the integrity of the mental faculties was most remarkable; and throughout there seems to have been a peculiar immunity from any bodily uneasiness (excepting sickness, the relics of the action of the emetic which was resorted to), merely a sense of sinking vitality being experienced. It appeared likely that twelve grains might, if retained on the stomach, have proved fatal.

From Professor Balfour's paper above-mentioned, it appears that Dr. Sharpey found by experiments on the frog, that it "paralyses the action of the lymph heart, does not impair circulation in the vessels, appears to suspend the influence of volition over the muscles, does not affect the direct excitability of the muscular fibre, and apparently also leaves the muscles excitable by stimuli conveyed along the nerves, other than volition; at least by electricity." Professor Balfour describes the experience as given to him by several missionaries, who witnessed the effects of the bean upon natives in the Calabar country. The entire plant is fully described by Professor Balfour in this paper.*

I may say here that Sir W. Hooker informs me that at Kew he is trying to rear one or two living plants. He gives to them the name of *Physostigma venenatum*.

* Sometimes a little vascularity of the conjunctiva follows this use of the atropine paper; but it only remains a short time, and is not worthy of mention, being quite confined to the parts with which the paper is in contact.

* I have to thank Professor Balfour, and also my friend Sir W. Hooker, for kindly forwarding to me some of the beans for experimental purposes.

CASE OF PROLONGED AND PROFOUND SLEEP, OCCURRING AT INTERVALS DURING TWENTY YEARS.

By W. G. Gimson, M.D., Witham, Essex.

J. C., aged 44, a farmer, had never been ill, beyond what he describes as a slight cold.

In 1842 or 1843, the patient after getting very wet and not changing his clothes, suffered from a severe cold, which was followed by long and deep sleeps, the duration of each sleep being more than twelve hours, and the sleep of so profound a nature that it was found impossible to awake him. This attack lasted nine or ten months, and ceased upon the setting in of very wet weather.

In 1848, he experienced a similar attack after catching cold. This attack was more severe than the former, was accompanied by occasional trismus, lasted over a period of eighteen months, and ceased upon the appearance of wet weather.

The present attack dates from the 11th or 12th of May, 1860. At this time the patient got very wet at a fair, and experienced considerable pain in all his limbs, and especially in his back. These symptoms, I am informed, were cured by small doses of Gregory's powder. About a week afterwards, the patient became very drowsy; and when he was once asleep it was found impossible to awaken him, the duration of the sleep being from twelve to twenty-four hours.

I was called to see him after the attack had existed for some time, and found him in bed apparently sound asleep, lying upon his left side; breathing quietly, respirations 18 in a minute; pulse 64, regular, feeble; skin generally warm and perspiring; hands and feet somewhat cold; complexion dusky: there was a peculiar twitching of the eyelids, and upon separating them the pupils were seen slightly dilated, and fixed.

After calling loudly in his ears, pulling him over from one side to the other, pinching his nails, etc., he was awakened by touching the conjunctiva with my finger-nail.

He awoke with a slight exclamation of surprise, and sat up. The pulse was slightly accelerated; the countenance heavy; the pupils were dilated, but acting under stimulus of light; his voice was low and husky; the mucous membrane of the fauces was slightly inflamed; his tongue was clean and moist; the bowels had been open twice the preceding evening, while he was awake. His urine was reported to be high coloured, and turbid on cooling.

He had no pains nor uneasy sensation to complain of, except a deeply seated pricking across the forehead, generally felt when awake.

He now passes about forty hours out of forty-eight in sleep; and has been known to sleep more than three days without taking food; the longest time, as I am informed, being eighty-four hours.

He generally awakes as the evening approaches; never dreams, or, if he does, the mind retains no impression of so doing; he generally goes to sleep upon the right side, soon turns over on to the left, and so remains until he awakes.

He has never voided urine nor stool even during his longest sleep, although he has several times laboured under diarrhœa during the present attack.

His memory is good; he inquires after friends whom he saw when last awake, and this before time has elapsed, or circumstance has occurred, to recall the fact to his mind. And he is now as capable (when awake) of transacting business, or of any calculation, as he was at any period of his life.

Weather and the state of the atmosphere seem to exercise a direct influence upon him; he is always more wakeful, and remains longer awake during wet and dull weather than at any other time, and he will frequently awake and foretell a coming storm.

During the preceding two attacks he was bled, blistered, etc., and all the experiments were tried upon him which medicine could suggest; but with no avail. My opinion was asked as to the advisability of a seton; and, as I could not see any benefit likely to arise from that mode of treatment, I gave an opinion against it. Upon being asked, what I could recommend as likely to be of service in this case? I felt how little I could suggest in the present state of things. The appetite was good; the functions of the stomach and alimentary canal of the liver and kidneys were carried on to all appearance efficiently; the heart-sounds were clear but feeble; respiration was free but shallow; the surface was generally warm. What could be of use? I confess I was puzzled; nor could I, by searching through books, or thinking upon the case, arrive at anything like a satisfactory conclusion.

The only case I can find at all approaching the one I have related, is that by Dr. Oliver, F.R.S., of "An Extraordinary Sleepy Person," at Timsbury, near Bath, May 1694.

This person seems to have been more of a somnambulist than my patient; and although he slept as profoundly and so long as a month at a time, still he managed to eat and drink during sleep. This state of things occurred at intervals for some four years; and during that time he was bled, blistered, scarified, etc., but to no purpose. The sleep in this case was so profound that one visitor thrust a pin into the patient's arm down to the bone without awakening him. During one attack, also, he suffered from trismus.

The physiology of sleep is too lengthy a subject to enter upon in a paper like the present. I have simply related facts as far as I am able in the case of my patient, and have done so with the hope that some one may suggest a mode of proceeding likely to be of use in the treatment of this disease, for disease it certainly is.

CASE OF PHLEGMASIA DOLENS FOLLOWING AN OPERATION FOR HÆMORRHOIDS.

By Henry Ewen, Esq., Long Sutton.

Mrs. C., aged 48, a farmer's wife, of active habits, has had seven children, the last 14 years of age, but still menstruates. She had had hæmorrhoids upwards of twenty years, and had suffered very great losses of blood.

June 17th, 1862. She was pale and anæmic, with a very quick pulse and great debility. There was a loose pendulous flap around the anus, and a pile of the size and colour of a cherry projecting therefrom. Nitric acid was applied to the pile.

June 23rd. The pendulous flap was removed by excision. The operation was followed by some protrusion from the anus, and superficial sloughing of the protruded part; but the parts healed kindly in the course of a month. Just three days before the expiration of a month, phlegmasia dolens supervened, affecting the left lower limb. There were great pain and tenderness in the groin, and along the course of the femoral vein, gradually extending downwards to the ham and calf of the leg, and considerable œdema of the whole limb.

August 31st. There remained much œdema of the left leg, and inability to walk. Her general health was much improved.

May 1863. She had an excellent recovery, and remains quite well.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON THE ACTION OF MEDICINES, SINGLY AND COMBINED.

By David Nelson, M.D.Edin., formerly Physician to the Queen's Hospital; and Professor of Clinical Medicine, Queen's College.

[*Read April 9th*, 1863. *This paper has also been read before the Midland Medical Society.*]

[*Concluded from page* 591.]

With regard to the heterologous agents, they act:—

1. Either as direct neutralisers, such as antacids, antiseptics, stimulants, sedatives, tonics, depressants, astringents, relaxants, cooling and heating remedies, and coagulants and resolvents; or

2. As exciters or adjuvants of morbid action, amidst which the offending matters are either destroyed or expelled; such as emetics, purgatives, diuretics, sudorifics, etc.; or

3. As specifics, acting after a manner more or less known, or utterly unknown, and hence called alteratives; the word implying a recognition of results without offering any explanation of them. In this class may be instanced quinine, colchicum, arsenic, mercury, silver, zinc, copper, etc.

From the fact that all remedial agents which enter the body have to deal with living tissues under innumerable variations of condition, and react within it according to peculiar vital laws, it happens that even the simplest homologous elements may act in diverse manners, according to the constitutions and idiosyncrasies of the individual subjects; and much more so those that are composite and heterologous. Beers, wines, spirits, and spices, and even albumen, starch, and oil, will behave very differently in different bodies, according to constitution and condition, as every one of delicate stomach is so well able to testify: how much more so those matters that are more foreign to the system.

1. Amongst the class of *neutralisers*, the antacids and antiseptics are almost the only agents that act in an invariable manner; and may, therefore, be passed over without comment beyond an observation or two in regard to the permanganates. While fully alive to the admirable antiseptic virtues of cinchona and the mineral acids, as well as some of the chlorides, I yet think there are conditions in which the internal and external use of the permanganate of potassa affords results far transcending those of any other agent. While bark and the mineral acids are more potent for good in the blood-putrescence of fever, carbuncular disease, blood-scurvy, and pulmonic gangrene, I believe the permanganates to be incalculably more efficacious when the surfaces are involved; as in cancers, and foul ulcers of the skin, and putrid states of the mucous membranes of the mouth, nose, throat, stomach, and intestines, and vagina and uterus. While the chlorides, creasote, and carbolic acid, etc., displace one bad odour, they themselves bring others scarcely, to some persons, less offensive; but the permanganate simply deodorises and freshens. The only odour perceptible is that pleasing impression which arises from the smell of recently bleached clean linen. Theoretically speaking, we have here a simple hyperoxygenation and dispersion of the offending elements by the powers of ozone; but, be the precise nature of the action what it may, the practical results cannot be doubted; for they are invariable and instantaneous; so that, against the putrefactive horrors of cancer, mercurial salivation, necrosis, and certain affections of the liver, intestines, and uterus, no agent can approach the freshening influence of the permanganate of potassa, a preparation as beautiful in appearance and as mild in taste, as it is certain and beneficial in its action.

The other classes of the heterologous remedies vary in their effects, and not alone from differences in themselves, but from differences in the constitutions of the patients. Thus, the power of bearing cordials or spices varies very much according to the state of the mucous membrane. Alcohol takes very different effects upon different individuals. While one person of compact, powerful brain, and rigid fibre, will only be moderately stimulated or slightly elated; another, of inactive and lax, full habit, will be rendered sleepy and even stupified by a much less quantity. With the first there will merely be an increase of the animal heat; with the second, there shall be congestive engorgement of the brain, liver, and lungs, etc., the heart palpitating, the respiration impeded, and the face highly flushed.

Under the bodily depression of disease, or the mental sadness of adverse affairs, much of this stimulant may be borne without any other effect than simply keeping the patient at par with others; while the plethoric and sanguine subject will become elevated by a moderate allowance. We also know what large quantities of sulphuric acid may be taken under scurvy, and of nitrate of potassa under fibrinous rheumatism, before they produce their counteractive effects. With regard to sedatives, how very little will often compose to sleep the full-fed, easy, unreflecting subject; and, on the other hand, what large doses may be administered under acute pain and high excitement, without any further result than the induction of a light sleep, or the mere soothing and lulling of intense agony. In the strong and rigid, these alone may occur; but in the lax and pale, how often have we symptoms of faintness and oppression which the patient can only compare to a sense as of the approach of death. All who hear me are of course familiar with the action of opium and other agents of that kind upon certain individuals, and how dangerous is heavy sleep in such diseases as bronchitis, pneumonia, and cardiac obstruction, where nature for her own safety demands watchfulness. In the aconite we have also a good illustration of the respective tolerance of a remedy by one patient or another. In the deep-seated pains of bones, and other more solid tissues, and also of the cranium and larger joints, but more especially in sciatica and amaurosis, all who have used it aright must confess to the wonderful relief afforded in respect to the leading symptom of intolerable and exhausting pain; at the same time, there are patients of a constitution that cannot well bear it, and whose hearts become so fluttering and feeble under its influence as to cause very great anxiety. It is fortunate, however, that potent diffusive stimulants have an excellent counteractive effect in such cases; and I always take care to administer such in combination with the aconite, whenever I do use it upon such subjects. The same observation is applicable to so depressant and relaxant an agent as antimony. Here we have a powerful and direct sedative, a calmer of the heart's action, a correcter of febrile heat, an expectorant and diaphoretic; yet ever requiring to have its action modified or restrained according to various circumstances. Here the utility of judicious combination becomes vividly apparent; and experience has to speak of the beneficial mutual control exercised between this remedy and others of a different, or even opposite nature, when allied together. Thus is observed the subdued pulsation of the cranial vessels, the gentle warm perspiration, and the subsidence of headache, stupor, or delirium, when the antimony is united with opium, as in fever. A similarly modified action is to be observed when pneumonia occurs in feeble constitutions, and when one desires to calm the heart's action, and open the pores of the skin without inducing nausea, or that sinking sense of weakness so apt to prove fatal in such cases. Combined with cinchona and ammonia, this re-

sult is obtained from it; and, though it might be urged by the sceptic, and those of the dry chemical school, that the ammonia, or the astringent principle of the bark, would decompose the soluble tartrate of antimony, and so render it inert, such, I feel certain, is not the case; and it will be observed that, while the antimony is so far chemically changed as to prevent its immediate nauseating effect upon the stomach, it yet acts in its usual sedative and diaphoretic manner, and, in fact, finds its way to the recesses of the system quite as surely, and more steadily, than in its more simple and soluble form. The fact is further proved by the beneficial action of the antimonial powder; and it is well known that the continued use of antimony will kill its victim, even though never used except in effervescing draughts, the alkali of which would as certainly decompose the tartrate as either ammonia or bark. Other remedies of an opposite mode of action may also, as we know, be combined with advantage; as digitalis with ammonia or with arsenic, or quinine and opium with kytta, etc.

2. In the class of *exciters* or *adjuvants of morbid action*, we have an illustration of that one kind of medical procedure on which is founded the absurd dogma of "like cures like," with us a limited truth, contained within the narrow compass of this one occasional line of treatment; but which, by a visionary sect, has been attempted to be set up as a universal principle in therapeutics, in the same manner as other purblind and enthusiastic panaceists have attempted to set up water, cod oil, electricity, and hot air. Each of these things have their uses, as we know, within certain bounds, and all rational physicians have so employed them; but the laudation of any one of them as a panacea, is simply an absurdity that can only be professed by rapacious rogues, and credited by the foolish and ignorant in matters medical. The sole ground-work of the phrase "like cures like" is evidently, then, this partial medical truth, and its natural operation in what one may call primary reaction, or that effort by which the constitution endeavours of itself to cast forth, as speedily as possible, whatever hurtful agent may have entered the system. Such primary and spontaneous reaction may assume the shape of vomiting, or purging, or sweating, or extraordinary micturition, or the explosion of eruptions, or boils upon the surface, or all combined, or in succession. Under such circumstances, we may certainly increase the reactionary symptoms with great benefit to the patient; especially if the efforts at expulsion be somewhat ineffectual. If the vomiting arise from offensive matters in the stomach, our readiest cure clearly consists in an emetic; if the purging proceed from a similar cause in the intestines, our reliance is in a brisk purgative; if the reaction be towards sweating, expectoration, or diuresis, we promote the flow of the respective excretions, and, if there be a tendency to cutaneous eruptions, or boils, we may give tonics, and thereby apparently increase the disorder by forcing out all latent morbid matters. So far all is consistent with experience and common sense; but what would be said of him who, acting under the ordinary dry rule of *similia similibus curantur*, should exhibit an emetic during the vomitings of cerebral disease or pregnancy; a purgative in ulceration of the bowels; a sudorific in the sweatings of phthisis, or a diuretic in diabetes? The question had better not be answered; for the answer would be a very rough one, in keeping with the roughness of such practice.

Amongst the exciters of morbid action, mercury must occupy a conspicuous place, when it is used to the extent of salivation. In this wise, we see in it a wonderful neutraliser of the syphilitic virus, and a promoter of that series of changes in the body which is equivalent to a distinct disease in itself, but yet acting curatively towards other diseases of the most formidable character. By some mysterious means, it invades the vitality of certain morbid growths, attenuates and dissolves the fibrinous material in the blood and elsewhere; so abating inflammations, softening and reducing hard swellings, and, in fact, disintegrating the tissues generally, if carried sufficiently far; but yet in this manner controlling deep seated action, and guiding to a safe issue the most dangerous internal disorders of the brain, heart, lungs, liver, intestines, serous surfaces, and last, not least, of the eye.

3. Turning our attention to the *alteratives*, we find amongst them innumerable illustrations of the fact that agents may work with the greatest efficacy, and yet their modes of operation remain utterly unknown. We must include amongst them the antispasmodics, the tonics, the febrifuges, and other specifics. In some of them we have but to admire the happy results, without having the remotest idea of how these have been produced. In others, we have some glimmering notion of the secondary means by which such results have been attained. For example, how strychnia excites or how conium paralyses the powers of the spinal system; how castor or valerian calms that wild nervous excitement which distinguishes emotional hysteria—we know nothing. How arsenic or quinine arrests ague or fever, we are equally ignorant. How calumba, gentian, and other such bitters, give tone to the stomach; and how bismuth assuages ordinary gastralgia—we know not. Neither can we explain how lobelia controls spasmodic asthma, or digitalis lessens palpitation. On the other hand, we do indulge in some reasonable suppositions with regard to a few of such remedies. For instance, when we employ steel and emmenagogues in the case of the female epileptic, who is also afflicted with deficiency of menstruation, and meet with a double success in bringing on the monthly discharge and arresting the epilepsy, we are entitled to believe in the uterine source of the more alarming disease, and the rational means of its subjugation by the removal of the primary exciting cause. So when we use purgatives with the constipated, and pepsine with the dyspeptic, and find the fits abate, we are equally entitled to hold the gastro-enteric irritation as the main cause. Also when we employ silver, and find that a worm is expelled while the epilepsy disappears, we feel further convinced that the worm was the cause of the fits by reflex action upon the nervous centres; and that the silver acted indirectly upon the epilepsy as an anthelmintic, in like manner as the steel and ergot, and the purgatives and pepsine, acted as deobstruents and solvents. Of course, as such derangements of the uterine and gastro-enteric functions may occur in thousands of instances without inducing an epilepsy, we must conclude that there exists in the exceptional cases an epileptic diathesis, that is, an occult something *plus* the ordinary conditions; and it is here, when the disease is apart from any known organic disease of the brain or other structure, and when, so far as we know, it is purely, as we call it, functional, but capable of being moderated or removed by remedies, that such remedies receive, more emphatically, the name of alteratives. Amongst these stand foremost zinc, copper, arsenic, and quinine—how operating we do not know, beyond this, that they seem, by their so-called tonic powers, to constringe the capillaries, and so lessen that congestion of the brain and nervous system which is apt to deprive these tissues of their natural quiet vigour and sustained tonicity. Under their influence, the white of the eyes shows less of that dull, dirty, reddish brown or thick-set venous network, so characteristic of the epileptic aspect; the mind becomes less hazy and confused; the muscles are not so tremulous; the hands can grasp objects more firmly; and the feet are moved upon the ground with more precision and elasticity. Yet sometimes one of these agents will act more beneficially in certain cases, and another in others, without any possibility of our knowing why. Again, combinations will often effect what each remedy separately has been unable to accom-

plish. This is again and again illustrated in obstinate chronic diseases of the skin and other such textures. Mercurials, iodides, and arsenic may each be used in succession and in increasing doses for a length of time, with little or no effect; and yet the iodide of arsenic and mercury, as represented by Donovan's solution, administered outwardly and inwardly, may speedily induce a favourable change, too marked and too often witnessed to admit of any doubt as to the cause.

So also with those remedies used in ulceration of the external surface—a subject of profound interest to the physician as well as the surgeon, as exhibiting under our eyes the processes of erosion or of healing, according as the reparative powers are strong or weak. We can tolerably well understand how, in an old standing indolent lesion of the surface, besides the employment of tonics and nutrients internally, we should also use certain applications superficially. We can easily see, by *primâ facie* reasoning, the utility of such agents as simple emollients, sedatives, deodorisers, antacids, absorbents, stimulants, and astringents. We can discern the directly beneficial action of the protective qualities of poultices, cerates, and oils, as imitating the scab of Nature; we witness the skin-like support of firm bandaging or strapping; we can appreciate the cleansing and cooling effects of pure water; we can see the use of carbon in absorbing irritative gases; of chalk in neutralising acrid exudations; of lytta in stimulating the circulation in sluggish sores; of opium in subduing undue sensibility; of the salts of iron, copper, zinc, or lead, in constringing the lax vessels, and firming the flabby granulations of old and deep excavations; of nitric acid and nitrate of silver in breaking down the brawny indurations which abut upon the softer textures and prevent any approach of the gaping sides of the sore;—all this, I say, we can tolerably well understand upon the general principles of physiology and therapeutics; but why, after we have used all these agencies in vain, a little sprinkling of calomel or of the red or black oxide or bichloride of mercury, or the internal use of iodide of potassium, should induce healthy cicatrisation as if by miracle, is to us a mystery. It is well enough, as is often the case, to say that such ulcerations, etc., must have been of a specific character; and that, even though syphilis could not be proved in the person so affected, yet his parents or grandparents or great-grandparents must have had it. Be it so, or let us suppose so; yet the mystery of the action remains the same as ever. It is a bare truth, a simple and inexplicable fact, which, as no rationalist can explain, so no sceptic can doubt.

Before concluding, I would also wish to speak briefly regarding the variable action of different anthelmintics, whether owing to the different constitutions of the patients, or the different constitutions of the worms, I am unable to declare. But this is certain, that one has sometimes used the kousso with perfect success, and at other times with no result at all; while the oil of male-fern has dislodged the parasite at once. In cases where both kousso and fern oil have failed, the oxide or the nitrate of silver has proved efficacious, the worm having been expelled after the first dose of the one or the other. These, however, are not to be relied upon in all cases; and now that the powers of each have been subjected in one's practice to repeated separate trials, I usually prefer using them in succession, beginning with the silver, and following that up with the fern oil or kousso, as required. The oxide of silver with calomel I have repeatedly found useful for young children. One little girl some time ago was brought to me on account of attacks of epilepsy, and was ordered two grains of the oxide of silver, with three grains of calomel, every other night for a week. A large tænia was passed after the first dose, and no fits have occurred since. I ordered the same for a young lad; and, after each dose for three times, there came a round worm, each of the three being ten inches long. These are but examples of a great many more. A lady who delayed taking, on account of its offensive flavour, what was ultimately successful in her case—namely, the fern oil—adventured at first rather upon the kousso. After drinking the infusion, she proceeded to chew and swallow the roughly powdered plant for an hour or so; and in a solemn manner, such as her son-in-law could only compare to a cow chewing her cud. She did stop short, however, and it was not successful; but the remainder being given to an old woman of the village noted for having a tapeworm which almost daily came away piecemeal, the entire parasite was discharged; though she had previously taken turpentine, gin and jalap, and other popular remedies, without that result.

Colchicum affords us another instance, when timely employed against the primary urinary indications, of a valuable and certain specific, not merely in ordinary articular gout and rheumatism, but in the various nervous, muscular, and osseous pains, and in the bronchitis, gastralgia, pleuralgia, and asthma of that peculiar diathesis. Some have attributed its virtues to its modification of the renal, and others to its alteration of the hepatic secretions; the latter even asserting that no good change occurs till purging takes place. Having used it carefully and extensively, I would emphatically deny the accuracy of this last quoted assertion. The benefit can be gained without purging, or indeed any other bodily disturbance whatever; but never, so far as I have observed, without having first effected a solution of the urinary deposits, or a conversion of the irritative insoluble urates into urea. Act in whatever manner it may, however (though I believe it acts both on kidneys and liver), we use it for its usually happy results; and, having ascertained these by giving it at one time and withholding it at another, and noticing the different results, our knowledge of such results does not at all prevent us from combining it with other agents, but rather enables us to do so the more effectually. Taking rheumatism as the aptest illustration of one's procedure, we would ally the colchicum with mercurials and saline aperients in acute inflammatory cases; with hyoscyamus, or opium, or aconite, etc., where severe pain prevailed; with hydriodate or nitrate of potassa, or both, where fibrinous deposits or swellings occurred; and with soda, or rather potassa, in all. Complicated cases might demand a still greater variety of combinations of these and also other adjuncts, according to symptoms; as bleeding, or leeching, or antimony, for the plethoric; and bark, cardamoms, and ammonia, for the aged and enfeebled.

Such I conceive to be the rational employment of specifics in conjunction with general remedies; the first operating upon the essence of the disease, and the others on its concomitant symptoms; and, so believing, I can see no inconsistency in a sound combination of the so-called empiric, or rather experimental, and the rational systems of medicine. Indeed, they must be so combined, to enable our composite science and art to assume the character of a real philosophy.

MIDLAND BRANCH.

CASE OF DISEASE OF THE TARSAL BONES; AMPUTATION OF THE FOOT AFTER PIROGOFF'S METHOD: RECOVERY.

By T. Sympson, Esq., Lincoln.

[*Read March 27, 1863.*]

The operation performed in the following case is one which is severely deprecated by Professor Syme (*Observations in Clinical Surgery*), and not very favourably spoken of by Professor Lister (*Holmes's System of Surgery*, vol. 3); nevertheless, in this, as in other instances, it has been found fully to answer its intended purpose, the patient at the short period of between three and four months after the operation being able to walk two miles

with ease, and without the application of any form of apparatus, his boot being merely stuffed with tow. The difficulty, incidental to hospital practice, of ascertaining the state of patients some time after their discharge from the hospital, having in this case been happily obviated, I have thought it worth while to bring the result before you.

Case. F. T., aged 24, was admitted under my care into the Lincoln County Hospital, July 28th, 1862. He was a thin, pallid-complexioned man, who had been in the Horse Artillery. He complained of his left foot; which was much swollen, red, and very tender. Several sinuses yielding a copious thin purulent discharge led to diseased bone; there was severe pain in the part, especially at night. He had night-sweats; his tongue was coated; his pulse rapid; the bowels were disposed to be relaxed, and his urine was turbid and high coloured. There was some dulness on percussion over the apex of the right lung, and prolonged expiratory murmur was audible on auscultation.

A year and nine months ago, when in Dorchester barracks, he caught his foot under a scraper, fell, and wrenched it. For this he entered the Military Hospital, when severe inflammation of the foot and ankle occurred, followed by abscesses, which were opened. He was discharged as unfit for the service, and then placed himself under a quack at Harby. He improved somewhat, and was able to walk with little pain; and the openings (some of which were made to let out pus, others had ulcerated through) many of them closed, leaving two on the inner and one on the outer side of the ankle, and three on the dorsum of the foot.

At last he applied as an out-patient at the hospital; but, from the day being rainy, and his having to walk more than usual, he thinks he took cold; the pain became aggravated, the foot and lower part of the leg much inflamed, and the old openings, previously closed, broke out again and discharged pus freely. A fortnight afterwards, he became an in-patient.

He was ordered a tonic mixture and cod liver oil, full diet and a pint and a half of porter daily, and a linseed-meal poultice to be applied to the foot.

In August, a slight attack of diarrhœa was checked by the compound kino powder.

In the beginning of September, he complained of violent frontal pain attacking him at night, preceded by febrile symptoms. He was relieved by an emetic, followed by a dose of mercury with chalk. Soon, however, his lower extremities became covered with copper-coloured scaly blotches, and he confessed to having had syphilis five years ago. He was ordered five grains of iodide of potassium three times a day; and in three weeks was quite free from the eruption.

On October 4th, as there was no improvement in the state of the foot, and his general health was manifestly suffering, after a consultation with my colleagues, I amputated at the ankle-joint after Pirogoff's method; the anterior tibial and the plantar arteries required ligatures; the flaps were retained in apposition by four silver sutures and by strapping. The operation was performed at 11 A.M., and at three P.M., there being considerable hæmorrhage, the stump was opened, when blood was seen oozing from the surface of the bone. The surface was left exposed to the air until 8 P.M., when under the influence of chloroform the sutures were reintroduced; a sedative draught was then given.

An examination of the foot after removal disclosed the astragalus anchylosed to the tibia, and its anterior articulating surface, as well as the articulating surfaces of the os calcis, roughened and deprived of cartilage. The cuboid and scaphoid bones were carious.

The wound healed kindly, and nothing worthy of remark occurred during recovery, excepting the formation of a small sinus under the integuments along the outer and lower part of the leg. As this refused to close under the influence of either pressure or astringent injections, it was laid open with a bistoury, after which it gave no further trouble.

The patient called on me on March 7th of the present year. There was then firm union between the bones, and a mere linear cicatrix on the front of the stump. The limb was one inch and a half shorter than the sound leg. When his boot was on he could bear the whole weight of his body on the stump, and with the aid of a stick had walked a couple of miles without fatigue. He had quite lost his cough, and had grown stout.

Reviews and Notices.

Studies in Physiology and Medicine. By the late Robert James Graves, M.D., F.R.S. Edited by William Stokes, M.D. Pp. 428. London: 1863.

This volume, prefaced with a notice of the life and labours of Dr. Graves, consists of a series of essays selected from the papers which were published in different journals during his lifetime by Dr. Graves. The essays appeared at various times between the years 1828 and 1851.

All the essays thus selected for republication bear upon physiology or medicine, and are divided into two sets, Physiological and Miscellaneous. Some of the papers have undergone alterations. "Their supervision," we are told, "as they originally appeared in print, seems to have been, in some instances, intrusted to other hands than those of the author; in all such cases, the editor has sought to convey the meaning of the writer so as to prevent misconception."

We need hardly say that these essays are not meant to convey to the mind of the reader an idea of the state of physiology at this present day. They are published to show the great grasp, and breadth, and depth of their author's mind; to show that the author of the famous *Clinical Medicine* was not merely a successful physician in practice, but also a philosopher in mind.

The mere enumeration of the titles of these essays suffices to indicate the wide range of Dr. Graves's studies. And it need hardly be added that their author treated them after no fugitive or superficial fashion. He made himself master of the subject he took in hand; and brought all the force and vigour of his intellect to develope and elucidate it.

In the list of Physiological Essays we find the following:—The Ubiquity of Life; The Position of Man in the Scale of Life; The Influence of Light; Phosphorescence; Effects of Temperature on Animal and Vegetable Life; Electricity in Relation to Plants and Animals; Distinctive Characters of Man; Faculties and Instincts of Man; Varieties of the Human Race; Laws of Periodicity; Chances of Life; Temperature and Appetite; General Principles of Dietetics; On the Sense of Touch; On the Use of the Cochlea in the Organ of Hearing; On Latent Life and on Vital Crystallisation; On Double and Single Visions; The Laminated Structure of the Crystalline Lens; Anomalies of Organisation; The Functions of the Lymphatic System.

The Miscellaneous Essays are the following:—The State of Medicine in European and Asiatic Turkey; Effects of Intoxication upon Graminivorous and Carnivorous Animals; Birthdays of Celebrated Living

Authors; On Preventing Evaporation from Water-tanks in Hot Climates; On the Hock-joint of the Horse; On the Structure of the Vertebræ of the Delphinus Diodon; On some Affections of the Hair; On some Peculiarities of the Skeleton in Hunchbacks; On the Supposed Want of the Sagittal Suture in Certain Tribes of Negroes; Influence of the Waters of the Dead Sea and of the Great Salt Lake of America on Animal Life; On the Progress and Contagion of Asiatic Cholera; Liebig's Theories of Animal Heat and Disease.

The enumeration of the titles of these essays indicates the extensive field of learning through which the discursive genius of Dr. Graves took its way; and it is well that all these scattered thoughts of his should be thus collected together. We need hardly say that such writings are not now subjects of criticism. They have most of them long been the property of the profession; and have afforded pleasure, instruction, and matter for reflection to its members. They will still be read with pleasure and profit; bearing as they do upon every page of them the stamp of an earnest observer and an original thinker.

Nothing could show more forcibly the clear and practical judgment of Dr. Graves than does, for example, the essay on Liebig's Theories of Animal Heat. This essay was written in 1843, when Liebig was the rage—when all the world saw everything physiological, etc., through the light of Liebig's fascinating theories.

We could give other examples of a similar sober judgment, in the expression of which the author certainly lived in advance of most of the authorities of the moment.

The preface, containing an account of the life and labours of Dr. Graves, will be read with much interest, coming as it does from the pen of his once friend and colleague Dr. Stokes. Dr. Graves was a member of a very talented family. He was the youngest son of R. Graves, D.D., Senior Fellow of Trinity College and Regius Professor of Divinity in Dublin University, who afterwards became Dean of Ardagh. The dean had three sons; and it is worthy of note that each of them, in three successive years, obtained the gold medal in science and in classics. Dr. Robert Graves (our author) took his M.B. in 1818. He afterwards studied in London; and then, during three years, visited the German, French, and Italian schools; and after residing some months in Edinburgh, returned to Dublin. The accounts of his travels and adventures are interesting. He was successful in Dublin, soon taking a leading position in his profession and in society. "Nature had been bountiful to him; he was tall in stature, of dark complexion, and with noble and expressive features. In conversation he possessed a power rarely met with. He had a warm and sensitive heart. Loving truth, he held in abhorrence all attempts to sully or distort it." He was, moreover, an ardent lover of civil and religious liberty. The world did not spoil him; and "he preserved all the kindly and better qualities of his mind up to the day of his death." He was elected President of the King and Queen's College of Physicians in 1843 and 1844, and a Fellow of the Royal Society in 1849. In 1852, in his fifty-seventh year, symptoms of his fatal malady appeared. He suffered much; but his mental faculties never failed or flagged. He died on March 20th, 1853.

JAUNDICE: ITS PATHOLOGY AND TREATMENT. With the Application of Physiological Chemistry to the Detection and Treatment of Diseases of the Liver and Pancreas. By GEORGE HARLEY, M.D., Professor of Medical Jurisprudence in University College, London; Assistant-Physician to University College Hospital; etc. Pp. 136. London: 1863.

AMONG the causes which have contributed to retard the progress of medical science, the practice of regarding some prominent phenomenon in the light of a substantive disease stands among the foremost. Thus, from old times down to the present day, cough, headache, and jaundice have, both in the professional and in the public mind, had an importance as morbid entities assigned to them, irrespectively of the varied nature of the pathological conditions under which they occur. Albuminuria, again, has barely escaped, thanks to the investigations which have so closely followed up its discovery, from falling into the same category.

When, therefore, a medical writer entitles a book by the name of some one of those conditions which, because they are obvious to the senses, are liable to have the rank of substantive diseases assigned to them, he is at first sight liable to be misunderstood. Hence Dr. HARLEY finds it necessary at the outset to say that he does not "regard jaundice as a disease *per se*"; but, like albuminuria, as "only the most prominent symptom of several widely different pathological conditions". What these different conditions are, and how varied, will be seen in a table which the author gives at the end of his work. According to this statement, jaundice may arise both from suppression and from obstruction: and the action of these is further subdivided in the following manner.

"*From Suppression.*

Enervation - -	Fright. Anxiety. Over Mental Exertion. Aneurism of Brain.
Congestion of Liver (Active) -	Hepatitis. Direct Violence. Dyspepsia. Ague. Typhus. Typhoid. Scarlatina. Pyæmia. Yellow Fever. Poison.
Congestion of Liver (Passive) -	Heart-Disease. Pneumonia. Pleurisy. Imperfect Circulation in the New-born.
Absence of Secreting Substance -	Cancer. Cirrhosis. Fatty and Amyloid Degenerations. Acute and Chronic Atrophy.

"*From Obstruction.*

Congenital Deficiency of Duct	Small Ducts (?). Common Duct.
Accidental Obstruction in Course of Duct	Gall-stones. Hydatids. Foreign Bodies from Intestines.
Closure of Outlet	Pressure of Pregnant Uterus. Impacted Fæces in Transverse Colon. Organic Disease of Pancreas or of Neighbouring Organs. Abscess in Head of Pancreas. Ulcer of Duodenum."

Each of these conditions, in their relation to jaundice, is discoursed of by Dr. Harley; who then describes the analysis of the intestinal excretions and of urine as aids to diagnosis in jaundice.

The indications as to the presence or absence of bile in the excreta, derived from their colour, are, with Dr. Harley as well as with some other observers, subject to certain qualifications.

"It must not be forgotten that, unless care be taken, the colour deducible from highly coloured food may be

mistaken for an excess of bile. This remark is still more applicable to medicines; for mercury, bismuth, iron, and some other mineral remedies, give rise to dark evacuations so closely resembling bilious stools in appearance, that the only way to distinguish them is by chemical analysis; when the presence of the mineral, together with the absence of the bile-pigment and the biliary acids (which are always to be found in normal evacuations), will at once reveal the true nature of the case.... Blood from the stomach or bowels is also apt to be mistaken for biliary matter, especially when acted on by the gastric juice, which has the property of turning red blood brown. With these exceptions, the absence of bile from the stool is usually very easily ascertained. For, if the patient be taking no highly coloured food, or any of the medicines above indicated, the stools are of a dirty pipe-clay colour." (P. 53.)

After observing that the presence of fat in the fæces, which has been regarded by some as indicative of pancreatic, by others as of hepatic disease, in reality in some measure depends upon both, Dr. Harley goes on to describe the practical application of urinary analysis to the diagnosis of cases of jaundice. There has been much debate among German pathologists as to the presence or absence of the bile-acids in urine in cases of jaundice; Frerichs and Städeler asserting that they are never to be found, while Kühne and others state as positively that these acids are to be detected in the urine. Dr. Harley believes that he has obtained a solution of the difficulty; that, in fact, the supporters of each assertion are right in the simple statement, but wrong in giving it an universal and unlimited application: and that the contradiction in the results has risen from overlooking a circumstance which may be turned to useful account in diagnosis.

"In jaundice from *suppression*, the liver does not secrete bile; consequently, no bile-acids being formed, none can enter the circulation, and they are therefore not to be detected in the urine. In jaundice from *obstruction*, on the other hand, bile is secreted, and absorbed into the blood; and the bile-acids, not being all transformed in the circulations, as Frerichs supposed, are eliminated by the kidneys, and appear in the urine, where they can be detected by Hoppe's method, or even, with proper precautions, by simply adding sulphuric acid and sugar." (P. 60.)

For further details on this matter, and on the diagnostic value of leucine, tyrosine, and melanine, in the urine, we must refer our readers to the book itself.

Dr. Harley has a word to say on the therapeutics of jaundice. As might be expected, recognising it merely as a symptom of various pathological conditions, he holds it absurd to attempt to remove it without reference to its causes.

Regarding mercury, he notices the reaction against the use of this remedy which has taken place in the minds of many, from the discovery that it does not in reality stimulate the liver to secrete bile, and the inference therefrom that its use in hepatic disease has been a mere delusion. The real interpretation of the action of mercury with him lies between the two extremes.

"Though believing that mercury does not directly stimulate the liver to secrete bile, I nevertheless opine that it has an important indirect effect in reinducing the biliary secretion, and thereby curing certain cases of jaundice,

"The action of mercury seems to me to be this. Mercury is a powerful antiphlogistic—it reduces the volume of the blood by its purgative properties, and it impoverishes the blood by its direct action on the red corpuscles. ....From this it is easy to understand how mercury acts in inflammatory affections; and as in the majority of cases of jaundice from suppression, the stoppage of the biliary secretion is due to active congestion of the liver, mercury proves beneficial in such cases, not by stimulating the biliary secretion, but simply by removing the obstacle to its reestablishment, namely, the hepatic congestion." (Pp. 103-4.)

After some remarks on the action of acids and alkalies in jaundice, and the circumstances under which the use of each of these classes of remedies is indicated, Dr. Harley calls special attention to benzoic acid. This was recommended some years ago by a German physician; and Dr. Harley has found it of benefit in jaundice arising from suppression; while, in jaundice arising from obstruction, its employment has appeared to him "anything but beneficial". It appears to have a remarkably rapid effect in removing the yellow discoloration of the skin and conjunctiva.

The newly introduced remedy, podophyllin, is regarded by Dr. Harley as an useful purgative, but liable to the objections, that its action is slow and not always certain, and that in delicate females it produces griping—which, however, can to a certain extent be obviated by combining the podophyllin with hyoscyamus. Like mercury, podophyllin is not to be indiscriminately employed in all cases of hepatic disease.

"In cases of feeble liver, where there is an insufficient secretion of bile from want of nervous power, podophyllin is decidedly of service, for in such cases mercury is of course contraindicated. Moreover, podophyllin can be advantageously combined with vegetable tonics; and, when given along with gentian or quinine, forms an admirable hepatic stimulant in some of the cases usually denominated 'torpid liver'."

On the other hand, while podophyllin is indicated in some cases of jaundice from suppression, Dr. Harley holds it to be decidedly contraindicated in all cases of jaundice from obstruction, because it increases the secretion of bile. For the same reason, it is injurious in all cases of gall-stones, whether they actually block up the bile-ducts, or are being formed or lying on the gall-bladder.

The author, at p. 125, speaks of the artificial establishment of a biliary fistula in cases of distended gall-bladder, as "not such an Utopian idea as might at first be imagined." We remember to have heard this proceeding suggested some years since; but doubt whether the proposal would be likely to find favour.

One subject more we must notice in Dr. Harley's therapeutical observations. It is on the administration of bile itself as a remedy. As at present usually administered, he believes that it more frequently does harm than good; and he describes a way in which, as he opines, it may be administered with benefit.

"If bile be administered at the end of stomachal digestion, it will, as in the healthy organism, act on the chyme at the proper moment, and thereby render it fit for absorption. In order still further to ensure the action of the bile being delayed until the food is in a condition favourable to its action, that is to say, until it is ready to pass from the stomach into the duodenum, I have had the bile (prepared by filtration and rapid evaporation) put into capsules which are not readily acted on by the gastric juice. While in the stomach, the

capsules swell up from the size of a pea to that of a small gooseberry, and at the same time become so soft that they will readily burst in passing the pylorus into the duodenum, and thereby allow the bile to escape, and come into contact with the food at the precise moment its action becomes requisite in the digestive process." (Pp. 129 30).

Among the works which have in late years appeared on the subject of liver-diseases, this one of Dr. Harley is entitled to a creditable position. Whatever may be the form which our knowledge of hepatic pathology may ultimately take, he will deserve the merit of having laboured towards the removal of some of the difficulties with which the subject is surrounded; and, we may venture to predict, not altogether without success.

British Medical Journal.

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MR. CÆSAR HAWKINS AND THE "LANCET".

THE *Lancet* is again at its work. It has made a very unjustifiable attack on one of the most honoured and estimable members of the profession in London, Mr. Cæsar Hawkins. The accusation made against that gentleman is no slight one; it is that, in his capacity of Examiner in the College of Surgeons, he has acted towards candidates with rudeness and unfairness. The attack has been made on the eve of the College election of members of Council; and, whether intended or not for the purpose of prejudicing Mr. Hawkins's re-election to the Council, it has undoubtedly been made use of for that purpose by gentlemen who are desirous of substituting some other Fellow in his place. We therefore feel it our duty, in justice to a most high-minded and honourable gentleman, to point out the utter groundlessness, we might rather say to show the fabricated nature, of the charge. The groundlessness of it is amply proved out of the very pages of the *Lancet* itself. Let us see.

On the 9th of May, Mr. Christopher Heath, the most recently appointed lecturer on anatomy in London, writes to the *Lancet* that a pupil of his has been unfairly treated at his examination at the College by Mr. Cæsar Hawkins. To be sure, as Mr. Heath wisely adds, "students' statements must be taken *cum grano;* but this is not the first time by many on which I have heard loud complaints of Mr. Hawkins's behaviour." Such is the general, slipslop, and manifestly tainted evidence—we need hardly say, not worth a moment's consideration—on which a grave charge is made against an honourable man.

In the *Lancet* of the 16th of May appear four more letters on the subject of college examinations. Two of them speak highly of Mr. Hawkins's gentlemanly behaviour, his kindness and courtesy towards the writers when under examination. The other two letters contain general accusations against the Examiners as a body, *but not one word against Mr. Hawkins in particular.* Some of the Examiners, we are told, use language which (if the imputation be true) would disgrace the chairman of a decent pothouse club; for example: "What the devil do you mean?" "We don't want any of your d——d book-learning here!" But who of us will credit such statements without proof positive?

To these four letters the editor of the *Lancet* appends the remark, that "Mr. Heath's manly expression of opinion has brought a flood of correspondence". Let our readers observe that, out of this "flood", *not one line of accusation against Mr. Cæsar Hawkins is produced,* although out of the "flood" actually come letters of praise of him. May we not fairly suspect, from the fact of the publication of these, that letters of praise formed a very large share of the suppressed flood? Be this as it may, in the *Lancet* of May 23rd appear five more letters on the subject. Of these, four bear marked testimony to the courtesy and gentlemanly behaviour of Mr. Hawkins; and one is a break out against the "bumptiousness of the Council". Still no word against Mr. Hawkins! In the *Lancet* of May 30th are inserted two letters, neither of which contains one word of any kind against Mr. Hawkins. Once more, however, the *Lancet* tells that it "has received upwards of fifty letters, and will next week notice the matter fully". Hereon we beg again to remark that, out of this bag of fifty letters, it does not—and we may safely conclude, cannot—produce one single line of accusation against Mr. Cæsar Hawkins! Nevertheless, in the *Lancet* of June 6th comes the promised notice—the summing up and the passing of judgment by this honest and upright judge. There we read: "A shower of letters has been rained upon us, which in the main fully confirm Mr. Heath's statement." "One Examiner was especially indicated" (by Mr. Heath) "as habitually hard and discourteous in his manner of conducting the examinations. This was Mr. Cæsar Hawkins." Of course, admits the *Lancet,* candidates who can't answer questions naturally dislike the questioner. "Let a large allowance, therefore, be made for the personal bias which such circumstances may have given. But, after the amplest deduction has been made, it is evident that a real grievance exists. A large number of gentlemen do not separately and without concert each fabricate statements wholly devoid of foundation; yet that is the violent assumption which would be necessary in order to acquit Mr. Hawkins and some of his colleagues of the charges made against them."

Where the fabrication lies our readers can now judge for themselves. Positively and literally, beyond Mr.

Heath's original "manly expression", the *Lancet*, out of its budget of fifty letters, does not or cannot produce one single line in support of Mr. Heath's "expression", or in support of the accusation which it has itself had the audacity thus to endorse against a man of the most unblemished honour. The *Lancet* assails Mr. Cæsar Hawkins. It asserts that its upward of fifty letters corroborate Mr. Heath's accusation. It produces not one line out of the fifty letters to back its assertion. Will any one believe that it would have suppressed the proofs of Mr. Hawkins's unfairness as an Examiner, had it really possessed any? Here, then, stand the plain facts.

Of *eleven* letters published in the *Lancet* to show the ill conduct of the Court of Examiners, and especially of Mr. Hawkins, *six* speak in the highest terms of praise of Mr. Hawkins as an Examiner; *four* attack the Examiners generally, *but say not one word against Mr. Hawkins;* and one letter is merely an attack on the *Council* of the College! Hence, then, the *Lancet*, without producing one single word against Mr. Hawkins, has put it forth to the world, insinuatively, as only Tartuffe could have done, that this packet of fifty letters is redolent with evidence against Mr. Hawkins. The *Lancet*, evidently with the best of wills to feed Mr. Heath's flame against Mr. Hawkins, produces, week after week, a series of letters which speak volumes in favour of Mr. Hawkins's honesty and fairness as an Examiner; and then, at the end of these weeks, winds up, as we have seen, by giving judgment directly opposed to the evidence which it has itself produced.

On the strength of the correspondence above referred to, and of the unpublished contents of the letter-bag, the *Lancet* thus deals out its Buncombe: "Rarely has any voice been raised which has been more widely echoed than when Mr. C. Heath", etc. "There can be no doubt of the propriety of the course which that gentleman has taken", etc. "The letters which lie in a heap before us describe incidents which may be exaggerated in their portraiture, but which undoubtedly occurred somewhat as described." "A considerable sensation has been created by the extent and force of the complaints now urged"; well knowing that many who have never read the letters which praise Mr. Hawkins, will read the remarks (founded on them) which condemn him.

The real "extent and force" of these complaints are now placed in their true light before the profession. To sustain them, the *Lancet* boasts of possessing upwards of fifty letters; and yet, as we have seen, out of the budget does not produce a single word to justify the attack it makes against Mr. Hawkins! Does the *Lancet* really believe the credulity of the profession is large enough to swallow such an utterly unfounded accusation as this? Is there a man in the profession who, after he has read these lines, will believe that the *Lancet* possesses one single line of accusation, anonymous or other, against Mr. Cæsar Hawkins, unless it is produced? And if the *Lancet* does not produce the grounds upon which it has framed its charge against Mr. Cæsar Hawkins, in what light must it stand before the profession as an exponent of its honour, its honesty, and its gentlemanly bearing? Is not the charge a gross insult to the whole profession?

In conclusion, we beg to add that we have taken up this subject purely on public grounds, and in no way commit ourselves to the support of the principle of College of Surgeons Council re-elections. We have felt it our duty publicly to protest against the injury done to Mr. Hawkins through unfounded insinuations made against his honesty as an Examiner, and are satisfied, after the *exposé* here made, that no Fellow of the College will allow his vote to be influenced, *on this score*, to the prejudice of Mr. Cæsar Hawkins.

One word respecting Mr. C. Heath's accusation. We need hardly tell him that the very surest proofs could alone have justified him in rushing into print on such a charge as this. He should have known that the popular Examiner is naturally the easy-going Examiner; and that an Examiner who honestly does his duty will, in all probability, not be a popular Examiner. We have taken the trouble to make some inquiries about Mr. Cæsar Hawkins as an Examiner from different teachers and students; and assuredly the results are, that he is a strict and an honest Examiner—one whom no candidate who deserves his diploma need fear to face. And we cannot help asking: How is it that, out of the hundreds of medical teachers in London, not one can be found to endorse Mr. Heath's accusation?

The profession will naturally suspect that some motive must have been at the bottom of this business; and we regret to say that we cannot separate the fact of Mr. Cæsar Hawkins's retirement and proposed re-election at the College from connexion with the matter. In the *Lancet* of May 30th, we read: "Mr. Cæsar Hawkins and Mr. Tatum will, it is expected, have their re-election opposed." At all events, the two facts—the attack on Mr. Hawkins and the question of his re-election—come out simultaneously.

We may add, in confirmation of this view, that it was last year a matter of *private* conversation that Mr. Hawkins's re-election would be opposed on the grounds of his being an unjust examiner. But, contrary to general expectation, Mr. Hawkins could not then retire, in consequence of being President of the College. And (whether *post hoc* or *propter hoc*, our readers may judge), the charge was not then publicly made. But this year, Mr. Hawkins does retire, and presents himself for re-election; and now the charge is *publicly* made!

MR. BOTTOMLEY AND THE CROYDON BOARD OF GUARDIANS.

We very much regret to observe the part which Mr. Bottomley has taken in reference to the subject of Poor-law vaccination at Croydon. In consequence of some remarks made by Dr. Carpenter at the Croydon Local Board of Health (which were alluded to in this Journal), the question of vaccination came under the notice of the Croydon Board of Guardians. On this occasion Mr. Bottomley appeared before them, by the invitation of the chairman, to give the Board the benefit of his experience. The whole effect of his remarks made to the Board was to show that, in the matter of vaccination, doctors should, for the sake of humanity, work cheaply or for nothing. We have on many occasions pointed out the injury inflicted on the profession by the system of gratuitous medical services, and the irrationality and the degradation of the thing; and we now again refer to it, because no better example of the fact could be found than this one before us. Here were guardians abusing medical men who asked for something above 1*s.* 6*d.* per *successful* case of vaccination, and insulting their own officer for venturing to say that increase of pay would induce vaccinators to be more energetic in vaccinating. And here comes in Mr. Bottomley, who, to the delight of the Board, said that

"He attended there for the purpose of assisting that Board to exonerate itself from a charge that had most unjustly been brought against them. He was formerly a medical officer in that parish; and, from his experience, he said most distinctly that he considered it to be the duty of all medical officers to vaccinate children brought to them without fee or reward. His reason for writing to Mr. Drummond last week was because he thought the charge brought against the guardians was unfounded. He considered it absurd to talk about the question of fees, as having anything to do with the spread of the small-pox; because the medical officers, in order to save themselves time and expense, would take care to vaccinate children in their district whom they might be liable to attend if taken with small-pox; and whether the fee was 2*s.* 6*d.* or 1*s.* 6*d.*, it would make very little difference. He said such observations as had been made elsewhere were a slur upon the gentlemen of the medical profession [*Hear, hear*], to suppose the additional shilling would induce them to act more than before for the good of their fellow-men. Therefore no consistent person could for one moment maintain that the spread of small-pox had arisen from the smallness of the fee paid. [*Applause.*] Feeling very strongly on the subject, he had thought it to be his duty to come there and state his opinion. The charge against the guardians had not only found its way into the local newspapers, but even into a medical paper circulating over the whole kingdom, in which it was shown that the Board of Guardians, from their parsimonious conduct, had committed murder, and spread a disease of a most loathsome and malignant character."

Now, in our judgment, Mr. Bottomley has done, by his remarks, an injustice and an injury to his medical brethren and to himself. Mr. Bottomley had neither right nor reason when he told the Board of Guardians that medical men ought to vaccinate without fee all children brought to them. To suppose that men who have to live and feed their families by their labour will work as well for a miserable pittance, or for no pay at all, as for a decent reward for their services, is to be dreaming in Utopia. To pretend that medical men, or any other body of men, will, as a matter of business, minister to the sufferings of fellow creatures as effectually for 1*s.* 6*d.* as they will for 21*s.* per head, is mere claptrap. Mr. Bottomley admits the fallacy of his proposition; for, while stating that it is a calumny on doctors to suppose that an extra shilling per case would make them more energetic as vaccinators, he tells us that, whether they get 1*s.* or 2*s.* 6*d.*, they will vaccinate freely enough, in order to avoid the trouble and expense of afterwards attending the children who might fall sick of small-pox! We say that it is the *duty* of medical men to demand proper payment for their services; and we are satisfied that poor suffering humanity has no worse enemies than those who recommend Boards of Guardians to pay their doctors badly. We say without hesitation, and the conscience of the profession is with us, that the work of vaccination would be infinitely better done at 2*s.* 6*d.* than at 1*s.* 6*d.* per head. Why, what does this sort of reasoning of Mr. Bottomley's come to, if legitimately carried out? It throws the whole labour of the vaccination of the poor, which is manifestly the business of the parish, upon the shoulders of the doctors alone! What sort of sense or justice is there in this? The medical man pays his poor's rates like the butcher and baker and guardians of Croydon: why is he then to give his time and labour also without pay to the poor, any more than the butcher his meat, or the baker his bread? And what particular sublime attribute is there in the nature of a medical man, which should induce him alone, of all members of society, to work, as a matter of business, as well without fee, or for a miserable pittance of a fee, as he would with a due recompense for his labours? Where is the man of business or sense in this country who expects work done for nothing or underpaid to be well done?

We certainly must repeat that we regret to see Mr. Bottomley occupying a position given him by the chairman of the Board. The thanks of the Board on such an occasion are very equivocal praise.

"The Chairman was sure the Board felt extremely obliged to their friend Mr. Bottomley for attending and explaining the duty of medical officers as vaccinators."

The medical officer of the Board spoke common sense.

"Mr. Jeynes wished to say, with regard to the fees given to medical men for vaccination, speaking for them and for himself, that the remuneration had certainly a great effect upon them in inducing them to search out vaccination cases. He (Mr. Jeynes) felt certain that the payment of fees would influence medical men very much in attending to vaccination. [*Laughter and 'Question'.*]

He did not find fault with the fees paid by the guardians. The fault did not lie there."

Mr. Bottomley had been, of course, cheered. Mr. Jeynes was, of course, insulted.

"Mr. Spofford: We are not to be dictated to by one of our own officers.—Mr. Jeynes: I don't dictate, sir.—Mr. Spofford (warmly): You do, sir.—Mr. Close: I think, as Mr. Jeynes is allowed to make a statement, we ought to hear him.—Mr. Spofford: But not if he insults the Board.—Mr. Jeynes again disclaimed any intention of insulting the Board. He added, that it was his opinion, if the fees were taken off altogether, there would be no vaccination performed."

THE MEDICAL COUNCIL.

The Medical Council continued its meetings during the first three days of last week.

On Monday, June 1, the first business transacted was the presentation of a report from a committee appointed to "consider and report on the publication and distribution of the *Register*, and also on the expediency of accepting a proposal for the insertion of advertisements in the *Register*." The report stated that the committee saw no impropriety in the insertion of advertisements in the *Register*; but, having regard to the practical difficulties which would probably attend the exercising a censorship on the advertisements offered, they did not think it expedient that the proposal made should be accepted. The committee also furnished in the report a list of public officers and functionaries among whom the 2000 copies of the *Register* to be supplied to the Government should be allotted; viz.—

In England and Wales. County Courts, 560; Coroners, 353; Law Courts (various), 149; Poor-law Board, 1; Home-office, 1; Lunacy Commissioner, 1; Directors-General of the Army and Navy Medical Departments, 2; Registrar-General, 1; Emigration Commissioners, 1; Registrar of Friendly Societies, 1; —total for England, 1070.

In Scotland. Sheriff-Substitutes, 56; Principal Clerks of Court, 4; Justiciary Clerks, 3; Clerks and Deputy-Clerks of the Peace, 56; Procurators-Fiscal, 80; Registrar-General, 1; Lunacy Commission, 1; Town Clerks' Offices, for public reference, 79; Board of Supervision of the Poor, 1;—total for Scotland, 277.

In Ireland. Chancellor, Master of the Rolls, Masters in Chancery, and Chancery Lunacy Offices, 7; Courts of Queen's Bench, Common Pleas, Exchequer and Recorder, 4; Chairmen of Quarter Session and Clerks of the Crown, or Town Clerks, 90; Clerks of the Peace in Counties and of Petty Sessions in Boroughs, 40; Coroners, 100; Petty Sessions' Courts held in Various Counties, 346; Magistrates' Courts, Dublin, 3; Poor-law Board, 1;—total for Ireland, 591.

No provision was made for supplying the *Register* to the Registrars of Births and Deaths; their number amounting to 3026. It was determined by the Council to adopt the recommendations of the committee; and the Executive Committee was directed to append annually, in the *Register*, a statement of the distribution of the copies, as approved by the Government.

The report of the Committee on the Amendments in the Medical Act was next brought up. This document will be published in another place; as will also the Report of the Special Committee appointed on May 27th, relative to the *Pharmacopœia*, which was also presented and received.

A report was then presented from a Committee appointed to consider the recognition of foreign or colonial degrees or examinations.

The McGill University of Montreal had, in a letter from Dr. Campbell, Dean of the Medical Faculty, dated August 22, 1862, applied to have the degrees granted by it recognised for registration. The registrar, Dr. Hawkins, had replied, promising to refer the letter to the Council; in the meantime intimating to Dr. Campbell that the Council had no power to recognise any other degrees or diplomas than those of the bodies mentioned in Schedule A of the Medical Act, but that it was open to the foreign and colonial universities and colleges to make arrangements with the bodies named in Schedule A for the recognition of their degrees and diplomas. The Committee approved of the Registrar's letter, as fully explaining the position of the Council.

An application from Codrington College, Barbadoes, to have the *testamur* of the College received as a testimonial of preliminary examination, was recommended to be granted without hesitation; and a similar application from the Tasmanian Council of Education, respecting their degree of Associate in Arts, was also recommended to be granted, under the following restrictions:—

"It appears that the regulations do not render *both* Latin and mathematics imperative, and the Committee cannot recommend the Council to sanction any certificate which does not bear that the holder has passed a satisfactory examination in Latin as well as in mathematics. As, however, many students will probably pass in both these branches, their degree might be accepted, if accompanied by a certificate that the examiners were satisfied with the knowledge of the applicant in these two departments in each particular case."

The Committee on Special Claims for Registration recommended that the application of George F. Collier to have his degree of M.D., conferred by the University of Leyden, registered, should be complied with, such degree having been obtained after examination; and that the application of Dr. Peter Smith for the registration of his degree of M.D. from the University of Pennsylvania, should also, under very peculiar circumstances, be complied with. No other claims beyond these had been made.

The Committee on Returns from the Licensing Bodies presented a report, from which we extract the following tabular statements:—

1. *Table of Returns under Recommendation* 23.

Licensing Bodies.	Passed.		Rejected.	
	1st Exam.	2nd Exam	1st Exam Number.	2nd Exam Number.
Royal Coll. Phys. England	60	65	5	22
Roy. Coll. Phys. Edinburgh	75	81	10	10
K. & Qu. Coll. Phys. Ireland:				
Passed for Dip. on old reg.	..	33	..	10
Passed 1st Ex. on new reg.	2	..	1	..
Roy. Coll. Surg. England..	513	462	142	61
Roy. Coll. Surg. Edinburgh	143	123	23	15
Fac. Phys. & Surg. Glasgow	12	78	2	10
Roy. Coll. Surg. Ireland ..	105	105	23	23
Soc. Apothecaries, London	121	343	7	40
Apothecaries' Hall, Dublin	23	23	4	2
University of Oxford	3	0	2	0
Univ. of Cambridge	7	2	1	1
Univ. of Durham.....	0	3	0	0
Univ. of London	23	17	8	6
Univ. of Edinburgh	113	109	77	16
Univ. of Aberdeen (3 exam.)	(1st)49 (2nd)36	(3rd)28	(1st) 8 (2nd)10	(3rd) 4 ..
Univ. of Glasgow.....	82	48	11	4
Univ. of St. Andrew's	15	580	3	65
Univ. of Dublin	7	17	0	1
Queen's Univ. in Ireland ..	36	34	6	5
Totals.....	1425	2151	343	295

Register of Students, 1862, *under Recommendations* 8 *and* 9.

Licensing Bodies.	Before the 15 days.	After the 15 days.	Total.
Royal College of Physicians, London	169	37	206
Royal College of Physicians, Edin...	No Register.		
King and Queen's Coll. Phys., Ireland	No Register.		
Royal College of Surgeons, England	1401	26	1427
Royal College Surgeons, Edinburgh	231	..	231
Faculty of Phys. and Surg., Glasgow	106	..	106
Royal College of Surgeons, Ireland..	149	3	152
Apothecaries' Society, London.....	1010	..	1010
Apothecaries' Hall, Dublin	No Register.		
University, Oxford	No Register.		
University of Cambridge	18	1	19
„ Durham	15	..	15
„ London	No Register.		
„ Edinburgh	367	..	367
„ Aberdeen	61	..	61
„ Glasgow	258	3	261
„ St. Andrew's	2	2	4
„ Dublin	16	5	21
Queen's University, Ireland	266	9	275
Totals	4069	86	4155

Table shewing the Number of Students registered by the Licensing Bodies, Oct. and Nov. 1862, *who have or have not passed a Preliminary Examination before commencing Professional Study:*

Licensing Bodies.	No. of Students passed Prelim. Examination.	No. of Students who have not passed pre. Examin.	Total.
Royal College Physicians, London	212	3	215
Royal College Physicians, Edin...	No Register.		
King & Queen's Coll. Phys. Ireland	No Register.		
Royal College Surgeons, England..	593	834	1427
Royal College Surgeons, Edinburgh	Not Stated.		230
Faculty of Phys. & Surg., Glasgow	89	17	106
Royal College Surgeons, Ireland..	*119	48	167
Apothecaries' Society, London....	355	1390	1745
Apothecaries' Hall, Dublin	No Register.		
University of Oxford	No Register.		
„ Cambridge	19	3	22
„ Durham.....	15	..	15
„ London	No Register.		
„ Edinburgh	335	32	367
„ Aberdeen	144	5	149
„ Glasgow	240	21	261
„ St. Andrew's.....	4	..	4
„ Dublin	24	..	24
Queen's University, Ireland	298	5	303

* 1, Examined by an American University.

The report was referred to the Education Committee.

The Council having resolved itself into a Committee on Education, it was determined to adopt the following form of registration of students in place of that which stands in the education report for 1861.

No.	Name.	Date of Registration.	Place of Study.	Arts Examination, and Date.

The consideration of the privileges of the Licentiates of the Apothecaries' Hall of Ireland was resumed, but was adjourned again until the following day, when it was decided, by a majority of 13 to 8, that, in the opinion of the Council, "Registered Licentiates of the Apothecaries' Company of Dublin are, as apothecaries, entitled to practise medicine in Great Britain and Ireland."

The Report of the Committee on the requirements of the Poor-law Commissioners in Ireland regarding a license in midwifery was then presented. It concluded by recommending—

"1. That the President be requested to correspond with the Home Secretary, in order to have the order of the Irish Poor-law Commissioners rescinded.

"2. That the bodies at present granting licenses in midwifery should be requested to surrender this privilege, in the event of a new Medical Act being obtained.

"3. That should this be found impracticable, the amended Medical Act should be so framed as to confer the power of granting certificates in midwifery on all bodies which duly examine in that department of medicine.

"4. That the Executive Committee be instructed to take the opinion of counsel unconnected with Ireland, on the propriety of continuing to register those qualifications in midwifery which do not appear in Schedule A to the Medical Act."

The report was ordered to be received and entered on the minutes; as were also those which have been previously mentioned.

The report of the Special Committee relative to the *Pharmacopœia* was then taken into consideration, and the following sums were voted:—£94 : 10 to Dr. Apjohn, and £154 : 7 to Dr. Douglas Maclagan, for chemical investigations; £150 to Dr. Garrod as general secretary to the *Pharmacopœia* Committee and secretary to the London subcommittee; £100 each to Dr. Charles Wilson and Dr. Aquilla Smith as secretaries of the Edinburgh and Dublin subcommittees; £75 to the principal editor in London, Dr. Farre, and £50 to each of the Edinburgh and Dublin editors, Dr. Maclagan and Dr. Neligan—to be received when the *Pharmacopœia* is published; and £500 to each of the subcommittees engaged in preparing the *Pharmacopœia*, as an *honorarium* for their time and services.

On Wednesday, June 3rd, the consideration of the report of the Special *Pharmacopœia* Committee was

resumed. It was resolved that the proposed price of the *Pharmacopœia*—7s. 6d. for the large, and 5s. for the small edition—be submitted to the Commissioners of the Treasury; and the treasurers were authorised to advance, under the direction and with the sanction of the Executive Committee, the money necessary for preparing, printing, and publishing the *Pharmacopœia*. The recommendations of the Committee relative to the publication of new editions of the *Pharmacopœia* were adopted; and the following resolutions were also passed:—

"That Dr. Christison be requested to prepare and publish an explanatory statement of the forthcoming *Pharmacopœia*, showing its composition, the principles of its construction, the changes introduced, and the necessity under which the members of the several branches of the medical profession will lie of making themselves acquainted with the *British Pharmacopœia*, in place of the *Pharmacopœias* which it is to supersede."

"That it be an instruction to the Executive Committee to watch the progress of the Bill on Weights and Measures, now before Parliament, and in the event of its passing the second reading, to take such steps, by petition in the name of the Council, or otherwise, as may seem to them best calculated to prevent the enactment of any statutory restriction or obligation affecting the use of weights and measures in pharmacy, unless with such provisions as shall obviate the risk of its inconvenient or premature enforcement."

The Report of the Finance Committee was appointed; and an alteration was made in the standing orders relative to order of business, providing that an original motion and its amendments shall be put to the vote in the inverse order of their proposal.

The Registrar was directed to send annually, within a month after the meeting of Council, to the bodies named in Schedule A, the names of those who have been struck off the *Register* by order of the Council, and to call attention to the following regulation:—

"That the Council recommend that any person whose name has been once removed from the *Register* shall not be admitted to examination for any new qualification without the consent of the General Medical Council."

The Report of the Committee on the Recognition of Colonial and Foreign Universities was adopted. The Registrar was directed to apply to the licensing bodies mentioned in Schedule A, for copies of the charters or Acts of Parliament under which they possess or exercise their powers. The Executive Committee was also instructed

"To obtain returns of the regulations relative to education and examination from the several licensing bodies mentioned in Schedule A; to ascertain in what particulars the regulations of any of those bodies may differ from the recommendations of the General Medical Council; to request from those corporate bodies, whose regulations so differ, such observations or explanations as they may deem fit to offer; and to submit the correspondence, with their report thereon, to the next meeting of the General Council."

The Council then passed the following resolutions in regard to the curriculum of medical education:—

"That, looking at the various curricula of professional education enforced by the licensing bodies enumerated in Schedule A to the Medical Act, the Council are of opinion that the number of courses of lectures required to be attended, might be reduced with advantage, so as to give the student a larger amount of time for self-education."

"That the overloading of the curriculum of education—whether as to the number of courses, or of lectures in particular courses, must be followed by results injurious to the student."

These resolutions were carried by a majority of 13 to 4; and it was also determined that the Medical Council should take into consideration, at its next meeting, the propriety of recommending a diminution in the number of courses of lectures at present obligatory; that the opinion of licensing bodies on this subject be requested; that the resolutions and recommendations of the Council regarding medical education be printed separately; that a copy be furnished to the several bodies named in Schedule A, to the members of the Council, and to other persons named by the President, and that written communications concerning the regulations be invited from those to whom they are sent. The Council also resolved to recommend to the various licensing bodies the consideration of the *ad eundem* principle, with a view to the reduction of the number of examinations on the same subject, which the student is now frequently obliged to undergo.

The following bye-laws were adopted in reference to the corporate seal, which the Medical Council has become entitled to use by the act of incorporation:

"1. The corporate seal shall be kept in a box having two different locks. The key of one lock shall be in the custody of the President; that of the other in the custody of the Registrar.

"2. The seal shall only be affixed by order of the General Council, or, when the General Council is not sitting, by order of the Executive Committee of the General Council, its use by such Committee being limited to such Acts as may be necessary to effectuate the powers delegated to it by the General Council.

"3. Any order for affixing the seal, shall state the object of its use, and shall be entered on the minutes of the General Council, or of the Executive Committee, as the case may be."

The question of the simplest mode of registering students was referred to the Branch Councils, to be reported on at the next meeting of the General Medical Council.

Regarding the Medical Act, it was ultimately decided

"That the report of the Medical Acts' Amendments Committee be forwarded to the Branch Councils for their observations thereon."

The report of the Committee on appointments of Members of the Council was then adopted. The Committee called attention to the fact that some members appeared to have been appointed without specifying any term, others for five years, and others annually; and observed that the Committee was of opinion that the president is subject to the same rules as to tenure of office as other members of the

Council. The report then contained the following recommendations:—

"Your Committee recommend that a book should be kept, containing the names of the Members of the Council, the bodies they represent, the date of appointment of each member, the term for which he was appointed, and the date of the death or retirement of each member; such book to be regularly kept up, so as at once to show the period at which each of the bodies having power to appoint should proceed to a new appointment, also the same particulars with regard to members appointed by the Crown.

"Your Committee also recommend that a form for appointing members should be prepared, and sent by the Registrar to the Secretary of State, and to each body having power to appoint, two months before the expiration of the term of the existing appointment—so that the new appointment may be made to take effect from the day on which the old appointing shall expire.

"Your Committee submit a form of such appointment:—

"We, the
in pursuance of the power given to us by the Medical Act, do hereby appoint
to be a Member of the General Council of Medical Education and Registration of the United Kingdom, for the term of year from the day of 186

"With reference to the fact that the term of office of members constituting the Executive Committee may expire while the General Council is not sitting, your Committee suggest, that in appointing the Executive Committee the General Council should delegate power to supply vacancies amongst the members of that Committee."

The Council declined to enter on the consideration of certain matters referred to in a memorial presented by Dr. E. Crisp, respecting the Carmichael prizes; and in a memorial of Dr. H. Holmes of Bridgnorth, respecting the conduct of the Salopian Medico-Ethical Society; such subjects not being within the powers of the Council.

Dr. Embleton and the Registrar were directed to prepare and print an index of the minutes of the General Council, Executive Committee, and Branch Councils.

It was agreed, that £200 of the General Registrar's salary of £500 be charged against the funds of the Branch Councils for England.

The consideration of the Report of the Committee on the Requirements of the Irish Poor-law Commissioners was deferred till the next meeting of the Council.

The Executive Committee was appointed, to consist of the President, Dr. Burrows, Mr. Arnott, Dr. Acland, and Dr. Sharpey; and they were authorised to protect the copyright of the *British Pharmacopœia*, and to take steps for obtaining from Government a suitable place of meeting for the General Council.

The thanks of the Council were voted to the Royal College of Physicians for their accommodation, to the treasurers, Drs. Burrows and Sharpey, and to the President; and gratuities of ten guineas were ordered to be given to the servants of the College, and to each of the Clerks of the Council, Mr. Bell and Mr. Roope.

The proceedings then terminated; the session of the Council having lasted nine days.

THE WEEK.

Dr. Gaudin is (as reported) a French doctor practising in Wardour Street; and his friend and ally Thomas Holford, what is called a "chemist," doing business at Stratford. These worthies, it appears, play into each other's hands. The druggist sends the doctor patients, and receives 25 per cent. for the transaction. Their latest piece of business has come out at a coroner's inquest, and a pretty bit of villany it is. A servant-girl was in the family way. She applied to the druggist (who had previously attended her) for relief. He passes her on to his friend the doctor, on the payment of £4—one of which he takes for his trouble and advice, his percentage. The doctor "operates" on the girl at his own house in town. Immediately thereafter the girl becomes very ill. She goes into the country to her mother's, is prematurely confined, and eventually dies of peritonitis. Before she dies, she makes a confession. She said that

"He gave her powders twice. His (the doctor's) wife was in the room when he operated upon her, and she said the child would come, meaning before its time. It was a private house, and his name was on a brass plate. He introduced two instruments, one of which was sharp."

On the *post mortem* examination made by the order of the coroner, no other injury beyond that of peritonitis was found. Scoundrelism was, therefore, triumphant, as the verdict, "Death from peritonitis," shows.

"The coroner, however, said that the jury were desirous it should go forth to the public that they considered the conduct of both Dr. Gaudin and Mr. Holford to be highly culpable; and though they had considered them not legally responsible, they had no hesitation in expressing an opinion, that they were both of them morally responsible for the death of this unfortunate woman."

The character of the parties may be judged of from the following evidence given before the coroner's court:—

"Thomas Holford of Stratford said, that Dr. Gaudin called upon him and said, that if at any time any unfortunate women desired to get rid of their troubles, by sending them to him he could relieve them.

"The Coroner: Are we to understand then that you knew that Dr. Gaudin would, by medicinal or mechanican means, procure abortion?

"The Witness: Yes; that was my impression at the time. Dr. Gaudin said he would allow me a percentage on all such cases.

"The Coroner: Then you sent the deceased to Dr. Gaudin for the purpose of procuring abortion."

Thus justice was defeated, and the Frenchman and his friend are again let loose upon society to ply their abominable avocations. One remark especially we

would make on this case. It is much to be regretted that, in important criminal cases of this kind, the *post mortem* examination is not conducted under the superintendence of a medical man who is skilled and practised in the art of laying bare morbid processes and injuries. It is no reflection upon any member of the profession who is not daily exercised in the art of making *post mortem* examinations, to say, that he is not well-fitted for the perfect performance of this business. Those of us who have had much experience in this direction, must well know how readily minute morbid signs and injuries are overlooked by an unpractised eye. In this case, the inquiry failed because the peritonitis could not be connected with any signs of injury done to the uterus by the sharp instruments; but as it was the opinion of the gentleman who attended the girl when she was delivered of a dead child that the abortion was the result of peritonitis, and that the peritonitis was caused by the mechanical injury inflicted in the attempt to procure abortion—we cannot but believe that a more minute investigation of the parts would have shown some connection between the peritonitis and the instrumental injury; and in this way have brought the murderer of this girl to condign punishment. We have more than once alluded to this important defect in our criminal justice. In our opinion, the making of *post mortem* examinations in criminal cases should be always the work of an expert. Justice to the public and justice to the person inculpated demand this.

We beg to remind our readers, that the 1st of July is the date fixed for the return of most of the Schedules issued by the Therapeutical Committee of the British Medical Association. We therefore earnestly request those members of the profession who have filled up their Schedules, to forward them to the special reporters at the earliest date. The reporters have to give in their reports to the annual meeting; and, in order to do this satisfactorily, it is necessary that the Schedules be placed in their hands at least one month before the meeting in August.

We are requested to state that Mr. Turner of Manchester does not intend, on the present occasion, to offer himself as a candidate for office in the Council of the College of Surgeons.

In the Liverpool Police Court, a few days ago, a person named Thomas Fell was charged by one of the district registrars of births and deaths with having wilfully and falsely pretended to be a legally qualified medical man. Evidence was furnished that the accused had given medical attendance to several persons, and had signed certificates of death. His name was not in the *Medical Register*. It appeared that he had formerly placed the word "surgeon" on his door, but had removed it five or six years ago. The magistrates fined him £5 and costs.

The subject of medical evidence against medical men in courts of law is engaging the attention of several of the Branches of our Association. The present number of the Journal contains the resolutions passed at a special meeting of the Reading Branch held recently, and also a series of propositions which the Council of the Metropolitan Counties Branch have resolved to submit to the members of that body at their annual meeting. We have been informed also, that the subject will be brought under the notice of the members of the South-Eastern Branch at their annual meeting on the 24th instant. Some sound and decisive expressions of opinion, on the part of the Branches now about to hold their annual gatherings, will, we are sure, do much good in arresting the reckless disregard which some members of our profession manifest towards the character and interests of their brethren.

Two of the children of the late Dr. J. O. McWilliam are candidates for admission into the Royal Naval Female School at Twickenham. If successful, they will receive a first-class education at an extremely moderate charge—£12 a year. Their admission depends on the votes of the subscribers to the school; and we do not hesitate to mention the subject in this place, and to appeal to the good feeling of our readers, being assured that they will not fail to use their influence in securing the votes of any of the subscribers with whom they may be acquainted, in favour of the candidates whom we have mentioned. An act of kindness of this kind, towards the family of so honourable and esteemed a member of our profession as Dr. McWilliam, will at the same time be one of respect to his memory.

Mr. Lane is the senior London Fellow applying for a seat on the Council of the College of Surgeons. His claims in other respects to the honourable post are unquestionable. He established the Grosvenor Place School of Medicine in 1830—the first anatomical school in connection with St. George's Hospital. He was lecturer on Anatomy and Physiology for more than twenty-five years, and for many years on Surgery also. He has been for many years surgeon to the Lock Hospital; and has been surgeon to St. Mary's Hospital since its opening.

The body of M. Renault, brought to Paris from Bologna, was deposited in the Church of St. Augustine. The funeral service was celebrated with great pomp; and the remains subsequently conveyed to Père la Chaise, where numerous discourses were delivered over his grave.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on Tuesday, the 16th of June, at 1.30.

Business:—The relation at present subsisting between the General Secretary and Committee of Council.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, June 10th, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Annual.]	Philosophical Institution, Bristol.	Thursday, June 18, 4.30 P.M.
BIRMINGHAM AND MIDLAND COUNTIES. [Annual.]	Hen and Chickens Hotel, Birmingham.	Friday, June 19th, 3.30 P.M.
LANCASH. & CHESHIRE. [Annual.]	Medical Institution, Liverpool.	Wednesday, June 24th, 12 noon.
SOUTH-EASTERN. [Annual.]	Bull Inn, Rochester.	Wednesday, June 24, 1.30 P.M.
EAST ANGLIAN. [Annual.]	Yarmouth.	Friday, June 26th, 3 P.M.
WEST SOMERSET. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.
MIDLAND. [Annual.]	Board Room of the Infirmary, Derby.	Thursday, July 2nd, 2 P.M.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 7, 3.30 P.M.
NORTH WALES. [Annual.]	Royal Hotel, Rhyl.	Tuesday, July 7, 1 P.M.
SOUTH MIDLAND & CAMBRIDGE & HUNTINGDON. [Annual.]	Infirmary, Peterborough.	Thursday, July 9th, 1 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-Seventh Annual Meeting of this Branch will take place at the Medical Institution, Liverpool, on Wednesday, June 24th, at 12 o'clock, noon. President-elect, J. R. W. Vose, M.D.

Notices of papers or other communications to be sent to the Honorary Secretary, as early as possible.

A. T. H. WATERS, M.D., *Hon. Sec.*

27, Hope Street, Liverpool, May 27th, 1863.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

THE Annual Meeting of these Branches combined will take place at the Infirmary, Peterborough, on Thursday, July 9th, at 1 P.M. President-elect: William Paley, M.D.

Gentlemen intending to read papers or cases will oblige by forwarding the titles as early as possible to the Honorary Secretaries,

JOHN M. BRYAN, M.D., Northampton; or
G. M. HUMPHRY, M.D., Cambridge.

METROPOLITAN COUNTIES BRANCH.

THE Eleventh Annual Meeting of this Branch will be held at the Crystal Palace, Sydenham, on Tuesday, July 7th, at 3.30 P.M. President-elect: Francis Sibson, M.D., F.R.S.

The members will afterwards dine together.

The following resolutions will be brought forward for the consideration of the meeting.

1. Whereas the facts universally accepted by the profession as absolutely true concerning the nature and treatment of disease are few in number; and whereas medical men of equal knowledge and honesty differ widely in their views of the nature and proper treatment of many diseases; and whereas the opinions of medical men, and especially of those of high standing, given in courts of law on medical matters, are generally (if uncontradicted) accepted both by judge and jury as of equal value with positive facts, and may consequently lead to the perversion of justice and the gross injury of innocent persons:

This meeting is of opinion that no medical man is justified in expressing, in a court of law, a positive opinion on any medical subject concerning which he is aware that medical men of equal knowledge and honesty with himself hold different views, without endeavouring to inform the court that his opinion is a personal one, and not universally accepted by the profession.

2. Whereas, owing to the often necessarily experimental character of the medical art, the most experienced members of the profession are liable to err in diagnosis and treatment; and whereas it is seldom possible for a medical man to form, from the statements of patients themselves or of their non-professional friends (which are notoriously untrustworthy and defective), or from the present condition of the patients, an accurate judgment as to the propriety of the treatment previously adopted:

This meeting is of opinion that no member of the profession is justified in expressing, in a court of law, an opinion as to the treatment adopted by a professional man, when his knowledge of the treatment employed in a given case is derived solely from the non-professional statements of the patient or his friends.

3. Whilst expressing these sentiments, this meeting recognises in the fullest manner the solemn duty incumbent on every medical man, in common with all other classes of the community, to further the ends of justice by unhesitatingly deposing to all facts within his knowledge, without regard to the effect of such evidence on the interests or character of a professional brother.

A. P. STEWART, M.D.,
ALEXANDER HENRY, M.D., } *Hon. Secs.*

London, June 11th, 1863.

READING BRANCH: SPECIAL GENERAL MEETING.

A SPECIAL meeting of the Reading Branch was held at the Royal Berkshire Hospital, on June 3rd, 1863.

Vote of Sympathy with Dr. Waters of Chester. It was proposed by Mr. MAY, seconded by Dr. COWAN, and carried unanimously—

"That we desire to express our sincere sympathy with Dr. Waters, under the circumstances of the recent trial of Bromwich *versus* Waters, and deeply deplore the tone and character of much of the medical evidence given in favour of the prosecution.

"That, while we hold sacred the paramount claims of justice, we regard with jealous solicitude the reputation of all our professional brethren, and strongly deprecate the dogmatic assertion in courts of law, of mere opinion, having a tendency to injure any individual member, and to lower the status and dignity of the profession."

REPORTS, &c., PRESENTED TO THE MEDICAL COUNCIL, 1863.

Report of the British Pharmacopœia Committee.

May 25th, 1863

The *Pharmacopœia* Committee begs to submit the following report of the progress made towards the publication of the *British Pharmacopœia* since the meeting of the General Medical Council in May 1862.

It will be remembered that, at the above meeting, the manuscript of the *British Pharmacopœia* was laid before the Council almost complete, and was then approved of by that body; but as it was found that the printing of the work could not at once be proceeded with, from the fact that the Council did not at that time possess the necessary qualification for holding a copyright, and, moreover, from the wording of the Medical Act of 1858 not giving the legal power of superseding by the forthcoming *Pharmacopœia* the existing *Pharmacopœias* of the London, Edinburgh, and Dublin Colleges of Physicians, the General Council deputed to its executive committee the task of endeavouring to obtain a supplementary act granting the necessary powers, which was accomplished at the end of the last parliamentary session.

Shortly before this period, when it became publicly known that the *Pharmacopœia* Committee had, in the manuscript of the *British Pharmacopœia*, made a considerable alteration in the weights to be employed in pharmacy; and, among other changes, that the troy grain was proposed to be discarded, and a new grain substituted for it—a grain which would bear the same relation to the avoirdupois ounce as the troy grain does to the apothecaries' or troy ounce, many objections were raised and remonstrances made to the executive committee—amongst others, one by the Royal College of Physicians of London, protesting strongly against such a change of weights; and it was thought advisable by the executive committee that a special meeting of the Medical Council should be summoned, that the matter might be definitely and satisfactorily dealt with. This meeting was held in October last.

After this, the *Pharmacopœia* Committee made the alterations in the manuscript, rendered necessary by the changes in the weights. The executive committee at once commenced arrangements for the printing of the work; making contracts with the printers, previously selected by the *Pharmacopœia* Committee, and approving the specimen pages of typography fixed on by the same committee at its conference at Edinburgh.

The three editors, one chosen by each branch *Pharmacopœia* Committee, also commenced their task; but some little delay occurred at the outset, from the discovery that the approved specimen pages, although well adapted for portions of the work, were not in all respects suited for the whole; and, with the consent of the executive committee, certain alterations were made in the typography of the first part of the *Pharmacopœia*. Since this time the printing of the volume has steadily progressed, and the Committee has now the satisfaction of laying before the Council proof sheets of the whole *Pharmacopœia*, with the exception of the preface and appendix.

The manuscript of the former is complete, while the latter only awaits the corrections in the body of the work, before being put into type, which could be readily accomplished in a few days. As this may be the last Report which the *Pharmacopœia* Committee will have to make, it may be advisable to point out to the Medical Council the amount of time and labour which has been devoted to the accomplishment of the work.

The *Pharmacopœia* Committee naturally separated into three branch committees, one in London, a second in Edinburgh, and a third in Dublin, and each commenced its sittings in December 1858; from that period to the present, the number of sittings and attendances of each branch has been as follows:—

The London Committee has held 158 meetings, and the number of attendances of its members has been 567.

The Edinburgh Committee has held 108 meetings, and the number of attendances has been 657.

The Dublin Committee has held 141 meetings, and the number of attendances has been 627; making a total of 407 meetings, and 1,851 attendances. These numbers are exclusive of the two conferences of delegates, held in London and Edinburgh.

The financial statement of the *Pharmacopœia* Committe, since the accounts were audited, in May 1862, is contained in the following table:—

Financial Statement of the Pharmacopœia Committee.

Dr.	£	s.	d.
To Balance in hand on Audit of Accounts, May 19, 1862 .	128	13	9
To Amount voted by the General Medical Council, May 21, 1862	600	0	0
	728	13	9
Cr.			
London Delegates at Edinburgh . . .	195	6	0
Dublin Delegates at Edinburgh . . .	192	3	0
Edinburgh Delegates at Edinburgh . . .	110	5	0
Mr. Warrington, Chemist to London and Edinburgh Committees	105	0	0
Edinburgh Secretary, for Postage . . .	0	13	4
Dublin Secretary, do.	2	0	7
London Secretary and General Secretary, do. . .	2	15	0
Mr. Glover, for Attendance on *Pharmacopœia* Committee at Soho Square	10	10	0
	618	12	11

Leaving a Balance of £110:0:10 in the hands of the General Secretary.

The number of meetings and attendances given in the present Report, may probably appear very large; but it must be remembered that in accomplishing the task of publishing a national *Pharmacopœia*, the Medical Council will have accomplished what has been long looked upon as a great desideratum, but which has hitherto frustrated the efforts of the three colleges of physicians of the United Kingdom; and in order to effect this, it was necessary to have a committee composed of several members of Council from each division of the kingdom, and also to associate with them gentlemen from different learned bodies specially conversant with the subjects.

As but little is now required before going to press, besides the correction of the proofs and the completion of the appendix, the *Pharmacopœia* Committee can confidently predict that the national *Pharmacopœia* will be published not later than October next.

A. B. Garrod, M.D., F.R.S.,
Secretary to the Pharmacopœia Committee.

Report of the Finance Committee.

The Finance Committee beg leave to present, in the table subjoined, a statement of the estimated and actual income and expenditure of the year 1862; also an estimate of the income and expenditure, as far as the Committee are able to judge, for the year 1863.*

	Estimated Income for 1862.			Actual Income for 1862.		
Fees received by Branch Councils	3650	0	0	3787	15	0
Dividends received by Do.	750	0	0	768	17	1
Sale of *Registers*	80	0	0	85	2	0
Penalties				20	0	0
	£4480	0	0	£4661	14	1

* The table is here slightly condensed from the original.

	Estimated Expenditure for 1862.	Actual Expenditure for 1862.
Expenses of General Council	3000 0 0	3161 15 5
„ of Branch Councils	1364 0 0	1060 17 5
Advanced to *Pharmacopœia* Committee		600 0 0
	£4364 0 0	£4822 12 10

	Estimated Income for 1863.
Fees received by Branch Councils	3700 0 0
Dividends received by ditto	763 0 0
Sale of *Registers*	330 0 0
	£4793 0 0

	Estimated Expenditure for 1863.
Expenses of General Council	3068 0 0
„ of Branch Councils	1115 0 0
	£4183 0 0

These figures give, in the estimated income and expenditure for 1862, a balance of £116 in favour of the Medical Council; in the actual account for that year, an excess of expenditure amounting to £160:18:9; and in the estimates for 1863, a calculated balance of £610 in favour of the Council.

The Committee also append a statement of the actual and prospective expense of the publication of the *Register*, under the reduced charge for printing, and the arrangement that 2000 copies in sheets are to be purchased for circulation by her Majesty's government.

Statement showing the Actual and Prospective Saving in the Expense of Publishing the "Register."

	£	s.	d.
750 copies of the *Medical Register* for 1862 cost	439	5	7
Total receipts for sale of ditto	85	2	0
Loss in 1862	£354	3	7
750 copies of the *Medical Register* for 1863 under the new estimate cost	325	15	10
2000 copies in sheets to be circulated by the Government	168	0	0
	£493	15	10
Probable produce by sale of the *Medical Register* for 1863, say 80 0 0			
By sale of 2000 to the Government 250 0 0			
	330	0	0
Loss in 1863	£163	15	10
In future years the cost of 2500 copies of the *Medical Register* will be about	475	0	0
And the produce of the sale about	330	0	0
Leaving a deficiency of about	£145	0	0

The Finance Committee of 1862 called the attention of the Council to the cost of publishing the Monthly Lists of New Entries on the Local Registers; and the Council, on the recommendation of the Committee, directed that henceforth the publication of the Lists should be quarterly. The result of this change has been as follows:—

	£	s.	d.
The Monthly Lists for 1861 cost	58	17	6
The Quarterly Lists for 1862, as recommended by the Finance Committee of last year, cost	30	0	0
Being a saving of	£28	17	6

The Finance Committee have also suggested certain modifications in the annual statement of receipts and expenditure, etc., for the consideration of the Executive Committee.

The Committee have again to report that with respect to the further demand that may be made on the funds of the Council, on account of the publication of the *Pharmacopœia*, they can offer no approximate estimate.

[The Financial Statement of the *Pharmacopœia* Committee, which will be found in another place, is given here.]

Provincial Hospitals as Schools of Clinical Instruction.

To the President and General Council of Medical Education and Registration of the United Kingdom.

The Memorial of the Physicians and Surgeons of the Devon and Exeter Hospital,

Sheweth,

That we the undersigned, being physicians and surgeons of the Devon and Exeter Hospital, beg most respectfully to represent to the General Council that the Devon and Exeter Hospital was founded in the year 1741, by the very Reverend Dr. Clarke, Dean of Exeter, who had previously founded the Hants County Hospital, at Winchester.

That the Devon and Exeter Hospital has four physicians, four surgeons, and a resident house-surgeon and apothecary, besides consulting physicians and surgeons, who were so elected on retiring from the more active duties of physicians and surgeons. That it contains 228 beds, and is most liberally furnished with every appliance. That it has a Museum of Natural and Morbid Anatomy, with lecture and dissecting rooms attached. That it has a medical library of about 3000 volumes (comprising every branch of medical literature), derived chiefly from the libraries of Dr. Glasse, Dr. Bartholomew Parr, and the late Samuel Barnes; and that this library, which is supported by the contributions of the medical staff, and most of the medical practitioners of Exeter, is open to the students frequenting the said hospital on the payment of a small annual subscription.

That we further beg leave to state that, for more than a century, the Devon and Exeter Hospital has been reputed to be an eminent school of clinical instruction. That its apprentices and students have been distinguished in the metropolitan schools for their knowledge of medicine, surgery, and practical anatomy, as long as schools of medicine have existed in the metropolis.

That, notwithstanding that these facts are frankly acknowledged in the chief metropolitan schools of medicine, the number of students, especially of apprentices, has of late so declined, that the said general committee of governors of the said Devon and Exeter Hospital have passed and sent to us, your memorialists, the following resolution:—"That the medical officers of the hospital be desired to consider the great diminution of the number of the pupils that are entered here, and if any, and what remedy can be applied, and report thereon to the weekly Board."

To this inquiry we, your memorialists, have replied that the diminished number of pupils has been principally, if not entirely, caused by the gradually prolonged courses of study at medical schools enforced on candidates by the various examining and licensing Boards, and the consequent neglect of early practical study; and that we are further convinced that the evil will be in-

creased and perpetuated if the General Council, ignoring the valuable means of early education afforded by the hospitals, dispensaries, and other medical institutions, so numerous in all parts of England, should persevere in their present resolution to confine the commencement and prosecution of professional study to medical schools.

That we further assured the committee of the Devon and Exeter Hospital, that as these regulations of the General Council diminish the number of pupils throughout the country districts, to the prejudice of medical education, and serious inconvenience in conducting the business of provincial hospitals, and other medical institutions, we regarded the question as one of importance to the members of the medical profession generally, that we therefore should deem ourselves justified in calling attention to this subject, in order that we might take counsel with the medical officers of the provincial hospitals in England, which like our own, though not fully constituted "schools of medicine," are recognised as "clinical schools" by the Royal Colleges of Physicians and Surgeons.

That we were the more bold in adopting these opinions, and in taking this course, because we believe that the majority of the members of the General Council are by their high position, social and professional, too far removed from the great body of medical practitioners to be intimately acquainted with their habits of life and modes of practice; whilst we, who are largely consulted throughout a very extensive and varied district, presenting every conceivable condition of practice, are intimately acquainted with our medical brethren at their own homes, and in the houses of their patients.

That we would premise that, in any suggestions we may presume to offer, we do not contemplate the higher rank in medicine or surgery, but the great body of general practitioners; the former, after the completion of their collegiate education, can afford for many years to maintain their connection with hospitals and other great medical institutions, and scarcely commence practice in earnest until they have attained to middle life; whilst the latter, who constitute the more important class of the medical profession, enter early upon their full sphere of duty, and must be competent from the outset to act with self-reliance, business habits, and powers of physical endurance.

That the mode of education formerly pursued fulfilled these conditions—being eminently practical; that it commenced with an apprenticeship nominally of five years, but practically of shorter time, because it usually included the period spent at a medical school; that it taught from the commencement the daily requirements of the medical man, trained him to the general duties of private practice, instructed him in medicine, surgery, and pharmacy; and that, when the education was conducted in an hospital, anatomy was usually acquired, and the higher doctrines and proceedings of surgery were inculcated under circumstances far more advantageous than they can be in a crowded hospital attached to a medical school; that the apprentice then proceeded to a metropolitan school, where he attended a few short courses of lectures, but was particularly occupied with dissection and with hospital practice, which the knowledge he had already acquired enabled him to comprehend; that, during the summer, he usually returned to his master, and applied in practice the science he had acquired in the school; that thus this practical knowledge, collected day by day, and without exhausting effort, was early associated with a patient self reliance and self-confidence necessary to its judicious application.

That the system enunciated by the General Council (after some preliminary examination, which implies the possession of a certain amount of general knowledge), begins and ends with lectures in a medical school, and with hospital practice—this occupies nearly four years; that the number of lectures is so considerable, and their topics so varied, that the mind of the student (wholly unfamiliarised, as is assumed, with medical subjects) is bewildered and exhausted by the continuous strain upon its attention.

That during this exhausting succession of lectures, hospital practice is, indeed, enjoined, but it is performed under all the unfavourable circumstances of a crowd; and that practical anatomy is not so diligently cultivated as heretofore.

That this system does not make the practical and ready man, so conspicuously the case in the older plan of a preliminary apprenticeship.

That it provides, by lectures, a full amount of professional lore, but that virtually it sets aside the practical instruction available, throughout the provinces, under the guidance of country practitioners, and of medical officers of provincial hospitals.

That these important sources of efficient practical instruction, where disease can be calmly studied, and its treatment be understood and appreciated, are now, in a great measure, running to waste; whilst, by returning to the former system of medical education, they would be utilised for the improvement of medical education, and the public benefit.

We trust that we shall be pardoned if we remind the General Council that there are in England nearly three hundred hospitals and dispensaries, besides clubs and unions, which, however unpretentious, supply a still larger and more important experience in the treatment of acute disorders, all of which are available for clinical instruction, but from which, as we understand, it withholds its sanction.

That, even at the risk of being wearisome, we must again entreat the General Council to be patient and hear us; that, in the former mode of education, a large proportion of young medical pupils passed their earlier years of study in the country, for the most part under the eye of their immediate relatives; that the plan of the General Council renders their residence in a large city during the whole period of medical education obligatory; that this not only injures their morals, but presses heavily on the resources of their parents; that it will cast almost insuperable difficulty in the way of medical practitioners, country clergymen, and other professional men, who could formerly educate their sons for the medical profession at a moderate expense, and that we conceive that the result is already evident.

That we, your memorialists, therefore, earnestly entreat that the General Council may have regard to the education of that more numerous and more important class of the practitioners of medicine, and no longer seek to compel them to a course of study well suited, indeed, to its own members, and to those whose circumstances justify their aspiring to the exclusive class of consulting practitioners, but wholly unsuited to the limited means and toilsome lives of general practitioners.

T. Shapter, F.R.C.P.
Sam. Budd, M.D.
Augustus Drake, M.B.
W. H. Elliot, M.D.
P. Miller, M.D.
Fred. Granger, M.B.
P. C. De La Garde, F.R.C.S.
John Edye, M.R.C.S., L.S.A.
Arthur Kempe, F.R.C.S.
W. W. James, F.R.C.S.
Jno. Haddy James, F.R.C.S.

To the General Council of Medical Education and Registration of the United Kingdom.

The respectful Memorial of the Medical Officers of the West of England Infirmary for the Cure of Diseases of the Eye,

Sheweth,

That the said Infirmary was founded in Exeter in the year 1808, and is the oldest provincial Eye Infirmary in England.

That as its means have enlarged its benefits have

been more widely extended, and that it derives its patients mainly from the four Western Counties.

That it is conducted with the utmost liberality, so as to facilitate as much as possible the admission of all persons requiring its aid. That to this end all clergymen, whether subscribers or not, are privileged to introduce their own poor parishioners as out-patients. That in practice the recommendation to this charity is a bad eye, and that no introduction is required except when there are strong grounds to suspect imposition. That for an in-patient the recommendation of a governor (whose right of recommendation is unlimited) is required, but that such patient is supported free of all expense, whatever length of time he may remain, unless by his own admission he can pay a small sum towards the positive expense of his maintenance.

That it had under care during the last year 1874 patients, of whom 78 were in-patients. That since the opening of the Infirmary there have been admitted 42,641 patients; that of these 612 have been cured of blindness from cataract, and 90 by an operation for artificial pupil.

That the pupils attending this Infirmary rarely exceed five in number; that they are therefore able to inspect, under the supervision of the surgeon, the patients resorting thereto, and actually and truly to see the operations and other delicate manipulations, which is impossible when many pupils are collected together; that they have ample opportunities of afterwards watching these cases in which operations have been performed, and know exactly the result.

That we, your memorialists, believe that this genuine practical instruction is the common characteristic of provincial medical charities, we therefore earnestly pray that the General Council may encourage medical students to resort to provincial schools of clinical instruction, and not limit its recognition of "practice" to the crowded hospitals attached to "schools of medicine."

P. C. De La Garde, John Edye, } *Surgeons.*
T. Shapter, M.D., *Physician.*

Report of the Committee on Amendments of the Medical Act.

The course the committee have adopted is to go through the sections of the Medical Act *seriatim*, and to append to each section such proposed amendments as seemed fit to be submitted for consideration.

The committee do not propose that the General Council should at present express an opinion on the proposed amendments, nor are the committee unanimous in some of the amendments suggested.

The committee suggest that the present course might properly be, that the General Council, without expressing any opinion on the proposed amendments, should give instructions to the executive committee to have a bill drawn up, embodying the proposed amendments; that the bill thus drawn up should be transmitted to the several licensing bodies mentioned in schedule (A) for their consideration, and that the amended bill, with any alteration suggested by the several licensing bodies, should be submitted for consideration at the next annual meeting of the General Council.

There remains one point on which the committee have not been able to suggest a satisfactory amendment, the license in midwifery. The difficulty has arisen from the charters of the several colleges differing in power in regard to this license. The College of Physicians of London, the Colleges of Physicians and Surgeons of Edinburgh are not authorised to issue separate licenses in midwifery, while the College of Physicians in Ireland, and the Colleges of Surgeons of England and Ireland, are empowered to issue such separate licenses. This appears to maintain an inequality of privilege that ought to be removed.

The Medical Act. Anno vicesimo primo et vicesimo secundo Victoriæ Reginæ, Cap. XC.

Original Act. Title. An act to regulate the qualifications of practitioners in medicine and surgery.

Proposed Amendment. A Bill to amend the Medical Acts.

Original Act. Preamble. Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners. Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in the present parliament assembled, and by the authority of the same as follows:—

Proposed Amendment. Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners; and whereas it is moreover necessary for the safety and protection of the public towards securing adequately educated practitioners in the several departments of medicine, surgery, and pharmacy; be it therefore enacted, etc.

Original Act. x. The General Council shall appoint a Registrar, who shall act as Secretary of the General Council, and who may also act as Treasurer, unless the Council shall appoint another person or other persons as Treasurer or Treasurers; and the person or persons so appointed shall likewise act as Registrar for *England*; and as Secretary and Treasurer or Treasurers, as the case may be, for the Branch Council for *England*; the General Council and Branch Council for *England* shall also appoint so many clerks and servants as shall be necessary for the purposes of this Act; and every person so appointed by any Council shall be removeable at the pleasure of that Council, and shall be paid such salary as the Council by which he was appointed shall think fit.

Proposed Amendment. The General Council shall appoint a Registrar, who shall act as Secretary of the General Council, and may act as Treasurer, unless the Council shall appoint another person or other persons as Treasurer or Treasurers. The General Council shall also appoint so many clerks and servants as shall be necessary for the purposes of this Act; and every person so appointed shall be removeable at the pleasure of the Council, and shall be paid such salary as the Council shall think fit.

Original Act. xiii. All moneys payable to the respective Councils shall be paid to the Treasurers of such Councils respectively, and shall be applied to defray the expenses of carrying this Act into execution in manner following: that is to say, separate accounts shall be kept of the expenses of the General Council, and those of the Branch Councils; and the expenses of the General Council, including those of keeping, printing, and publishing the Register for the United Kingdom, shall be defrayed, under the direction of the General Council, by means of an equal percentage rate upon all moneys received by the several Branch Councils; returns shall be made by the Treasurers of the respective Branch Councils, at such times as the General Council shall direct, of all moneys received by them; and the necessary percentage having been computed by the General Council, the respective contributions shall be paid by the Treasurers of such Branch Councils to the Treasurer or Treasurers of the General Council; and the expenses of the Branch Councils shall be defrayed under the direction of those Councils respectively, out of the residue of the moneys so received as aforesaid.

Proposed Amendment. Clause xiii. and proposed amendments, with observations of Scotch Branch Council of No. 27, 7th Feb. 1863, to be referred back to solicitor for observations.

For Sect. xiii.—Substitute a section to the following effect:—

Separate accounts shall be kept of the expenses of the General Council, and those of the Branch Councils. The expenses of the Branch Councils shall be defrayed under the direction of those Councils, respectively, out of the moneys received by them. Returns shall be annually made by the Treasurers of the respective Branch Councils of all moneys so received and expended by them; and the said Treasurers shall, as soon as possible, transmit the balance remaining in their hands to the Treasurer of the General Council; and the expenses of the General Council, including those of keeping, printing, and publishing the Register of the United Kingdom, shall be defrayed, under direction of the General Council, out of the fund arising from the contributions of the Branch Councils, as well as from all other sources, to be called the General Council Fund.

Original Act. XIV. It shall be the duty of the Registrars to keep their respective registers correct in accordance with the provisions of this Act, and the orders and regulations of the General Council, and to erase the names of all registered persons who shall have died, and shall from time to time make the necessary alterations in the addresses or qualifications of the persons registered under this Act; and to enable the respective Registrars duly to fulfil the duties imposed upon them it shall be lawful for the Registrar to write a letter to any registered person, addressed to him according to his address on the Register, to inquire whether he has ceased to practise, or has changed his residence, and if no answer shall be returned to such letter, within the period of six months from the sending of the letter, it shall be lawful to erase the name of such person from the Register; provided always, that the same may be restored by direction of the General Council, should they think fit to make an order to that effect.

Proposed Amendment. Sect. XIV. Insert the following after the words "his residence."

And if any person registered shall notify to the Registrar that he has ceased to practise, and wishes to withdraw his name from the Register, the Registrar shall have power to erase his name.

Original Act. XX. In case it appear to the General Council that the course of study and examinations to be gone through in order to obtain any such qualification from any such college or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession, it shall be lawful for such General Council to represent the same to Her Majesty's Most Honourable Privy Council.

Proposed Amendment. For Sect. XX.—Substitute a section to the following effect:—

It shall be lawful for the General Council to lay down such regulations respecting the education and examination of practitioners in medicine, surgery, and pharmacy, as may appear to them fitted to insure adequate knowledge and skill in the several departments of the profession; and the said General Council shall then submit said regulations to Her Majesty's Most Honourable Privy Council. And the said regulations, if sanctioned by the said Privy Council, shall then be obligatory upon all universities, colleges, and other bodies enumerated in schedule (A) to this Act.

Original Act. XXI. It shall be lawful for the Privy Council, upon any such representation as aforesaid, if it see fit, to order that any qualification granted by such college or body, after such time as may be mentioned in the order, shall not confer any right to be registered under this Act: provided always, that it shall be lawful for Her Majesty, with the advice of her Privy Council, when it is made to appear to her, upon further representation from the General Council or otherwise, that such college or body has made effectual provision, to the satisfaction of such General Council, for the improvement of such course of study or examinations, or the mode of conducting such examinations, to revoke any such order.

Proposed Amendment. For Sect. XXI.—Substitute the following:—

And it shall be lawful for the Privy Council, upon its being represented to them, that any university, college, or other body enumerated in schedule (A) does not comply with such regulations, to declare that any qualification granted by such university, college, or body, shall not confer any right to be registered under this Act. Provided always, etc.

Original Act. XXVII. The Registrar of the General Council shall in every year cause to be printed, published and sold, under the direction of such Council, a correct Register of the names in alphabetical order according to the surnames, with the respective residences, in the form set forth in schedule (D) to this Act, or to the like effect, and medical titles, diplomas, and qualifications conferred by any corporation or university, or by doctorate of the Archbishop of *Canterbury*, with the dates thereof, of all persons appearing on the General Register as existing on first day of *January* in every year; and such Register shall be called the *Medical Register*; and a copy of the *Medical Register* for the time being, purporting to be so printed and published as aforesaid, shall be evidence in all courts and before all Justices of the Peace and others that the persons therein specified are registered according to the provisions of this Act; and the absence of the name of any person from such copy shall be evidence, until the contrary be made to appear, that such person is not registered according to the provisions of this Act: provided always, that in the case of any person whose name does not appear in such copy, a certified copy, under the hand of the Registrar of the General Council, or of any Branch Council, of the entry of the name of such person on the general or local Register, shall be evidence that such person is registered under the provisions of this Act.

Proposed Amendment. To Sect. XXVII.—After the words "Provisions for this Act" add the words as proposed in the *Tabular Statement*, viz:—

"And that he is not possessed of any qualification which would entitle him to be registered in accordance with the provisions of this Act."

Original Act. XXIX. If any registered medical practitioner shall be convicted in *England* or *Ireland* of any felony or misdemeanour, or in *Scotland* of any crime or offence, or shall after due inquiry be judged by the General Council to have been guilty of infamous conduct in any professional respect, the General Council may, if they see fit, direct the Registrar to erase the name of such medical practitioner from the Register.

Proposed Amendment. For Sect. XXIX.—The clause, as suggested by Mr. Ouvry, and printed in the *Tabular Statement* approved of, viz.:—

The Council may refuse to register any person who may have been convicted, in England or Ireland, of any felony or misdemeanour, or in Scotland of any crime or offence; and if any registered person shall be so convicted, or shall, after due inquiry, be judged by the General Council to have been guilty of infamous conduct in a professional respect, whether before or after registration, the General Council may, if they see fit, direct the Registrar to erase the name of such person from the Register.

Original Act. XXXI. Every person registered under this Act shall be entitled, according to his qualification or qualifications, to practise medicine or surgery, or medicine and surgery, as the case may be, in any part of Her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for professional aid, advice, and visits, and the cost of any medicines or other medical or surgical appliances rendered or supplied by him to his patients: provided always, that it shall be lawful for any College of

Physicians to pass a byelaw to the effect that no one of their Fellows or members shall be entitled to sue in manner aforesaid, in any court of law, and thereupon such byelaw may be pleaded in bar to any action for the purposes aforesaid commenced by any Fellow or member of such college.

Proposed Amendment. Sect. XXXI.—Every person registered under this Act shall be entitled, according to his qualification or qualifications, to practise medicine, or surgery, or pharmacy; or medicine and surgery, and pharmacy, as the case may be, etc.

Original Act. XXXIV. After the first day of *January*, one thousand eight hundred and fifty-nine, the words "legally qualified medical practitioner," or "duly qualified medical practitioner," or any words importing a person recognised by law as a medical practitioner or member of the medical profession, when used in any Act of Parliament, shall be construed to mean a person registered under this Act.

Proposed Amendment. To Sect. XXXIV.—The following words to be added:—"According to his qualification or qualifications."

Original Act. XXXVI. After the first day of *January*, one thousand eight hundred and fifty-nine, no person shall hold any appointment as a physician, surgeon, or other medical officer, either in the military or naval service, or in emigrant or other vessels, or in any hospital, infirmary, dispensary, or lying-in hospital, not supported wholly by voluntary contributions, or in any lunatic asylum, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish union, or other public establishment, body, or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age, or as a medical officer of health, unless he be registered under this Act: provided always, that nothing in this Act contained shall extend to repeal or alter any of the provisions of the Passengers Act, 1855.

Proposed Amendment. Sect. XXXVI.—The word "apothecary" to be inserted after "surgeon."

Original Act. XXXVII. After the first day of *January*, one thousand eight hundred and fifty-nine, no certificate required by any act now in force, or that may hereafter be passed, from any physician, surgeon, or other medical practitioner, shall be valid, unless the person signing the same be registered under this Act.

Proposed Amendment. For Sect. XXXVII.—Substitute the following:—

After the first day of January, one thousand eight hundred and fifty-nine, no certificate required by any act now in force, or that may hereafter be passed from any physician, surgeon, or apothecary, or other medical practitioner, shall be valid, unless the person signing the same be registered under this Act.

Original Act. XL. Any person who shall wilfully and falsely pretend to be or to take or use the name or title of a Physician, Doctor of Medicine, Licentiate in Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner or Apothecary, or any name, title, addition, or description implying that he is registered under this Act, or that he is recognised by law as a Physician, or Surgeon, or Licentiate in Medicine and Surgery, or a Practitioner in Medicine, or an Apothecary, shall upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds.

Proposed Amendment. On and after the day of 186 , it shall not be lawful for any person unless registered under this Act, to pretend to be, or take or use the name or title of Physician, Doctor of Medicine, Licentiate in Medicine or Surgery, Master in Surgery, Bachelor of Medicine, Doctor, Surgeon, Medical or General Practitioner, or Surgeon Apothecary or Accoucheur, or Licentiate or Practitioner in Midwifery, or any other medical or surgical name or title, and any unregistered person so offending shall forfeit and pay a sum of not exceeding £20, to be recovered in a summary way before the Justices of the Peace.

Original Act. XLVIII. It shall, notwithstanding anything herein contained, be lawful for Her Majesty, by Charter, to grant to the Royal College of Surgeons of *England* power to institute and hold examinations for the purpose of testing the fitness of persons to practise as dentists who may be desirous of being so examined, and to grant certificates of such fitness.

Proposed Amendment. Sect. XLVIII.—Amend by introducing the words "*Ireland and the Faculty of Physicians and Surgeons*," after *England*.

Original Act. LV. Nothing in this Act contained shall extend or be construed to extend to prejudice or in any way to affect the lawful occupation, trade, or business of chemists and druggists and dentists, or the rights, privileges, or employment of duly licensed apothecaries in *Ireland*, so far as the same extend to selling, compounding, or dispensing medicines.

Proposed Amendment. Sect. LV.—Omit the words, "Chemists, Druggists, and."

A section to the following effect to be added:—

Sect. LVI. It shall not be lawful for any person to keep open shop for the compounding of physicians' and surgeons' prescriptions, unless he be a Licentiate of the Apothecaries' Hall of England or Ireland, or shall have received a certificate of the competency to compound medicine, from either of the above bodies, or from the Pharmaceutical Society, or from some other body duly authorised in England, Ireland, or Scotland, by the General Medical Council, to institute the necessary examination, and to grant such certificate, and at such rate of fee as the General Medical Council, with the approval of the Privy Council, may sanction; and any person keeping open shop for the compounding of medicine, unless qualified as aforesaid, shall, upon a summary conviction for any such offence, before any Justice of the Peace, pay a sum not exceeding £20. And for the better protection of the public, and to ensure the carrying out of the provisions as aforesaid, it is hereby enacted that the Medical Council may appoint from time to time one inspector for England, one for Ireland, and one for Scotland, whose duties it shall be to inspect, as often as may be required, all shops where medicines are compounded, and to carry into effect the provisions of this Act in regard to such shops; and that such inspectors be paid such salaries out of the Consolidated Fund as the General Council, with the approval of the Lords Commissioners of Her Majesty's Treasury may from time to time determine.

A section also to be added as follows:—

Sect. LVII. No patent quack or other medicine shall be sold unless a sworn certificate of its composition be lodged with the Registrar of the General Council, and a copy thereof be open for inspection in the shop or place in which such medicine is sold; and any person, or proprietor of a shop, selling any secret remedy shall, on summary conviction, for each such offence, be liable to a penalty not exceeding £20.

D. J. CORRIGAN, *Chairman.*

REPORT OF THE SPECIAL COMMITTEE APPOINTED BY THE GENERAL COUNCIL ON 27TH MAY, 1863, RELATIVE TO THE PHARMACOPŒIA.

The Committee appointed "to take into consideration, and to report what further steps it is desirable for the General Council to take in reference to the *Pharmacopœia*," have carefully considered various matters which have been put before them and the Council, by the Chairman of the *Pharmacopœia* Committee. They have to report that several of these matters are of great importance, and require the attention of the Council, before its present meetings come to an end; and they recommend that these be all settled now, so that as little as

possible of the business connected with the *Pharmacopœia* shall be left over to another session of the Council.

I. The first subject to which the Committee have turned their attention is the expense attending the preparation and publication of the *Pharmacopœia*, and the mode and terms of payment.

Every member of Council was, or might have been aware, that a *Pharmacopœia*, which was to be an amalgamation of three *National Pharmacopœias*, could not be prepared without a large expenditure. During the first session of the Council there seems to have been a general understanding that, unless for the services of professional chemists and others, to whom the several branches of the *Pharmacopœia* Committee might find it necessary to entrust a part of their duty, the Council would escape any outlay on account of those engaged in preparing the work. The labour required of the Subcommittees, however, soon proved to be so great in prospect, that it was impossible to expect that so many professional men should surrender their time without some compensation. Accordingly it was stated by the Chairman of the *Pharmacopœia* Committee, at the session of Council in 1859, that provision would have to be made for a charge on this account. No idea could be formed at that period, however, of the probable charge, under any possible arrangement which the *Pharmacopœia* Committee, or the Council, could then have proposed.

This Committee are confident, that no one conversant with the practical difficulties which surround the task committed to the *Pharmacopœia* Committee will suppose that any part of the work they have gone through was superfluous, or has been the cause either of delay or of expense which might have been avoided. It may be added, that the extra expenditure occasioned by the delay which originated in the question settled by the Council last October, relative to Weights and Measures, has been inconsiderable.

The mode of payment of all charges on account of the *Pnarmacopœia* has been clearly understood by its Committee; but little appears on the subject in the Minutes of the Council, which can serve as a guide to the present Committee. The understanding was, that the Council should advance from the Registration Fund such money as might be required for current expenses, the payment of which could not be justly postponed; that these advances should be repaid from the proceeds of the sale of the *Pharmacopœia;* and that the other charges, including especially compensation to members of the Sub-committees for their time and services at Sub-committee Meetings, must depend on the amount of these proceeds. Accordingly, the advances made by the Council, on account of the *Pharmacopœia*, were applied to remuneration for much chemical, botanical, and pharmaceutic advice and experiment; for the attendance of nine members at two Delegations, one in London and another in Edinburgh; and for lesser current expenses. But the remaining charge, which relates to the services of Secretaries and Editors, to certain extensive chemical investigations, and to attendance on Sub-committee Meetings, is still open for consideration; and this Committee are of opinion that all these charges ought to be settled, as far as possible, by the Council, before its present meetings terminate.

The Committee of Council beg here to observe, that the Council, in advancing at different periods sums from the Registration Fund, for the current expenses of the *Pharmacopœia* Committee, does not appear to have given any special authority, or instructions, as to the particular items of current expenses which should be paid from these advances. The Chairman of the *Pharmacopœia* Committee made certain statements on that head to the Council from time to time; and he considered himself entitled to endorse, and the Treasurer of the *Pharmacopœia* Committee to pay the charges mentioned above, as in conformity with the statements made in Council. It might have been better had the instructions of the Council been more specific. But this Committee submit that the attempt to make them so, would probably have involved frequent delays, on account of the necessity, under such instructions, of references from the *Pharmacopœia* Committee to the General Council at times when the Council might not be sitting.

The Council should keep in view, before providing for the payment of attendance on Sub-committee Meetings, that a large proportion of the Fund accruing from the sale of the *Pharmacopœia* will be required to replace what has been advanced from the Registration Fund, and to defray the cost of printing and publishing the work, and remuneration still due for Chemical Investigations, and to Secretaries and Editors.

The terms on which the charges thus remaining due should be paid, have received the most earnest attention of this Committee.

Two distinguished chemists were requested jointly to undertake together extensive investigations essential for the Chemistry of the *Pharmacopœia*. These gentlemen devoted their whole time for many days to these investigations, and one of them had to leave his professional duties at Edinburgh in order to meet the other at Dublin. The Chairman of the *Pharmacopœia* Committee informs us that these labours were undertaken on the footing that, in all probability, those who conducted them would be paid by the Council an allowance at the same rate as Members of the General Council for attending its meetings: and that this allowance would be very much under the usual fees received by chemists in the like circumstances.

The duties of the Secretaries being over, or very nearly so, the Committee are able to come to an opinion under that head of expenditure; and they recommend that the sum of £100 be paid to each of the Secretaries of the Edinburgh and Dublin Subcommittees; and the sum of £150 to the Secretary of the London Subcommittee, who has acted also as General Secretary of the whole Committee.

The duty of the Editors has only now begun. The Committee have been informed that this duty will last four months: and as two of the Editors reside at a distance, one in Edinburgh and the other in Dublin, the labour of all three must be considerable. The Council should also be informed that it has no claim on these gentlemen, originating in membership of the Council; for none of them is a member of this body. The Committee are, therefore, of opinion that the Edinburgh and Dublin Editors ought to be awarded for their trouble a sum of £50 each, and the principal Editor in London a sum of £75.

The payment to members of the Subcommittees is a different question. If the Committee look only to the professional position of most of the gentlemen who compose the *Pharmacopœia* Subcommittees, and to the time and knowledge which they have given to the duty undertaken by them at request of the Council, this Committee could scarcely hope to compensate them for their services by an adequate remuneration. The Committee therefore recommend that £500 should be voted as an Honorarium to each Subcommittee. The sum of all the Subcommittee meetings has been during four years 407; and the sum of attendances of all the members has been 1851. But even these numerous attendances give no idea of the amount of labour of the Subcommittees, not a few of whose members have given much of their private and individual leisure to the business of the *Pharmacopœia*.

II. The next subject brought before the Committee relates to the form or forms in which the *Pharmacopœia* ought to be published. After the statements put before the Council at the meeting of Council on the 26th instant, it is merely necessary for this Committee to report

their opinion, that on the whole it is advisable that two Editions be published contemporaneously, an octavo and a duodecimo edition, as proposed by the Executive Committee of the Council. The Committee find that the duodecimo edition may be sold at the low price of 5*s.* a copy, and the octavo at 7*s.* 6*d.*, without involving the Council in any eventual loss, although a portion of the advances made by the Council may be for some time undischarged.

The Council will recollect that the price of the work must receive the sanction of the Lords of Her Majesty's Treasury.

III. The third question submitted to the Committee is, whether it may not be advisable that the publication of the *Pharmacopœia* be preceded by some explanation of its composition, the principles of its construction, the changes introduced, and the necessity under which the members of the several branches of the medical profession will lie of making themselves acquainted with the *British Pharmacopœia*, and of discarding all those which it is to supersede. The Committee are of opinion that a measure of this kind may prove not only acceptable to the medical profession at large, but likewise very serviceable for preventing inconvenient and even dangerous errors. The Committee do not think it necessary that the General Council should themselves prepare and authorise a publication of this nature. But the Chairman of the *Pharmacopœia* Committee has expressed his readiness to publish such a document, if agreeable to the Council.

IV. The next subject for the Committee's consideration regards the means which may be taken by the present Council for supplying their members with the experience which the Council has gained as to the most suitable machinery for preparing future editions of the *Pharmacopœia*, and publishing them with the least possible delay and expense.

It appears to have been thought by some members of the Council, that the number of persons who have been engaged in preparing the *British Pharmacopœia*, and consequently the expense, might have safely been less than on the present occasion. The *Pharmacopœia* Committee might indeed have consisted of a smaller number of members, had the Council not had to reconcile three *Pharmacopœias*, and the members of the medical profession in the three divisions of the kingdom, who have been long accustomed to use them. Without a large representation in Committee from the several bodies concerned in those works, serious jealousies and obstacles would have arisen, which it would have been highly undesirable to provoke. But the Council is now the sole authority, and alone incurs public responsibility, in regard to the *Pharmacopœia*. It may henceforth adopt without reserve the measures which seem most suitable for subsequent editions.

The Committee, on considering what measures may be now recommended to the Council, have been impressed with the recommendation of the Chairman of the *Pharmacopœia* Committee, that the improvements in medicine and pharmacy ought not be allowed to accumulate long without being introduced by authority to the medical profession at large; and that therefore either a supplement, or new edition, of the *Pharmacopœia*, ought to be brought out every five years on an average; and that, for this purpose, a charge should be given by the Council to one or more competent persons to keep up the necessary information for the *Pharmacopœia* on a level with advancing knowledge from month to month; so that the requisite changes might be supplied to the Council within a very short period after demand.

To this end the Committee advise that—

1. In each capital of the three divisions of the kingdom respectively the Branch Council should appoint a person to undertake this duty who is a medical practitioner, acquainted with the natural history and chemistry of pharmacy.

2. That it should be an instruction to these gentlemen to invite information as to improvements in the *Pharmacopœia* from the medical, surgical, and pharmaceutical bodies of the several divisions of the country.

3. That, under the sanction of the Executive Committee, the treasurer be empowered to pay to each of these gentlemen a sum not exceeding £20 annually for charges for scientific and practical inquiries.

4. That they should inter-communicate their results half-yearly.

5. That they should be ready every five years to give, at the request of the General Council, their conjoint opinion as to the changes they consider advisable for a new edition, or a supplement, of the *Phaarmacopœia*.

6. That the Executive Committee should have charge of editing and publishing such new edition or supplement, after approval by the General Council.

V. The last subject to be referred to by this Committee is the recent introduction of a Bill into the House of Commons, for altering the Weights and Measures of the Kingdom to the Metrical Decimal System of France and many other countries. The Bill contemplates, that, if passed, the Act shall be permissive for three years, and then compulsory. Pharmacy is expressly included. The House of Commons takes up the second reading of the Bill on July 1.

The Council will observe that it is quite otherwise circumstanced in respect to this Bill, than when it came to a decision last October on the question, whether the French Metrical System of Weights and Measures should be adopted at that time as the system for pharmacy in this country. The Committee, therefore, beg to call the attention of the Council to the approaching proceedings in Parliament. But they leave it to the Council itself to decide whether any, and what steps should be taken by the Council in the present position of this important question.

R. Christison, *Chairman.*

Correspondence.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—Permit me again to trespass on the pages of your journal to inform the Poor-law medical officers that, since my last communication with them, I have employed much time in superintending and directing the preparation of an extensive series of tables, placing side by side the number of parishes, area in statute acres, population, number of medical officers and their salaries at different periods, also the amount of extra medical fees, and in a final column the total medical expenditure, the dates commencing in the year 1842, and terminating in 1861. The evidence accompanying this will, I trust, convince the most sceptical of the justice of our complaints, and the incorrectness of some of the material points in Mr. Cane's statement last session. This evidence I intend to lay before the select committee as soon as it shall be reappointed. I have, however, been informed through the medium of a member of parliament, "that the delay in the reappointment of the committee arises from pressure of business at the board owing to distress in the north, and that a continuance bill for the year is likely to be brought in." In this I trust my informant may be mistaken, as it is not long since I had a letter, in reply to one I addressed to the Right Hon. C. P. Villiers, promising me a communication as soon as the appointment is

made, which leads me to believe that it was then at least intended to move the reappointment of the committee; but as it is possible that even when they meet, it may only be for the purpose of drawing up a report and not to receive further evidence, I think it most desirable to be prepared for that event, and put into print a part at least of the evidence I have drawn up, in order that the committee may be in possession of certain facts, and come prepared to recommend to parliament resolutions which will tend to improve the system of medical relief to the poor.

The great drawback in placing my evidence in the printer's hands, is the want of money, having already expended about £25 more than I have received; it must therefore, now rest with the Poor-law medical officers themselves, whether I am to proceed or stand still. I believe we have arrived very near the termination of our up-hill labours—I therefore advise we should go on a little further and crown the summit of the hill—the old adage "faint heart never won fair lady" is not inapplicable to our case.

No great cause has ever been carried in the House of Commons without much trouble and some expense; and as ours is a great cause involving annually the welfare of one million and a quarter of the sick poor of this kingdom, I do trust my medical friends will not shrink from a little further exertion. I am aware it is considered by many a hopeless task to fight against a public board, but I feel convinced that we have only to prove the soundness of the views we advocate, to insure the present President of the Poor-Law Board following in the footsteps of the Right Hon. T. Sotheron-Estcourt, and aiding us in the reform so much needed.

Since the commencement of the present year, I have received but £19 : 10, and part of this is from gentlemen unconnected with union practice, a sum but little over the cost of the postage of the last issue of circulars sent to the 3,073 Poor-law medical officers. I trust I have but to name the circumstance of the want of money to arouse my friends to the very little exertion required, to place a few shillings worth of postage stamps in a letter and forwarding them to me.

Permit me a little further space to say a few words on a subject personally affecting myself. I should feel deeply obliged to any gentleman who could assist me in obtaining the date of the birth of Charles Henry Miller Lolley, and his uncle, John Hopkinson Lolley, son of William Martin Lolley, by his first wife Anne Swaine, to whom he was married in *Liverpool* in 1802, and from whom he was divorced in Scotland, in 1812. Search has already been made to discover their place of birth, but in vain; I have, therefore, thought it just possible some one of my medical friends who possess medical ledgers for the years 1800 to 1813, might, by simply turning to the index of their books and running down the letter L, by chance discover the name of Lolley, and thus give me a clue to the dates of these births, and assist a brother in either obtaining a few hundred pounds, or in preventing him in needlessly expending money in a chancery suit.

The births most probably took place either in or near Liverpool, the father having been a wine and spirit merchant there. In Wales, they also had relatives; as the property in chancery belonged to a Mrs. Allen, of the Glen near Llangollen, Denbigh; but as the divorce took place in Scotland, the births might possibly have been there. This, it will be said, is rather a wide field, but as your journal is read in all those places, it is not improbable some one of your readers may be found who can assist me.

I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, June 1, 1863.

Medical News.

UNIVERSITY OF CAMBRIDGE. The fees for the degree of Master in Surgery have been fixed as follows:—For those who have not taken any degree previously £18; for those who have taken the degree of B.A. or M.B., £12; for those who have taken the degree of B.A. and M.B., £6; for those who have taken the degree of M.A., £1.

THE INDIAN MEDICAL SERVICE. In the House of Commons on Thursday week, in reply to a question from Earl Jermyn, touching the details of the amalgamation of the medical service of the late East India Company with that of the Royal service, Sir C. Wood said that he had forwarded the papers to the Horse Guards, and that he had as yet received no answer.

ST. MARY'S HOSPITAL. On the 6th inst., Chief Justice Sir A. J. Cockburn, presided at the distribution of prizes to the successful students connected with St. Mary's Hospital Medical School. The following is the prize list:—*Winter Session*, 1862-3. *Scholarship in Anatomy*, value £25, Mr. Carey P. Coombs. *Prize for students of the first year*, value £20, Mr. William John Land, Mr Augustus Müller. *Prize for students of the second year*, Mr. Philip George Philps. *Prize for students of the third year*, Mr. Thomas Lyle. *Summer Session*, 1862. *Prize for students of the first year*, Mr. Thomas Lyle. *Prize for students of the second year*, Mr. Milner M. Moore. *Natural Philosophy* (1862), Mr. Francis John Marshall. *Certificates of Honour* were also presented to Mr. Richard S. P. Griffiths, Mr. William L. Denziloe, Mr. Henry Bertin, Mr. M. M. Moore, Mr. Hamilton De Tatham, Mr. Charles Owen Aspray, Mr. Charles James Pavit, Mr. P. G. Philps.

THE LEVÉE. The following presentations to the Prince of Wales, on behalf of the Queen, took place at St. James's on Monday the 8th instant, the names having been previously left at the Lord Chamberlain's office, and submitted for her Majesty's approval:—Staff-Surgeon P. J. Clarke; Assistant-Surgeon M. W. Cowan, M.D.; Dr. S. J. Goodfellow; Assistant-Surgeon D. Hodgson; Dr. E. Lankester; Deputy Inspector-General of Hospitals J. Lovell; Inspector-General Dr. Macpherson, on appointment of Honorary Physician to her Majesty; Staff-Assistant-Surgeon E. L. McSheehy; Dr. George Moore, R.N.; Surgeon G. Pain, Royal Artillery; Assistant-Surgeon W. Tanner; Assistant-Surgeon T. Tarrant, M.D. The following gentlemen also attended the *levée*:—Drs. Minter, James McCann, McCann, Ed. Smith, Royston Piggot, and Messrs. G. B. Childs, John Simon, Howel Morgan, and Haynes Walton.

TESTIMONIAL TO A SURGEON. For several years past, Mr. W. B. Young, of Reading, has held the appointment of medical officer of the Caversham District of the Henley Union, and his great kindness and unremitting attention to the poor secured for him universal esteem throughout the locality, and considerable regret was therefore manifested by all classes, on its becoming known that he had resolved upon resigning his post. Anxious to testify their sense of Mr. Young's services, as well as of his courtesy and kindness, the residents in the district commenced a fund for the purpose of presenting him with a suitable testimonial on his retirement, and the poor very gladly contributed to the extent of their ability. The testimonial consisted of a handsome bronze gilt clock, with candlesticks to match, forming an unique drawing-room set; also several articles of plate. The clock bore the following inscription:—"Presented to W. B. Young, Esq., by the parishioners of Caversham and Sonning, on his resigning the appointment of medical officer of that district, after fifteen years faithful service.

1863." On May 16th, the subscribers assembled at the National Schoolroom, Caversham, when the Rev. J. Bennett presented the testimonial. Mr. Young, in acknowledging the presentation, assured the subscribers that he felt highly gratified at such an expression of their good feeling, and it was pleasing to know he had discharged the duties of medical officer to the satisfaction of all classes.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Asiatic.

TUESDAY. Statistical.—Ethnological.

WEDNESDAY. Meteorological (Anniversary).—Geological.

THURSDAY. Zoological. — Antiquarian. — Linnæan. — Chemical.—Royal.

SATURDAY. Association Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JUNE 6, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... {Boys.. 971 / Girls.. 877}	1848	1214
Average of corresponding weeks 1853-62	1850	1132

Barometer:
Highest (Mon.) 30.081; lowest (Sat.) 29.277; mean, 29.819.

Thermometer:
Highest in sun—extremes (Wed.) 124.5 degs.; (Sun.) 77.0 degs.
In shade—highest (Wed.) 84 degs.; lowest (Mon.) 42.1 degs.
Mean—57.2 degrees; difference from mean of 43 yrs.+0.5 deg.
Range—during week, 41.9 degrees; mean daily, 23.4 degrees.

Mean humidity of air (*saturation*=100), 76.

Mean direction of wind, S.E. & S.W.—Rain in inches, 1.07.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

VILLAGE HOSPITALS.—SIR: I should feel much obliged if through the medium of your JOURNAL any one who has had experience in Village Hospitals would favour me with some facts relative to their practical utility; also, I should be glad to ascertain in what towns of England such institutions exist.

June 8th, 1863. I am, etc., F. T. J.

[Our correspondent will find the information he asks for in the back pages of the JOURNAL. EDITOR.]

THE ASSOCIATION PRIZE.—In answer to the question of a "Surgeon": "Whether the Annual Prize of the Association is to be given for an essay on *medicine* properly so-called, or on *any* branch of medicine or *surgery?*" We reply, that the prize is (as we understand it) for the best essay on Practical Medicine, and does not apply to surgical subjects.

AN ANNOUNCEMENT. — The following interesting announcement adorns the interior of London omnibuses:—"Ozonised Cod-Liver Oil discovered at the Brompton Hospital to be the nearest approach to a specific for consumption as yet known."

THERAPEUTICAL INQUIRIES.—SIR: As one of the Therapeutical Committee appointed by the British Medical Association to compile the Reports on the Action of Medicines in Certain Diseases, may I request you to remind our members that the Schedules are to be returned to the members of the Committee on or before the 1st of July. I am, etc., GEORGE HARLEY.

77, Harley Street, June 6th, 1863.

Addresses of the Committee:—

For Acute Pneumonia.—Dr. Hughes Bennett, 1, Glenfinlas Street, Edinburgh.

For Non-Syphilitic Psoriasis.—Dr. C. Handfield Jones, 49, Green Street, Park Lane, London.

For Tape-Worm.—Dr. Alexander Fleming, 20, Temple Row, Birmingham.

For Scarlatina.—Charles F. Hodson, Esq., Bishop's Stortford,

For Jaundice.—Dr. George Harley, 77, Harley Street, Cavendish Square, London.

LIFE ASSURANCE OFFICE FEES.—SIR: I received this morning from the Clerical, Medical, and General Life Assurance Office, the usual medical certificate to be filled up, accompanied by the following note.

"Mr. G. really referred to you as a private friend. We should, however, prefer to have your *professional* opinion, and we cannot think of availing ourselves of that without payment."

Bristol, May 28th, 1863. I am, etc., W. F. MORGAN.

"SARRACENIA PURPUREA" AND "VERATRUM VIRIDE."—SIR: I beg fully to coincide with you in your cogent remarks in the JOURNAL of May 30th, in reference to Mr. Cosmo Logie and the "Sarracenia Purpurea." Mr. Logie is only one of many victims of a delusion; but there is no excuse for a man of Mr. Logie's experience acting so foolishly.

The other day I met one of the surgeons belonging to the celebrated "Cunard" line of Atlantic steamers, and he told me that a physician in Boston told him that the introduction of the Sarracenia Purpurea in the treatment of small-pox was the work of a Yankee who was commercially interested in the sale of the drug. He at the same time informed me that this same dodge was rather a favourite in the States.

You could not have better specimens of the wholesale dodges of this kind than in the *vendors* of the *Sarracenia Purpurea* and the *Veratrum Viride.*

The vendors of the latter drug have gone a step higher; they have victimised every man in the States who favoured them with their *favourable* opinion of *their own* preparation, by giving publicity to their names in all the leading American, British, and continental journals; they, the *vendors*, have actually taken the pen in their own hands, and puffed their own wares in medical journals, aided by the willing testimony of their victims. It is positively melancholy to think of the blind ignorance of some members of the profession, both at home and abroad. If further proof is requisite of the *commercial* nature of all that has been written by a certain Yankee party on the virtues of the Veratrum Viride, let me just state that the same gentleman who opened my eyes to the sarracenia dodge, also positively assured me that, last summer, the vessel in which he is the surgeon, brought over no less than *three barrels* of the tincture of "*veratrum viride*", along with the *owner of them*, a Dr. ——, of Massachusetts, who has identified himself with the preparation in every journal and meeting to which he could get an introduction, and who has an undoubted commercial interest in its sale.

May 30th, 1863. I am, etc., T. S.

[Mr. Cosmo Logie's letter has already begun to bear good fruit for the herbalists. We see that extracts from it are already finding their way into the country journals, as puffs for the sale of the Sarracenia. EDITOR.]

THE SARRACENIA PURPUREA.—SIR: Mr. Logie's letter in the *Times* is a very excellent advertisement for increasing and extending the sale of the pitcher plant. We are to presume that the letter was inserted simply *pro bono publico.* Nevertheless, the public expectation of the efficacy of the remedy would not have been raised to so high a degree if Mr. Logie had informed them that every recruit on entering the service is vaccinated.

As I have known a man who had been inoculated for small-pox when a boy, take the small-pox by infection, and die from the second attack, I am not surprised on seeing small-pox after vaccination; and I think Mr. Logie might have told the public that "every subject of his eleven cases had been previously vaccinated." I am, etc., W. A. R.

June 2nd, 1863.

COMMUNICATIONS have been received from: — Mr. WILLIAM COPNEY; Mr. J. D. HILL; Mr. JOHN BROWN; Mr. STEELE; THE REGISTRAR OF THE MEDICAL COUNCIL; Dr. HARLEY; Dr. HENRY GOODE; Dr. J. W. OGLE; Mr. RICHARD GRIFFIN; Mr. THOMAS BRYANT; Mr. STONE; Dr. T. SKINNER; Dr. SANKEY; Mr. JABEZ HOGG; Mr. J. T. FEATHERSTONE; Dr. THUDICHUM; Mr. OLIVER PEMBERTON; Mr. SOUTHAM; Mr. WM. PARKER; Dr. HUMPHRY; Mr. E. G. NOOTT; Dr. WOLLASTON; Mr. WALKER; Mr. THOMAS MARTIN; Mr. J. THOMPSON; Dr. J. M. BRYAN; Mr. P. MARTIN; Mr. E. CROSSMAN; Mr. F. WHITWELL; and Dr. LEARED.

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University of London. Notice

is hereby given, that the next Half-yearly Examination for MATRICULATION in this University will commence on MONDAY, the 6th of JULY, 1863. In addition to the Metropolitan Examination, Provincial PASS Examinations will be held at Stonyhurst College; Owen's College, Manchester; Queen's College, Liverpool; and St. Cuthbert's College, Ushaw.

Every Candidate is required to transmit his Certificate of Age to the Registrar (Burlington House, London, W.) at least fourteen days before the commencement of the Examination.

The Matriculation Examination is accepted by the Council of Military Education as an equivalent for the Entrance Examination otherwise imposed on Candidates for admission to the Royal Military College, Sandhurst. It is among those Examinations of which every Medical Student now commencing his professional studies is required (by the Regulations of the Medical Council) to have passed some one; and it is accepted by the Royal College of Surgeons of England in place of the Preliminary Examination otherwise imposed on Candidates for its Fellowship. And under the recent Attorneys' Act, it is among those Examinations of which it is necessary for every person entering upon Articles of Clerkship to have passed some one, whilst those who pass it in the *first division* are exempted from one year's service.

WILLIAM B. CARPENTER, M.D., Registrar.

June 5, 1863.

Clinical Lecture

ON

CONICAL CORNEA.

BY

HAYNES WALTON, F.R.C.S.,

SURGEON TO THE CENTRAL LONDON OPHTHALMIC HOSPITAL, AND TO ST. MARY'S, PADDINGTON; LATE TEACHER OF ANATOMY, AND DEMONSTRATOR OF THE SURGICAL OPERATIONS IN ST. MARY'S MEDICAL SCHOOL.

Morbid Anatomy and Pathology of the Affection: Treatment by Appliances and by Operation.

THE name of this disease at once implies the physical changes that the eye undergoes, and which so completely spoil it. There is no other important ophthalmic affection so likely to be mistaken as conical cornea. Indeed, I may say that it is certain to be overlooked, except by one who has studied eye-diseases, and the impaired vision it causes attributed to a wrong cause. In the very early stage, even an expert ophthalmologist may be deceived, if he be hasty in his examination, or careless.

The cornea loses its spherical form, and literally grows conical, not quite regular, but more or less undulated; but this is apparent only when highly magnified. When the conical change has reached its maximum, it is at once apparent to any one who knows the disease; but in the commencement there is only at a first view an appearance of increased lustre—a symptom, in connection with bad sight, that should always induce a profile examination of the eye, when, if the conical change be going on, it will seem as if a drop of water were placed on the cornea. The anterior chamber always looks large in proportion to the projection. In exaggerated examples, the apex of the cone may be opaque at the summit, and dotted; sometimes the iris is slightly tremulous. The ophthalmoscope is a very sure means of diagnosis in doubtful cases. I made out this fact several years ago. The defective sight of a young woman had been a puzzle to all who had seen her, and for a time to myself; and I was able by ophthalmoscopic examination to detect a degree of conicity so trifling, that in the first instance, and by ordinary inspection, it escaped my notice.

These are the ophthalmoscopic signs of it. When the front of the cornea is focused, the apex is remarkably brilliant; while the base, the part not in focus, is in deep shadow, through the darkened circle may be imperfectly seen portions of the retinal vessels.

I have been invariably told by patients that the first symptom showing something to be wrong was near-sightedness; and, as the disease usually appears between the ages of fifteen and twenty, such an alteration in the focal range at that time of life demands a strict scrutiny of the eye. Very decidedly impaired vision follows, and distant things are lost to view; objects are multiplied, and luminous ones have zones about them. The best sight is got by looking sideways, as nothing can clearly be seen through the apex of the cornea. As the affection advances, the eye gets quite useless. Instead of the rays of light being concentrated, as by the natural cornea, and directed through the pupil, they are bent and thrown off, and otherwise influenced by the mechanical changes in the part.

The affection has been seen at birth, and has occurred hereditarily; but ordinarily it does not appear till after childhood. The slowness of the progress is among its characteristics; but the ratio of increase is uncertain, and there may be an arrest at any stage of development.

We are in ignorance respecting any predisposing cause; and as to the direct cause, nothing satisfactory has been established. I mean this to apply to the genuine conical cornea, in which there is nothing but the transparent cone; and not to staphyloma of the cornea; nor to bulging from ulceration; nor enlargement, not very uncommon in strumous corneitis.

Respecting the structural alterations that take place, it has been observed by actual dissections, that the cone is thinner than the unaffected portion of the cornea at the circumference that is healthy, and that the greatest thinness is at the apex. Still more accurate investigation has found that the anterior elastic laminæ on the apex is thinned, having beneath it a congregation of nuclei; also that the laminæ of the corneal tissue proper are converted into a web of caudate and nuclear fibres, and, among the meshes, clusters of cells; and that these changes increased from the base of the cone, where it began in the healthy part of the cornea at the circumference, to the apex. No alteration has been detected in the posterior elastic lamina, nor in the epithelium.

The important question of treatment now arises; and I shall first consider what has been derived from the various appliances of art, optical and mechanical; and how it may be obtained. The object sought is to direct the light into the eye through the circumference of the cornea, the portion of it not yet diseased. The principle is, to expand the pupil beyond the base of the cone. The success, then, must depend on the amount of the cornea involved, the size of the cone, its angle and undulations; for, when these exceed certain limits, a case may be irremediable—a distressing condition, at which any individual progressive instance may arrive. And the duration of benefit will be according to the arrest in the disease. As it progresses, so must there be decline in the assistance that has arisen, whatever may have been the source.

Dilatation of the pupil by atropine is sometimes beneficial. It is effected by a drop of a very weak solution, varying in strength from a quarter of a grain to a grain in an ounce of water, according to the amount of dilatation desired and the susceptibility of the eye; and renewed every third or fourth day. However, this method of artificial dilatation is difficult to regulate, and the effect is most likely to be in excess. Then the atropine much interferes with the adjusting power of the eye.

But by far the most generally applicable pupillary influence is to be got through the natural expansion, by shading the eye; that is, shutting off the general stream of light with a goggle of some kind, and admitting rays only through a small slit, or a circular hole. It is in consequence of the very decided benefit that I was enabled to confer, a few weeks ago, by means of an appliance of this nature,

that I have put these ideas together concisely in the form of a lecture.

Case. The patient was a female cook, aged 27, sent to me by my colleague Dr. Markham. For some time her sight had been impaired, and medical assistance sought; but neither the physical changes in the cornea, nor the peculiar disturbance of vision, were recognised. A great blunder was committed, and wrong treatment instituted. The cones were small, and that in the right eye was the larger; but I detected them at a glance. As usual, there was that indistinctness of sight which is almost invariably spoken of as "confusion". There was no definition of any distant object; friends could not be recognised a few yards off. The nearer a thing, the better it could be seen; and large type held very close could be made out; but the indistinctness and confusion affected everything, however near it was viewed. Concave glasses afforded no benefit. The use of atropine in the one eye made matters worse. I then tried the effect of looking through apertures of different sizes and shapes in a piece of metal, and soon discovered that type which could not be deciphered with the naked eye could now be read. Moreover, there was much gained in focal range, and in distant definition. Things in the street, that before could not be recognised, were now readily named. The contrivances decided on were two bowls of metal, like the bowls of a teaspoon, with slits in them, united in front by a nose-bridge, and kept on by an elastic band around the head; and, as being more sightly for out of doors, a pair of ordinary goggles, with crape rims and neutral tint glasses the sides of which were made opaque by a circular piece of plaster stuck behind them. I was satisfied that the first gave the best vision, although the second were the easier to wear, and looked better.

It is quite incredible how much pains, care, patience, and time, are required to find out whether a patient can derive assistance, or cannot, by any of these means; and if he can, what is the highest attainable amount. And, so far as my own experience goes, the optician generally shirks to the utmost the trouble that all the trials and the alterations of the several contrivances impose on him, and which is not to be wondered at. However, in this instance, I found a remarkable exception in Mr. Millard of 334, Oxford Street. Supposing the disease in this case to progress, as most likely it will, and we have no power to check it, the woman is still very materially aided, perhaps for years. Should it be stationary, she has had as much done for her as art and science of the nineteenth century can afford.

I have made an allusion to concave glasses. I must tell you that occasionally very deep ones afford help in the early stage of the affection. I met with a gentleman who discovered that by having his spectacle-frame bent at the bridge, so as to place the glasses at certain angles to the eyes, he could see better.

Now, let us see what practical surgery can accomplish. If we could rely on what the authors of the several procedures advocated tell us, there are several perfect cures. But most of them have not survived the life of their originators. It is scarcely possible to conceive anything that has not been tried, even to so absurd a measure as removing the lens; but I shall not recount them, but direct attention at once to the only measure that has, according to my observation, proved trustworthy; and I do not think any could be named that I have not fairly tried.

An artificial pupil—that is, drawing the pupil away from the centre of the cornea, the part spoiled by the cone, to the margin, the most perfect part, and displacing it there—is an operation admissible under certain circumstances, and to be recommended. To the late Mr. Tyrrell is due the merit of suggesting this. Sometimes he cut off a bit of the iris, sometimes he strangulated it in the corneal wound. There can be no doubt that Mr. Tyrrell did sometimes meet with success—sometimes he did not; but this highly practical man did not discover the secret of his success. It has been reserved for Mr. Bowman to show that, to get the desired benefit, there must be only a mere slit-like aperture of pupil. The large lateral opening which ensues when a considerable portion of the iris is excised is useless. In all probability, it was only when Mr. Tyrrell "strangulated" and did not "excise", that benefit was got. In operating, too, with his hook, the form of the pupil much depends on the amount of the iris drawn out. It would make too long a lecture, were I to describe the details of the modern operation; and to those surgeons who are likely to put it in execution, and are not already learned in it, I beg to refer to my work on the *Surgical Diseases of the Eye*, for an ample description, with illustrations.

Now, the great practical therapeutic question that arises out of this, is to decide when the one or the other of these two means should be adopted. To develope some principle, however narrow, for guidance, demands a careful study of many cases with a scrupulously unprejudiced mind, together with some experiments, and not less to examine cases that have been operated on by other surgeons.

My own present conviction is, that in the earlier stages of conical cornea the greatest improvement to the imperfect sight will be got through expansion of the pupil by shading the eye; that the artificial pupil tells most in the advanced stages, when either so much of the cornea is involved as to leave too little space for the light to pass through the dilated pupil, or the form of the cone prevents it. Then, too, it is, that there is no risk to our patient of rather dimming than improving him, as does sometimes happen from the side pupil in the early stage. After an artificial pupil at the period I advocate, I have even found a concave glass materially to assist in clearing objects.

Destroyers of Salmon-Spawn. Not one salmon-egg out of a thousand ever comes to maturity as a grown fish. In the case of the salmon, a thousand evils beset it on its way to the shallow water, where it wished, if he might so term it, to make its nest. When in this condition it was called a foul fish, and was not eaten in this country; but, unfortunately, it was not only eaten, but very much liked in France, which offered a ready market for the poacher. When, however, the spawn were laid, the perils of the young fish began at once. There might be a drought, or their might be a flood, and either would destroy the eggs. Other fish ate the spawn; trout sometimes ate their own, and five hundred eggs had actually been hatched after being taken from the maw of a trout which had swallowed them. The larvæ of dragon-flies, and the little insect called the "water sweep," were great destroyers of the young eggs. The poor little water ousel was often shot for his supposed depredations on the spawn; but the real truth was that he never touched it, and only came to prey on the insects that had assembled to prey on the spawn. A bird that did a vast deal of mischief in the way of devouring spawn was the swan. (*F. Buckland.*)

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

LECTURE III. (*Continued.*)

ON DISEASES OF THE JOINTS IN CHILDREN.

On such a subject, the whole course of three lectures might readily be expended, and to touch upon it in the third lecture may to some appear foolish; but, to be consistent, I shall confine my observations to the differences which are met with in practice between these diseases as witnessed in early and in adult life; and I shall condense my remarks to the narrowest possible limits.

To speak generally, it may with some confidence be asserted that there are but two structures entering into the formation of an articulation in which primary disease ever commences; viz., the bones and the synovial membrane. Primary disease of the articular cartilage is unknown; and I have shown elsewhere, some years since (Book on *Joints*, 1859), that the diseases of the articular cartilage are secondary in the course of events, and are the necessary results of any lasting or acute affection of the articular extremities of the bones and synovial membrane. We may, therefore, exclude diseases of the articular cartilage from our consideration; at the same time recognising the fact that, in all extreme conditions of disease of the other two tissues, degeneration or so-called ulceration of this articular cartilage will take place, even to its total disorganisation. Taking, therefore, the diseases of the bones and synovial membranes as the sole causes of primary disease of an articulation, I believe that I am strictly within the limits of truth when I assert that in adults at least *two-thirds* of all the cases of diseased joints commence in the synovial membrane, and *one-third* in the bone; whereas in children these proportions may be reversed; at least *two-thirds* of all the cases of joint-disease commencing in young subjects in the articular extremities of the bones, and hardly *one-third* in the synovial membrane.

This difference in the seat of the primary disease is the most important pathological distinction which I have to notice between the articular affections of early and adult life. I will not, therefore, run the risk of depreciating its importance by attempting an explanation of its cause, further than to add, that the more active growth and development of the bone of the child renders it more prone to inflammatory affections.

The next pathological fact to which I would briefly refer is the nature of the disease; as it is under the inflammatory affections that the majority of cases may be unquestionably classed. Inflammation of the articular extremities of the bones is, therefore, the cause of at least two-thirds of all articular disease in children; inflammation of the synovial membrane being the cause in the remaining third.

I would expunge entirely from our vocabulary the terms strumous or scrofulous disease of an articulation. I know no positive condition to which such terms should be applied. They convey no definite meaning to my own mind, and I have never yet met with any one who could correctly understand their true nature. If by such a term it is meant to describe an inflammation of a part of a cachectic and feeble type, it may be intelligible; but surely, under these circumstances, the expression, "an unhealthy or cachectic type of inflammation", would be pathologically more correct, and would more readily convey the right pathological idea. "Unhealthy inflammation" is the term to which I affix my preference; and the phrase "scrofulous or strumous disease of a joint" I would not employ, unless I confined it to the cases in which true strumous deposit exists in a tissue; under which circumstance it would be rarely written.

In the earlier portion of this lecture, when dwelling upon the inflammation of the articular extremities of the bones, I pointed out the chain of symptoms by which the pathological changes in the bone are usually manifested. I showed how the earliest symptoms of disease in the bone were characterised by a gradual expansion of the epiphyses, accompanied by an aching pain and increased temperature of the part, with tenderness. In the second stage, when the inflammation had extended to other tissues, I showed how some enlargement of the articulation from effusion is the most prominent symptom; the synovial membrane having become secondarily involved, and the inflammation thus manifesting itself. If the disease should have progressed still further, and the inflammation in the bone have passed on to suppuration and destruction of tissue, the inflammation in the articulation becomes severe and of a destructive type; and it is at this period that the degeneration of the cartilage and a disorganisation of the joint will take place. In the majority of cases of joint-disease originating in the bone in children, this inflammatory process is of a low type and of slow progress; and, if unchecked, it has but one ending—the disorganisation of the joint.

At the commencement of this disease of the bone, the joint is uninvolved, and is quite healthy; and, if rightly treated, no affection of the articulation may be produced. It is only in the later stages of the affection that the joint itself becomes involved; and this fact alone is enough to point out the danger of the case.

In the majority of cases of disease about the carpal and tarsal joints, unhealthy inflammation of the bone is the primary cause; and it is too well known that death of the bones involved is a frequent and destructive complication, the joints, as such, rapidly disappearing, and the bones exfoliating; and it rests alone with the constitutional power of the patient to determine the result.

Disease of the Synovial Membrane. It is unnecessary to dwell upon the symptoms which characterise synovitis, or to point out the differences between ordinary or healthy inflammation of the synovial membrane, and unhealthy inflammation which gives rise to pulpy or gelatiniform disease; they are essentially the same in children and in adults. In an early stage, both affections are remediable; but,

if neglected, disorganisation of the articulation will be the result.

Treatment of Joint-Disease. In the treatment of all cases of joint-disease, whether in the child or adult, it is right that we should have almost unbounded confidence in the reparative powers of nature to effect a cure, as it can be only through such a feeling that the surgeon will be preserved from interfering in the process of recovery, and from lapsing into the practice of that great error—meddlesome surgery. In the treatment of diseases of the joints in children, the necessity to bear this conviction in mind is far more necessary than it is even in adults; for it would almost appear as if there is no amount of mischief to the articulation of a child which is not remediable by natural processes; and that during young life every disorganised joint is capable of recovery, although perhaps it may be with anchylosis. I believe this opinion to be strictly true, with one exception; and that is, when any necrosed bone is present to keep up the irritation and prevent the completion of the cure. Under any other circumstances, a disorganised joint appears capable of repair; and, in the diseases of children, the proof of the accuracy of these opinions is constantly brought before us. The only drawback, however, to their universal application depends much upon the condition of the general health of the child; for it is in this that the grand fault always lies. The chronic inflammatory affections of an articulation are essentially diseases of debility; they are found in children who are naturally frail, or in others who have been brought into a cachectic condition by some other affection, such as fever, etc. Let these general conditions be improved, it is quite sure that the local affection will improve also; and that, as the general health of the child becomes reestablished, the local health of the articulation will also return. In the treatment of joint-diseases, the surgeon's duty lies, therefore, in the carrying out of simple principles. He must, first of all, look to the general health, and employ all hygienic and medical means to improve and to sustain the powers of his patients—good food, good air, and such tonic remedies as appear applicable, being of primary importance; for, without these, all local treatment will doubtless fail. Specific treatment, such as by mercurial remedies, is rarely required; and it would be better for such remedies to be altogether forgotten, than that they should be generally resorted to in chronic joint-affections. In some few instances they may be of service, but such cases are few and far between.

As to the local treatment of joint-affections, there is but one principle upon which we should always act; and that is, to remove all local sources of irritation by maintaining rest of the affected joint, and to sooth pain. The first indication is best carried out by the application of a good splint to support the limb, leaving the joint uncovered for observation; and the second is well secured by the application of warm fomentations, either by flannel stupes or strips of lint, kept moist by warm water or poppy decoction. Counterirritation in children is hardly ever required, and must be employed with great care and caution. It is very rarely indeed that I have recourse to such a practice, finding other treatment equally efficacious.

The above remarks apply more particularly to cases in which diseased action is still progressing, although they are applicable to others in which only the effects of disease remain; but, in this latter class of cases, some additional local treatment may be used with advantage; and it is in such that the benefits of pressure are well exemplified. Firm, equal, and steady pressure upon a joint by means of strapping, cannot be too highly extolled; for few things have greater influence in exciting the reabsorption of inflammatory deposit, and thus of restoring the parts to their normal condition.

After these remarks, it may not be unfairly asked if operative interference is ever called for in the treatment of joint-disease when taking place in early life? and to answer this question, I must occupy your attention for a few minutes.

As a general answer, it may without doubt be affirmed that far fewer cases of joint-disease require operative interference in children than in adults; for it must be again remarked, that the natural powers in the repair of mischief are almost unlimited in early life, and operative interference is, as a rule, not only unnecessary but mischievous. Again, it is only in extreme conditions of joint-disease that any operation is ever needed, and then only when the bone is extensively involved and has become necrotic; the suppuration being kept up, and the repair of the disease being prevented by the presence of the foreign body—dead bone; and, if this be removed, the subsequent repair of the part may with some confidence be predicted; it is, therefore, in these cases alone that any operation is called for on account of local conditions. It would be foreign to my purpose to enter into the question of the propriety of operative interference on account of the general failure of the child's health. In certain cases, this practice may be called for, for higher motives than local considerations; for the life of the child may be imperilled unless the removal of the source of irritation be carried out. But, regarding the case purely from local considerations, it is only in cases of necrosis of the articular extremities of a bone that operative interference is demanded; in all others, the subsequent cure of the case may with confidence be left to natural processes. It is not, however, in all cases of necrosis in a joint that operative interference may be required; in many instances, the necrosed bone, if limited in extent, will come away, and recovery ensue. This fact was well illustrated in a case which came under my care in the year 1860.

Case I. A boy, aged 5 years, had been the subject of diseased shoulder-joint for one year and a half; and for one year suppuration had existed. Partial anchylosis had also taken place. After he had been under observation for some months, a piece of bone came away, which was evidently part of the articulation, and recovery by anchylosis followed.

Instances like this are also met with in adults; I possess several. In other cases, however, operative interference is unquestionably demanded; the diseased bone being either too extensive or too deeply placed for external exfoliation by natural processes. In these instances, its removal by operation is justifiable and essential; and the following case is a good illustration of the practice.

Case II. A boy, Henry F., aged 5 years, came under my care in July 1861 with a disease in the right

hip-joint of two years standing, suppuration in the part having been present for one year. It was quite clear that total disorganisation of the joint had taken place; and that dead bone existed, as it was readily felt upon passing a probe down the sinus which was present behind the trochanter. Regarding the case as one of disease of the joint, secondary to inflammation and necrosis of some portion of the femur, I proposed an operation for the purpose of its removal; and on August 27th I carried out the practice. Upon making my incision behind the trochanter, a piece of dead bone within the hollow of the trochanter was at once observed; and, on further examination, it was found that the head of the femur had separated at its line of junction with the neck, and was lying loosely in the acetabulum. I therefore thought it best to excise the head and neck of the femur below the trochanter; and the preparation which I now show to you contains the specimen. I may add, that the acetabulum had been deprived of its cartilaginous covering, but was otherwise healthy. Convalescence rapidly followed; and in three months the child got up, and was able to stand upon and flex the limb without pain. The wound also had quite healed. He left the hospital, and unfortunately contracted measles, which reduced his powers extremely; a large abscess also formed in the right thigh below the seat of the original disease. For this he was readmitted; and, after good feeding and tonics, this gradually disappeared, and he left with a good, useful limb. He is now quite well. The limb is about one inch shorter than its fellow, but otherwise it is quite sound. The boy can walk and run freely without the assistance of any stick. He can stand upon the limb alone, and bend and rotate it in any position. Indeed, the result of the case is as satisfactory as could be wished.

This case is given as a good illustration of joint-disease, the result of inflammation and necrosis of a bone. Natural processes could hardly have proved sufficient to get rid of the sequestrum and exfoliated epiphysis; and an operation was, therefore, strongly called for. The success of the case was most satisfactory.

As further illustrations of Nature's powers, assisted but feebly by art, in repairing extensive injury or disease of an articulation, the following cases may be read with interest. They are given as typical examples of distinct classes. The first was the result of injury.

Case III. A boy, aged 10, was admitted under my care into Guy's Hospital in July 1859, with a compound dislocation of the right ankle-joint, produced by a fall of ten feet off a tree. The foot was twisted to a right angle with the leg; the sole presenting inwards; and the superior articular surface of the astragalus appearing through a large wound below the external malleolus. The articular surfaces also of the tibia and fibula were exposed to view. The fibula was broken three inches up. The dislocation was readily reduced by extension, and the foot fixed in position with a posterior and side interrupted splints; water-dressing being applied to the wound, and powdered ice in a bag around the foot. Everything went on well from the day of the boy's admission; and, when he left the hospital, he was quite well, and, what is more, had good movement in the articulation.

The success which followed the treatment of this case was most marked, although it is hardly to be expected that in all such severe injuries a good recovery with movement of the limb will follow; nevertheless, I believe that, in a large proportion of like cases in children, an equally good result may be anticipated; and of this I am certain, that it may be obtained far more frequently in children than in adult life.

I must give one other case as an illustration of the recovery of a disorganised joint from disease with movement, as typical of a second class of cases; and will select the ankle again.

Case IV. A boy, aged 8, had been the subject of joint-disease for three years, and with suppuration for two. When he was admitted into Guy's under my care, the right ankle was riddled with sinuses; and a probe could readily be passed through the articulation. Exposed but not dead bone was also observed. The child's health was bad; and it was a question, when I first saw him, of amputation, as it was feared that the health of the patient was incapable of supporting the tax upon its powers. Tonics and good diet, with perfect rest of the limb, however, worked wonders. With the improvement of the general health of the child, the local disease took on a healthy action; and in six months all sinuses had healed, and diseased action had subsided. In another three months, all appearances of disease had disappeared; and the child left the hospital well, with good movement of the articulation. I have seen the child since, one year after treatment; and the foot is as strong and sound as its fellow.

I might quote numerous other cases of disease of a joint to illustrate the truth of the remark which I made when first taking into consideration the subject of joint-disease—that in almost every instance, even the most severe, natural powers alone are amply sufficient to effect a cure. Time will not allow me to carry out these wishes; but I can fearlessly appeal to the experience of all surgeons to bear out the truth of the remark. Such experience, however, is of little use, if some practical deductions be not drawn to guide us in future practice; and I think that there can be little doubt as to the lesson which it teaches, for it is to leave Nature to herself. Let the surgeon aid to the utmost the natural powers by hygienic and general tonic means, and treat the local disease by placing it in the position in which it is least exposed to sources of irritation and local injury; relieving symptoms, and looking for indications of treatment, with the feeling of confidence that in time Nature's efforts will effect a cure even in apparently hopeless examples.

I must add one word upon the subject of excision of joints in children; and it will be to repeat what must have been gathered from the observations which I have already made—that it is rarely required. In necrosis of a joint, the operation for the removal of the dead bone may be called for; but such cases cannot with fairness be described as cases of excision, for they must be classed with other instances of removal of dead bone.

I have shown also that operative interference is rarely if ever demanded for any other local condition; and although I am prepared to believe that, in the joints of the upper extremity and hip, excision of the articulation may be called for, I am still, as I have always been, disposed to deny the value of the operation when applied to the knee;

the weight of evidence which has recently been adduced certainly tending to confirm me in the truth of this opinion, in which I am now supported by many of the former advocates of excision, who appear disposed to doubt the value of the practice when applied to children.

[*To be continued.*]

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF PUERPERAL CONVULSIONS.

By S. H. Swayne, Esq., M.R.C.S., Bristol.

[*Read Feb. 26, 1863.*]

The following case appears to present features of interest in relation to the vexed questions of the dependence of puerperal convulsions on uræmia, and of the treatment by bleeding.

Mrs. G., primipara, aged upwards of 40, of middle height, rather stout and thickset, expected her confinement about the middle of April 1861. For some days previously to the seizure, she had felt headache and pains in the left side of the neck, and immediately ushering in the attack there was temporary loss of vision.

About 3 P.M., Jan. 25th, a violent convulsion occurred, which lasted for several minutes, and after a short interval of remission, there was another of equal severity. Owing to a mistake in the message, several hours elapsed before I saw her. In the meantime, she was seen by a neighbouring surgeon, Mr. W., who applied mustard to the legs and feet and cold to the head. Some castor oil which had been taken in the morning acted about this time. On examining by the stethoscope, Mr. W. heard the fœtal and placental sounds.

When I saw her, consciousness had returned, and she appeared to be considerably relieved. There was no sign of commencing labour. Under these circumstances, a blister was applied to the neck; and after waiting some time, and finding no return of fits, we left her.

I took away some of her urine, which, on examination, I found to be highly albuminous, becoming nearly solid on boiling; and the deposit, after some hours subsidence, occupied about five-sixths of the whole volume.

About twelve at night, the fits recommenced, and Mr. W. again saw her, and administered a turpentine enema, which was retained, but acted after some hours. She had altogether about eight fits up to three o'clock A.M., Jan. 26th.

On visiting her early in the morning, I found nearly complete unconsciousness and considerable restlessness, but no convulsion; pulse full, but not quick; face rather flushed; pupils slightly dilated; a very trifling appearance of swelling about the eyes; but no œdema of the extremities. On making a vaginal examination, I found the os uteri not at all dilated, and no indication of labour. Feeling that further attacks were imminent, I bled her to twenty-five or thirty ounces, without inducing faintness. After the bleeding, the restlessness, in great measure, ceased; but she remained during the day like a person in heavy sleep, but she could be partially roused by speaking loudly or shaking her. I was unable, by stethoscopic examination, to detect the fœtal or placental sounds. Calomel and antimony were given at intervals, and a blister applied to the back of the head.

About half-past five o'clock A.M., January 27th, after a quiet night, she awoke, recognised her friends, and spoke rationally, although some confusion of intellect remained. Some urine passed at this time was examined, and the albumen found to occupy only one-sixth of the whole volume, after subsidence.

From this time, she steadily improved, although several days elapsed before she had recovered the full use of her faculties. She had no recollection of anything that had passed, from the day before the first fit. There was no return of convulsions, and the albumen speedily disappeared from the urine.

On February 8th, labour set in slowly, and after some hours terminated favourably, without any return of convulsions; the child was dead, and rather decomposed; the cuticle peeling, and the head like a bag, with the cranial bones lying loose in it.

In August following, she again became pregnant; and I took occasion, during the latter months, to examine the urine for albumen, but there was never any trace of it; and on May 13, 1862, she passed through her second confinement favourably.

The points in this case that seem the most important are:—1. The large quantity of albumen in the urine before bleeding, and its rapid disappearance afterwards; 2. The complete recovery from the convulsions and albuminuria before labour set in, notwithstanding that the child was dead; and 3. The absence of convulsions during labour. No other exciting cause for the convulsions beyond the uræmia could be discovered; and that the presence of the fœtus in the uterus had little share in bringing them on or maintaining them, would seem to be shown by the cessation of the convulsions and of the albuminuria, notwithstanding the presence of a dead child in the uterus, and by the uterus remaining quiescent for a fortnight after the first fits. That the improvement was due to the measures employed, especially to the bleeding, can, I think, scarcely admit of a doubt.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

ON THE NECESSITY OF COMPARATIVE OBSERVATION IN THE INVESTIGATION OF INJURIES.

By John Grantham, Esq., F.R.C.S., Crayford.

[*Read April 24th*, 1863.]

I made a remark in the paper I read to this Association last year (1862), to this effect: "Surely, there is something due to the power of observation in the investigation of diseases incidental to human nature." I would further pursue this subject, by referring to the importance of *comparative observation*. The cultivation of this faculty must be patent to every one of us in the duties of our profession, whether these duties be considered medically or surgically; and I would fain indulge the hope that the time is not far distant when the unnatural separation of medicine from surgery will for ever be done away—the one being inseparable from the other; as the restoration of a disease or the reparation of an injury in any part of the body can only be effected by the vital law of the whole system.

I know that in this statement I am only reiterating the sentiments long ago promulgated by Peyronie of France, and Abernethy of our own country, and probably by many others equally worthy. When I reflect on the early effects of observation, I look back on the time when this principle appears only as a small speck or narrow line which time and experience have assisted in developing. This principle or faculty is pregnant with the amount of knowledge we may be able to impart; and, according to our individual acquisition, forms in after life the one important distinction of character between one medical man and another; it cannot, therefore, be a matter of surprise that the public should suppose that there is something added to the man who may happen to reside in London or some large city, surrounded as he is with so many opportunities of improving and maturing the faculty of observation. Now, the efforts of this Association are tending to remove this apparent

distinction, and enabling those of us who are isolated in country villages to have the opportunity of meeting and being known to each other in town and country. It is the fact that, with every one of us, wherever we may be, this part of our calling—I mean comparative observation—is known and felt to be defective in the investigation of disease, or damage to the body, that has given rise to my introducing the following subjects to this meeting; viz., "ruptured muscle" and "adherent capsular ligament."

In the *Medical Gazette* for 1841, I published the first case of rupture of the rectus femoris muscle that had been recorded in British surgical literature; subsequently, in the same journal for 1850, a case of rupture of the flexor carpi radialis and palmaris longior muscles. Since this, I have attended three other cases of ruptured muscles; viz., of the rectus femoris and vasti muscles, unobserved at their commencement; also, a case of rupture of the extensor longus digitorum and rupture of the gastrocnemius muscles. These and other cases have afforded me much information as to the propriety or rather the necessity of making more careful and extensive examination of an injured limb, by comparing it with the one not injured; also, of not being led away by any definition the patient may offer to make in reference to the seat of the malady. For example, in a case of rupture of the extensor digitorum communis muscle, the patient complained of inability to extend the hand, in consequence of pain in the wrist-joint, caused by suddenly catching hold of a heavy weight with the tips of the fingers. I requested him to expose both arms up to the elbow-joints then and there; at once I observed the elevation of the lower end of the torn muscle on the upper third of the arm, with a depression above the swelling. I grasped the elevated portion of the lacerated muscle, and immediately the patient was enabled to extend the fingers and hand. This case had been treated with counterirritants for inflammation of the wrist-joint.

In July 1862, I attended a case of rupture of the gastrocnemius muscle. The following is the patient's narrative. "Four weeks ago, I was playing at cricket with some friends in one of those large hop-lofts in the Borough. I felt, while in the act of throwing the ball, as if I had been struck with another ball on the back part of the leg. On inquiry, I found that not to be the case; therefore, I sent for a surgeon, who, after examining my leg, stated it to be a rupture of the tendon of the plantar muscle. He ordered perfect rest, and the application of the iodine liniment." Not improving, Mr. W. sent for myself; and, having compared one leg with the other, I observed a depression across the middle portion of the gastrocnemius muscle, with complete inability to raise the heel; consequently, I inferred separation of the muscular part of the gastrocnemius; to prove which, I grasped the muscle nearest the tendo Achillis; and, in so doing, the patient felt he could raise the heel and extend the foot. I applied strips of adhesive plaister, and secured the same with a flannel roller from the foot to the knee, so as to give support to the lower end of the torn muscle. After supporting the limb by these means, he was at the twelfth day able to return to London, and resume his duties.

In all the cases of rupture of the rectus femoris muscle, the pain has been referred to the knee-joint, and has consequently led the surgeon to suppose the seat of the malady to be there. One instance of rupture of this muscle occurred to a student at Harrow School. He was treated for some months by two men of no mean eminence, for inflammation of the cartilaginous structure of the knee-joint. I make this assertion not to condemn, but to prove that this subject requires greater extent of comparative observation than has hitherto been bestowed upon it.

Lastly, I will relate an instructive case of adherent capsule, assisting, as it does, the necessity of furthering our duties of observation. In the commencement of 1862, Mr. H. applied to me in consequence of defective movement of the ankle-joint, the result of an injury received about three years ago. The imperfect flexion of the tibia on the astragalus incapacitated him to the extent of one-fifth degree of flexion. On examination, I found the dorsum of the foot depressed; not finding any displacement of the bones, I advised the slipper to be worn with an elevated heel, instead of the boot, which afforded him some relief, notwithstanding the inconvenience in walking from impeded flexion remained. He was persuaded by a friend to consult a non-professional man, who passed under the name of a "bone-setter". He informed him there was a dislocation of one of the small bones of the foot. He used very forcible extension, with a rapid return movement of the foot towards the tibia, by which act he restored the joint to perfect mobility; so that the patient could use one foot as freely as the other, leaving only some tenderness in the front of the ankle and side of the foot.

Reasoning on this event, I applied myself to the consideration of this mode of treatment. Knowing the bones of the foot to be normal and not displaced, I inferred, and I think rightly so, the possibility of my not having observed some abnormal adhesion of the capsular structure under and in front of the outer condyle, which became separated by extending the foot at an obtuse angle, leaving the capsular ligament loose and painful, resembling two bursæ on the dorsum of the foot; it being a similar mode of treatment to that adopted by the first Mr. Hey of Leeds for displacement of the semilunar cartilage or cartilages on the head of the tibia.

The question, therefore, I ask, is: Might not the capsular ligament have been adherent from the effects of shock or partial dislocation? Mr. Brodhurst has published a very instructive pamphlet on the restoration of motion by forcible extension and rupture of the uniting medium of partially anchylosed surfaces, which is well worth perusal.

Progress of Medical Science.

Facial Paralysis in Children. The various forms of paralysis of the face met with in children have formed the subject of a clinical lecture delivered at the Children's Hospital in Paris by M. H. Roger. After a general consideration of the phenomena of the affection, which are on the whole analogous in the child and in the adult, he proceeded to examine the value of facial hemiplegia as a symptom.

1. *Facial Hemiplegia in newly born Children.* Paralysis of the face appears in a very small number of children as the result of the application of the forceps. In such cases, a slight deformity of the countenance, scarcely appreciable when the child is quiet, is observed at birth or a day or two afterwards. The deformity is perfectly visible when the child cries, because the defect of symmetry is then exaggerated. During sleep, the paralysed eyelids remain half opened: there is not, however, as in the adult, epiphora, or inflammation of the conjunctiva of the eye. The infant experiences some difficulty in taking the breast, especially if it be weak, and if the secretion of milk be scanty; and still more so when the breast is too tense, the nipple not sufficiently prominent, and the milk-ducts permeable with difficulty. There is no paralysis of the muscles of the velum palati. On examining the face, traces of contusion produced by the forceps will be found. If, as most commonly happens, the instrument have compressed the nerve in front of the ear—at its point of exit—the paralysis affects all the

parts supplied by it: if, on the other hand, the upper or the lower division of the facial nerve have alone been compressed, the paralysis is confined to the eyelids or the lips. At first sight, it would be thought that paralysis should be produced on both sides of the face by the pressure of the forceps; but the pressure is not applied on the same point at each side, nor with equal force. Hence, M. Roger believes, double paralysis from this cause has never been observed. Sometimes there is no trace of contusion; but the diagnosis is here assisted by the history of the case, by the absence of any other sign of palsy, and by the fact that, in the newly born child, facial paralysis is not known to depend on any other cause than the application of the forceps.

Facial hemiplegia in newly born children differs from that of adults in the slight amount of alteration of the expression of the face, and in its rapid disappearance—at the end of some hours or days, or, at most, one or two months. The prognosis is very favourable, unless the forceps have produced some other lesion. M. Danyau once saw facial hemiplegia in an infant, accompanied by paralysis of motion of the arm of the same side; and there was a distinct impression produced by the forceps in the supraclavicular triangle. At the *post mortem* examination, there was not only effusion of blood around the facial nerve at its exit from the stylo-mastoid foramen, but also around the nerves forming the brachial plexus.

Two cases have come under M. Roger's notice. In one there was simple facial paralysis from application of the forceps; and the child recovered perfectly on the fifth day. In the other, there was also paralysis of the right arm, with permanent retraction of the fingers and tetanic rigidity of both legs. The child was unable to suck. Leeches were applied; the legs recovered in three or four days, the face in about a month, but the arm not until the end of three months.

2. *Rheumatic Paralysis of the Face* is much more frequently met with in adults than in children; it is attributed to a rheumatic affection of the nerve at its exit from the skull, in consequence of exposure to cold and wet. M. Roger has, however, seen a few cases in children. He was once called to two female children, who both had facial paralysis. The children had been accustomed to sleep at a porter's lodge, one in a bed placed near a very damp wall, the other in an overheated room having an opening through which the cold air penetrated. Both recovered rapidly. The disorder is almost always curable, but not so quickly as the paralysis of newly born children.

3. *Facial Hemiplegia from Cerebral Hæmorrhage or Softening* is very rarely met with in children, because the lesions which should produce it are in them not localised as in adults. Tubercle of the brain, however, may possibly be so situated as to involve the facial nerve at its origin, and produce paralysis of the face; but M. Roger was not aware of an example.

4. *Facial Paralysis from deep-seated Lesions of the Ear.* The most frequent cause of facial hemiplegia in children is compression or destruction of the facial nerve at some point of its passage through the petrous bone, from the internal auditory meatus to the stylo-mastoid foramen. The nerve may be compressed by swelling of the bony parts; it may be lacerated or destroyed by contact with angular portions of carious or necrosed bone, or by maceration in purulent matter. In a little patient under the care of M. Blache, an attack of measles was followed by otorrhœa, which lasted six months, when the child was found to have facial hemiplegia. The long duration, in this case, of the discharge from the ear, and its great fœtidity, pointed to disease of the temporal bone. Moreover, there was considerable enlargement of the submaxillary and cervical glands, probably of tuberculous origin, as well as dulness with blowing respiration at the apex of the right lung: hence M. Roger believes there was tubercular disease of the lungs, of the lymphatic glands, and of the temporal bone. In another instance, M. Roger once observed at the Foundling Hospital the case of a little boy aged 11 months, who had facial hemiplegia with chronic otorrhœa (the discharge being very scanty), emaciation, and general weakness. Six days before death, there were symptoms of pneumonia, with torpor and vomiting. At the *post mortem* examination, there was found non-tuberculous ostitis of the petrous bone, involving chiefly the middle ear. The cavity of the tympanum was filled with a dense reddish liquid, slightly viscous, in which the ossicles of the ear floated: the mastoid cells were full of purulent matter. The bony tissue was greyish, and more spongy than in the normal state. It presented a carious aspect, but no trace of cheesy or tuberculous matter could be detected. The facial nerve presented no change in structure: it had evidently been only compressed in its passage. There were no traces of meningeal or cerebral inflammation.

In all these instances of facial hemiplegia from lesion of the petrous bone, it is the discharge from the ear, in the great majority of cases, that establishes the diagnosis. Nevertheless, the pus has been known, instead of escaping through the external meatus, to pass through the mastoid cells, and to form a fistulous abscess at the level of the mastoid process. M. Bouchut has described a case of this kind.

5. *Alternate and Double Hemiplegia of the Face.* Under the name of alternating hemiplegia, M. Gubler has described facial hemiplegia of one side alternating with paralysis of the opposite side of the body. He attributes it to a lesion of the pons Varolii after the decussation of the facial nerve. M. Roger has not observed any case of this kind in children; yet circumscribed tubercle of the pons Varolii is sufficiently frequent in them to be developed at the points described by M. Gubler, and to produce alternate hemiplegia. This occurred in two cases copied by M. Gubler from the *Bulletins de la Société Anatomique.*

M. Davaine has described a double paralysis of the face, in which the deformity is symmetrical; that is to say, the two sides of the face are equally immoveable and destitute of expression. The lower eyelids allow the tears to flow over them; the mouth is half open, and does not retain the saliva; various motions of the mouth are impeded, and the labial consonants are pronounced with difficulty. The voice is nasal; and deglutition, especially of liquids, is very difficult. This affection in adults is commonly traceable to some lesion affecting the brain on each side, which is not likely to be met with in children. Nevertheless, double paralysis may be produced in a child by tubercle at the base of the brain, or by scrofulous disease of the base of the skull. M. Roger has not, however, seen an instance. A slight and unequal paralysis of both sides of the face may be observed in tubercular meningitis: the deposits, the effusion of serum or of plastic lymph, the cerebral softening, may take place in such situations as to impair the functions of both facial nerves. In this case, however, the paralysis is a symptom—an epiphenomenon—of little importance among the numerous phenomena of palsy or convulsion which characterise the disease.

The *treatment* of facial hemiplegia differs according to the cause. The most simple treatment will succeed in the first two varieties described; while the most energetic and rational means may fail when the paralysis is connected with disease of the ear. In the facial paralysis of newly born children, M. Landouzy advises that the infant should not be laid on the paralysed side, and that the clothes which cover the head and neck should not be fastened too tightly. The little patient should be removed from a too strong light, and its cradle should be placed where it can receive only diffused light; the eye, as long as the paralysis continues, being not sufficiently

protected by the eyelids, nor lubricated by the tears. If sucking be impeded, and the difficulty be increased by want of prominence of the nipple, a wet-nurse with a sufficiently projecting nipple should be employed. Emollient topical applications may also be used. It is seldom necessary to have recourse to more energetic means, such as blistering along the course of the nerve with ammonia, or, in obstinate cases, applying electricity.

In rheumatic paralysis of the face, it is sufficient, when the affection is slight and not of long duration, to protect the nerve from the action of the external air in such a way as to keep the parts in a local vapour-bath by the imprisonment of the perspiration. Stimulating liniments may also be applied. M. Roger is not in favour, in such cases, of local depletion by leeches or cupping; nor of the endermic application of strychnine or veratrine, which has been recommended. If, however, the paralysis have continued a long time, he would, following M. Trousseau's advice, apply along the course of the nerve compresses soaked in tincture of nux vomica, or small blisters, taking care not to allow suppuration to occur.

In a small number of cases, where, from the long duration of the paralysis, there is danger that the muscles will become atrophied from disease, M. Roger recommends electricity.

In paralysis symptomatic of deep seated lesion of the ear, the indications of treatment are generally the same as those of the otorrhœa. If the facial nerve is only compressed by the swelling of the adjacent parts, emollient injections, or local applications in the vicinity of the ear, should be used. If lesion of the nerve have arisen from a morbid change in the petrous bone, the same treatment must be followed more energetically, and combined with the constitutional remedies proper for scrofula or tubercle. All these means will probably fail; but recovery has sometimes taken place in apparently hopeless cases.

Aneurism of the last Aortic Intercostal Artery. A man aged 23 was admitted into the Hôtel Dieu at Nantes on September 25th, 1860, having, since the 17th, suffered from fever, headache, epistaxis, and great prostration of strength. His health had been generally good; but, six months previously, he had received a severe kick in the posterior part of the right loin, and had for some time felt an uneasiness io that region. On admission, he presented the symptoms of typhoid fever, and was treated accordingly. On October 1st, on attempting to rise, he fell back, and was unable to raise himself. When seen by M. Calloch at his visit, he was extremely pale; the skin was generally yellowish; the lips and conjunctivæ were exsanguine; the pulse 126, small, and very weak. The legs, thighs, scrotum, and abdominal walls, were strongly œdematous. There were indistinct signs of effusion within the abdomen; and he had violent pain in the right iliac fossa and in the upper part of the thigh of the same side. The intellect did not appear more affected than before. He died at noon on the same day.

In the course of the *post mortem* examination, the intestinal convolutions were found to be bound together by old adhesions, which were more numerous and closer near the diaphragm than elsewhere. Several of the mesenteric glands contained pus; the spleen was large and soft. The intestines were healthy, and presented no traces of the lesions proper to typhoid fever.

Before removing the intestines, a sanguineous effusion was perceived in the right iliac fossa. On careful examination, it was found that this effusion filled the fossa above and below the iliac aponeurosis, entered the lower pelvis, and passed along the sheath of the femoral vessels, being arrested at the upper third of the thigh. Upwards, it passed along the psoas muscles, until it reached a tumour of the size of two fists, situated at the level of the crura of the diaphragm, occupying the left side of the right hypochondrium, and pushing the liver forwards and outwards. The tumour lay in front and at the sides of the vertebral column for the extent of nearly four vertebræ; it was in great part covered by the crura of the diaphragm, the muscular fibres of which were hypertrophied. The aorta was raised by it from the spine; this vessel was healthy, and presented no trace of atheroma. But, at the point where the orifices of the last right and left intercostal arteries should have been, there was a single opening of the size of a large goose-quill, communicating with the tumour. On opening the tumour through this orifice, it was found to contain red coagula in the centre; next, membranous and stratified fibrinous concretions; then a layer of cellular tissue infiltrated with blood; and finally some of the muscular fibres of the diaphragm. Above the diaphragm, the tumour pushed aside the lung and rose on the right side to the level of the eighth dorsal vertebra. The sac had ruptured in the right hypochondrium; and the blood had followed the course taken by pus in some abscesses.

The eleventh and twelfth dorsal vertebræ were deeply eroded in front and at the right side. At the front where the aneurism opened into the aorta—the junction of the above named vertebræ—there was an excavation in the thickness of these bodies affecting half the depth of the body of each of them. The ninth and tenth dorsal vertebræ and the first lumbar were slightly affected. At these points there was no trace of anterior vertebral ligament. The articulation of the twelfth rib was opened; and the rib itself was somewhat eroded near its upper and anterior aspect. (*Journal de Méd. de la Loire Inférieure;* and *Gaz. Méd. de Paris*, 11 Avril 1863.)

Preparations of Glycerine. M. Surun, a *pharmacien* in Paris, has published a work in which he describes the applications of glycerine in the making of pharmaceutical preparations. He has determined its dissolving power in regard to more than two hundred substances used as external medicines; such as extracts, tannin, gums and sugars, tinctures, the metalloids, chlorides, bromides, iodides, sulphides, salts of iron, zinc, lead, mercury, etc., and the alkaloids and their combinations. The following are some of the formulæ which he gives for the formation of *glycerolates*. He divides glycerolates into two classes—liquid, having glycerine, and solid, having glycerolate of starch, as the excipient.

1. *Liquid Glycerolates. Glycerolate of alum* is made by dissolving 4 *grammes* of alum in 30 *grammes* of glycerine, and filtering. Glycerolates of borax, sulphate of iron, sulphate of copper, chloride of zinc, and other metallic salts, are prepared in the same way.

Glycerolate of Perchloride of Iron is made by mixing 4 *grammes* of solution of perchloride of iron and 30 *grammes* of glycerine. In the same manner are prepared the glycerolates of hypochlorite of soda, and of ammonia; as well as glycerolates of tinctures of opium, belladonna, etc.

Glycerolate of Catechu is prepared by dissolving 4 *grammes* of powdered catechu in 30 *grammes* of glycerine, at the temperature of a water-bath, and filtering. Tannin, aloes, etc., may be treated in the same way.

Glycerolates of Extract of Rhatany, belladonna, hemlock, etc., are made by dissolving, with the aid of heat, 4 *grammes* of the extract in 30 of glycerine.

Glycerolates of Hydrochlorate of Morphia, and of other alkaloidal salts, are made by dissolving, at a slightly elevated temperature, 30 *centigrammes* of the salt in 30 *grammes* of glycerine (1 in 100), and filtering.

All these preparations contain the active substance dissolved in the glycerine, and may be solidified by starch, if this be not incompatible with the medicinal agent.

2. *Solid Glycerolates* have as their excipient the glycerolate of starch. This is prepared by rubbing up 5 *grammes* of starch in 10 *grammes* of water, adding 85 *grammes* of glycerine, and gently warming until a gelatinous mass is formed. The water facilitates the breaking up of the starch, and also supplies what is lost by evaporation during the preparation of the glycerolate. This is important, in order to prevent the glycerolate from acquiring the disagreeable odour which is manifested where glycerine, prepared by the prolonged action of heat, is deprived of its water.

Glycerolates of Sulphide of Sodium, iodide and bromide of potassium, tannin, etc., are prepared by rubbing up the medicinal agent with a little water, and operating in the same way as directed for glycerolate of starch.

Glycerolates of Oxide of Zinc, binoxide of mercury, calomel, sulphur, tar, etc., are formed by simply incorporating 4 *grammes* of the substance with 30 *grammes* of the glycerolate of starch.

Numerous experiments made in the Hôpital de la Pitié, under M. Matice, appear to show that glycerine has a laxative action. As an enema, 125 *grammes* (about 4 ounces) may be administered, in a sufficient quantity of water. As a draught, from 60 to 100 *grammes* (2 or 3 ounces) may be given in mint-water. (*Gazette des Hôpitaux*, 4 Avril 1863.)

Reviews and Notices.

PRACTICAL LITHOTOMY AND LITHOTRITY; or an Inquiry into the Best Modes of Removing Stone from the Bladder. By HENRY THOMPSON, F.R.C.S.; of University College Hospital; Consulting Surgeon to the St. Marylebone Infirmary; etc. Pp. 274. London: 1863.

THIS work is the production of a surgeon, who, in a comparatively short career, has gained a very honourable position among those who have made it their special duty to attend to the diseases affecting the urinary organs. Mr. THOMPSON is already well and favourably known by his writings on diseases of the prostate, on urethral stricture, and on lithotomy; and of the reputation which he has gained as a skilful surgeon, perhaps no better proof could be afforded than the fact of his having been recently called on to afford his professional aid to the King of the Belgians, with whose case men of world-wide celebrity have already dealt. In taking up this book for review, then, our knowledge of the author's antecedents leads us to expect, not a mere routine treatise, but an able exposition of the results of extensive experience and enlightened observation.

Before entering on the task of giving an outline of the book, we cannot omit to notice with satisfaction the very amicable manner in which numerous of Mr. Thompson's professional brethren have co-operated with him in laying the foundations of his work. In his preface, he acknowledges his obligations to many of the hospital surgeons of Great Britain "for very complete and valuable information relating to nearly 1500 cases"; to Mr. Crichton of Dundee for having entrusted to him the entire and unpublished notes of his late father's practice, amounting to above 200 cases; to Dr. Keith of Aberdeen, for his kindness in placing at the author's disposal the history of each one of more than 300 cases on which he has operated; and to Civiale, for having "unreservedly communicated on all occasions his unrivalled experience in lithotrity," as well as for having been "especially desirous to afford all the aid in his power in connection with the present task." The manner in which this aid has been granted and received is equally honourable to the grantors and to the recipient.

The book is divided into twelve chapters. In the first chapter, the author offers some General Considerations regarding Lithotomy. He points out that the conviction has been gaining ground in Great Britain during the last ten or fifteen years, and for a longer period in France, that, instead of lateral lithotomy being *the* remedy, and other methods being merely exceptional, "it is neither philosophical nor politic to apply to every stone . . . one and the same proceeding. We have learned the importance of ascertaining the physical character of the stone, and the condition of the patient in relation to the state of his urinary organs and his general susceptibilities."

He then classifies lithotomy operations into those performed in the perinæum, and the high or suprapubic operation. The perinæal operations, again, are divided into lateral and central. Of lateral lithotomy there is but one typical form; while, under the term central, are included at least five procedures —viz., the median operation (Marian or Allarton's); Dr. Buchanan's operation with the angular staff; Dupuytren's bilateral operation; Civiale's medio-bilateral operation; and the recto-vesical operation. The remainder of the chapter is occupied with a description of the anatomical relations of the parts involved in lithotomy.

In the second chapter, the Lateral Operation of Lithotomy is described. Mr. Thompson begins by enumerating the several instruments which it is desirable to have at hand; and of each a wood-engraving is given. He speaks very favourably of the apparatus for securing the patient's wrists and ankles, described by Mr. Prichard of Bristol in this JOURNAL (Dec. 22, 1860).

"During the last few months," says Mr. Thompson, "I have myself used these anklets in three cases of lithotomy, and much prefer them to the garters for ease in application and for security afterwards." (P. 22.)

The author then goes on to describe the various steps of the operation. In the course of doing so, he makes some interesting remarks on the relative merits of sharp and probe-pointed knives and of gorgets, for making the deep incisions. After describing the instruments used by Sir W. Blizard, Clive, Sir B. Brodie, John Hunter, Langenbeck, Mr. Smith of Leeds, Dr. Keith of Aberdeen, etc., he observes that

"With respect to the choice which may be exercised among these methods of making the last incisions, there is a certain ease and simplicity in the use of a single knife, the sharp-pointed scalpel, which has commended it greatly to modern surgeons; and, unless there are some exceptional circumstances present, it must be admitted to be both a safe and convenient instrument..... But, on the other hand, there are circumstances, and by no means unfrequent ones too, in which I believe the probe-pointed knife is superior. When the stone is large, and the deep incision must therefore correspond to it, the latter is then a safer instrument, since its point leaves the staff in that act. When the perinæum is deep, as in very stout subjects, and in those suffering from enlarged prostate, so that the finger cannot follow the knife as far as the neck of the bladder, I decidedly prefer the probe-pointed knife for the last incision, as

well as the blunt gorget to dilate it, and conduct the forceps into the bladder." (P. 39.)

At the conclusion of the chapter, Mr. Thompson describes the late Mr. Aston Key's method of performing lithotomy.

The third chapter contains a notice of the Operations of Lithotomy performed in the Central Portion of the Perinæum. These operations have been devised, under the idea that severe hæmorrhage is less likely to follow incisions made in the centre than in the lateral parts of the perinæum; and also in order to avoid dividing the capsule of the prostate and opening up the cellular interspaces between the pelvic viscera.

The medio-bilateral operation of Civiale, devised by that distinguished surgeon in 1829, and performed by him ever since, appears to be scarcely known in England. Mr. Thompson, indeed, believes that he was the first to perform it in this country, in the autumn of 1861; and his colleague, Mr. Erichsen, who had, in the last edition of his work on Surgery, suggested it as an improvement on the median (with which it bears a close relation), has since also performed it. The operation is performed by Civiale in the following manner.

"Having introduced a staff with a median groove, which is firmly held resting against the pubes by an assistant, he makes an incision about an inch and a half long in the raphe of the perinæum, immediately in front of the anus, and carefully cuts down in the direction of the staff, endeavouring to avoid the bulb, until he reaches the membranous portion of the urethra. He then carries his knife into the staff in that situation by an incision sufficiently large to insert with ease the end of a double-bladed lithotome, resembling that of Dupuytren, but straight instead of curved, into the groove of the staff. He then slides the beak of the lithotome steadily inwards into the bladder; and, having done so, draws it outwards in the groove towards himself, dividing the neck and the prostate horizontally, as well as the deep fascia in its course. The external wound is oval in form, a vertical incision in the perinæum always becoming so; hence the skin is not cut transversely by the lithotome in the act of withdrawal. The finger is now introduced, and the forceps upon or guided by it, in the usual way; the external and internal openings are felt to correspond, and to form an easy and direct route for the removal of the stone." (P. 58.)

In the fourth chapter, the author describes the High or Suprapubic Operation; and at the end gives some statistics of the results following the performance of lithotomy, according to the various methods described. In 1827 well-authenticated cases of lateral lithotomy, there were 229 deaths, or 1 in $7\frac{1}{2}$. In 139 cases of median operation (collected by Mr. Allarton) there were 13 deaths, or 1 in 11; the mortality, however, was nearly the same as in lateral lithotomy in between 40 and 50 cases operated on in the Norfolk and Norwich Hospital, which are not included in the 139 just mentioned, and among which there was a rather full proportion of unpromising cases.

The bilateral operation, in the hands of Dupuytren and his contemporaries, gave a mortality of 19 in 85 cases, or about 1 in $4\frac{1}{2}$. "In other hands, it is said to have been more successful." Of the medio-bilateral operation (Civiale's) we have no statistics. The records of the recto-vesical operation give a result of about 1 death in 5; and a similar proportion of the patients who recovered were the subjects of fistula. The suprapubic operation, according to the statistics collected by Dr. Humphry of Cambridge, has been followed by a mortality of 31 in 104 cases, or 1 in $3\frac{1}{3}$.

In the fifth chapter, Mr. Thompson considers the important question of the Causes of Death following Lithotomy. He very judiciously objects to grouping together cases of all kinds, whether in adults or in children; for the causes of death vary with the age. The causes of death in the adult are first examined in the order of the frequency of their occurrence.

The most frequent cause of death is "acute inflammation of the tissues, especially of the loose cellular tissue around the neck, base, and sides of the bladder; always of a destructive character, and generally with a tendency to invade other parts."

Among the causes producing such inflammation, Mr. Thompson assigns a prominent place to violence in the removal of the stone; and this, indeed, he regards as more disastrous, at least according to the mode of operating now generally inculcated, than urinary infiltration, which has been so much dreaded by surgeons, but which he holds to occur less frequently than is usually supposed. He admits that rapidly spreading inflammation may occur from the infiltration of urine into the cellular interspaces, when too deep incisions have been made; but he believes that, in most cases where extravasation of urine has appeared to be cause of the inflammation, it has in reality been the result of destructive cellulitis induced by violence in operating. He doubts, indeed, whether urinary infiltration ever occurs as a result of simple incision of the cellular tissue, in persons of fair health.

"To judge from the language held respecting this subject, one would imagine that hollow intervals existed between the pelvic organs, over which urine had only to be poured in order to be drained mechanically into them. No such thing exists. In the child, where the cellular connections are of the loosest and most delicate kind, and where the bladder is active, powerful, and irritable, urine flows constantly after this operation over a cut surface which affords free access to them; nevertheless, with what extreme rarity do we meet with urinary infiltration in the child! But once inflame this cellular tissue, destroy its healthy character, or even, perhaps, let the patient be of unsound health, or one in whom 'the flesh never heals well', to use a common phrase; and then we have the condition in which urinary infiltration may take place with rapid and fatal effect." (Pp. 88-9.)

The doctrine here expressed by Mr. Thompson is, he acknowledges, at variance with generally received notions. But he decidedly makes out very clearly that the dread of making too extensive an incision and thereby inducing urinary infiltration, has tended equally to produce an evil result. While he deprecates strongly the making a larger incision in the prostate than the size of the stone demands, he considers that the tendency is at present to make the incision much too small, and thereby to expose the patient to the dangers inflicted on the cellular tissue by the passage of the forceps and of the stone.

"Inflammation of the cellular structures is easily produced by that process of forcibly dilating the neck of the bladder which insufficient incisions render necessary, through the pressure sometimes producing sloughing, to which they are subjected; it is also no less certainly caused by the traction downwards of the viscus, which inflicts injury upon them..... And, when inflammation

has once extended through these structures, it rapidly invades the peritoneum, which very probably is more frequently implicated in this manner than by any other agency." (Pp. 82-3.)

Mr. Thompson prefers to extend the incision when the stone is large, rather than to attempt to remove it by violence; and he points to the fact, that gentleness in the extraction of the stone is the one point of agreement among the experienced lithotomists of our day, especially the provincial surgeons of this country, such as Dr. Keith and Dr. G. M. Humphry.

Cellulitis may also sometimes occur independently of traumatic influences; in unhealthy or predisposed subjects, or where erysipelas is present, or where the patients are placed in crowded wards. This, however, may be avoided, as is done at University College Hospital, by placing the lithotomy patient in a private ward, or in a small ward containing six or eight beds, where erysipelas rarely occurs, or is at once removed if it appear.

The next cause of death which comes under consideration is inflammation of the mucous membrane of the bladder itself, leading rapidly to inflammation of allied vital organs.

Absorption of poisonous products derived from the urine may also rapidly produce dangerous symptoms and even death; the poisoning, in Mr. Thompson's opinion, arising probably not so much from impaired excretory power on the part of the kidney and consequent retention of excrementitious matter in the blood, as from the taking up poisonous products from decomposing urine and unhealthy discharges, in the neighbourhood of the wound. If the kidneys be organically diseased, of course the elimination of the poison is more difficult or even impossible.

Phlebitis and pyæmia, and "shock," are occasional, but comparatively rare, causes of death after lithotomy; and the latter cause must be distinguished from the rapid effects of blood-poisoning as well as from those of the exhaustion produced by loss of blood.

Hæmorrhage is regarded by the author as of grave import. It is not that patients often die actually from loss of blood during lithotomy—such an occurrence is rare. But

"Free bleeding, continuous bleeding, and bleeding that tends to recur, are always to be regarded as circumstances of very evil augury for the well-doing of the patient. Such hæmorrhage lowers the powers of life, impairs the adhesive action in the wound, and therefore also the resisting power in the newly-cut surfaces to the action of urine and other products passing over them. It diminishes the patient's power of resisting infection, or other deleterious influences which may be around him, and enervates him for the struggle with them when it has commenced. Lastly, it may endanger, and in any case prolongs, the period of convalescence." (Pp. 94-5.)

Mr. Thompson concludes the expression of his dread of loss of blood by observing

"That the surgeon should, during the operation, regard the patient's blood as valuable in the highest degree; and whatever may be his views respecting its loss under other circumstances, he should rest assured that every ounce of blood lost in lithotomy is, *pro tanto*, a positive injury to his patient." (P. 95.)

The causes of death in children are next considered. In them, lateral lithotomy is notoriously much less fatal than in adults; but the liability to death varies, according to a table of 850 cases in children, drawn up by Mr. Thompson, in different periods of childhood.

"From the first to the fifth year inclusive, the deaths are about one in fourteen cases; they then decrease, so that between six and ten years inclusive, they are only one in twenty-three or twenty-four cases. Between eleven and sixteen the mortality gradually rises to one in nine and-a-half cases; and from the sixteenth to the twentieth year to one in seven cases." (P. 97.)

The principal cause of death in children is very different from that in the adult—that is to say, as regards the seat of the inflammation. Violence is the great cause of mischief in both instances; but, in the adult, its evil effects are exerted on the pelvic cellular tissue, while in children, "the undue manipulation of instruments in the cavity of the bladder, or exertion in withdrawing the stone, appear to excite peritoneal inflammation much more readily than any other lesion."

Exhaustion from loss of blood is another cause of death in children; and it is also to be remembered, that the condition of calculous children, if the stone have long existed, is sometimes very low. Death may also occasionally be produced in children by shock, disease of the kidneys or bladder, phlebitis, intrapelvic abscess, etc.

In the sixth chapter, the author discusses with great care and ability the Difficulties and Dangers met with in Lithotomy. These depend on the age of the patient; on personal peculiarities, such as excessive depth of the perinæum, narrowness of the pelvis, unusual distribution of arteries, etc.; or on peculiarities of the stone. All these are carefully and practically treated of by the author, who then notices certain accidents which may attend or follow the operation; viz., wounding the rectum; removal of a portion of the prostate gland; retention of calculi or fragments of calculus in the bladder; secondary hæmorrhage; slow healing of the wound, and perineal fistula; sexual impotence; incontinence of urine; and inability to discover a stone in the bladder.

In the seventh chapter, Mr. Thompson introduces the subject of Lithotrity. This operation, which was but a theory forty years ago, has subsequently undergone progressive improvement; so that, as Mr. Thompson observes, "the lithotrity of to-day is not the lithotrity of even ten years ago, but a safer and a better operation."

The author attaches great importance to the preliminary preparation of patients for lithotrity; especially if they have been newly brought up from the country to London for the purpose of operation. By fresh comers from the country, a period of acclimatisation has to be passed, enduring from three or four days to a fortnight; and the symptoms attending the change, which may occur even in tolerably healthy subjects, ought to be overcome before an operation is attempted. Irritability of the bladder is also to be allayed, and the nervous system tranquillised, by rest and appropriate dietetic and medicinal treatment.

In the eighth chapter, the author notices the Objects of Lithotrity, and the Principles on which Instruments should be constructed in order to attain them. The reader will here find a description, illustrated with wood-cuts, of various forms of lithotrite in use by different surgeons.

The ninth and tenth chapters contain an account

of the Systematic Application of Lithotrity in the Various Stages of the Operation.

In the eleventh chapter, the author discusses a highly important subject—the Choice of Proceedings best adapted to Different Cases. As long as only lateral lithotomy, or sometimes the high operation, was practised, the characters of the stone were regarded as of little consequence; but since the introduction of the modifications of lithotomy, and of lithotrity, it has become absolutely requisite to ascertain the size, form, and chemical characters of the calculus. If these be neglected, advantage from the operation cannot be expected in a fair number of cases; and Mr. Thompson does not hesitate to assert that the non-recognition of the importance of attention to these matters actually increased the fatality from stone operations in the earlier days of lithotrity. So convinced is the author of the importance of ascertaining the physical and chemical characters of the calculus, whenever this can be done, before attempting its removal by lithotrity, that, in any case of doubt, he would perform lithotomy.

"It is probably safer uniformly to practice lithotomy in every instance, if the surgeon does not arrive at an accurate diagnosis of the nature of the stone, and select an operation in accordance with it." (P. 217.)

The author then goes on to give directions for the operation of sounding the bladder; he next describes the most marked physical characters of calculi, from which a judgment may be formed of their chemical constitution; and enumerates the points, in regard to the stone, which ought to be ascertained before deciding on an operation.

Other data which it is important to consider are classed under the heads of age, absence or presence of local disease, and susceptibility to constitutional disturbance as a result of local irritation.

In reference to age, Mr. Thompson has collected a valuable amount of statistics; and he gives a tabular statement of the mortality from lithotomy at different periods of life.

Age.	Cases.	Deaths.	Proportion. 1 in
1 to 5	473	33	14⅓
6 to 11	377	16	23½
12 to 16	178	19	9½
17 to 20	76	11	7
21 to 29	86	11	8
30 to 38	75	7	10½
39 to 48	100	17	6
49 to 58	191	40	4¾
59 to 70	233	63	3¾
71 to 81	38	12	3¼

From this table it appears that one-half of the number of calculous cases occur before the thirteenth year. It is not, however, correct to infer that calculus is absolutely most frequent in children. Mr. Thompson believes it to be so at the period between fifty and seventy years.

"That is to say, the proportion of elderly calculous patients to the existing population at their own age is larger than the proportion of children afflicted is to the number of existing children."

As to the choice of operation according to age, Mr. Thompson says:—

"There is little temptation to employ lithotrity, as a rule, below ten and eleven years of age. I believe lithotrity has never offered any result at all comparable with these" (of lithotomy, as given in the table) "at this period of life. The propriety of employing it is, however, a matter for consideration between fourteen and twenty, but only if the stone is small and easily dealt with. It becomes still more so subsequently, as far as to forty years of age, under the same condition. But the period which follows, embracing all ages above forty years, is essentially the period for crushing the stone; that during which we may derive the greatest aid from it; provided always, that some other considerations, which shall be discussed hereafter, are fully taken into account in dealing with individual cases." (P. 229.)

In children, then, Mr. Thompson would perform lithotomy as a rule, except "when the stone is only a little too large to pass by the urethra," and can be easily crushed. In such cases, lithotrity is admissible.

In tolerably strong and healthy adults, the stone should be crushed, if it be of small or medium size, and single, whether soft, friable, or compact; provided, of course, that instrumental manipulations can be easily performed and are well borne. In feeble and diseased subjects, if there be no marked disease of the urinary organs, lithotrity may be performed on small and friable stones, and perhaps on larger stones. When disease of the urinary organs is present, lithotomy is generally preferable; but the choice admits of modifications, an account of which will be found in the book.

The twelfth chapter, which closes the volume, contains Illustrations of the Applicability of the Preceding Principles to Practice, and consists of the narratives of twenty-one operations—fourteen of lithotrity and seven of lithotomy; the selection having been made in reference to various practical points.

In reading through this book, a reflection has occurred to us, to which we must give utterance before closing the present notice. It is this: that the results of all the mechanical ingenuity which has been called into action in devising and improving instruments for removing stone from the bladder, of all the operative skill exercised in applying these instruments, of all the judgment exercised as to the choice of operation and the propriety of its performance under various circumstances, only lead one to wish, while admiring the manner in which these qualities have been exhibited by surgeons, that lithotomy could be prevented from ever being necessary. No one, we are sure, will acknowledge this more fully than the author, who admits that chemical solvents are of some service in the treatment of an already formed calculus, but more especially in the earlier stages of the calculous diathesis. It may be a long time, however, before medicine shall have entirely superseded manual surgery in the management of stone in the bladder; and, while we must depend on surgical resources, the labours of men who endeavour to render operative procedures as easy and as safe as possible cannot be too highly praised. Among such men, Mr. Thompson has established himself in the foremost rank; and, in his present work on *Lithotomy and Lithotrity*, he has deduced from his own extensive experience and from that of other surgeons, a mass of practical information and instruction, which, we venture to say, even the ablest and most practised operators may study with advantage. The thanks of the profession are due to him for the valuable contribution which he has just made to surgical literature.

On the Diseases of the Heart and Great Vessels. By H. W. Fuller, M.D.Cantab., F.R.C.P.L., Physician to St. George's Hospital, etc. Pp. 247. London: 1863.

The matter contained in this volume is a reprint from Dr. Fuller's work on *Diseases of the Chest*, which was recently noticed in the Journal. It contains, the author tells us, "those portions of his work on *Diseases of the Chest*, which relate to diseases of the heart and great vessels." He has thus reproduced this portion of the lately published volume, "urged thereto by some of his professional friends, for whose judgment he has the highest regard, in the hope that the present volume may be acceptable to many who have no occasion to refer to much of the matter contained in the larger and more comprehensive treatise." This volume, therefore, being a portion of the work which was recently noticed in these pages, requires no further notice from us.

British Medical Journal.

SATURDAY, JUNE 20th, 1863.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Once every year, at all events, the College of Surgeons of England occupies an especially prominent position; and that is, on the occasion of its election of Councillors. We have taken previous opportunities thus offered of bringing under the notice of those concerned the shortcomings and defective constitution of this important medical corporation. It is well that this should be done; for it is a very remarkable fact that, on many most important points connected with the management of the College, the profession at large is lamentably ignorant. And it is evidently in consequence of this ignorance of the profession at large, that the managing body of the College has been hitherto enabled to elude carrying out those principles of reformation which are clearly indicated in its renewed and latest charter. A rapid review of the history of its present charter will enable the profession to judge whether or not the College has done its duty in accordance with the principles of its charter.

The corruption of the body corporate of surgeons was once a very notorious fact. Energetic reformers, amongst whom shone conspicuously Mr. Lawrence, attacked it in its shortcomings. But the corporation was powerful, and it was wise; and for a long time it resisted all the efforts of external pressure. Partly it quieted opposition by absorbing into itself the loudest of its reforming opponents; and so, by a wise administration to them of a share of the good things of office, converted loud-voiced democrats into silent observers, and eventually into ultra conservatives. At length, however, even this resource failed; the abuses were too great, and the clamour too just and loud, to stand the attacks of a reforming age. The Council, therefore, determined to set its house in order; and of course it did so with as bad a grace as possible. It yielded, in the first place, the very smallest possible quantity of reform compatible with a decent pretence; and, in the next place, endeavoured to the best of its abilities to prevent the carrying into practice of the reforming measures. It may, indeed, still boast of being at this day as oligarchical in rule as the Emperor of all the Russias. This great and wealthy and important medical corporation, unlike all other medical bodies, has, in fact, never yet bent to general professional opinion. Need we add that it has failed in its great duties to the profession; and that it stands to this day a monument of misrule and of selfishness?

Let us see. By external pressure, the charter of 1843 was carried. It was the production of years of agitation outside, and of years of forced deliberation inside, the Council. This charter had for its object the reform of the constitution of the College; and so also had the charter of 1852, which was obtained to amend and improve that of 1843. Now this charter was a good charter, and had within it seeds which would have borne good fruit, had they been fairly dealt with and cultivated—had the spirit of the charter been honestly interpreted. Need we say that those who had to nourish and develope the bantling were not its friends; they looked upon it as the cuckoo in the sparrow's nest—as their enemy and their injury?

By this charter the number of the Council was increased from twenty-one to twenty-four; and the Council, instead of being, as heretofore, self-elected, were chosen out of the body of Fellows. A body of three hundred Fellows were created to form this elective power. Again, to the Council was given power of electing Examiners out of the body of Fellows; they were no longer, as previously, obliged to elect them out of their own body—the Council. The Examiners and Council, moreover, were no longer elected for life; the Council were elected for a term of years; and the Examiners during the pleasure of the Council. The President and the Vice-President were not to be taken exclusively from the Court of Examiners; and no Fellow was eligible to the Council who lived outside a five-mile radius of the Post Office. Into this charter of 1843 was slipped, as a sop to Cerberus, a clause distinctly opposed to its main principles; viz., the confirmation in office for life of those members of Council and Examiners who held office at the date of the charter.

Now this charter, as we have said, contained in itself much good; but, unfortunately, its interpreters took care to prevent its principles being liberally carried out and duly developed. To stop discontent, three hundred more Fellows were added to

the former three hundred, making a formidable body of six hundred Fellows. But discontent still prevailed; and to such an extent that, in 1852, a new charter was obtained, "at the humble petition of the Royal College", as the preamble of the charter itself affirms. But in these very words there was plainly a loose screw perceptible to those who looked closely; for the Royal College at that time consisted of "Council, Fellows, and Members"; and neither Fellows nor Members were consulted on the subject.

Under this improved charter of 1852, however, the five-mile radius clause was done away with, and Members were no longer excluded from the fellowship merely because they practised midwifery. The body of Fellows was also again enlarged. Any one who was a Member of the College before 1843 could, on the recommendation of six Fellows, become a Fellow by paying £10. The Examiners were to continue in office five years, instead of holding at the pleasure of the Council; and the bye-laws of the College, for the election of members of Council, were altered and made unfair and stupid.

Such are the chartered laws under which the College now carries on business. Let us next see how far the administrators of the charter have acted in accordance with its manifest intentions and its spirit. But first we must remind our readers that the powers given in the charter were manifestly given (unless the whole proceeding in obtaining the charter was a pure farce) for the purpose of being brought into play. At least, the profession at large thought so; and so also did the governing power which granted them. The permissive power would, in fact, have been equal to a positive injunction to the Council, had they honourably carried out its distinct purport and intentions. Thus the power to elect a President or Vice-President from outside the Court of Examiners was clearly given for use, and not as a mere verbal figment. But has it ever been acted upon? No! not once in the past twenty years. So that the clause in the charter has been used as a blind—a pretence of liberality; whilst its spirit and intent have been purposely eluded. To his lasting honour, Sir Benjamin Brodie retired from the Court of Examiners in the full vigour of his intellectual powers, to make way for younger men, in order to show that he knew how to carry out honestly the intent of the charter. And how was he rewarded? He was actually passed over when his turn should have come on for election to the presidency; because, as we may fairly suppose, he had set such a *bad* example in retiring from the Court of Examiners, and in thereby rebuking others for their unseemly attachment to the rich loaves and fishes of office. The Council seems to have resolved to punish condignly any attempt of this sort at acting in accordance with the spirit of the charter. By a most stupid and unfair mode of election, we may add, the Council have so contrived that some Examiners are elected President *twice* before others are elected *once*.

Now, grand practical abuses result from this eluding of the charter's spirit. In the first place, as the only way to the presidential chair is through the Court of Examiners, and, as all Examiners are naturally ambitious of attaining to the presidential chair, the Council have never elected an Examiner except from their own body; they have never elected one from the general body of Fellows, as they are indirectly enjoined to do by the charter, and bound in honour to do, if they cared to obey the spirit of the charter. And, in the second place, however ancient an Examiner may be, he never retires from office so long as he has a chance of obtaining a seat in the President's chair.

Such is the viciously rotating circle under which the Council have managed to elude reform. The Council were directed by the spirit and words of the charter—the giver of the good charter weakly putting his confidence in the honourable actions of that soulless, conscienceless thing, a body corporate—to infuse new and young and capable blood into the Court of Examiners. They were directed to go outside and choose a good man from the body of Fellows at large; but not once have they done so. The framers of the charter doubtless thought that those who taught physiology and anatomy thirty or forty years ago were hardly the men to examine in physiology and anatomy at the present time of day. They wished the highest scientific knowledge to be associated with the gravity and grey hairs of practical experience. But they wished in vain. The Council, as we have said, have never once elected a Paget or a Hewett to help their Court of Examiners. They have stuck with exactness and scrupulously to their good old times system of distributing the loaves and fishes of office amongst themselves.

Under the new charter, again, the Examiners are elected to office for a term of five years; the plain idea involved in this new clause, of course, being that, at the end of their five years of office, new Examiners should be from time to time appointed. But, as we need now hardly tell our readers, the intention and spirit of this clause have also been most scrupulously evaded. New elections, it is true, have regularly taken place at the end of each five-years term of office; but, without one single exception, the Examiner temporarily defunct has been re-elected.

We again plainly state these facts, because of the remarkable ignorance concerning them which prevails; and we beg to tell those gentlemen who are now about to seek admission into the Council of the College of Surgeons, that not in one single important particular have the Council of the College carried out the alterations—the reforms intended by the new charter referred to. Sir Benjamin Brodie's conduct in connexion with the governing body of the

College, whilst it is the condemnation of the Council, is the sole honest instance of an action in these particulars done by a member of the Council, in accordance with the manifest intent of the charter.

What is the reason, it may be asked, of this determined resistance to a fair interpretation of the charter? The answer is this: The gains of office are great, and the voluntary relinquishment of them a thing which ordinary human nature cannot contemplate. The practical result is something of this kind: an Examiner under the system rarely attains office before the age of fifty or sixty; and the youngest Examiner now in action was elected a Member of the College thirty-eight years ago!

We shall, on a future occasion, show how it is that reformers outside become conservatives inside the Council of the College of Surgeons. In the meantime, we have said enough to show how it is that our most wealthy medical corporation is the most unpopular corporation in the kingdom. It is regarded as the abode of rank Toryism and place-holding. We especially notice the subject now, because we consider that the Fellows would do well to obtain a pledge from those whom they return to the Council that they will earnestly do their best to carry out the spirit of the charter of the College.

VACCINO-SYPHILITIC INOCULATION.

At a meeting of the Academie de Médecine held lately, M. Devergie gave some particulars of a patient, 15 years of age, who had been vaccinated at the Hôpital St. Eugenie.

The patient, who was admitted for pleurisy, left the hospital apparently well; but returned, after an interval of seven months, affected with syphilis. Every effort was made to trace the origin of the syphilis in this patient; but it could not be traced to any other cause than the vaccination practised seven months previously. The evidence upon this point was not, however, conclusive.

Nevertheless, M. Ricord, with his love of truth for its own sake, and his openness to conviction, publicly stated his opinion that syphilis might be introduced into the body by vaccination. This opinion he founded, not on the case that M. Devergie had exhibited to the Academy, but upon other cases which he had carefully considered. He had long resisted the growing conviction arising in his mind on account of his dread of the effects which such a doctrine might exercise upon the future practice of vaccination. He now, however, confessed the opinion, that although cases of such transmission of disease were, fortunately, very rare indeed, yet their occurrence proved that no child vaccinated was absolutely safe from syphilitic infection.

How can we, asks M. Ricord, obtain a guarantee that no such infection will take place? Are we to seek the guarantee from the parents of the vaccinifer? The parents may appear to be in perfect health; and unless the contamination of the child come from the mother, it is often difficult to prove the origin of the syphilis. Are we to look to the vaccinifer himself? Syphilis in new-born children often does not appear for some time after birth. This is, in fact, usually the case.

And, besides this, the syphilitic diathesis can exist in children without the least external appearance of the disease. Does the vaccine vesicle present any characters by which the infection in the child's system can be diagnosed? No! absolutely none. Hence, then, according to M. Ricord, there is real cause of alarm lest, in the process of vaccination, syphilis may be introduced into the body of the vaccinated.

Now, we would venture to draw a conclusion quite opposed to that of M. Ricord. Our opinion is, that the discussion of this question and the admission of truer views concerning syphilis is more likely to do good than harm, by rendering vaccinators more careful in the performance of the operation of vaccination. Admitting fully, with M. Ricord, the possibility of the transmission of syphilis through vaccination, it must be confessed that, under any circumstances, the cases are excessively rare in which such an accident happens. Several, indeed, of the cases which have been produced in favour of the fact—even this very one of M. Devergie—are far from being complete and conclusive.

If all the conditions under which syphilis is liable to be communicated through vaccination are distinctly understood, vaccinators will of course avoid the intervention of those conditions, and so render the operation positively free from danger. These conditions have been clearly laid down in recent works, and especially in the late work of Mr. Henry Lee; and it may be well that we just repeat the four simple rules which he gives for the performance of vaccination. These are:—

1. The lancet should be clean;
2. The lymph used should be taken from the vesicle not later than the eighth day;
3. The lymph only should be taken; and it should be free from blood or other secretions; and
4. The lymph should be taken from a healthy subject.

Now the chief rule to be attended to in reference to the subject of vaccino-syphilitic inoculation is the third one. In every instance in which syphilis has been communicated by vaccination, blood or bloody fluid has been mixed up with the vaccine lymph. Consequently, we learn, from an admission of the fact of vaccino-syphilitic inoculation, and of its mode of transmission through the blood, the very important practical lesson; viz., that blood and all bloody fluids must be carefully excluded from admixture

with the vaccine matter employed. "The pure vaccine lymph," says Mr. Henry Lee, "it would appear, will produce only the vaccine disease, although that lymph be taken from a patient suffering from syphilis, or even from small-pox."

Instead of drawing doleful conclusions from the admission of these facts, as M. Ricord has done, we should draw the very reverse. It seems to us most reasonable that their acceptance as facts will naturally lead to greater care in the performance of the operation of vaccination, and in the collection of the lymph; and consequently, that the operation will itself become more safe—actually less fraught with any possible dangers—than it has heretofore been. The chance of a vaccino-syphilitic inoculation has been most minute; now, under our better knowledge, it will become almost impossible.

THE WEEK.

Kind and instructive words on medical evidence from the lips of the Lord Chief Justice of England should be regarded as pearls dropped from the mouth of wisdom. The medical profession has not a warmer friend than Sir A. Cockburn; and we may be very sure, therefore, that what he tells a body of medical students is told all in love. But who has thought upon the subject, and does not feel the justness of the remarks made by him when he distributed the prizes to the students at St. Mary's Hospital Medical School? Study (he said) to give your evidence, when called into a court of justice, in plain and simple language; shun the pedantry too often shown by medical men there. Call a skull a skull, not a cranium; don't talk of clavicles when you can tell of collar-bones; breast-bone is comprehensible to a jury, but a sternum is unknown to them; why say axilla when you could say arm-pit, or popliteal space when you could say under the ham? don't talk about abdomens or cerebrums, speak of bellies and brains. The lesson is excellent, and the pupils —members of the profession—who require instruction in it are very numerous. But more important still was that other topic of the Chief Justice's discourse. It is one which has of late too often been prominently, and of necessity, brought under our notice in these pages. Remember (he said) that you medical men are expected to come into court as scientific witnesses. Do not, therefore, accept a summons from the first man who asks you to back his cause. First examine his case thoroughly, and see if your opinion go really to second his side. If it do not, have nothing to do with him. It is very sad (he said) to see six honourable-minded members of your profession enter the witness-box and swear the very opposite opinion to that of six other equally honourable-minded members of the same profession. This should not and could not be, if you would consider yourself solely as scientific witnesses, and give evidence on the merits of the case as your conscience and intelligence direct you, and not in accordance with the wishes of the first lawyer who subpœnas you. We trust these golden words—which have been so often preached in these pages—may now, when dropped from the lips of so high an authority—of one who loves and admires the profession, and who admits that he has often been pained to experience in courts of justice the thing which he condemns —we trust (we say) that these words may make a strong, and effectual, and practical impression on the minds of those who require instruction in the lesson which they convey.

Our readers will be pleased to hear that the King of the Belgians has received very great relief from the surgical assistance of Mr. Henry Thompson. We learn from good authority that Mr. Thompson has succeeded in removing by lithotrity a phosphatic calculus of considerable size, larger than a filbert, from His Majesty's bladder. The King had previously suffered most severely, and, as it was supposed, in consequence of the impaction of a broken fragment of calculus in the urethra, for which he has been lately treated. The real cause of his sufferings, however, was the vesical calculus which has now been so happily removed by Mr. Thompson. The King has been thereby greatly relieved, and is, in fact, much better than he has been for the last fifteen months. The following is the official communication on the subject made to the journals.

"The health of the King has notably improved during the last few days. The operations have been performed by Mr. Henry Thompson, Surgeon of University Hospital, London, who was recommended to the King by Queen Victoria. Everything tends to show that in a very short time the King will be completely restored to health."

The Acclimatisation Society, of which Mr. Frank Buckland is the leading member, is flourishing and progressing. It has just issued its third annual report, which tells of its doings during the past year. The report says:—

"The Council cannot but regard the progress of the Society with great satisfaction. With increased numbers and augmented means, the Society appears to be approaching the period when it can safely and prudently embark in the prosecution of experiments upon a larger scale than it has hitherto been able to attempt. The Council feels confident that as a knowledge of the Society and of its objects increases, many will be found ready to join its ranks who, although themselves unable to assist personally in its operations, may not be unwilling to contribute to its support."

We can only again repeat it, that any member of the profession who adds the title of M.D. to his name (not possessing the diploma of Doctor of Medicine) offends against the laws of his country, sub-

jects himself to a legal penalty, and outrages professional morality. In whatever way the act be regarded, it is manifestly unjustifiable. The very last things which a title thus falsely appropriated can give to a man are either dignity or grace. We have no doubt that the expression of professional opinion on the point will eventually bring those men to a proper sense of decorum, who thus offend against the laws of their country, and in the face of their professional brethren. At all events, the subject should be brought under the notice of the Medical Council.

St. Thomas's in search of a resting-place reminds of the tale of *Japhet in Search of a Father*. The history of the whole business is ludicrous, as well as most deplorable. We cannot continue a weekly detail of the hospital's misadventures. Certainly its managers are either the most incapable or the most unfortunate of men. At present, the future prospect of the hospital is just one of those things which, as Lord Dundreary would say, no man can explain. We have heard a good deal of late of the disadvantages and objections attaching to the government of hospitals by an open board; but we will venture to say that no hospital managed by an open board of governors ever yet, in the history of the world, brought their charity into such a fix as the double-dyed close board of St. Thomas's has brought theirs. What must be thought of the management of a hospital which in the year 1861 (by a curious coincidence) admitted precisely the same number of in-patients as St. George's Hospital, and which expended during that year upwards of £32,000; whilst the open board of St. George's expended under £16,000? If St. George's Hospital is not cruelly parsimonious, St. Thomas's must be playing the egregious spendthrift.

Since the above lines were written, we have received information which renders it probable that, after all, pressure from without will be exercised on the Governors of Bethlehem Hospital. The folly of the Governors in refusing the offer of the rulers of St. Thomas's Hospital has brought into the field Lord Shaftesbury, the Commissioners of Lunacy, and Sir George Grey. The Commissioners have addressed a letter to Sir George Grey, who has sent it on to the Bedlamites, with an expression of his own views. The Commissioners say that they have long reprobated the unnatural and unfitting position of Bethlehem, hedged in as it is in the midst of a noisy population; that it ought to be placed in the country, where plenty of space, quiet, and fresh air and exercise, could be had; and that, therefore, they ought to seize upon the present favourable opportunity of carrying out the desired translation of Bethlehem into the country—an opportunity which may not again occur. Sir George Grey requests the President of Bethlehem to lay the letter of the Lunacy Commissioners before the Governors of Bethlehem, and to tell them that he fully concurs in the views expressed in the letter, and that he hopes they will yet seize upon the offer which they have already rejected. This unmistakable hint from so high an official will probably have the desired effect, and so bring about a settlement for St. Thomas's and the removal of Bethlehem into the country. It may seem curious, but we know it as a fact, that many of the Governors of Bethlehem voted against the removal of their hospital solely on philanthropic grounds; viz., because they firmly believed that the cure of their lunatics went on better in the midst of the noise, and smoke, and close confinement of their present hospital, than it would do in the country!

One Castex, who has been long practising as a curer of all diseases by electricity in Toulouse, has fallen into the hands of justice, and been condemned to a fine of 600 *francs* and six months imprisonment for the illegal practice of medicine!

L'Union Médicale tells us that a Dr. Paolo has practised paracentesis abdominis, in a case of ascites, 255 times in ten years and eight months, drawing off altogether 3111 *litres* of water.

Doctors differ. At a late meeting of the French Academy, M. Depaul asserted that when the parents are infected with syphilis, their offspring have signs of the disease when they first come into the world. Nothing of the sort, replied M. Ricord. "It is a great mistake to imagine that syphilitic children are born with present manifestations of the disease. I totally dissent from M. Depaul, and with the most positive conviction of the correctness of my views. Very often, three, four, five, or six months elapse, before the least signs of syphilis appear." M. Depaul, in reply, insisted, *per contra*, on the frequency of the appearance of syphilis at the birth of the child; and M. Ricord rejoined by insisting on its rarity.

Dr. Morel-Lavallée tells the Academy of Sciences that he has discovered a new sign of hydro-pneumothorax. He gives to it the name of *bruit de moulin*, the mill-sound. It is at one time intermittent, and coincides with the contraction of the ventricles; at another time, it is continuous, but increased during ventricular contraction. It gives the sound of an hydraulic wheel, whose floats beat the air and the water alternately. It may be heard all round the bed, and even beyond it. It is loudest over the cardiac region. The doctor had observed it in only two cases of injury of the chest with effusion of blood into the pleura. The heart beats the water and air together, and so determines this *mill-sound*.

THE LORD CHIEF JUSTICE ON MEDICAL EVIDENCE.

The following is a summary of the address delivered at the distribution of prizes at St. Mary's Hospital, by Sir A. Cockburn.

The Lord Chief Justice begged sincerely to congratulate those who had received prizes and certificates of honour. Even those who had been unsuccessful in the competitions would be benefited, for, like the man who dug the field to find the hidden treasure, they would get their reward in one way if they did not get it in another. He was quite sure that none of them would rest satisfied with the progress they had already made, and, therefore, he would not take up their time by urging them to steadfast perseverance. He would say a few words on a subject which he hoped might be useful to them—especially to those who were about to enter on the active duties of their profession. There was common ground on which the professions of law and medicine came into contact—he alluded to that branch of the science which came under the name of medical jurisprudence. It was impossible for him to express his sense of the importance of the services rendered by the medical profession in the administration of justice. Of course the value of that assistance would depend to a considerable extent not only on the knowledge which medical men possessed, but also on their appreciation of the points in which that knowledge could be brought to bear on the proceedings of courts of law. Therefore he would urge them to turn their attention to the study of medical jurisprudence. Very likely all of them would in the course of their lives be called to give evidence in courts of law. They would remember that the most momentous issues often depended on the opinions given by medical men. Guilt might be punished or it might escape; innocence might suffer or it might be rescued from the suspicion surrounding it. He also wished them to remember that medical men giving evidence in courts of law were not to be regarded like ordinary witnesses, but as scientific men, who were assisting in the administration of justice. And furthermore, he would remark that more confidence would be placed in their opinions by judges and juries if the medical witnesses showed not only that they were well acquainted with the matter on which they were examined, but that they were also conversant with the views which had been published upon it by leading men in the profession. All these considerations showed how important was the study to which he had directed their attention. It sometimes happened that scientific witnesses differed from one another, and that in consequence the value of their evidence was considerably diminished. He had seen one set of scientific witnesses called, and give their opinion on one side, while another set of witnesses had testified just to the reverse. From this description of scientific evidence medical evidence was not exempt. Now, on this point he would say that there was a natural tendency for men to become biassed in favour of the side for which their evidence was sought. They were inclined to look with more or less favour on the side that paid them the compliment of asking their assistance. He did not mean to say that they intended in any way to depart from the truth, but, unconsciously, they looked at all the circumstances on the one side, while they did not give the same attention to circumstances on the other. He therefore hoped that whenever they had to appear in courts of law they would take care to allow no sort of bias to enter their minds. Scientific men frequently showed a tendency to speak of their science in hard technical terms, which was natural, but evidence given in pedantic language was often nearly unintelligible to laymen, and consequently its value was lessened. He recollected once that a medical man of vast attainments drew up a report which was read in court. He (the Chief Justice) was counsel on the other side, and the report being couched in bombastic and pedantic language he turned it into ridicule and got the verdict. On grounds which he explained, he believed the verdict was right. Some time afterwards he fell ill, and he sent for the doctor whose report he had ridiculed. The doctor said to him, "Well, I thought you were a clever fellow, but I have altered my opinion." "How so?" he (the speaker) asked. "Because," replied the doctor, "you are foolish enough, after speaking of my report in the way you did, to put yourself under my care." The doctor treated him with the greatest care and skill, and he soon recovered. After dwelling on the expediency of medical men giving their evidence in the plainest and simplest language, he said that however much he might be disqualified from presiding at the distribution of prizes, he could sincerely say that a man entertaining a profounder respect and esteem for the medical profession than he himself did could not be found. The care, skill, kindness they displayed in the discharge of their duties was above all praise.

SERGEANT *versus* THE MEDICAL COUNCIL.

In this case, which was heard in the Court of Queen's Bench on June 12, a rule had been obtained calling on the Medical Council to shew cause why a *mandamus* should not issue to compel them to register the plaintiff, or to hear and determine his application. The case raised a question of great importance to the medical profession. The question was as to the functions of the Council in regard to registration of medical practitioners. The Act imposes on the Council the duty of keeping such registry; and the 14th section provides as follows:

"It shall be the duty of the registrars to keep their respective registers correct, in accordance with the Act, and to erase the names of all registered persons who shall have died, and shall from time to time make the necessary alterations in the addresses or qualifications of the persons registered under the Act; and it shall be lawful for the registrar to write a letter to any registered person addressed to him according to his address on the register, to inquire whether he has changed his residence or has ceased to practise, and if no answer shall be returned within six months to erase the name of such person from the register, provided that the same may be restored by direction of the General Council, should they think fit to make an order to that effect."

Another section (28) provides that for certain causes names may be struck off the list. In the present case the applicant, a Mr. Sergeant, was a member of the College of Surgeons, and had been upon the *Register*. The registrar sent the usual letter in 1860, and owing to the applicant's absence he did not get it, and in April 1861, the six months having elapsed without an answer, they struck his name off. He did not hear of it until December 1861, and in November 1862, he applied to the Council to restore his name. This was not done; but in March 1863, the secretary intimated that it would be referred to the General Council, which only met once a year. They met on the 26th of May last, and referred the matter to the executive committee, who were ready to consider the application on being satisfied as to character and qualification. The real question was whether the Council had any authority to entertain this question as to character, or were under an absolute duty to restore the name. The Council, it was said, were under this difficulty, that by the Act they could only meet once a year, and had now referred the matter to the executive committee. This was done at the next annual meeting after the application. The Lord Chief Justice said he thought it could not be contended for a moment that the Council could arbitrarily refuse to reenter the name of a

practitioner merely on account of the miscarriage of a letter through his accidental absence; and it was not reasonable that the question of a reentry of his name should be hung up for nearly a year. Surely, the Council should meet oftener for such purposes. Mr. M. Smith said they had now delegated such matters to the executive committee, which sat permanently; and were now ready to hear and determine the matter. Mr. H. James said that the Council had no right, in such a case, to enter into any inquiry into character, but were bound absolutely to reenter the name; but Mr. Justice Wightman pointed out that there could be no *mandamus* to the Council to register, because the duty of registry was on the registrar. The duty of the Council was to hear and determine the matter. The Lord Chief Justice pointed out that the words of the Act were, "if they shall think fit," and thus implied that they were to exercise some judgment. Mr. Justice Crompton said it could not be contended that the Council could not consider under what circumstances the applicant in such a case had been absent or abroad, as they might have been disgraceful, though it might not be so in this case; they could not be precluded from inquiry into that matter. The Court said the applicant could not possibly be entitled to more at present than a *mandamus* to the Council to hear and determine the matter, and that they were ready to do, it appeared, without a *mandamus*. If, indeed, they decided against him on a wrong ground, there might be a ground for a *mandamus* to register; but it could not be anticipated that they would decide wrongly, and, therefore, though the rule for a *mandamus* might be made absolute, the writ need not issue unless the decision should be adverse to the applicant, and he should desire to have the ground of the decision considered.

THE SAINT GALMIER MINERAL WATERS.

A COMPANY has recently been formed in London for the sale of mineral waters procured from St. Galmier in France. These waters appear to have an extensive and increasing reputation in that country; according to a statement before us, the town of Lyons alone consumes one million of bottles annually. According to an analysis by M. Ossian Henry, the water contains air very rich in oxygen; a large proportion of free carbonic acid; carbonates of soda, potassa, lime, and magnesia; sulphates of soda and lime; chlorides of sodium and magnesium; alkaline nitrates; and a small amount of silica and strontia. It is said to be antilithic; so much so, that the inhabitants of St. Galmier are free from calculous disorders. The water is also recommended for use in functional disorders of the digestive organs; in chlorosis, amenorrhœa, dysmenorrhœa, and leucorrhœa; and in various affections of the urinary organs. Experience has yet to prove the beneficial effect of the St. Galmier water as a medicinal agent in this country: it may readily be supposed, however, that its alkaline properties render it likely to be serviceable where it is desired to neutralise and remove an excess of acid. Having received some of the water from the company, we have tried it as an ordinary drink—using it as Seltzer water; and, from our examination, are enabled to confirm the statement made to us regarding it, "that it has a pleasant taste, and possesses the most perfect limpidity." We believe that it will be found safe and agreeable for general use.

MUSCLE AS A CONDUCTOR OF ELECTRICITY. Rank states that dead muscle is a much better conductor of electricity than living, from the presence of certain products of decomposition, and that living muscle is 3,000,000 times a worse conductor than mercury, 115,000,000 worse than copper.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
LANCASH. & CHESHIRE. [Annual.]	Medical Institution, Liverpool.	Wednesday, June 24th, 12 noon.
SOUTH-EASTERN. [Annual.]	Bull Inn, Rochester.	Wednesday, June 24, 1.30 P.M.
EAST ANGLIAN. [Annual.]	Yarmouth.	Friday, June 26th, 3 P.M.
WEST SOMERSET. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.
MIDLAND. [Annual.]	Board Room of the Infirmary, Derby.	Thursday, July 2nd, 2 P.M.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 7, 3.30 P.M.
NORTH WALES. [Annual.]	Royal Hotel, Rhyl.	Tuesday, July 7, 1 P.M.
SOUTH MIDLAND & CAMBRIDGE & HUNTINGDON. [Annual.]	Infirmary, Peterborough.	Thursday, July 9th, 1 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-Seventh Annual Meeting of this Branch will take place at the Medical Institution, Liverpool, on Wednesday, June 24th, at 12 o'clock, noon. President-elect, J. R. W. Vose, M.D.

Notices of papers or other communications to be sent to the Honorary Secretary, as early as possible.

A. T. H. WATERS, M.D., *Hon. Sec.*

27, Hope Street, Liverpool, May 27th, 1863.

METROPOLITAN COUNTIES BRANCH.

THE Eleventh Annual Meeting of this Branch will be held at the Crystal Palace, Sydenham, on Tuesday, July 7th, at 3.30 P.M. President-elect: Francis Sibson, M.D., F.R.S.

The members will afterwards dine together.

A. P. STEWART, M.D.,
ALEXANDER HENRY, M.D., } *Hon. Secs.*

London, June 11th, 1863.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

THE Annual Meeting of these Branches combined will take place at the Infirmary, Peterborough, on Thursday, July 9th, at 1 P.M. President-elect: William Paley, M.D.

Gentlemen intending to read papers or cases will oblige by forwarding the titles as early as possible to the Honorary Secretaries,

JOHN M. BRYAN, M.D., Northampton; or
G. M. HUMPHRY, M.D., Cambridge.

Correspondence.

MR. CÆSAR HAWKINS AS AN EXAMINER.

Sir,—Allow me a small space to say a few words in reference to my experience of the conduct of Mr. Cæsar Hawkins as an examiner.

His table was the second I went to at my examination. As I approached the table, he pointed to a chair for me to take on his right hand. I felt that I should be in a better position if I sat on his left, between him and his colleague. He kindly assented, and immediately rose and fetched a chair, placing it where I desired to sit. Mr. Lawrence rose at the same time, and assisted him in his courteous act. I cannot but add that this gentlemanly treatment gave me the assurance that I should have nothing but fairness at their hands. Mr. Cæsar Hawkins was the examiner, and his manners throughout made me feel that I was in the society of the polished gentleman. It was the first and last time I ever had an interview with him; and I feel convinced that that gentleman is incapable of behaving with rudeness or unfairness to any candidate. I am, etc., S. F.

June 17th, 1863.

PUBLIC VACCINATORS.

Letter from William Allison, Esq.

Sir,—From what I read in the Journal of June 13th, I understand that Mr. Bottomley wished to exonerate a Board of Guardians from what he considered an unjust charge; namely, that of "indirectly discouraging vaccination"—to exonerate them by himself assuming the office of dictator to Poor-law medical officers; his dictum signifying that "the medical officers can better afford to act gratuitously for ratepayers, than ratepayers can afford to remunerate medical officers for services rendered to paupers, even in a matter which is of infinitely greater importance to ratepayers than to medical officers." I also find that a medical officer who was present ventured to say, "a refusal to pay for vaccination, or to pay sufficiently, would be a discouragement to vaccinating."

It does not appear that the chairman accused Mr. Bottomley of being dictatorial, though he thanked Mr. Bottomley for having "explained the duty (?) of medical officers in respect to vaccination."

Mr. Spofford could, with complaisance, hear Mr. Bottomley dictate to medical officers; but became irascible and violent when Mr. Jeynes differed in opinion from Mr. Bottomley; and during his "little brief authority" called Mr. Jeynes "our dictatorial insulting officer."

If I have fallen into misapprehension of what passed at the meeting, I shall be obliged to any party who will give me correct information on the subject.

I am, etc., W. Allison.

Sir,—Having occupied the position of public vaccinator to several parishes for many years past, I beg to thank you for holding up to opprobrium such sentiments as Mr. Bottomley was pleased to enunciate before the Croydon Board of Guardians.

I daresay the chairman of the Board did feel "extremely obliged to Mr. Bottomley for saying medical men were contented with eighteenpence per case of successful vaccination." If they receive so paltry a sum, sure am I that

> "Their poverty, and not their will, consents";

and we well know that the plan of gratuitous labour for the public brings us up a harvest of contempt instead of commendation.

As a brother medical officer and public vaccinator, I thank Mr. Jeynes for talking common sense on such a subject as the payment for vaccination. It is an important subject; and the effective vaccination of the community is a great public duty. That duty will be far better discharged when we are adequately paid for the performance of it, and when the proper carrying out of the Compulsory Vaccination Act is taken out of the hands of Boards of Guardians altogether—ever a prejudiced ignorant body—and placed under the immediate supervision of a Public Board of Health, who, we may hope, will approach the subject in a wise and liberal spirit.

I am afraid Mr. Bottomley lost his *esprit de corps*, and was carried away by the "hear, hear" and applause of the Croydon Board. We must whisper in his ear,

> "Praise undeserved is censure in disguise."

The noisy approbation of some men,

> "Whose greatest boast must surely be,
> To snub the doctor, and to mulct his fee,"

is not to be desired; and this I say, not out of any ill-feeling to Mr. Bottomley, but from a wish to set him right in his very mistaken notion that public vaccinators share the sentiments he is pleased to avow.

I am, etc., M.R.C.S., L.S.A.

EXTREMES IN PRACTICE.

Letter from Thomas Martin, Esq.

Sir,—I am encouraged to offer a few observations in reference to the subject of Dr. Mayo's communication in your last number on Extremes in Practice, as the result of reflection on my experience as a general practitioner during half a century, although I have been in retirement for the last twelve or fourteen years, during which time I have scarcely seen a patient.

In the diagnosis of disease, I am humbly of opinion that gentlemen do not sufficiently distinguish between *inflammation* and *irritation*; the consequent difference of treatment being most important with the requisite modifications.

In the years 1796, 1797, and 1798, I had the good fortune to enjoy the tuition of Dr. George Fordyce; and he, amidst an abundance of practical and valuable instruction, insisted on the importance of distinguishing between *real debility* and the semblance of it, *depression of strength* arising from congestion of diseased structures, and partial determination of blood before or after the accession of inflammatory action; and consequently of deciding when and to what extent to deplete, and when to stimulate and support, or when to combine the two modes of treatment.

In the treatment of acute disease, Dr. Fordyce relied much on "relaxants", more especially on the preparations of antimony, placing the chief reliance on emetic tartar.

In reference to acute diseases, I have cured hundreds of cases—if applied to early, or immediately after the seizure—by perhaps one very moderate bleeding; the abstraction of ten, twelve, sixteen, or more, ounces of blood—enough to produce *a decided impression on the action of the heart and arteries*, with or without syncope (bleeding from a good sized orifice, not a mere pin-hole), followed up by the administration of emetic tartar, so as to produce required effects. From this moment, the pulse, having been hard and wiry, has become soft; the bowels have acted spontaneously, or as the result of medicine; and all the operations of the system have been restored to harmonious action. The patient has begun to turn the corner, and all goes on well; we may then administer our *placebos* or medicines of second rate efficacy as auxiliaries until the cure is complete.

In many cases of chronic disease, where there may be congestion, local or general, bleeding with discretion may be very beneficial. Of course, the decision of the practitioner must be guided by the symptoms of each individual case.

I have no doubt, however, that thirty, forty, or fifty years ago, there was a great deal of over-bleeding. We are much indebted to Dr. Marshall Hall for pointing out the utility and efficacy of opium; and in many cases, where there has been no over-bleeding, the benefit from the use of opium is very great indeed.

In the course of the last twenty years, from all I have heard of medical practice, I am of opinion that the acute diseases which now occur are not so urgent and do not require so much depletion as formerly. I have been pained to hear that gentlemen have exclaimed, "Oh! I never bleed"; and I have not the slightest doubt that patients have been lost from the want of the early and timely relief which the lancet would have afforded.

We may ask, of what utility is our judgment and discrimination, if we do not weigh the various points of a case, instead of being actuated by a blind empirical adhesion to any given system, whether of depletion or stimulation? I am firmly persuaded that of late years a vast deal of mischief has been done by the too copious administration of stimulants, just as formerly we had too much depletion.

Certainly, we are very much obliged to Dr. Mayo for having invited attention to the subject of Extremes in Practice. I am, etc.,

THOMAS MARTIN.

Reigate, June 8th, 1863.

THE USE OF VENESECTION.

LETTER FROM EDWARD CROSSMAN, ESQ.

SIR,—Dr. Mayo's "Remarks on Extremes in Practice", contained in last Saturday's JOURNAL, induce me to report a case pertinent to the subject of venesection.

The case itself is so commonplace, and the indications for treatment are so obvious, that, but as an illustration of the truth of Dr. Mayo's remarks, I should not venture to intrude it upon your readers.

Late in the evening of the 7th of May last, I was hurriedly summoned to visit a cattle-dealer between 40 and 50 years of age, who was well known to me as a man of full habit, a free liver, and habitually, in his avocation, drinking much and often. I found him seated upon the floor, in violent delirium, with difficulty restrained by four men. His head was hot; his face deeply flushed; his eyes injected; the pupils widely dilated and insensible to light; and his pulse frequent and hard.

The account I received from his wife was, that he had complained for several days of headache, and particularly that morning before he went out from home; that he had been unusually irritable and ill-tempered during the same time, and had on several occasions given way to violent fits of passion; that he had been out all day about his business, had come home in the evening, and put away his horse as usual; but that, as soon as he entered the house, he sat down in a chair and burst out crying, after which he began to talk incoherently, and had been rapidly getting worse up to the time of my arrival.

I immediately opened a vein in the arm, and succeeded in drawing about twenty ounces of blood, with such marked relief that, although from his violence I had the utmost difficulty in opening the vein, he allowed me to close it without resistance, and quietly submitted to be carried up stairs to bed.

Compelled to leave home that night, and to be absent twenty-four hours, I ordered repeated doses of calomel and saline purgative, and left him in charge of a neighbouring friend. To my astonishment, when I returned the following evening, I found him quite rational, and free from all symptoms of cerebral congestion. A few days more of active purgation removed all traces of the attack, and in a fortnight he was at his business again.

I ascertained from him afterwards that he had taken nothing more than usual to drink that day; but that, while he was out, he had felt the sun affect his head very much, and had several times lost his way, and found himself where he had no business to be; but that, as late as 4 o'clock in the afternoon, he had made a satisfactory deal with a farmer for some calves.

In such cases as the above there can, I think, be but one opinion as to the necessity for free venesection; and, although I have found occasion to bleed only about as many times as I have been years in practice, I feel firmly convinced that, in certain acute disturbances of circulation, no remedy we possess may safely replace the lancet. I am, etc., EDWARD CROSSMAN.

Hambrook, near Bristol, June 10th, 1863.

THE ARMY MEDICAL SERVICE.

SIR,—In your JOURNAL of the 30th ult. I read some observations regarding the naval medical service, and feel it right to correct an error relative to the army medical service contained in the article alluded to.

The army medical officers are still deprived of the full benefit of the warrant of 1858, and great efforts are being made in influential quarters to obtain a further withdrawal of the advantages and rank, etc., then conferred. I need not remind you of the vast importance of at least *maintaining* the *present* position. Any retrograde movement must be not only injurious to the officers immediately concerned, but also insulting to the whole profession. Candidates are required in August; it is to be hoped that they will not rashly rush into a snare. Danger is threatened; and the hearty assistance of the medical press is of great importance.

I am, etc., VERITAS.

June 1863.

THE TREATMENT OF TAPE-WORM.

LETTER FROM ARTHUR LEARED, M.D.

SIR,—I stated, in a letter published in the JOURNAL for March 21st, that there are two tests of the cure of tape-worm—either finding the head or heads corresponding to the bodies which have been expelled from the intestines; or the non-appearance of segments with the fæces after the expiration of three months from the time of taking the tænicide drug.

In a letter, in reply to mine published April 4th, Dr. Ogle says:—"I there adduced" (referring to his paper of March 14th) "probable reasons why the 'head' of the worms was not brought to me by the patients. I would only adduce, in addition, the observations said to have been made by Bremser, that out of one hundred persons affected by, and treated by himself for, tænia, in only one of them was the expulsion of the head of the worm detected, *and yet ninety-nine out of the hundred were cured.*"

I have to observe that while the immediate test of cure depends on finding the head or heads, as already stated, this test is so seldom available, that it is fortunate that we possess another. It does not positively appear that Bremser made the statement in question; it is only "said" that he did. But whether he did or not, I feel no hesitation in expressing my disbelief in such remarkable success. No matter what treatment is adopted, reappearance of the worm, when looked for after the lapse of three months, will be found to have occurred in a much larger percentage of the cases treated.

Some years ago, a regiment returned from India, in which a number of the men were affected with tape-worm. Acting upon my suggestions, the surgeon of the regiment gave, in some cases kamala, in others oil of male-fern, in large doses, and in some both these remedies combined. A number of cures was the result. But we invariably found that out of the total number treated,

a large proportion again passed portions of worms after an interval of between two and three months had elapsed. As the patients remain under constant observation, the regimental system is the best for testing the treatment of an affection like the present. I well know, by experience, that patients finding themselves not cured at one hospital, instead of returning to it, usually repair to another.

I have brought this matter forward in relation to the investigation now pending as to the relative merits of certain remedies for tape-worm; and I cannot avoid repeating that it is a pity that kamala, one of the best, if not the very best, has been omitted from the scheme.

Dr. Ogle states, in his letter of April 4th, that I have been inaccurate in supposing that he spoke "of the propagation of tape-worms in children by swallowing fragments of the worms." The sentence, "I think there may be reason for believing that the tænia may be communicated to infants and children from others," etc., did convey that impression to my mind. Dr. Ogle has, however, explained that he intended to convey that by this means children may become affected by cysticerci. As far as I am aware, no case has been recorded in which cysticerci were found in the tissues of a very young subject.

I am, etc.,

ARTHUR LEARED.

12, Old Burlington Street, June 20, 1863.

DR. HODGKIN'S THEORY OF NIGHTMARE, ASPHYXIA, ETC.

LETTER FROM CHARLES KIDD, M.D.

SIR,—It is interesting to find, from various independent sources, that the true *rationale* of "apnœa" is becoming more and more clear. The observations of Dr. Hodgkin (page 501), are of great and peculiar interest, especially to physicians who seek the true reason of persons being found occasionally dead in their beds, not so much from organic disease of the heart, as mere distension of its right cavities from apnœa.

That there may be, simultaneously with anæsthesia under chloroform, suspension of the involuntary movements of respiration, as suspected by Dr. Hodgkin, is too painfully true, and forms the one single abnormity in chloroform administration against which we have to guard. A new function has been given to the cerebellum, that it presides over all such involuntary movements of Bichât's splanchnic arrangement; and Dr. Carpenter's theory is not proved. If this be true, we must look in that direction for the source of apnœa, as also the cause of nightmare, etc. I rather think, as to the latter, that anything pressing on the surface of the body may cause nightmare, as well as a distended stomach; and, as to the alternate play of parts in sleep, this passage occurs in my small work, now written some years ago.

"I believe that in natural sleep, where the mind, as Locke says, retires—where the perceptions accompanying impressions made on the body are absent, as the cerebrum proper is dormant; or, explain it how we will, during common sleep, when the will is passive,—that then ordinary breathing is carried on *solely* by the diaphragm, which becomes a sort of second heart. If, out of a deep sleep, one is calmly awoke by some low murmuring noise, it is easy to perceive an involuntary action of the diaphragm still going on that you cannot control without pain, followed by a deep inspiration, which seems to startle or wake up the external respiratory nerves! It seems to me also that this is a plain provision to afford rest during sleep to the *external* respiratory nerves and muscles. We have the same kind of slumber, under chloroform, of the external respiratory muscles.

"I know of nothing more beautiful than the alternate action of the voluntary and involuntary muscles of respiration—the associated action of the scaleni serratus and intercostals in inspiration, so much under the influence of the will, and so soon anæsthetised under chloroform. And then the diaphragm, 'musculus nobillissimus post cor'; but, like the heart, still keeping up its action, independent of the will and the *slighter* degrees of etherisation by chloroform.

"The great problem was to be solved, to continue respiration when sleep brought on its deep unconsciousness, and to leave respiration also voluntary for its uses in connexion with the spinal nerves and those of the human voice: the former is effected through the agency of reflex nerves and diaphragm; the brain proper is dormant; there is no association of ideas or reception of ideas in the mind;

'Mens sine pondere ludit,'

but still the ever wakeful diaphragm keeps all right through its phrenic nerve."

As to nightmare occurring from external pressure of *any* kind, I may mention the following. A gentleman in good health suffered most terrible nightmare three or four nights one after another. Being superstitious, he got alarmed the fifth night, and started up determined to come at the bottom of it; for the nightmare always took the same form—viz., a horrid railway train came and crushed him under it, cutting off both his thighs, without his being able to move! He is a most abstemious man; but one of his frailties is to go to "dog-shows", where, or somewhere, he purchased a small dog of the size of a very big mouse. This little creature felt the cold at night; and it would lie on the stomach of his sleeping master, for the sake of the warmth. This was the mystery.

I am now almost sure that, by certain manipulations of a patient half under chloroform, one can add a hundredfold to or equally take from the horrors of this agent, as in nightmare.

We could not at first, at the era of the discovery of chloroform, give a proper estimate of the part played by syncope in these accidents; because experiments were instituted to ascertain certain purely physiological conditions in the lower animals, where the higher psychical or mental bearing of emotion in hospital patients' minds was absent. Large numbers of such animals were killed with chloroform; and we found what was called "cardiac syncope"—a simple *post mortem* indication of asphyxia. We certainly had a long series of facts—indicative facts, like pearls in the figure of Dr. Whewell, requiring a string to colligate them; but, after all, they are only coincidences, or part of the sources of danger; and leave out 40 per cent. of the cases produced by emotion—viz., syncope proper. These syncope cases never occur in the lower animals; so that this *post mortem* appearance of asphyxia misled observers, and was even itself misinterpreted. We must test and verify by clinical experience what we wish of physiological experiments to be useful in further every day practice; and, to make these asphyxia cases useful, we must trace them to the respiratory muscles, not to the heart.

We have had at one time a hypothesis that all the deaths were from fatty heart; next it was observed that accidents occurred from neglect of some instrument in form of inhaler. Such hypotheses have a certain value; but it is alone by constant comparing of groups of cases one with another that we can give them their value aright. All practical medical science tends towards deduction rather than induction; and it is in this direction one would, in much humility, indicate that this and some kindred subjects, such as the mortality in croup with or without tracheotomy, mortality after drowning with or without various means of restoring suspended animation, etc., should be studied. Chloroform accidents are, in point of fact, not more frequent than railway accidents. We do not wish to systematise or continue such chloroform accidents; but rather, by careful

study of where the sources of danger may lie, we may combat them more effectually. If accidents occur just as often with an inhaler as without one, it is clear the inhaler has not much to do with the catastrophe. If accidents occur, as they do most frequently, from apnœa, and, I sometimes fear, from rough handling, pressure, nightmare, etc., it shows us the wisdom of Dr. Hodgkin's views, and that "fatty heart" has been rather a fancy than a fact; and artificial respiration with the "Silvester method" will do more for us in relieving the distended right cavities than anything directly to the heart itself, as also well argued out by Dr. Hodgkin.

I am etc., CHARLES KIDD.

Sackville Street, W., June 1863.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. The following gentlemen passed the first part of the Professional Examination for the Licence of the College, on June 5th, 1863:—

Foster, Charles William Ellis, Leeds School of Medicine
Lamb, George, 162, Caledonian Road, Islington
Lupton, Richard John, School of Medicine, Liverpool
Lyle, William Vacy, St. Mary's Hospital
Thibou, Jesse Wheelock, St. Bartholomew's Hospital
Walker, Henry George, University College
Wolston, Walter Thomas Prideaux, King's College

At a general meeting of the Fellows, held on Saturday, June 13th, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Buckle, William Henry Fleetwood, Royal Mint
Embling, William Henry, 30, Oakley Square, Regent's Park
Hunt, William John, Hathersage, near Sheffield
Macdonald, Keith Norman, Bath
Rendle, James Davy, M.D. St. Andrew's, Brixton Hill
Rickards, Alfred, Armley, near Leeds
Sutcliff, Edward, 1, Champion Grove, Camberwell

ROYAL COLLEGE OF SURGEONS. The following members of the College, having undergone the necessary examinations for the Fellowship, on May 26th, 27th, and 28th, were reported to have done so to the satisfaction of the Court of Examiners, and at a meeting of the Council on June 12th, were admitted Fellows:—

Brown, Frederick James, Rochester; diploma of membership dated November 1st, 1844
Carr, William, Somersal; October 26, 1855
Clarke, William Fairlie, Curzon Street, May Fair; Jan. 30, 1862
Helm, George Frederick, Cambridge; January 14, 1859
Lund, Edward, Manchester; April 9, 1847
Marsdin, Frederick, Staniforth; March 2, 1859
Meric, Victor de, Brook Street, Grosvenor Square; June 11, 1847
Rivington, Walter, Upper Holloway; March 18, 1859
Rouse, James, Coleshill Street; April 11, 1851
Thompson, John, Bideford; November 4, 1842
Tuson, John Edward, H.M. Indian Army; April 25, 1851

At the same meeting of the Council, the following members of the College, who had been *elected* Fellows at previous meetings, were admitted as such:—

Byass, Thomas Spry, Cuckfield, Sussex; diploma of membership dated August 7, 1829
Eden, Thomas Edward, Brighton; March 27, 1835
Hutchins, John Henry, Rochester; September 2, 1831
Lowe, George, Burton-on-Trent; May 5, 1837
Thomson, Charles Edmunds, Ross; June 13, 1828

UNIVERSITY OF OXFORD. In a Congregation holden on June 10th, the Degree of Doctor in Medicine was conferred on

Harvey, Edward R., Christ Church
Monro, Henry, Oriel

UNIVERSITY OF CAMBRIDGE. First M.B. Examination. Easter Term, 1863.

Balls, W., B.A., St. Peter's College
Graham, A. B., M.A., St. Peter's College
Hoffman, H. W., M.A., Trinity College

Second M.B. Examination.

Bagshaw, F., M.A., St. John's College
Welch, T. D., M.A., Caius College
Wilks, A. G. P., M.A., Trinity College

APOTHECARIES' HALL. On June 4th, the following Licentiates were admitted:—

Angus, James Acworth, Newcastle-upon-Tyne
Barnes, Thomas Henry, Clare, Suffolk
Burdett, Francis Henry, Birmingham
Davidson, Christopher M. D., Wandsworth Road
Hayward, William Henry, Oldbury
Jefferson, Thomas Jewison, Market Weighton
Lawrie, John Douglas, Bradford
Lindop, John Crump, Newport
Nash, W. Llewellyn, Cheltenham
Wesley, John Sebastian, Southampton Row

Admitted on June 11th:—

Evans, Thomas, Llandyssil, Cardiganshire
Harman, John, Canterbury
Jackson, Thomas Creswick, Wimpole Street
Laidlaw, William, Newcastle-on-Tyne

Passed as an assistant:—

Kenyon, John Kilshaw, Liverpool

APPOINTMENTS.

*HUTCHINSON, Jonathan, Esq., elected Surgeon to the London Hospital, in the room of G. Critchett, Esq, resigned.

*MITCHINSON, George, L.K.Q.C.P.I., has been placed on the Commission of the Peace for the city of Lincoln.

THOMAS, Lyle, Esq., elected Assistant Medical Superintendent of the Devon County Asylum.

TOLLER, Ebenezer, Esq., elected Medical Superintendent of the Gloucester County Asylum.

YEO, Isaac B., Esq., appointed House-Surgeon and Secretary to the Hants County Hospital.

POOR-LAW MEDICAL SERVICE.

BROWN, John M., Esq., to the Burton District of the Kendal Union.

BRYAN, Andrew H., M.D., to the Ballyneen Dispensary District of the Dunmanway Union, co. Cork.

KING, Henry, Esq., to the Brideswell Dispensary District of the Athlone Union.

LANGDON, Henry W., Esq., to District No. 6 of the Devizes Union.

MOORE, Adam J., Esq., to the Caversham District of the Henley-on-Thames Union.

OLIVER, S., M.D., to Cromdale, Abernethy, and Duthill, Morayshire.

SLADE, Robert, Esq., to the Puddletown District of the Dorchester Union.

ARMY.

OVENS, Staff-Assistant-Surgeon J. C., to be Staff-Surgeon.

STEWART, Staff-Surgeon-Major J., retiring on half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

ROYAL NAVY.

CALDWELL, John, Esq., Surgeon, to the *Osprey*.

COOKE, George P., Esq., Surgeon, to the *Dee*.

FRAZER, John, Esq., Acting Assistant-Surgeon (additional), to the *Royal Adelaide*.

LONGFIELD, William D., Esq., Assistant-Surgeon, to the *Styx*.

M'DONOGH, George P., M.D., Surgeon, to the *Active*.

M'IVER, Donald, M.D., Acting Assistant-Surgeon (additional), to the *Royal Adelaide*.

WARD, John, Esq., Surgeon, to the *Trincomalee*.

WHITAKER, Joseph, M.D., Acting Assistant-Surgeon (additional), to the *Royal Adelaide*.

WHITLEY, Alfred W., Esq., Acting Assistant-Surgeon (additional), to the *Victory*.

WORDSWORTH, William D., Esq., Acting Assistant-Surgeon (additional), to the *Victory*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

TAYLOR, C. G., Esq., to be Surgeon 2nd Essex R.V.

WEST, R., M.D., to be Assistant-Surgeon London Irish R.V.

WILDERS, John St. S., Esq., to be Assistant-Surgeon 1st Warwickshire R.V.

WILSON, J., Esq., to be Assistant-Surgeon 19th Lancashire A.V.

To be Honorary Assistant-Surgeons:—

THORN, J. T., M.D., 1st Kincardineshire A.V.

MILITIA.

PIRIE, J., M.D., to be Surgeon Argyll and Bute Artillery Militia.

BIRTH.

SOPER. On June 8th, at St. George's Villas, Stockwell, the wife of William Soper, Esq., Surgeon, of a daughter.

DEATHS.

ARTHUR, Thomas Norway, Esq., Surgeon, at Prees, Shropshire, aged 52, on May 22.
AYRES, Philip B., M.D., at Port Louis, Mauritius, aged 49, on April 30.
COMBS. On June 6th, at Hastings, Henry James, infant son of J. W. Combs, Esq., Surgeon, of Burwash, Sussex.
HARRIS. On June 1st, at Brighton, aged 69, Sarah Rose, wife of Charles Harris, Esq., Surgeon.
HODGES, Thos., Esq., Surgeon, at 104, Guildford Street, on June 11.
NEWNHAM. On June 16th, at Tunbridge Wells, aged 72, Caroline, wife of *William Newnham, Esq., late of Farnham.
WEST. On June 14th, at Woolwich, Eliza, wife of M. T. West, Esq., Surgeon R.N.

THE VACCINATION (IRELAND) BILL. This bill has been read a third time in the House of Lords, and passed.

BEQUEST. An old lady has left £10,000 to the Royal Society for Prevention of Cruelty to Animals, to be expended solely in the reform of the slaughter-houses of London.

AN ARMY SURGEON MORTALLY WOUNDED IN BATTLE. Surgeon Hartmann, of the 107th Ohio Volunteers, was shot through the bowels at Chancellorville, and died of peritonitis.

THE LONDON HOSPITAL. Mr. Hutchinson's appointment as surgeon to this hospital leaves a vacancy for an assistant-surgeon. Mr. Walter Rivington is, we understand, a candidate for the latter office, and has a good prospect of success.

GARIBALDI. According to the following, Garibaldi's wound is healing at last:—The General's wound is rapidly healing. All the symptoms are now favourable. In his daily walks, on crutches, the General can now occasionally rest his foot on the ground without feeling any pain in the articulation, or in the wound itself. ENRICO ALBANESE.

PENSIONS ON THE CIVIL LIST. The following are among the pensions granted on the Civil List:—Mr. Joshua Alder, of Newcastle, £70, for his labours as a naturalist, especially in the department of marine zoology; Mr. George Bartlett, £100, in appreciation of his pursuit of the natural and physical sciences during thirty-six years, resulting in the establishment of the "Devon and Cornwall Natural History Society;" Dr. Robert Latham, £100, in appreciation of his eminence in the studies of grammar, philology, and ethnology.

ROYAL COLLEGE OF SURGEONS OF IRELAND. The annual election of President, Vice-President, and Council, to serve for the ensuing year, was held on June 1st, as provided by the Charter of the College. The following are the names of those elected:—*President*, William Coles; *Vice-President*, Josiah Smyly; *Secretary*, Edward Hutton; *Council*, A. Jacob; W. Hargrave; R. Adams; James Barker; Hans Irvine; E. Hutton; R. Pentland; S. G. Wilmot; R. G. H. Butcher; A. P. Banon; P. Shannon; R. Macnamara; H. Labatt; B. McDowel; E. Ledwich; W. Jameson; A. Carte; W. Healy; J. H. Wharton.

RAILWAY TRAVELLING. Dr. Waller Lewis, the medical officer of the London Post-office, states in his report just issued, that he has arrived at these conclusions from observations of the health of the travelling officers of the Post-office. Railway travelling has little, if any, injurious effect on healthy, strong, well-built persons, if the amount be not excessive and if they take moderate care of themselves; but persons who take to habitual railway travelling after the age of 25 or 30 are more easily affected than those who begin earlier; and the more advanced in age a traveller is the more easily is he affected by this sort of locomotion. Weak, tall, loosely-knit persons, and those suffering under various affections, more especially of the head, heart, and lungs, are very unsuited for habitual railway travelling.

QUININE IN INDIA. Mr. Clements R. Markham writes as follows:—"As great numbers of persons are watching with deep interest the progress of the experimental cultivation of quinine yielding cinchona trees in India, I should feel obliged if you would make public the important and gratifying fact that quinine and other febrifuge alkaloids have already been extracted from bark grown in India. Specimens of bark of only two years growth have been forwarded from the Neilgherry hills, and analysed by Mr. Howard with most satisfactory results. He obtained crystallisations of very white sulphate of quinine, as well as cinchonidine and cinchonine, and the percentage product of alkaloids is as great as would be met with in South America.

ENFORCING VACCINATION. There is before the House of Commons a Government Bill, extending only to Scotland, proposing that after February next a schoolmaster or schoolmistress shall be liable to a penalty for receiving into a school a child under 14 without a medical certificate of its having been vaccinated. There is to be a penalty also upon any one who shall receive into his or her employment or service a young person under 18 without such a certificate. Every prisoner and every person admitted to the parochial relief is to be vaccinated as soon as possible after admission to such relief or imprisonment, unless the surgeon is satisfied that such person has been vaccinated or has had small-pox.

THE TESTIMONIALS TO DR. AND MRS. CHADWICK, OF BOLTON. The inhabitants of Bolton are about to present to Dr. and Mrs. Chadwick, a most flattering testimonial. Dr. Chadwick is gloried in as having been an ornament to his profession and a benefactor to the poor. The testimonials consist of a large *épergne*, a massive salver, and a neat and compact rosewood workbox, bearing the inscription: "Presented to Samuel Taylor Chadwick, Esq., M.D.Edin.; F.R.C.S.Eng.; J.P., etc.; in testimony of the grateful appreciation by the inhabitants of Bolton and the neighbourhood, of his long continued and valuable services as a learned physician and skilful surgeon, and of his gratuitous devotion of time and ability to the poor. Bolton, May 13th, 1863."

ROYAL COLLEGE OF SURGEONS. The following are the names of the Fellows who are candidates for seats in the Council at the ensuing election on Thursday, July 2nd:—Mr. Cæsar Henry Hawkins, of Grosvenor Street; and Mr. Thomas Tatum, of George Street, Hanover Square. These gentlemen offer themselves for reelection; and for the chair vacated by Mr. Coulson, there are four candidates in the field; viz., Mr. Samuel A. Lane; Mr. George Busk; Mr. Thomas Blizard Curling; and Mr. Henry Hancock. After the election, the Fellows will dine together at the Albion Tavern; on which occasion Mr. Turner, of Manchester, will preside.

SMALL-POX PATIENTS IN PUBLIC VEHICLES. In the House of Commons, on Thursday, June 11th, Sir A. Agnew asked the Attorney-General whether the officials of railway and steam-boat companies might lawfully remove from carriages or vessels under their supervision persons who were obviously labouring under small-pox; and whether individuals thus wilfully travelling from place to place at the risk of spreading so dreadful a scourge through a whole community were subject to any penalty on conviction before a magistrate? The Attorney-General said it appeared to him that by the common law the officials of the company would not be justified in removing the persons alluded to. In respect to the second question of the hon. gentleman, he was not aware of any Act of Parliament on the subject.

DEATH OF EDMUND BELFOUR, JUN., ESQ. The members of the professsion will no doubt symathise with the worthy Secretary of the Royal College of Surgeons, in the lamentable death by drowning, of his only son. The sad event took place on the 4th instant, when Mr. Bel-

four left his residence, Grove House, Putney, soon after six o'clock, for his usual early pull on the Thames. As he did not return, some uneasiness was felt which caused inquiries to be made. The result was that his boat, one of those dangerous out-riggers, was discovered drifting without him; and it soon became evident that he had met with a watery grave. Search was immediately commenced, and a large number of boats were employed in dragging that part of the river over which he was supposed to have passed; but no trace of the body could be found until Saturday, when it was discovered at Chiswick. An inquest was held at Hammersmith, when a verdict of "Found drowned" was returned. The deceased, who was only in his fortieth year, leaves a widow and seven children. This catastrophe has not only plunged his family and numerous friends into deep grief, but is keenly felt by all who enjoyed the privilege of his acquaintance, as was exhibited at his funeral which took place on Wednesday, and was attended by a large number of the principal inhabitants of the neighbourhood and several members of the London Rowing Club, of which the deceased was Vice-President.

THE NATIONAL MEDICAL REGISTRATION ASSOCIATION. This Association was established immediately after the passing of the Medical Act in 1858, to secure, as far as possible, the efficient operation of those clauses which it was expected would confer much benefit upon the public and profession, by affording them protection against the unqualified and dishonest pretender. That this Association has not attained to all that was hoped and expected, has been due to the failure of a certain clause of the Act referred to, and of the means at its disposal, rather than to a want of effort on its part. Prosecution after prosecution was undertaken, and manfully fought to the death, nor did they desist until they had demonstrated but too clearly the worthlessness of the 40th clause in particular. The Committee then memorialised the Medical Council to obtain from Parliament an amendment of this clause, but at present to no purpose. Until, however, the clause is altered, the Association, as a prosecuting body, is powerless. But we regret to learn that, owing to the members' subscriptions being very much in arrear, a debt of nearly £200 properly incurred is pressing very heavily on the Committee, and that their respected treasurer, J. Lavies, Esq., is really subject to personal annoyance on account of it. This ought not to be, and we wish to call the attention of our readers to the fact. All members of the Association are beyond doubt legally liable for the debts of their Committee. There is, however, a higher feeling, and one that we feel sure will actuate them and the profession generally, and they will feel in honour bound to protect the pockets of those who have so generously bestowed their time and energies, as well as their money, in this service. Some members of the original Committee have determined to relieve their treasurer of the annoyance to which he is subject, and a subscription has been started for the purpose. Subscriptions should be sent direct to J. Lavies, Esq., Great George Street, Westminster.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Curling, "On Sterility in Man"; Mr. Moore, "Strangulation of the Stomach in an Umbilical Rupture"; and papers by Dr. Cockle, Dr. Kramer, and Mr. George Southam.—Zoological.

WEDNESDAY. Society of Arts (Anniversary).

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JUNE 13, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys .. 995 / Girls..1000 }	1995	1186
Average of corresponding weeks 1853-62	1791	1143

Barometer:
Highest (Sat.) 29.641; lowest (Sun.) 29.331; mean, 29.444.

Thermometer:
Highest in sun—extremes (Th.) 105.5 degs.; (Sun.) 96.7 degs.
In shade—highest (Wed.) 68.3 degs.; lowest (Sat.) 45.7 degs.
Mean—54.7 degrees; difference from mean of 43 yrs.—3.2 degs.
Range—during week, 22.6 degrees; mean daily, 16.8 degrees.

Mean humidity of air (*saturation*=100), 78.

Mean direction of wind, S.W.—Rain in inches, 0.76.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE REVIEW OF DR. HARLEY'S BOOK.—SIR: In the review of my work on *Jaundice*, which appears in the last number of your JOURNAL, your reviewer, in quoting my classification of the causes of jaundice, has put "aneurism" instead of "concussion" of the brain as one of them. I shall feel obliged by your kindly correcting this error, which is of more importance than at first sight appears. I am, etc., GEORGE HARLEY.
77, Harley Street, June 15th, 1863.

THERAPEUTICAL INQUIRIES.—SIR: As I have not received any of the Schedules of the Therapeutical Committee, referred to in Dr. Harley's letter published in the JOURNAL of to-day, I presume that their issue has been limited to gentlemen who were members of the British Medical Association in 1862.

It may, perhaps, be considered too late for any alteration in the present arrangements; but I would venture to suggest that if any copies of the schedules remain in the hands of the Committee, they might be issued to the members who, like myself, have joined the Association during the current year. The reports upon the various subjects included amongst the Therapeutical Inquiries would then actually represent the opinions of the whole of the members of the Association in 1863, which would, of course, be the date borne by the reports. I am, etc.,
WILLIAM ABBOTTS SMITH, M.D.
38, Doughty Street, W.C., June 13th, 1863.

P.S. If my suggestion be not now practicable, it may be worthy of consideration whether, in future inquiries, the schedules ought not to be sent out at the commencement of the year, so as to include all of the members of the Association.

[The inquiry was not limited to members of the Association. It was distinctly stated that information would be gladly received from any members of the profession; and that schedules (as far as practicable) should be supplied to any member requiring them. Schedules shall be forwarded to our correspondent. EDITOR.]

COMMUNICATIONS have been received from:—Mr. THOMAS BRYANT; Mr. S. H. SWAYNE; Mr. JNO. GRANTHAM; Mr. WILLIAM COPNEY; Mr. S. WOOD; THE HON. SECS. OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; F. S.; Mr. T. M. STONE; HOMO LIBER; Dr. HARLEY; Dr. W. PRICE; Dr. BARCLAY; Mr. J. VOSE SOLOMON; Mr. GRAMSHAW: Mr. W. ALLISON; Dr. WM. ABBOTTS SMITH; C. DE CINQ MAISONS; and Δ.

BOOKS RECEIVED.

1. Outlines of Surgery. By F. Le Gros Clark. London: 1863.
2. The Watering-Places of England. By Edwin Lee, M.D. Fourth Edition. London: 1863.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

Lecture III. (*Concluded.*)

On Tumours in Children.

The pathological nature of the tumours found in children differs but little from those in the adult. They may possess peculiarities which are due to the rapid growth and structure of all infantile tissues; but, in their morbid and natural pathology, they are strictly analogous. There are the simple or innocent, and the malignant or cancerous tumours. In both forms, fibre-tissue is deficient, and cell-development abundant. Of the simple tumour we have, therefore, the fibro-plastic or fibro-cellular more frequently than the fibrous; and of the cancerous, the carcinoma medullare rather than the carcinoma fibrosum.

Tumours also, when they appear in any gland or tissue, as a rule have a rapid growth; the increase of the tumour keeping pace with the increase of the body; the cell-growth and multiplication of the abnormal equalling the cell-growth and development of the normal tissues.

In the bones of children there seems to be a special tendency to the development of tumours; cartilaginous growths appearing in these parts more frequently at an early period of life than at a late one. Cartilaginous or enchondromatous tumours of bone are almost always found in children; and, when in the adult, they have generally originated in early life. The explanation of this fact does not appear difficult, when we recollect that bony development almost always proceeds through the cartilaginous; for the cartilage-cell has but to remain as such, and to go on repeating itself, instead of progressing towards the development of a bone-structure, in order to form a tumour. This cartilage or enchondromatous tumour, under these circumstances, appears developed within a bone, and expands its shell. A most beautiful instance of this disease has recently come under my care; it was in a woman aged 32, and was of congenital growth, its increase having been gradual. It occurred in the little finger, and was treated by amputation. The specimen I now hand round.

Congenital Tumours. One of the most frequent forms of congenital tumours is the *sebaceous*, and its most common seat is the neighbourhood of the eyebrow. These sebaceous tumours have also one peculiarity: they are not situated in the skin, as are the other forms, but are placed beneath the muscle and close upon the bone. They very generally contain hair, in addition to the ordinary sebaceous matter; and this is found either in masses, or like fine eyelashes. These sebaceous tumours may appear also in other parts. I removed one from the labium of a child four months old, which contained abundant hair; and a second, of the size of a walnut, from the extremity of the coccyx of a girl aged 10 years.

Congenital *fatty* tumours are not unfrequent; and they occasionally possess a peculiarity for which it is difficult to account. In adults, fatty tumours are, as a rule, encysted; that is, they are distinct tumours, and can be enucleated. In children, an opposite condition is not infrequently found; the fatty tumour appearing as a diffused growth, and without distinct limits. I had an instance of this under my care in 1857, in a boy aged six weeks. He had a diffused congenital fatty tumour around the right elbow-joint, and this grew with his growth. It had no boundary, nor any borders; but its margins gradually disappeared in the tissues around. I have witnessed a second case in a child aged 5, a patient of Mr. Cock's; and in this instance the region of the occiput was the seat of the disease. I have also under care at the present time a child aged one year and a half, with the same affection; the tumour occupying the left axilla and side of the chest.

Congenital *pedunculated fibro-cellular* tumours of the integument are very common, and need no description. The best example I have ever seen was in a male child who came under my care a few months ago, when only three days old, with a pedunculated tumour, of the size of a large walnut, growing behind the left ear; it was black from effused blood, and was very firm. It was excised, and recovery followed. The preparation and drawing, which I hand round, indicate its size and nature. An interesting case has also lately been under my care, of congenital fibro-plastic tumour growing from the little toe of a girl aged 8; it was of the size of a walnut, and occupied the whole of the extreme phalanx of the toe. It was amputated; and the specimen I now hand round.

Congenital *cancerous* growths also occur, but it has never fallen to my lot to witness an example.

Non-congenital Tumours: Sebaceous Tumours. One of the most singular cases of sebaceous tumour which has ever come under my care was in a female child aged five months, whose face and head were literally studded with sebaceous tumours, varying from the size of a hempseed to a large almond. They had been of three months growth, and were in all stages of development; some just appearing, others suppurating; and some had enucleated their contents, and presented excavated granulating surfaces. I removed many by pressure with the nail, and the larger by incision; giving tonics, and maintaining cleanliness. Recovery followed.

The fatty and fibro-cellular and fibro-plastic tumours need not occupy our attention, as they present no points of contrast or peculiarity which deserve notice. But I cannot refrain from quoting a case of *simple cystic tumour* which came under my care in 1861. It was in a boy aged six weeks, and was, when seen, of about the size of a small egg, situated on the right side of the median line over the occiput. It was evidently cystic, and appeared to be connected solely with the soft tissues. It was observed the day after its birth, and was believed to have been congenital; and was then of the size of a small nut. I tapped it, and drew off some fluid stained with blood; and the cyst collapsed. When seen

three weeks afterwards, no appearance of a re-collection could be observed. I have no later observation to record.

Keloid Tumours. These do not appear to be infrequent growths during young life. I have seen several such. One was in a male aged ten years. The keloid tumour was over the forehead, and was of the size of a nut. It was said to have been congenital, and was growing. It was excised. Recovery followed. I have also observed the same disease in a boy six months old, growing from the cicatrix on a spot from which I had removed a nævus by ligature some months previously. The same disease appeared also in the child of a cousin of the former patient, in the cicatrix of a nævus which I had similarly treated.

Cancerous Growths are not uncommon in young life, and these appear to attack the bones more frequently than other parts. The best example which I have seen was in a boy aged twenty months. The tumour was in the head, and occupied the position of the metacarpal bones, spreading the tendons over it. It was globular, as seen in the drawing and preparation; and was, as usual, of a medullary character. The glands were uninvolved. No other treatment than amputation could be thought of; and this I did in September 1859. In 1862, the child was well, and had had no return.

Tumours of the Testes. Tumours of the testes must occupy our attention, although only for a few minutes. I have the records of one interesting case of inflammation of both organs in a boy six months old, who had had an enlargement of both glands from birth. When I first saw the child, the right was of the size of an unshelled almond, and the body of the testis was the part involved; and the left was about half the size of the right. I regarded the case as inflammatory, although no history of injury or of syphilis could be obtained; and gave tonics. In one month the right testis suppurated, and subsequently recovered; the left gradually became smaller.

I have also had under my care a child only six weeks old, with an abscess in the right testis of a day's duration, after inflammation a week old. No appearances of injury were visible, although, from the rapidity of the attack and progress of the disease, perforation with a pin appeared probable.

Respecting *cancerous disease*, I can relate an interesting case of a boy aged two years, who came under my care at Guy's Hospital in February 1860, with medullary cancer of the right testis of six months' growth. The organ had enlarged gradually for four months, and for the last two had increased more rapidly. When excised, it was of about the size of a small bantam's egg. On April 3rd, I removed the gland; and a speedy recovery followed. He remained well till May 1862, nearly two years, when a return growth appeared at the original seat; and this increased rapidly for three months, when I again saw him. At this date, there was a tumour of the size of a walnut in the position of the original testicle; it appeared moveable, and gave but little pain. No glandular enlargement could be detected. On August 6th, 1862, I again excised a portion of the growth, but found that a narrow neck of it dipped downwards into the perinæum, which could not be removed. The wound healed kindly, but the growth increased; and in November 1862, when I last saw the child, he was sinking from apparently cancerous infiltration of the lumbar glands.

Strumous disease of the testes may also be found during young life. I have seen it in a child two years old, and of one year's growth; and again in a second aged 2½, in which the disease had existed six months. In the last case, excision was called for; and the gland contained a large mass of strumous deposit, which was softening down. Recovery followed. Both of these cases were under my own care.

Inflammation of the Sterno-Mastoid Muscle. I must not omit to dwell upon a class of cases to which attention has not been much drawn, although it can hardly be doubted that most surgeons must have had such instances under their charge, although their true nature does not appear to have been understood. I allude to thickening and enlargement of the body of the sterno-cleido-mastoid muscle. I have observed it in three separate instances; and have always, from the ill-defined nature of the swelling, looked upon it as inflammatory.

Case I. A boy, aged 3 months, was brought to me in 1857. The mother stated that the disease had appeared three weeks, and had gradually increased. The muscle was hard and much thickened; and, on manipulation, the child gave evidence of pain. I gave cod-liver oil and ordered warm water fomentation, which rapidly dispersed the disease.

Case II. A female child, aged 2 months, came under my care in 1858. The disease was of one week's standing, and was of the same nature as in the last case. It was cured also by the same treatment.

Case III. This case occurred in 1862, and was in a male child aged 5 months. The disease had existed five weeks, and was very marked; the body of the muscle stood out like a distinct tumour, but it had no defined boundary. Quinine and fomentation proved rapidly successful, and a cure resulted.

In none of these cases could any history of injury be traced. The disease was in all alike; it was in the sterno-mastoid muscle, and was evidently inflammatory; the inflammatory product apparently infiltrating the body of the muscle.

My colleague Dr. Wilks has recently reported several cases of a like kind; but, with these exceptions, I have no other record of the affection.

Tumours at the Umbilicus. The fleshy tubercle at the umbilicus is an affection which occasionally comes under notice; it is evidently composed of nothing more than exuberant granulations, as it always follows the separation of the umbilical cord, and is readily removed by the application of a ligature. I have had five cases under my care within the last few years in children, aged respectively fifteen, six, and five months, seven and five weeks; and in all a cure was at once effected by ligaturing the growth.

In connexion with this subject, I cannot refrain from quoting the brief note of an interesting case of growth from the umbilicus, of a totally different nature from those I have described. It was in a boy aged 8 years, who had a fleshy growth springing from the umbilicus, precisely like the glans penis of an infant. It was very red, and covered with mucus; and in its centre there was a distinct canal, through which urine passed; when the child retained its

urine, it flowed freely from the opening; for it appeared tolerably certain that the canal was an open urachus. I was anxious to admit the child into Guy's, to see if anything could be done for his relief; but the mother refused, and I consequently had no opportunity of carrying out my wishes.

Cases like these are very rare, and are, therefore, worthy of a separate record.

I have thus, in these three lectures, brought before you the principal points of difference between the diseases of the various systems in the child and adult; and have, as far as I have been able, dwelt upon many of the special affections of early life. I have attempted to find an explanation of these differences, in the physiological and pathological processes as witnessed at these different periods of existence; and I have aimed at giving principles, rather than details of daily practice. How far I have succeeded I must leave to your kind judgment to decide. But of this I am sure, that I have advanced nothing which experience has not sanctioned; and, if I have been too short and brief in many of my descriptions, I have been so from the necessity which has been always before me of confining my observations to the few hours which are allotted to these Lettsomian Lectures. In conclusion, I have to express my thanks for the kind attention with which you have followed me; and to assure you that, if I have added anything either of interest or of fact to the important subject which has occupied our notice, I have been amply repaid, and I shall feel that the object for which these lectures were instituted has not suffered from having been intrusted to my care.

Original Communications.

CASE OF RENAL CALCULUS.

By W. H. Day, M.D., L.R.C.P.Lond., Newmarket.

In the British Medical Journal for June 6th, 1863, Dr. John Brown of Rochester has related a very instructive case of renal calculus. After death, "four calculi and several ounces of thin pus" were found in the left kidney, and there was a large cyst in the right kidney. A case of renal calculus, beset at one time with obscurity in diagnosis, and attended with great danger to life, has lately come under my observation. I extract the following report from my case-book.

Mr. R., aged 59, a tall, well-formed man, of regular and active habits, and seldom ailing, except from occasional constipation, which usually yielded to a domestic remedy, was attacked on the evening of Oct. 8th, 1862, with severe stabbing pain in the left lumbar region, so that he could not keep in one position for a minute together. He vomited dark green bile, and could retain nothing on his stomach. His suffering was referred to the left side, between the crest of the ilium and the lower ribs. The pain was very acute, extending across the lumbar region to the edge of the spine; the pulse was quick and sharp; countenance most painfully anxious; tongue brown and dry. The abdomen was clear on percussion over the cæcum and region of the colon; but some dulness was detected at the umbilicus. The urinary secretion was scanty and high coloured, and the bowels had not acted for two days. Ten grains of calomel were placed on the back of the tongue, turpentine stupes were applied to the side, and a turpentine and castor oil enema thrown up the rectum.

On the 9th, he was worse; sickness had continued uninterruptedly during the night, and there had been no relief of the bowels; pulse 120. A cathartic enema was ordered, which returned without any tinge of fæcal matter. Ten leeches were applied to the side; six grains of calomel and one drop of croton oil were given; and small doses of the sulphate and carbonate of magnesia, with syrup of ginger and dill water, were also ordered.

On the 10th, I found him much worse. The belly was tympanitic, and tender on pressure; his knees were drawn up, and his breathing was entirely thoracic; vomiting and hiccup were constant; and he could not keep his medicine down.

I was fearful, from these symptoms, that there was either internal strangulation, or very severe spasmodic stricture at or near the splenic curve of the colon, producing colic in its most severe form. I was impressed with the belief that in cases of obstinate constipation, with pain and sickness, purgatives are apt to become eventually irritants; I omitted the medicine prescribed the day before, and gave the citrate of soda in effervescence, with small doses of nitrous ether and prussic acid.

On the 11th, the bowels acted gently, and the vomiting and pain were relieved. Late in the evening, it seemed so probable that fæcal matter was the main exciting cause in operation, that I determined to try two pills every four hours, made with two grains of extract of oxgall, two grains of aqueous extract of aloes, and two grains of extract of hyoscyamus.

On the 12th, the bowels acted most copiously; and, although there was great tenderness in the left renal and splenic region, he was so much relieved, that I took my departure, after advising two of the pills twice a-week, and a dose of castor oil in the morning if they should effectually clear the bowels. He was to take a warm bath every night at bed-time.

He went on well till November 6th, when I was again asked to see him. A similar train of symptoms prevailed, and vomiting was again urgent. I now began to suspect the presence of a calculus in the left kidney; the bowels being undisturbed, and the pain extending in the course of the ureter.

On the 18th, he was cupped over the left lumbar region, and copious enemata of warm water were thrown up the bowels night and morning.

On the 19th, he was no better. Fearing that the case might lead to disorganisation in the kidney—although no enlargement could be detected, and there was an absence of pus and blood in the urine—I met Mr. Image of Bury St. Edmunds in consultation. He thought there was a calculus in the kidney, and advised a continuance in the treatment, particularly the enemata, to which the patient had a great objection.

A fortnight later, after despairing of recovery, and being very worn and sallow, he passed a calculus of phosphate of lime of the size of a horse-bean. From that hour, he rapidly gained his health and strength.

Remarks. This case commenced with symptoms of spasmodic constriction in the splenic curve of the colon, or of strangulation at this part. No evidence existed of renal mischief, beyond the sickness and lumbar pain; there being no frequency in micturition, no trace of blood or pus in the urine, and no fever.* Such obstinate constipation is not usual where the intestines are not involved. This, no doubt, partially kept up a state of hyperæmia in the kidney, favourable to pain and vomiting, and unfavourable to the descent of the calculus.

* The pain of colic is often associated with sickness and retching; and it may occupy those parts of the abdomen which correspond to the place of the ureters. The urinary functions are undisturbed, and this is a capital point of distinction. The numbness of the thigh and drawing up of the testicle are sufficiently characteristic when they happen, but they are frequently altogether absent. (Dr. Watson, *Principles and Practice of Medicine*, vol. ii, p. 617.)

Later, we have indications of the presence of an irritant; though the same symptoms may occur, according to Sir B. Brodie, when there is no calculus in the kidney.

Another point applicable to all cases of constipation, irrespective of the cause producing it, is the danger of continuing aperient medicines when they have shown signs of failure. They increase the evil by adding to the irritability of the stomach, and exciting pain and commotion in the intestinal tube. We have a well marked example here of the stomach becoming quiet from the least irritating medicines. When this is achieved, if spasm alone exist, it relaxes under rest and sedatives, and the bowels begin to act.

A single calculus is less perilous than where several exist, as in Dr. Brown's case; for so long as it is small and remains in the pelvis of the kidney, it may give rise to scarcely any discomfort or uneasiness; but, when once it has attained any magnitude, it is likely to cause great suffering, till it either enters the bladder or again falls back upon the kidney. In the latter case, we must always be fearful of suppuration. It is not improbable that the constipation may have arisen independently of the renal disorder, and may have been the exciting cause of that disorder. If not, the coexistence of the two states increased the difficulty in diagnosis; for no sooner was the constipation overcome, than a mitigation of the other symptoms ensued. At the same time, it is not to be overlooked, that any disturbance or irritation of a vital organ like the kidney, is enough to derange the whole abdominal viscera, and to paralyse their functions.

MUSHROOM POISONING.

By Thos. R. Mitchell, M.D., F.R.C.S.I., Swanage.

In the month of October 1862, I was called to see a lady and gentleman, whom I found in the greatest state of alarm and suffering, which they attributed to having freely partaken of a dish of mushrooms about eight hours previously.

The lady's symptoms were much more violent than her husband's, and partook of more of the irritant character. She complained of a burning sensation extending down the whole pharynx, with great constriction; the stomach and abdomen were much distended; and the whole nervous system on the rack—no doubt from fright. The stomach was irritable; but there was no actual vomiting, but slight purging. She said her sight was dim, and that everything appeared blue.

In the case of the gentleman, the symptoms were more of a narcotic nature, and appeared much earlier. He was very drowsy, and complained of giddiness; and the symptom noticed above in the case of the lady, of everything appearing blue, was absent.

I lost no time in administering a zinc emetic to each of them; but I was obliged to repeat the dose in both cases before any effect was produced. Large pieces of undigested mushrooms were evacuated; and, after a smart attack of purging and vomiting, which left them weaker for a day or two, all bad effects disappeared, with the exception of both having nervous twitchings occasionally.

Remarks. It is not usual for cases of poisoning by mushrooms to terminate fatally, although in some cases such has been the result; it being generally only necessary to get rid of the offending substance as quickly as possible. From some cases I have had under my care, I am satisfied that the constant use of mushrooms, and particularly of ketchup, is highly deleterious. We have no positive means of ascertaining whether a mushroom is poisonous or not; and, although there can be no doubt that a great many of them are not only harmless, but highly nutritious, still I should not feel inclined either to try or recommend many which have been highly extolled as excellent, and as possessing peculiar flavour. For instance, the *fistulina hepatica* has been compared to veal cutlet; the *hydnum* to oysters; the *lycoperdon giganteum*, or puff-ball, to sweetbread. Of course, there is no accounting for taste; and no doubt those persons who so strongly recommend us to get rid of our fears of all the toad-stools, are actuated by a kindly motive to supply the poor with additional food. At the same time, I think it is the duty of the medical man to warn people to be careful, particularly as it is well known that locality alone will influence the wholesomeness of the mushroom; and the rule laid down by Richard, one of the best botanists of the age, never to touch one that was not grown in a bed, is, I think, the best to be followed.

On examining some that were left from my patient's repast, I picked out two of the most poisonous species, the *amanita muscaria* and the *boletus luridus*. The former is used principally for making fly-poison in England; but in Tartary a very intoxicating liquor is made from it, and which is highly valued by the natives. A few days afterwards, I met a mushroom-gatherer, and stopped to examine her basket, and picked out in a few minutes eight or ten of the lurid *boleti*. I told the woman to throw them away, as they were poisonous; but she refused, saying that they yielded the largest quantity of ketchup of any kind. I, therefore, think it by no means improbable that others act similarly, and that many cases of indigestion and irritation are produced from the use of such impure ketchup in cooking. In like manner, I think we may account for children having illnesses after eating gingerbread, as it is well known that a fungus (*tilletia*) destroys wheat, and renders it useless for flour, from its fœtid odour, but which odour the ginger covers.

CASE OF PLEURAL FISTULA.

By F. Whitwell, Esq., Shrewsbury.

Richard James, aged 17, was admitted into the Atcham Union House on April 17th, 1862. The statement gleaned from himself was, that he was taken with pain in the left side on the 5th of May, 1861. He was bled to fainting, and ten leeches were applied next day; which treatment was followed by five blisters in succession. He was confined to his bed for eighteen weeks; and about the twelfth he observed a swelling forming a little below the left nipple, which the surgeon in attendance opened with a lancet, and let out about five pints of thick pus.

On my examination of the chest, I found the left lung quite impervious to air, the heart forced over to the right side, and a continuous drainage of fœtid pus from a fistulous aperture where the abscess had been opened.

I ordered a generous diet, and prescribed various tonics, with little if any improvement, until the month of September, when I told him that, if he would allow me to make the attempt, I thought I knew a mode of treatment very likely to be of service in his case. He was very anxious to have it tried.

The following day, I introduced a metallic catheter through the aperture in the walls of the chest to a distance of six inches, and drew off about a pint of very offensive pus, and then washed out the cavity with a weak solution of chloride of lime. This proceeding was repeated daily; and the discharge became less offensive, and the amount gradually diminished. I then substituted a solution of nitrate of silver (four grains to the ounce), which was used in the same way; and by the middle of November, the discharge having entirely ceased, the fistulous opening was allowed to heal.

During the treatment, I observed that, in proportion as the left lung resumed its functions, the heart approached its normal situation; and now there is little or

no indication (except the external marks) of the former long continued disease.

The young man was employed in cultivating the ground attached to the union house for several months after he was cured; and has since been employed regularly as an agricultural labourer at a farm-house, and enjoys excellent health.

THE CALABAR BEAN PAPER, AND ITS EFFECTS UPON THE PUPIL OF THE EYE.

By John W. Ogle, M.D., F.R.C.P.

In the number of this Journal for the week before last, I made some remarks upon the action of the Calabar bean on the pupil. I there stated that I had had a "paper" prepared by saturation with a solution of the bean, analogous to that which, at Mr. Streatfeild's request, was made with a solution of atropine; but that I had not yet been able to use it. Owing to several inquiries having been made about the matter, and to the fact that Mr. Squire had placed in my hands a portion of Calabar-bean "paper", I have since then conducted some observations which show that the Calabar bean paper is equally useful and active, and equally commodious, in another direction, with the atropine paper to which I alluded.

I subjoin the following experiments, which, perhaps, will suffice to confirm what I have remarked.

Experiment i. In the case of a young woman, in whom the right pupil was about one-fourth larger than the left one, I inserted a portion of the Calabar bean paper between the lower eyelid and the eyeball at 12.20 p.m., and left it there. The patient reappeared at 12.30; and the pupil of the right eye was reduced to the size of a pin's head, being about one-fourth of the size of the left one.

Experiment ii. In another case in which the pupil of the right eye was of larger size than its fellow, I inserted the Calabar bean paper (as before) at 1.6 p.m. At 1.13, the pupil was beginning to contract. At 1.20, the pupil of the right eye was decidedly less in size than that of the opposite one; and at 1.27, it was of the size of a pin's head.

Experiment iii. At 1.55 p.m. I inserted the Calabar-bean paper as before. At 2.6, the pupil was decidedly smaller than its fellow. At 2.10, it was much smaller; and at 2.15, it was of about the size of a pin's head.

Experiment iv. In the case of a patient whose pupils were equal, at 1.55 p.m. I inserted a portion of the Calabar bean paper as before. At 2.6, the pupil of the eye was decidedly smaller than the opposite one. At 2.10, it was much smaller; and at 2.15, it was perfectly contracted.

Experiment v. In this case of a man whose pupils were equal, of ordinary size, and acting well under light, I inserted a portion of the "paper" at 12.44 p.m.; and at 1.20, when the man returned to me, the pupil of the eye to which I had applied it was reduced to the size of a pin's head.

I have not had the opportunity of ascertaining how long the contraction of the pupils continued in these cases.

It is quite clear, I think, that the Calabar bean paper will answer well as a contractor of the pupil. The task which remains in using the Calabar bean and the atropine papers as antagonisers is, to regulate the strength of the respective solutions of which these "papers" are made.*

* In two of the above cases, but in one especially, I noted a peculiar movement of the iris of both eyes whilst the pupil of one was under the influence of the Calabar bean. It consisted in the frequent and alternate dilatation and contraction of the pupil, and appeared to be quite independent of any modification of the access of light or of movement of the eyeball. This lasted for at least ten minutes; and, it may be, for a longer period.

British Medical Journal.

SATURDAY, JUNE 27th, 1863.

THE COLLEGE OF SURGEONS: ELECTION OF COUNCILLORS.

A correspondent suggests to us that we were unjust to the Council of the Royal College of Surgeons of England, in saying that they had never fulfilled the terms of their new Charter. He reminds us that in one particular, at all events, they have been most faithful to their charge. As we mentioned last week, a clause—a sop—was introduced into the Charter in order to make it more palatable to the ancients of the College, or, as our French friends would say, to the *satisfaits de la vielle*. Under this clause, the men then in office were permitted to hold it for life—that is, never to relinquish, as long as they lived, the £300 or £400—or whatever number of hundreds of pounds sterling it is that attaches to the performance of the pleasant, or at all events lucrative functions of College examiner.

Now, this clause the original men in office have most faithfully obeyed—with the one single exception, last week referred to, of Sir Benjamin Brodie. It may be interesting to record here who the original holders of office were—that is, in 1843. They were, Mr. Andrews, Sir B. C. Brodie, Mr. Samuel Cooper, Mr. H. L. Thomas, Mr. Keate, Mr. Vincent, Mr. Guthrie, Mr. A. White, Mr. Copeland, Mr. Briggs, Mr. Lawrence, Mr. Travers, Mr. Swan, Mr. Stanley, Mr. Green, Mr. Callaway, Mr. Babington, Mr. Liston, Mr. Arnott, Mr. South, and Mr. Morgan. Of these, all but five have disappeared from the scene; and, we may add, all died in College official harness. The five survivors of this famous Council are, Messrs. Lawrence, Swan, Green, Arnott, and South; and they are still Councillors, and four of them Examiners.

Sir Benjamin Brodie—the exceptional—disturbed by his action the even tenour of official holding which these "Antients" had struck out for themselves; he thought that the Charter's spirit should be carried out; and he paid the forfeit of his disobedience to their code of tenure of place. He was never made President of the College after that act. His crime was unpardonable. Those who stuck to office in spite of the Charter were made presidents two and three times; but Sir Benjamin Brodie, who vacated office according to the Charter, thereby showed that he was unworthy to occupy a second time the presidency of the College.*

* Under this head, we may refer to the very words of the Charter of 1852. We there read: "That the President and Vice-Presidents of the said College *shall no longer* be chosen from or out of the Examiners of the said College, but from and out of all the members

The "Antients" said, in unmistakable language, and *pour encourager les autres;* "It is very true you have got a new Charter; but, in spite of its terms, so long as we live, we mean to hold office, and so long as we hold office be assured none of the new fangled notions contained in this Charter shall ever come into play. We never have yet elected a president outside the Court of Examiners, and we never will. We never have elected an Examiner outside the Council, and we never will. As Examiners we nominally go out of office every five years; but we shall always re-elect ourselves, you may be very sure of that. We are not going, as long as we live, to loose out of our hands these hundreds of pounds sterling *per annum*, and this power of office. We are the dignitaries of the profession. We have gradually 'lived' our way up to these high offices; and the fact is, we now consider that we have a prescriptive right to hold them. These rich places were meant for surgeons of our standing and position. They are a sort of prebendary stalls. They have always been considered, and very properly, as equivalent to retiring pensions for estimable and renowned surgeons; and it is not we who will ignore so excellent an idea. Happily, this new Charter is worded in so gentlemanly and considerate a form as to enable us readily to evade its plain meaning."

Thus the original Councillors seem to have argued; and, assuredly, thus have they acted, and thus have they indoctrinated all who have since joined them in Council.

Now, these facts are worthy of especial note at this moment. It explains the whole history of the anomalous and improper conduct of the Council of and Court of Examiners of the College. The "Antients", be it remembered, were originally through their number omnipotent in office, and they held for life. Additions, to be sure, were made to their body from time to time; and it might have been thought that new blood would thus have gradually leavened the old corrupt mass; but not so, indeed. The originals formed the Court of Examiners as well as the Council; but the Court of Examiners were, curiously and strangely enough, the masters of the Council which elected them. The Council were and are a sham.

The Examiners, in truth, who were nominally elected by, actually ruled the Council; and the whole aim and ambition of a Councillor's life appears to have been to become an Examiner—in fact, to touch the high fees and exercise the pleasure of power.* The Examiners had a sovereign remedy for the silencing of any "troublesome customer" in Council. Anything in the shape of a reformer had no chance of ever touching fees and exercising power as an Examiner! Under such prospects, the valour of reforming Councillors soon oozed out once they entered under the portals of the edifice in Lincoln's-inn Fields. In fact, the new Councillor soon learnt the lesson—the utility and benefits — of passive obedience. It was clearly pointed out to him, in precept and example, by the "Antients", that he who attempted to carry out any of the reforms intended by the Charter would ever remain a tabooed and neglected Councillor—utterly inadmissible to the high office, the power of, and incapable of touching the very desirable fees attaching to, an Examiner's office. None but "Friends in Council" were held fit to be Examiners.

The lesson thus taught by the "Antients" has been hitherto most effectual. Though many men have been elected out of the Council into the Court of Examiners to supply the places of those Originals who simultaneously quitted life and office, they had all previously, as Councillors, given satisfactory pledges of future good behaviour before they gained admittance there. All Councillors went through their facings under the eye of the Court of Examiners before they were admitted into the choice band of richly paid Examiners.

Examiners, it must not be forgotten, are all Councillors, but Councillors are not Examiners! This is the key of the position. The Council, as we have seen, had power to elect Examiners from out of the general body of Fellows; but this provision of the Charter the Court of Examiners would never allow the Council to listen to. We must keep all these things amongst ourselves, they argue; let no one of the Council ever dare to think of such a novelty; no one of you Councillors shall ever come up here who proposes that the terms of this reforming Charter shall be carried out.

In this way has been kept up by the Court of Examiners the spirit and intention of the Originals, instead of the spirit and intention of the Charter. By this clever and most astounding system of misgovernment—though only five out of the twenty-four original holders of office remain—though nineteen new men have been elected to fill their vacant places, or rather to step into their slippers—the very worst spirit of the old corrupt corporation, which existed before the birth of the new Charter, has been inoculated into new comers, handed down, is still alive, and as vigorous as ever.

The tale as told in these pages must now be plain to every member of the profession. It is hope-

of the Council indifferently, whether Examiners or not." The three words in italics are put so by us. This looks something like a positive injunction; but we need hardly repeat to our readers, that in no single instance have the Examiners ever obeyed it. The President has invariably, and in the teeth of the Charter, been elected by them out of the Court of Examiners.

* Well worthy of note is the fact—probably known to few of our readers—that the fees of an *Examiner* amount to something like £400 or £500 *per annum*, perhaps more; and that the fees of a *Councillor* are about 20 or 30 shillings a quarter, so that in truth he must serve several years as a Councillor before he is even recouped the £20, of which he is mulcted on taking office as a Councillor!

less to look for a growth of reform within this ill-governed body. Reform can only be had through pressure from without; but it can be had by such pressure. The Fellows may now, if they please, create a knocking at the door, such as will effectually awaken from their repose, and astonish the satisfied men in office.

The annual election of Councillors is at hand. This election is decided by the votes of the Fellows of the College. The Fellows, by their votes, can, if they please, express their disapprobation of this continued rule of misrule; and in their hands alone lies the chance of reform. Their votes must decide whether or not they wish the terms of the Charter to be complied with, or whether they approve of the present system which ignores, in spirit, the very existence of the Charter, except in so far as it gives the Councillors and Examiners the power of keeping themselves in office.

If the Fellows of the Royal College of Surgeons really wish to break the neck of this confusion, they will, on this occasion, take the first step in the direction which leads to it. They will not vote for the replacing in office of men who have so long been participators in and supporters of this obsolete system of misgovernment. More than this. They will exact pledges from those for whom they record their votes, that they will, if elected to the Council, do their best to carry out the terms of the Charter, instead of assisting in the burking and defacing of it.

The lively contest which is now going on amongst those new men who are anxious for the honour of Council office is an excellent occasion for the Fellows at large. It is their own fault if they do not improve it. Why should they not say to the candidates, "Gentlemen, we will vote for none of you, unless you will pledge yourselves to carry out the Charter? We are sick of all this hole and corner work in Lincoln's-inn Fields; and we now, from this day forth, mean, by our votes, to show that the system of the "Antients" shall come to an end. We will not endure that it shall survive longer, and that it shall continue to taint all those who come under its influence. More than this. We will not only demand this pledge from new candidates; but we tell the old ones, who now come and ask for readmission to office, that we will not have them again. We tell them that they have proved themselves unworthy of their trust, because they have not fulfilled it honestly and faithfully. We also tell every Councillor who may in future offer himself for reelection that we will not have him at any price, unless he does his duty as prescribed by the Charter—unless he carries out its intentions, instead of thwarting and stifling them."

And why should not the Fellows demand this pledge of the representatives of their collegiate interests? Is it any great thing to demand of a candidate for the Council that he should honestly obey the Charter of the College, instead of assisting in the evasion of its plainest precepts, and that too out of the purest (if the term may hold) motives of selfishness and place-holding.

In our opinion, the Fellows must now make their choice. If they choose, without protest, to allow the present state of things to continue, it seems to us that they will do so because they look upon these College offices as capital rich benefices which they hope some day themselves to enjoy as snuggeries in their old days. If they regard them as held for the benefit of the profession at large—for the exaltation of surgical science—and not simply for personal and selfish purposes, they will express that opinion by excluding those who have supported the vicious system we have described, and will vote only for those new men who publicly pledge themselves to carry out the Charter.

If the Fellows now take no decided step, it is evident to us that the only remaining hope of reform lies in the obtaining of a new Charter similar to the present, except in this, that its terms shall be imperative instead of permissive. Perhaps, indeed, it is hopeless to expect patriotism where the sacrifice to be made in its display is so great. Certain, at all events, is it, that the anomalous position of the Court of Examiners and of the Council should be put an end to. The Court of Examiners ought to be ruled and regulated by the Council; instead of having the Council as a tool in its hands.

In conclusion, we will once again repeat the real facts of this strange tale. The College does not possess a distinct governing body. Its nominal executive is the Council; but the Council are virtually a flock of sheep in the hands of the Court of Examiners. No member of the Council is a man of authority unless he be also an Examiner. No member of Council can ascend the President's or Vice-President's chair unless he be also an Examiner. Members of Council, again, do not taste the rich sweets of office, unless they find their way into the Court of Examiners. Consequently, to become an Examiner is the end and object of a Councillor's life. Virtually, therefore, the real power of the College executive lies in the Court of Examiners, who, as we have seen, contrary to the spirit of the Charter, regularly, through the Council, reelect themselves when their period of office as Examiners expires. However much a new Councillor may be of a reforming turn of mind on taking office in Council, he soon learns that such exhibitions will not answer in practice. The prize which lies before him, and awakens his hopes and awakens his fears, is an Examinership, and its attendant possibility, the Presidency of the College. But no Councillor can ever hope to become an Examiner who is indiscreet or troublesome; or, in other words, who attempts to

introduce any novelty into the management of the great College. The Councillor must be a discreet personage if he aspire to the rich emoluments and and sweets of an Examiner's life. And thus it is that the reforming Fellow of to-day becomes a rank Conservative in Council to-morrow. We know that there are many members of Council who deplore this vicious state of things, and would gladly see it altered; but they are powerless against the overwhelming majority of those who are well pleased to let things run their old course.

HOW THE COLLEGE OF SURGEONS ELECTS ITS COUNCILLORS.

The candidates now in the field for the vacancies in the Council of the College of Surgeons are Messrs. Lane, Busk, Curling, and Hancock; Mr. Turner of Manchester having withdrawn his name. From the names brought forward, we must suppose that the election will be something of a struggle; and as, under such circumstances, we may conclude that the usual electioneering moves will be brought into play one way or another, we think it our duty once again to point out the outrageously senseless, if not illegal, method of taking the votes which is adopted by the College. It is, in truth, a part of the whole administrative system of the College; viz., the conducting of their affairs in a sense directly opposed to reason and to justice, and strictly in accordance with jobbery and place-holding.

Whoever will candidly consider the facts of the case will, we are sure, agree with us that it is impossible by the present mode of election to obtain a fair and true expression of the wishes and intentions of the voters—*i. e.*, of the Fellows of the College; and, secondly, that the method adopted is one remarkably well fitted for the encouragement of those who have a natural tendency to indulge in the arts of electioneering jockeying and trickery; therefore, especially prejudicial to the interests of those more reserved and high-minded men who will have nothing to do with such methods of obtaining honours. Doctors are notoriously bad men of business; and we should venture to suggest that, of the very worst displays they have ever made in this direction, it would be difficult to find one more utterly contrary to common sense and common justice than the one we are now speaking of. Our readers shall judge.

"The present mode of election is this. A list of candidates is printed, and served out to the electing Fellows. If there be on it more candidates than are required to fill the vacancies, the elector must thin the number down, so that it shall not contain *more* names than there are vacancies. But he need not stop here. He can make the list as fine as he pleases; and the truth is, that many electors, as was strikingly exemplified last year, do so please, and strike out the names of all except their favourite, whom they run to win. The consequence of this is, that the election becomes little better than a racing arena, wherein fine jockeying may be displayed, and second and third rate horses brought up first to the winning post. The result is (as happened, in fact, on the last occasion), men may be elected, notwithstanding that the majority of electing Fellows actually record their votes against them. It is utterly incomprehensible how a method of voting so contrary to common sense and fair-play, so demoralising in its action, and so unrighteous in its consequences, should ever have been devised by the wit of a man, or adopted by a body which calls itself royal. The only explanation we can give of it is, that the Council have adopted it for the purpose of throwing ridicule on popular elections." (Journal, May 3, 1862, p. 462.)

The profession could hardly believe in the existence of such a mode of election, if they were not aware of the "general method" of the College. A majority of the votes of Fellows present is not necessary to carry an election. As we showed on a former occasion, two elections of Councillors were made by a minority—one being carried by a *minority* of sixteen, and another by a *minority* of forty-four votes; the majority of Fellows present, of course, voting against them. But, to show the sublimity of absurdity of this mode of election, we may state as a positive fact, that, under favourable and quite possible circumstances, a Fellow may, by voting for himself, secure his election as a Councillor, though all the other Fellows—say seven hundred—present vote against him!

Now we have heard that advantage of this absurd law is being taken on the present, as it has on former occasions. Men are trying to obtain plumpers for their especial favourite. Instead of honestly recording their votes for as many candidates as there are vacancies, jobbers will, of course, vote only for one man; and the College favours their jobbery by allowing them to do so. It is plain to the common sense of every one of us that, if the election were a true and an honest one, no Fellow would find his way into the Council except he had a majority of the votes of those voting; and it is equally clear that no balloting-paper would be accepted which did not contain as many votes as there were vacancies to be filled. The present mode of election, we again repeat, is simply an insult to the common sense of the profession, and highly injurious to its morality.

THE EXAMINERS OF THE COLLEGE OF SURGEONS.

We have seen how completely the Examiners of the College have eluded the intent of the modern charter. Let us now see one of the results.

There is and can be no more important function exercised by the College of Surgeons than that of supplying the country with effective surgeons. This function is, we need hardly say, performed by the Court of Examiners. Now we ask every candid surgeon in this country, who does not hold a seat on

the Board, this question: Is the constitution of this Court of Examiners worthy of the confidence of the profession? Does the Court of Examiners, as at present formed, represent the science of the anatomy and physiology of the day? Is it reasonable or possible that sexagenarians and septuagenarians can be the expounders of the highest and most advanced surgical knowledge and practice of the day? It is useless, and worse than useless, to blink the question. The Court of Examiners of the Royal College of Surgeons is not a fair representative, as an examining body, of the anatomy and the surgery of the present day. Under the present system of election, it is manifest to every one who will fairly consider the matter, that the Court of Examiners, as now elected, never can be a proper Court of Examiners.

It is a fact—no one can deny it—that, after a given period of life, men are not apt to change their opinions. Men at a certain age grow weary of the labour of acquiring fresh knowledge and scientific minutiæ. The physiology and anatomy—aye, the surgery—of the working surgical spirits of 1863 are not, and cannot be, the physiology and the anatomy and the surgery of those who were working surgical spirits in 1833. Science and art move forwards; the horizon of knowledge is ever expanding; but men's faculties and powers are limited. As age advances, the body grows weary in research; the mind becomes less vigorous and active, and thus is outstripped by the ever onward march of knowledge.

The framers of the charter of the College knew and admitted all this; and they meant that the difficulty should be duly provided for. They said in the charter: "All future Examiners of the said College shall be elected by the Council of the College, either from the Members of the Council, *or from the other Fellows of the said College*, or from both or either of them." And how has the College accepted this order of the charter? *It has never once elected an Examiner from "the other Fellows of the College"*. It has invariably filled up death-vacancies in the Court of Examiners with Members of Council. More than this, by the charter of 1843, Examiners held office during the pleasure of the Council—*i.e.*, during their own pleasure. But, by the charter of 1852, it was enacted that Fellows "who shall henceforth be elected to the office of Examiner of the said College shall go out of office at the end of five years"; the Council having the power of re-electing them.

Well! here surely was clear indication enough of the intent of the framers of the charter. "Go", they said, "for Examiners outside the Council, and outside the Court of Examiners, as well as within. We wish you to secure for the Court of Examiners modern scientific knowledge, as well as the steadiness and gravity of long acquired and well stored up practical knowledge. We have no faith in the anatomical knowledge of those who ceased to teach anatomy thirty years ago—who flourished as teachers at a time when physiology was an unknown tongue in the schools. Again, we wish to secure for the College men whose surgical knowledge is on a level with the most advanced surgical knowledge of the day. We wish to see the sound practical wisdom of age and long experience illustrated by and mingled with modern progressive knowledge." This is clearly what the charter dictates. And how have its interpreters responded? They have never elected an Examiner from the body of Fellows; and, at the end of his five years of office, have invariably re-elected the retiring Examiner.

We regret to say it, there is not one just action we can quote, done by the College Council, which saves them from condemnation. Let the Council reflect (now that these facts are all before the profession) what an answer they could have given to these serious charges, had they happily been so inspired with an honest sense of duty as to have placed a Paget or a Prescott Hewett on their Court of Examiners! But what answer can the Council now give to us, when we tell them that the Court of Examiners is not an examining body which has the confidence of the profession at large, which is a representative of modern surgery and modern anatomy and physiology? For example, to show how grievous this injury is to surgery, we will quote one fact which, we believe, is universally known outside the walls of the College. The student of to-day is in too many instances forced to fit his surgical and other replies to suit the *opinions* of the questioner who was a teacher forty years ago. He has, in fact, at times to repeat the very reverse of that which he has been taught in his school; or, if he does not do so, is subjected to the severe correction of his questioner. And how could it be otherwise in a Court which is unrepresented by any modern illustration of our physiology and our surgery, into which no man finds admission before the age of fifty or sixty, and the youngest of whom was elected a Member of the College nearly forty years ago? Could any system be imagined more fitted to drive candidates into the grinder's hands? Do not the Examiners of the College of Surgeons encourage the grinding system?

BEDLAM AND ST. THOMAS'S.

The letters of Sir George Grey and of Lord Shaftesbury have had, as we last week suggested they would, their effect. The Bedlamites have met, and have come to a sane resolution this time. They have carried a proposition to the effect, "that the president, treasurer, and five of the governors of Bethlehem and St. Thomas's shall meet for a preliminary discussion." This preliminary discussion, consequent on the late final breaking off of all negociations be-

tween Bethlehem and St. Thomas's, is highly satisfactory, although, in one sense, somewhat ridiculous. In the meantime, the medical staff of St. Thomas's publish their unanimous opinion as to the proper site for a new St. Thomas's. Their choice is confined to two sites ; viz., Bedlam and

"The site which the Metropolitan Board of Works is about to create, partly by removal of present buildings, and partly by embankment of the river at Stangate, near the south end of Westminster Bridge, and directly facing the Houses of Parliament."

Either of these will do admirably, they say, and is incomparably superior to any possible third site.

"We unanimously believe that either of these sites would be admirably well suited for the reconstruction of the hospital; that either of them would be incomparably superior to any third site which has been named for the purpose."

But of these two admirable first rate sites they unanimously think that the Stangate site is superior to the site of Bedlam. And, therefore,

"The entire medical staff of the hospital desires respectfully to submit to the General Court of Governors its unanimous and most earnest recommendation that, unless unforeseen circumstances should render the object unattainable, the river-side site at Stangate be chosen for the reconstruction of St. Thomas's Hospital."

We are glad to find from this letter of the medical officers of the hospital, that the general principles so frequently and so long ago urged in this Journal, in reference to the reconstruction of St. Thomas's Hospital, are at length accepted as correct. We have all along maintained that the hospital ought to go westward ; and we have also always maintained that Guy's Hospital was quite sufficient for all the wants of the neighbourhood in which it is placed ; and that to reconstruct the hospital on its former site, or as close as possible thereto, which has been so often urged as the right thing, would be an absurdity. The staff now say :—

"We should regard it as an unqualified advantage that at either of the sites in question St. Thomas's Hospital would be standing considerably westward of its former situation. If, indeed, the demolition of our old hospital had occurred at a time when Guy's Hospital was not existing, the Governors might well have sought to re-erect our hospital as nearly as possible on the spot where its founder established it. Under existing circumstances, however, it is manifestly for the public convenience that the two great South London hospitals should not again stand closely together in the eastern quarter of the area which they have to serve ; but that the new St. Thomas's Hospital should stand fully a mile westward of Guy's, and thus let the western half of the South London population enjoy a larger proportion than heretofore of the relief which the two charities have to dispense."

We welcome these arguments from such an authoritative quarter, though they do come somewhat late in the day.

The only fault we find with them is, that they do not go far enough—that is to say, they do not take the hospital far enough in a westward direction, into the district where it is most wanted, and can be of most service. One mile westward may be right ; but would not two miles be better ? The district of Vauxhall, and away southwards and westwards, is where a hospital is most especially wanted. It must not be forgotten that the Westminster Hospital lies close to, and that the Charing Cross and St. George's Hospitals lie not far from the site proposed by the medical officers of St. Thomas's Hospital.

As far as we can judge as to what the decision will be, we think, notwithstanding the unanimous recommendation of the medical staff, that the betting is now decidedly in favour of the Bedlam site being eventually adopted. We sincerely trust, if St. Thomas's of the future is erected on this former abode of lunacy, that its managers will cease to exhibit any more of those eccentricities, to use a mild term, which have characterised their proceedings of late. If that hackneyed term, the "cause of humanity," be really of any consideration in the matter, there cannot, we should consider, be the slightest doubt as to the immense superiority of the Bedlam over the Stangate site. The humanitarian who takes a capacious view of human misery will have no difficulty in seeing that, by removing Bedlam into the country, the immense woes of that dismal abode will be greatly diminished, and that by raising St. Thomas's on the site of Bedlam we shall have, as the medical staff say, an "admirable site" for the object required.

THE WEEK.

Sir Charles Locock is, we are happy to state, favourably recovering from his severe accident. The humerus was broken immediately beneath the shoulder-joint. The elbow, also, was somewhat bruised, as well as the muscles of the thigh.

Mr. Henry Lee has tendered his resignation of the office of Surgeon to the Lock Hospital, offering another example worthy of general imitation; viz., of not holding office after a certain period of time, or when other avocations preclude the holder from properly performing his duties. Mr. Lee, having been appointed Surgeon to St. George's Hospital, finds that a field quite sufficiently large to occupy all the time he has to spare from his private practice. No one who has ever held the office of Surgeon to the Lock Hospital, we will venture to say, has made better use of the opportunities thus afforded him than Mr. Lee has done. He has by his writings made himself one of the first authorities on syphilitic diseases in this country.

We understand that the Chloroform Committee of the Royal Medical and Chirurgical Society are not able, at present, to deliver in any report to the Council. The investigation, as we may well suppose,

is very extensive and laborious; and no doubt the gentlemen who are engaged in it are resolved not to put forward any premature conclusions, or any conclusions which do not bear the test of and rest upon careful experiment. We have no doubt that the results of the labours of the Committee will prove most valuable.

Dr. Kœberlé of Strasburg, in operating for the removal of a fibrous tumour of the womb through the abdominal walls, found the uterus and one ovary so altered that he determined to extract both these organs, leaving only the neck of the womb. Five weeks after the operation, the woman was, we learn, convalescent!

MR. CURLING AND THE COLLEGE OF SURGEONS.

We think it fair to Mr. Curling to print the answer which he gives to an electioneering, and, we need hardly add, an unjust attack, made upon him in the columns of the *Lancet*. We regret to find that members of an honourable profession should attempt to back their own friends and injure their opponents' election by such unworthy means as these.

To the Editor of the Lancet.

Sir,—In your journal of last week you have given so prejudiced an account of the proceedings relating to my candidature for the Council of the College of Surgeons, that I am compelled to notice it. I will briefly describe what passed.

It was generally believed that Mr. Lane and Mr. Turner of Manchester would be candidates. Mr. Busk was uncertain, but inclined to come forward. I informed him that, if he did so, I would not stand unless a Fellow junior to myself became a candidate. In accordance with this determination, my papers were prepared; and in the notes sent to the Fellows who did me the honour to sign my certificate, I stated that I should not come forward unless a junior Fellow was a candidate. My papers were sent to the College on June 2nd, with the following note addressed to Mr. Trimmer, the Assistant-Secretary.

"To prevent any mistake occurring, I write a line to say that I do not wish to become a candidate for the Council of the College this year, except Mr. Busk declines to stand, or except a Fellow junior to myself comes forward. In either of these events, I desire to become a candidate."

On June 5th, Mr. Hancock informed me that he had been solicited to come forward, but that he would not do so if I was a candidate. I explained to him my position. He said his object was to force me to stand. I consented at the moment to do so; but, perceiving that my coming forward in this way would not be consistent with my assurance to Mr. Busk, with my statements to the Fellows who had signed my certificate, and with my letter to Mr. Trimmer, I felt that I must adhere to my original determination. I was called out of town, and there was some delay in my giving a further explanation to Mr. Hancock; but I took care that he was informed in time not to lose his chance of standing.

To the insinuation that "I am playing the cards of a clique, and allowing myself to be used as a tool by a small party in the Council whose intentions are practically obstructive," I reply, that I have acted without consultation or communication with any member of the Council, and in perfect independence of any College influence. In that spirit, I declare that I shall go to the poll. I am, sir, your obedient servant,

T. B. Curling.

39, Grosvenor Street, June 22nd, 1863

THE ABBEVILLE JAW-BONE.

The *Charivari* give the following lively, but, we believe, tolerably correct report, of the proceedings of the Academy of Sciences *in re* the famous inferior human maxillary of Abbeville. On the Horatian maxim of "ridentem dicere verum, quid vetat," we recommend this report as it appears of a scientific mare's nest to the consideration of our readers.

A charming comedy has been acted in the Academy of Sciences—a kind of serious *impromptu*. It is only the last act of the comedy, however, to which we shall allude, and which has been just played out to the delight of that extensive academician without rank—the public. As we have already said, the more arguments M. Quatrefages brought forward in favour of M. Boucher de Perthes' jaw-bone, the fewer became the number of his partisans in opinion. However, he managed to gain over to his cause MM. Milne-Edwards, father and son; and with them also a few amateur zoologists. It was decided that a great *coup* must be struck. The English *savans* were invited to assist in answering this knotty question; and an unexpected irruption into the gravel-pits, where M. Perthes turned up so many flint hatchets and one molar tooth, was improvised. The scientific expedition was most successful. The twelve *savans*, English and French, worked away with a will at the gravel, and brought to light five flint hatchet-heads. But neither jaws nor molars did they find. This fact M. Milne-Edwards communicated to the Academy in a paper half an hour long. M. de Quatrefages was happier than if he had gained a large prize at a lottery; he carried his head high in the air. Most of the academicians were, however, unimpassioned, as men both serious and *ennuyés* ought to be. M. Elie de Beaumont alone had something on his mind; he held his nose between his hands in a way which seemed to say, "Go on, my fine fellow; put your foot deeper in it; you have been too long at this sort of game, and it's a very bad one." The public at this meeting of the Academy were more numerous than ordinary, despite of the rain which had been falling all day. It was evident that there was something in the wind. But what was it? Coming to his conclusion, "Lastly," said M. Milne-Edwards, "the molar was sawn in two, and carefully examined by all of us; it was analysed; and all the witnesses, English and French, *concluded* (*sic*) in the existence of antediluvian man." M. Quatrefages thereupon demanded to speak. "Yes," said this apostle of the molar, "science has gained a great victory; I hesitate not in saying that this jaw-bone is the proudest day of my life. And our English friends—those *savans* of so many sciences, in spirit and in heart—those admirable men, who at first derided our discovery—now believe in it. They believe! Ah! they are true *savans*. Victory!" Hereupon M. Velpeau, the President, proclaimed M. Beaumont as speaker. Silence reigned; the rustling of a pocket-handkerchief might have been heard. "Ah! now for it," said the public. "I deny not the existence of the molar," said M. Beaumont. "All that our very learned colleagues have been telling us for the last five weeks is a very pretty tale; but it has one slight defect. Our colleagues forgot to take a geologist with them to Abbeville. I don't think I am doing a bad action in telling them that

what they have taken for *diluvium* is ground of recent formation, and has none of the characters of diluvian formations." A thunder-bolt falling at the feet of M. Quatrefages would have astonished him less. The whole scaffolding he had been erecting was shivered to the ground. The public grinned, and immediately quitted the Academy, whose business was ended in their eyes. M. Milne-Edwards swore, but rather too late, that they couldn't take him in. Whereupon M. Quatrefages, finding himself denied even by his companion, struck his colours, muttered a few words, and regained his seat quite crest-fallen. Certainly, from the very beginning, a word from M. Beaumont would have settled the question of the molar; but he designedly let his colleagues put their foot well into it, and so gave them a lesson which we hope will not soon be forgotten. So ended the comedy.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, April 21st, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
WEST SOMERSET. [Annual.]	The Squirrel Hotel, Wellington.	Wednesday, July 1, 2 P.M.
READING. [Annual.]	Council Chamber, Reading.	Wednesday, July 1st, 3.45 P.M.
MIDLAND. [Annual.]	Board Room of the Infirmary, Derby.	Thursday, July 2nd, 2 P.M.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 7, 3.30 P.M.
NORTH WALES. [Annual.]	Royal Hotel, Rhyl.	Tuesday, July 7, 1 P.M.
SOUTH MIDLAND & CAMBRIDGE & HUNTINGDON. [Annual.]	Infirmary, Peterborough.	Thursday, July 9th, 1 P.M.

METROPOLITAN COUNTIES BRANCH.

THE Eleventh Annual Meeting of this Branch will be held at the Crystal Palace, Sydenham, on Tuesday, July 7th, at 3.30 P.M. President-elect: Francis Sibson, M.D., F.R.S.

The members will afterwards dine together.

A. P. STEWART, M.D.,
ALEXANDER HENRY, M.D., } *Hon. Secs.*

London, June 11th, 1863.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

THE Annual Meeting of these Branches combined will take place at the Infirmary, Peterborough, on Thursday, July 9th, at 1 P.M. President-elect: William Paley, M.D.

Gentlemen intending to read papers or cases will oblige by forwarding the titles as early as possible to the Honorary Secretaries,

JOHN M. BRYAN, M.D., Northampton; or
G. M. HUMPHRY, M.D., Cambridge.

Special Correspondence.

CALCUTTA.

[*Letter from* S. G. CHUCKERBUTTY, M.D.]

April 2nd, 1863.

IT might be interesting to your professional readers to know that in this hot season, with the thermometer ranging above 100° in the sun, and hitherto without any rain, epidemic diseases are exceedingly prevalent in Calcutta. Cholera, small-pox, measles, and chicken-pox are so well known that little need be said about them, except that they are more rife than they have been for some years past. Cholera, as usual, counts the largest number of victims, the admissions into the Medical College Hospital being about twenty a day. Diphtheria, too, has carried off some persons; it assumes here much the same characters as in England, but ignorant practitioners not unfrequently mistake for it other throat-affections of totally different nature. This name just now is uppermost in men's minds; and no sooner is a little whiteness on the palate or ulceration of the tonsils observed, than the conclusion is at once jumped at, "Here is a case of diphtheria"; although the essential conditions of that disease may be entirely wanting. So cases of common cynanche, abscess of the throat, and other allied affections, I have sometimes seen trumpeted forth as cases of diphtheria. A very striking instance of this kind occurred to me only a few weeks ago, of which I shall give here some brief details.

On the 10th of March last, I was called to see a little child, three years old, who had been suffering from fever for two or three days. At this time there was nothing unusual about the case, and a very little medicine sufficed to effect a cure. He had no fever that day, nor the following; and every hope was entertained that he would be all right ere long. In the evening of the second day, however, the mother frantically rushed into my house, imploring me to call on her child, as, she said, she had seen something white in his throat while he was crying, which she was told was diphtheria. I visited him at once, and succeeded, after some difficulty, in inspecting his throat. The tonsils were somewhat swollen, and there was a small ash-coloured slough on the surface of each. The respiration was perfectly healthy every where; and, though he had a slight cough, there were no physical signs of disease of the chest. There was no fever nor restlessness, and no inability to swallow. Considering, therefore, that there was no present necessity for active interference, I left the patient for the night, after prescribing for him a mixture containing chlorate of potash and quinine. At my next visit, the child had become irritable and rather disinclined to open his mouth; but he had slept well, and was still disposed to doze. The sloughs had not grown larger, but the inflammatory swelling was extending downwards. The respiration was good; percussion-note of the chest clear; pulse tranquil; no feverish heat of skin; no diphtheritic deposit in the mouth. A twenty-grain solution of the nitrate of silver was now ordered to be applied to the throat morning and evening, the

mixture being continued along with generous diet. There was no further change this day. The next morning the mother reported that the child was very restless during the first part of the night, but had become quieter and fallen asleep towards the latter part. He had had much cough, and some difficulty of breathing; but, when I saw him, all this was changed. His complexion then was good, inclined rather to be ruddy than otherwise; pulse not much excited; respiratory murmurs healthy; skin not particularly warm; but there was a good deal of thirst, the iced water being taken with considerable avidity; no appetite. Later this day, I was waited upon by a friend of the mother, who told me that the child was then very ill, having a stronger fit than in the night. I immediately called, and found that my patient was breathing with great difficulty, the sternum sinking in with every inspiration. The percussion-note of the chest was clear throughout, but there was an entire absence of respiratory sounds. A mustard plaister had been applied to the neck, but without producing the least beneficial effect. Inferring from the foregoing circumstances that there was closure of the glottis from inflammatory swelling and spasm, I proposed tracheotomy, to which consent was granted after some delay He was then removed by my advice to the Medical College Hospital. The operation, which was ably performed by my friend and colleague Dr. Joseph Fayrer, first surgeon to the hospital, gave immediate and marked relief, re-establishing normal respiration, and removing every vestige of dyspnœa. The child fell asleep; and we left him with the tube in his windpipe, under the care of a competent assistant. But, although there was no lack of attention, the tube unfortunately became clogged, some hæmorrhage came on in the course of the night, and the poor fellow ultimately died about eight hours after the operation. It seemed very probable in this case that, had not the accident of the stoppage of the tube occurred, the child might have recovered—a circumstance which makes his fate a matter of regret.

I will now relate another interesting case, which is rare, and bears in several points a good deal of resemblance to the cases of malignant pustule recently brought to the notice of the professional public by Dr. William Budd, through the medium of the British Medical Journal.

J. L., aged 34, came under my treatment about ten days ago. He had been suffering from an intermittent fever, with enlargement of the spleen and liver, for some years, and was under my own care for a short time two years before. About a year ago, he had had severe epistaxis, and ever since then had continued to bleed more or less every day. By a sojourn in the Upper Provinces, he had grown apparently much stronger, and his complexion was decidedly redder, though the enlargement of the spleen and liver still remained, and blood flowed from the nose and mouth every now and then. He had come down to Calcutta on business; but, on the second day after his return, he had a violent fit of ague, along with an excruciating pain in the left cheek and eye. There was a bright spot on the skin of the lower eyelid, in which he had a dreadful itching. He fancied this was owing to the lodgment of grains of sand in the eye during his late railway journey. The eyeball, however, was remarkably clear and sound, and there was nothing notable in the conjunctiva. The lower eyelid was somewhat swollen, and there was bleeding from the nose and mouth to a small extent. The pulse was excited, body warm, and mind unnaturally anxious. I ordered him quinine, with compound infusion of roses and dilute sulphuric acid; Goulard's lotion for the eye, port wine, and generous diet. The following day, the swelling had involved both the eyelids, which could be forced open still, when the eyes themselves were found to be quite healthy, the power of vision being no way affected. The pain, however, was still most agonising; and, as the lotion had done him no good, he was ordered warm fomentation with poppy-heads boiled in water; and solid nitrate of silver was applied around the swelling, which was itself also pencilled over with the same caustic. These measures removed the pain; but the next morning the whole of the left side of the face, from the eyebrow to the chin, was immensely swollen; the lips were much tumefied and distorted; but there was nothing inside the mouth; and the eyelids were still capable of being forced open after persevering fomentation. The same measures were continued, with the free use of food and wine, till the afternoon, when, the swelling of the eyelids having become unyielding, and there being great pressure on the eye, I incised freely both the portions, which gave vent to a good quantity of reddish serum, and afforded great and immediate relief, the tumour subsiding considerably. Another and a freer use of the caustic was now made; and, as diarrhœa had now set in, some laudanum was combined with the quinine mixture, and food and port wine liberally given. Nevertheless, the next day the skin was found still more distended and brawny on the left cheek. There was a hard unyielding swelling on the throat; and the patient was fearfully agitated, complaining that his breath was choking. A longitudinal incision below the chin discharged a considerable quantity of serum, the swelling subsided somewhat, and he felt partial relief. Shortly, however, the distress of breathing returned; and he died about 1 o'clock P.M. on the 30th of March, that being the end of the fifth day of his present illness.

What was the nature of this case? Was it erysipelas, cancrum oris, or malignant pustule? I have seen a good many cases of erysipelas of the face, but this was nothing like them. There was no sloughing of the skin, muscle, or mucous membrane; so it could not be cancrum oris. It possessed, so far as I could make out from published statements, many of the characters of the malignant pustule, modified, no doubt, by the peculiar constitution of this patient. I may be wrong; but I thought it right to communicate these particulars of what appeared to me to be an obscure disease. As far as I can trust my memory, I remember only one other case of this kind in Calcutta many years ago, when a middle aged missionary, up to then in good health, was suddenly taken ill with a similar pain and swelling in the face and neck, and died of suffocation about the third or fourth day.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 6TH, 1863.

H. OLDHAM, M.D., President, in the Chair.

SIX gentlemen were elected Fellows of the Society at this and the April meeting.

Polypus of the Uterus. Dr. GRAILY HEWITT exhibited a fibrous polypus, of the size of an egg, which he had lately removed. The case was that of a patient of Dr. Browne, of Kew, married, and 43 years of age. The symptoms had lasted for two years, but only lately advice had been sought. The patient had become excessively weak, and reduced to a condition externally simulating that witnessed in cases of cancer. The growth, hanging just outside the os uteri, was removed by a pair of curved scissors; the pedicle was three-quarters of an inch thick. The recovery was complete.

FURTHER OBSERVATIONS ON USE OF ANÆSTHETICS IN MIDWIFERY. BY CHARLES KIDD, M.D.

The present communication was a sequel to a former one in the *Transactions* of the Society; and the author said it was satisfactory to find that all the leading details of that memoir had been highly appreciated, and since then very fully recognised as to their truth, more particularly as to the value of chloroform in cases of malpresentation, or contracted outlet of the pelvis, requiring versional delivery; as also in some bad forms of anæmic and epileptic puerperal convulsions, in tedious exhausting labours after dilatation of the os in women of a "particular age" who marry late in life, etc. The present communication in particular had reference—1. To cases attended with hæmorrhage, where the author wished to suggest caution in the administration, as also to obtain the opinion of the Society if hæmorrhage be encouraged by chloroform. 2. To the use of chloroform in cases of retained placenta. 3. To the usefulness of alternating the administration of ether with that of chloroform where the pulse sinks, as in some exhausting operations, such as ovariotomy. 4. To the vast advantage of using chloroform in puerperal convulsions. 5. To the greater safety of chloroform at present—it being now known that accidents do not occur so much or at all from heart-disease as from simple apnœa, as the result of stoppage of the respiratory muscles, and to direct the profession to the extreme value of the "Faradisation" current to these muscles in such accidents, when other means fail to restore the patient.

As to the tendency of chloroform to superinduce hæmorrhage in ordinary cases, the fear of this was not entirely without foundation; yet the administration could be stopped if hæmorrhage were feared; or the hæmorrhage could be combated by ergot, stimulants, the use of cold, pressure, etc. According as bleeding continued the absorption or endosmosis of the chloroform was slightly increased, if its administration were continued, though, on the whole, the author was not so much afraid of this condition with chloroform as of brain congestion, or of a state observed occasionally—almost of delirium tremens—in some hospital patients, or a state leading to actual effusion in the brain in the worst form of puerperal convulsions; but this latter disease might occur without chloroform at all. The author was certain that chloroform removed unnecessary and often exhausting pain; it rendered "versional" delivery much more easy; it also undoubtedly facilitated the recovery of the lying-in patient. It was not probable at all that chloroform skilfully used ever stopped a labour or caused inertia.

The next division of the paper had reference to the usefulness of chloroform in hour-glass contraction of the uterus, and in some, if not all, cases of retained placenta. A safe and useful rule (having the approval of the Dublin Lying-in Hospital and other institutions) was the following:—If, in efforts at manual extraction of adherent placenta, the uterus be contracted firmly or in "hour-glass" fashion, the condition of the patient fair, and yet much resistance offered to the hand, the administration of chloroform facilitates the removal of the placenta, and changes the firm contraction of the uterus. It was probable in many cases that there might be prostration or inertia; here ammonia must be given, and it acted very well with chloroform or brandy. Retained placenta was fortunately a rare complication in delivery; yet, in 6000 deliveries, 56 of bad hæmorrhage and 28 of retained placenta were noted, and one case was mentioned by the author where portions of a placenta were removed, and uterine phlebitis thus prevented, twelve hours after delivery; the removal being apparently impossible without chloroform. Chloroform was at least one remedy not to be neglected when the other ordinary measures were under trial.

The author here related his experience in the operation of ovariotomy, in about thirty of which cases he has assisted with the anæsthetic. He now preferred ether to chloroform, or, better still, to place the patient first fairly under the latter, and continue the anæsthesia with the former; it was not necessary to use very much of either, but if the pulse should sink, the action of sulphuric ether was very marked in restoring it. If ovariotomy could be performed without one or the other, but with a piece of ice over the linea alba, it might be better still. The chief portions of the operation—breaking down adhesions where they exist, securing the pedicle, etc.—were not very painful, and even the tension of the tumour sometimes stretched the abdominal wall to a thin membrane, devoid of feeling.

Chloroform should never be given in labour-cases before the os uteri had dilated to something like the size of a shilling. The narcotism of chloroform was more marked in the early than in the later portion of the labour; but it was here that chloroform "delayed a labour," as occasionally complained. It was a great mistake to begin it too soon, however, no matter what the entreaties of friends, or attendants, or the patient herself might be. Very many of the popular prejudices against chloroform in these cases arose from catching a fact by the wrong handle, as it were, or losing sight of the relief from pain in charity that it was our duty and privilege to afford the lying-in woman. The effort of the uterus to empty itself was so little related to the true seat of pain, that labour might go on in perfect paraplegia; as in cases where the relations of the spinal and reflex system were totally cut off from the sensorium and ganglia by acephalocysts in the upper portion of the cord. Labour, again, would proceed, though the cervical vertebræ might have been fractured in animals, or in the deep apopleptic coma of eclampsia in women, or in the dead insensibility of drunkenness.

Reference was next made to puerperal convulsions, and three cases were mentioned of fatal puerperal convulsions brought on apparently by the excessive reflex irritability excited by passing the hand into the uterus to remove adherent placenta. Both affections might have been prevented by use of chloroform, but could not fail to be aggravated by the lancet. Again, such convulsions were often the result of intense, long continued agony, which nothing would lessen so well as skilful and small doses of chloroform. It was probable, as observed by Schroeder van der Kolk, that in these and all such cases of convulsions direct irritation of peripheral ends of nerves was reflected directly back to the medulla oblongata; this direct irritation, by a sort of induction, acting on other roots of nerves lying side by side.

Hence, passing a hand into the uterus, excited convulsions in parts not apparently connected with the uterus; but all this excess of action, as well pointed out by Dr. Tyler Smith, Dr. Murphy, and others, was controlled, for a time at least, by chloroform. In conclusion, the author directed attention to seventeen women with obstructed labour, where the mothers had had in old times dead children, or eviscerated children, torn away by hook or crotchet, or craniotomy, but where, by means of version subsequently under chloroform, nine living children, and seven with heart-pulsation (but which did not live), were born. Such was one of the vast benefits of this still underrated and cruelly misrepresented agent, chloroform, which now was perfectly safe, as we were aware that the accidents arose not from heart disease, as previously surmised, but from diminished action of the respiratory muscles and general reflex system, which would be readily excited by electricity when ordinary means failed to restore the patient.

Dr. Hall Davis mentioned several instances in which chloroform had acted most beneficially during labour; cases of nervous agitation with rigidity of the passages of the os, vagina, and perineum, and where the chloroform had superseded the use of the forceps or other methods of mechanical delivery, in facilitating version in cross-presentations, where embryotomy had been contemplated. Chloroform frequently gave regularity and uniformity to the labour-pains. On the other hand, he had seen cases in which chloroform gave a lingering character to the labour, and he believed it sometimes left relaxation of uterine fibres and tendency to hæmorrhage. He had met with no death from the use of chloroform in midwifery practice.

Dr. Murphy stated that, with regard to the use of chloroform in puerperal convulsions, he had found it to be a most valuable agent in controlling the paroxysms. It had succeeded where the more usual remedies have failed. In ordinary cases of labour, where the pains were severe, he had also found it extremely beneficial. For this purpose it was not necessary to put the patient asleep; pain could be controlled, and the patient remain perfectly conscious. The first effect of chloroform was on the sentient nerves, and pain might be relieved long before insensibility took place. Its administration in this manner he had found to give the most complete relief. He knew of no deaths from chloroform in the practice of midwifery. With regard to its use in true puerperal convulsions with albuminous urine, he was called to attend a lady, a year or two ago, pregnant with her first child. She was of middle age. Her labour was not difficult; it lasted about eight hours; her pains were very acute. She would not take chloroform; and, being a woman of much fortitude, she struggled to command herself, but in the contest she became giddy, lost her sight, and convulsions followed. She was bled, without controlling the convulsions. Chloroform was then administered with perfect success, and the paroxysms were at once controlled. Tranquil sleep followed, and the convulsions did not return. He carefully examined the urine, and found it to be albuminous. The lady perfectly recovered.

Dr. Rogers could not recollect a single case of flooding produced by the use of chloroform. He was careful to give ergot to patients who had previously flooded. He had been able to turn more easily; and had likewise given chloroform to its full extent in some cases of craniotomy; but as a rule he merely soothed and calmed his patients with it. A very small quantity was used at the Samaritan Hospital during the operation of ovariotomy; he did not think it added to the shock of such operation, or diminished the chances of recovery, nor could he say that ether or a mixture of ether and chloroform was preferable in such operation.

The President would like to have the experience of the Fellows present on the effect of chloroform in predisposing to hæmorrhage after labour; the results as to the use of chloroform in puerperal convulsions; and as to the occurrence of death from the employment of chloroform in midwifery practice.

Mr. Cumberbatch had never known flooding induced by the use of chloroform in midwifery; and, as far as his experience went, hæmorrhage was not more likely to occur than if it had never been given. No fatal case had come under his notice in which the result could be ascribed to chloroform.

Dr. Routh believed that chloroform, when given to any extent, developed a tendency to imperfect contraction after the removal of the placenta, and thus favoured the occurrence of hæmorrhage. Since he had used chloroform he certainly had a larger proportion of cases of hæmorrhage. He was also certain from experiment that it materially lessened uterine contractions during the first stage. In the second stage, except when carried to the absolute unconsciousness of the patient, it did not influence the uterine contractions; but, if given largely, it certainly diminished the force of the contractions. He had heard of one case of death after chloroform in labour. It was that where a practitioner delivered by forceps, a well experienced nurse giving the chloroform while he was using the instrument. As the child was extracted, the woman fell back suddenly and died. The suddenness of the death especially appeared to him to prove the fatal issue was due to chloroform.

Mr. Chapman was desirous of eliciting the opinion of the Society as to the use of chloroform in puerperal convulsions.

Dr. Graily Hewitt observed that no rule universally applicable could possibly be laid down as to the use of chloroform in puerperal convulsions. In some cases—a marked instance of which he related—the condition present was caused by very extensive disease of the kidneys. In such cases, chloroform was perfectly useless. In other cases, when the blood-poisoning and the albuminuria were only temporary, and not so dependant on organic disease, chloroform had proved to be very serviceable.

Dr. Martyn had employed chloroform in painful and difficult labours for many years, and he had met with no seriously unfavourable results from it, but otherwise. Sometimes troublesome sickness appeared to follow, as in other cases; and he had observed some check to pains, but whether this effect was confined to the first stage of labour, he was not able to say. He had never met with serious hæmorrhage after the use of chloroform; indeed, he decidedly believed that it rather saved the patient in this respect. As to its application in severe cases of convulsions in labour, he was most anxious for the opinion of the author and of those who have had experience in such cases. In one case in his own practice which terminated fatally, a considerable amount of blood was lost naturally without any effect in abating symptoms. In watching the records of many cases of puerperal convulsions, he had observed that large bleeding, shaving the head, and the use of ice, had seldom been followed by satisfactory results. He would rather trust to chloroform than to any other known remedy. In many of the minor operations of midwifery, in hour-glass contraction, in the removal of the placenta, etc., excepting to relieve pain, he did not consider chloroform to be required.

Dr. Cleveland suggested that in convulsions associated with albuminuria, the specific gravity of the urine, when practicable, should be ascertained, inasmuch as the presence of albumen in that fluid, *per se*, did not necessarily indicate blood-poisoning; but when it coexisted with a low specific gravity there was evidence, in addition to the general symptoms, of the retention of those salts in the blood, which, in a healthy state, were eliminated by the kidneys. Under the latter circumstances he thought that the administration of chloroform was more likely to be injurious than otherwise.

Dr. Braxton Hicks had used chloroform in puerperal convulsions to produce quietude during instrumental delivery, and found it to succeed very well, and without untoward result. He had continually examined the urine of patients with puerperal convulsions, and had always found albumen at some time, during or after the attack. It might be present only for a short time, and might be missed if not carefully watched for. The specific gravity was always high, generally with blood-corpuscles, waxy and epithelium casts—in fact, the evidence of acute "Bright's disease." Whether the addition of chloroform to this state was safe, or whether it would add to the blood-poisoning, was not yet determined.

Dr. Druitt said it was difficult to apportion the amount of danger to be ascribed to the chloroform, or the amount of good in eclampsia. The cases must be judged by a fair analogy with others. He cited an instance of a lady dying in childbirth—so-called—but in reality of scarlet fever superadded. He did not find that hæmorrhage was induced by administration of chloroform, and he agreed with the author generally.

Dr. Braxton Hicks wished to know if chloroform and ergot could be combined, and what would be their action in "irregular" labours.

Dr. Kidd had found chloroform and ergot go very well together, especially if used alternately—the effect of one allowed to wear off a little before using the other. He expressed his satisfaction that the experience of the Society was in favour of chloroform even in hæmorrhage cases, and in cases of retained placenta. As to eclampsia, he believed there were three forms, and in two chloroform was a certain remedy rather than the lancet. Even albuminuria was due to pressure of the gravid uterus on the kidneys, not to actual disease. He agreed with Dr. Murphy on this point, but less, perhaps, as to the same speaker's view that the muscular fibres of the uterus were not relaxed by large doses of chloroform. He would say, however, as corroborating Dr. Murphy's opinions, that the muscular fibres of the heart were not acted on by chloroform as was popularly believed. Dr. Kidd preferred ether in tedious exhausting operations like ovariotomy. A mistake sometimes was made to use six or eight ounces of chloroform in such an operation; but six or eight drachms might answer, as the operation, though attended with vast depressing "shock" to the nervous system, was not very painful after the first section of the skin over the linea alba. He has known cases, too, where there was great exhaustion saved by beef-tea and wine injections, especially if sickness from chloroform prevented food from being taken. Chloroform did not lead to inflammation, as supposed by some, because in an hospital, of those not chloroformed, 1 per cent. only die. Of those under chloroform; a larger number have the operation of forceps or craniotomy performed; and this latter part is ingeniously omitted.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 9th, 1863.

R. Partridge, Esq., F.R.S., President, in the Chair.

On the Ordeal Bean of Old Calabar; its Action on the Animal Body compared with that of Woorara and Conia. By George Harley, M.D.

The author began his communication by a brief account of the literary history of the ordeal bean. He next alluded to the botanical characters of the plant. It is a long twining shrub, with papilionaceous flowers and leguminous fruit, the kernels of which, both in taste and appearance, resemble the common white haricot bean. The natives call the plant Eséré, and it was by the missionaries named the "ordeal bean," in consequence of it being given to persons suspected of witchcraft, with the view of discovering their innocence or guilt.

The paper was illustrated by diagrams of the plant, specimens of the bean and its preparations; and its effects on the pupil of a human being and of a cat were shown by Dr. Harley. The conclusions drawn by the author were as follows:—1. The ordeal bean may cause contraction of the pupil when taken internally as well as when applied locally. 2. Atropine and the Calabar bean are physiologically antagonistic. 3. The ordeal bean paralyses the motor nerves, and leaves the intelligence and muscular irritability unimpaired. 4. It excites the salivary and lacrymal secretions. 5. It destroys life by paralysing the nerves supplying the respiratory muscles—being, in fact, a respiratory poison. 6. Although it may weaken the heart's power, it neither stops the circulation nor arrests the heart's action. It is not, in fact, a cardiac poison. 7. It is closely allied in its effects to woorara and conia, most closely, perhaps, to the latter; but it differs from both in its tendency to produce muscular twitchings, and in its power of inducing contraction of the pupil. Neither woorara nor conia exert, generally or locally, any such effect on the iris. 8. The ordeal bean will prove a most valuable addition to the *pharmacopœia*, by not only giving us a useful myopic, but also a powerful anodyne, capable of soothing nerve-irritation without either destroying intelligence or endangering life by arresting the heart's action.

Account of a Patient upon whom Ovariotomy was Performed Twice; with Remarks. By T. Spencer Wells, F.R.C.S.

The author believed that this case was unprecedented, but he had lately learned that Dr. Atlee, of Philadelphia, had performed ovariotomy successfully upon a patient from whom Dr. Clay, of Manchester, had removed an ovarian tumour sixteen years before. The patient whose case, before, during, and after operation, was now narrated to the Society, was 42 years of age. One ovarian tumour was removed in May 1862; another in January 1863. The propositions the author believed to be established by the case were:—1. Ovariotomy may be performed twice on the same patient without unusual difficulty. 2. It may be advisable to make the incision, in the second operation, at some distance from the cicatrix left after the first operation. 3. Whenever one ovary is removed, the opposite ovary should be carefully examined. 4. In all penetrating wounds of the abdomen, the divided edges of peritoneum should be brought accurately and closely together.

On the Induction of Premature Labour in Cases of Pregnancy Complicated with Albuminous Urine, Dropsy, and Amaurosis. By Robert Lee, M.D., F.R.S.

Dr. Lee related the case of a lady, whom he saw in consultation with Mr. Bowman and Dr. Ferguson, suffering from disease of the retina and albuminuria. From having previously seen a case in St. George's Hospital, in which albuminuria and dropsy, occurring in a pregnant female, had disappeared on the spontaneous expulsion of a dead fœtus, Dr. Lee advised the induction of premature labour. This was not at once carried out, but after some delay some convulsion occurred, and it was then determined not to wait any longer. At this time there was amaurosis, albuminuria, and œdema of the face. The membranes having been punctured, labour ensued, and a dead fœtus of four months was expelled. After this the albumen gradually diminished, and the vision improved. In a postscript Dr. Lee reported the particulars of an analogous case, for which he was indebted to Mr. Bowman.

Description of a New Iris-Forceps. By W. R. Beaumont, Esq., of Toronto.

The instrument consisted, like Langenbeck's and von Grafe's, of a fixed and a sliding blade; but differed from theirs inasmuch as the point of the hook was not only more concealed, but its concavity was quite filled by the

end of the sliding blade when the blades were closed, so that the whole of the piece of the iris taken up by the hook was securely held. The form of the hook was less curved, and rather larger. The author commented on the disadvantages of the instruments used by Langenbeck and von Graefe, and stated his belief that the instrument he had invented was free from these. The mode in which his forceps were used was next described; and the paper concluded by the relation of some cases of operation in which the forceps was successfully employed. The newly invented instrument was exhibited.

Medical News.

UNIVERSITY OF OXFORD. In a Congregation holden on June 18th, the Degree of Bachelor in Medicine was conferred on

Heaton, Frederick L., Jesus College
Leeds, Edward, Wadham College

UNIVERSITY OF CAMBRIDGE. In a Congregation holden on June 18th, the Degree of Doctor of Medicine was conferred on

Thompson, Reginald, Trinity

APOTHECARIES' HALL. On June 18th, the following Licentiates were admitted:—

King, George, Leckford, Hants
Oliver, John Brown, High Wycombe
Robertson, John Charles George, Edinburgh
Smith, William Johnson, Wisbech, Cambridgeshire
Thompson, George Septimus, Newcastle-on-Tyne
Willes, Joseph, Brighton

At the same Court, the following passed the first examination:—

Weld, Charles Humphrey, Middlesex Hospital
Wilson, Henry, Charing Cross Hospital
Wraith, John Hargreave, Manchester

APPOINTMENTS.

*BROADBENT, William H., M.D., elected Physician to the Western General Dispensary, in the room of F. W. Mackenzie, M.D.
*COULSON, William, Esq., appointed Honorary Consulting Surgeon to St. Mary's Hospital.
*COUPER, John, Esq., elected Lecturer on Physiology at the London Hospital Medical College.
*JACKSON, J. Hughlings, M.D., elected Lecturer on Physiology at the London Hospital Medical College.
JEAFFRESON, Horace, M.B., elected Resident Medical Officer to the London Fever Hospital.
*LAWSON, G., Esq., appointed Surgeon to the Middlesex Hospital.
SHILLITOE, Buxton, Esq., appointed Surgeon to the Great Northern Hospital.

ARMY.

To be Staff-Assistant-Surgeons:—

WOOD, Assistant-Surgeon J., Royal Artillery, *vice* W. J. Mullan.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BEACH, J., Esq., to be Surgeon 3rd West Riding R.V.
CHATER, S., Esq., to be Assistant-Surgeon London Rifle Volunteer Brigade.
MCWATT, R. C., Esq., to be Surgeon 1st Administrative Battalion Berwickshire R.V.
NEWSTEAD, G., Esq., to be Assistant-Surgeon 3rd West Riding R.V.
ROBERTS, E. S., Esq., to be Assistant-Surgeon 1st East York R.V.

MILITIA.

LOVELL, F., Esq., to be Assistant-Surgeon West Essex Militia.

BIRTH.

CROSSMAN. On June 13th, at Hambrook, near Bristol, the wife of *Edward Crossman, Esq., of a daughter.

MARRIAGE.

WHITE, William A., Esq., Surgeon, Frome Selwood, to Jane Elinor, second daughter of the late J. F. M. REID, Esq., B.C.S., at Stoke-next-Guildford, on June 16.

DEATHS.

BODDINGTON, Robert, Esq., Surgeon, at Ditchling, Sussex, aged 69, on June 15.
GOLDING, Benjamin, M.D., at West Brompton, aged 69, on June 21.
HOUSTON. On May 9th, at Doornagoodium, Northern Circars, Charlotte, wife of Assistant-Surgeon J. McD. Houston, Madras Army.
JEAFFRESON. On June 13th, aged 67, Caroline, wife of William Jeaffreson, Esq., Surgeon, of Framlingham.
KAY. On June 18th, at King's Place, Commercial Road, aged 22, Jane, wife of J. W. Kay, Esq., Surgeon.
LEWIS. On June 18th, at Wiesbaden, Charlotte, wife of George Lewis, M.D.
O'HERLEHY, Daniel P., M.D., at Madeira, aged 38, on May 20.
*PEARSON, John A., Esq., at Buxton, on June 6.

THALLIUM. Specimens of thallium, and many of its salts, may be obtained from Messrs. Hopkin and Williams, New Cavendish Street. (*Chemical News.*)

THE LONDON HOSPITAL. Dr. Little, the senior physician, and Dr. Ramsbotham, the obstetric physician, have severally signified their intention to resign their appointments at this hospital.

SIR JOHN LIDDELL. Sir John Liddell, the present head of the medical department of the navy, was long at Greenwich Hospital, and laboured for the benefit of the pensioners with a splendid philanthropy. (*Times.*)

A SOLDIER'S HOME. It is proposed to establish an institution, which, for the soldiers of the State of New York, shall supply the place of the Hotel des Invalides in France, and the Chelsea Hospital in England. (*American Med. Times.*)

A MEDICAL SOCIETY IN THE FEDERAL ARMY. The surgeons of all the regiments composing General Granger's army corps (near Franklin, Tennessee) have formed themselves into a regular medical association. (*Amer. Med. Times.*)

THE CITY OF THE PLAGUE. It is doubtful if there is a city in the civilised world that contains within its jurisdiction as many sources of that class of diseases known as preventable, or capable of being removed and destroyed, as New York. They are thickly strewn in every street, in every lane, and even in every dwelling and shop. (*American Medical Times.*)

ADULTERATION OF GERMAN YEAST WITH PIPE-CLAY. At a recent meeting of the Commissioners of Sewers, Dr. Letheby reported that he had met with some samples of German yeast adulterated with from one-third to half its weight of pipe-clay. The Doctor pointed out how the presence of this latter substance in bread might mislead a baker, and occasion a false charge against him. The fact deserves the notice of chemists.

VACCINATION OF SHEEP. In the House of Commons, on Friday week, in reply to Sir J. C. Jervoise, Sir G. Grey said that some experiments had been undertaken with respect to the effect of vaccination upon sheep, with a view of preventing the spread of small pox among them; but the results of these experiments were not known, and when they were, they would be reported to the House.

THE PRINCIPAL HOSPITAL OF FLORENCE was founded as far back as 1286, by the father of Dante's Beatrice. It covers a large area of ground, though it has but one court of any great size. It numbers over one thousand beds. In consequence of the fashion to bequeath property to hospitals it became very rich, but in the last century the government seized upon all its possessions, and has since administered them. It contains wards for males and females, divided, as usual, into medical and surgical; a syphilitic ward, one for contagious disorders, one for ophthalmic diseases, a lying-in ward, *one for the delirious in fever*, and one for cutaneous affections. It also receives children, who, as in most Italian hospitals, are scattered around among the other patients. (*Professor Lee.*)

Degrees for Women. George Sand, the famed Madame Dudevant, has published a book, in which the admission of women to universities, or to any examination for degrees, is strongly condemned. "Why Female Academicians?" is its title. She says that women have no more business in the academy than in the army or the senate; that, if they wished for female professors, they should have begun with Mme. de Staël and Delphine Gay, the living Corinne. She then asks, apropos of the contests of the learned bodies: "What would women gain by being enrolled in that phalanx, the flag of which is a standard of war? If their mission is really one of concord and love, let us leave to them the illusion of the purity of the Castalian spring, or tell them frankly that the spring has ceased to flow for them.

Mons. Du Chaillu's Collection. The museum of this indefatigable adventurer has just been dispersed by auction, and one of the most valuable lots, viz., 93, described as a magnificent series of gorillas, male and female and young, in fine condition, the two adults having been beautifully prepared by Mr. Wilson, the eminent taxidermist, the skeleton of the male being nearly complete, that of the female quite so, and also the skeleton of a young male, was knocked down to Dr. Edwards Crisp, for the sum of £110, being much below its real value. Mr. Flower, the conservator of the Hunterian Museum, and Professor Clark, of the University of Cambridge, made judicious purchases for their respective collections. Several specimens also went to the University of Oxford.

Testimonial to W. Mason, Esq., of Burton-on-Trent. On the 16th inst., a large body of his fellow townsmen assembled together to present Mr. Mason with a token of their esteem and gratitude. Mr. Mason has been long known for his amiability of disposition, his professional skill, his unremitting kindness and attention to his patients, and his fervent sympathy with all classes of the community. The tangible proof of gratitude and respect was represented by a handsome brougham, horse, set of silver-plated harness, and a beautiful silver salver. The following inscription was engraved upon the salver:—"This salver, with a brougham, horse and harness, were presented to William Mason, Esq., of Burton-upon-Trent, on the occasion of his sixtieth birthday, by his patients and friends, in token of their high esteem for his professional skill and his unremitting kindness and attention, and especially for his self-denying services to the poor in times of sickness, through upwards of thirty years of medical practice. Burton-on-Trent, June 1863."

Vaccination. In the House of Lords, on Thursday week, Lord Lyttelton inquired whether it was the intention of the government to bring in any measure for the amendment of the Vaccination Acts. They had just gone through, if indeed they had gone through, one of those panics on this subject well known to those who attended to the administration of the affairs of boards of guardians. There was a great outbreak of small-pox, great attention was excited, union officers were unusually active, many persons were vaccinated and revaccinated, much good was done, the stable door was closed before all the horses were stolen; but, nevertheless, the Act was very imperfect. This Act, like most amateur efforts of legislation, and many that were not, left the law defective. He had brought in an amended Bill the following session, and it passed their lordships' House, but was rejected in another place; and since then very little had been done. Increased powers had been given to the Privy Council, but still that was not enough. It should be borne in mind that there was at this moment some parts of Europe where small-pox had been entirely eradicated by the effect of vaccination. The Council of the Epidemiological Society, who were the highest authority on this subject, had furnished the following suggestions for an alteration of the law:—1. The making provision for the systematic local supervision of vaccination; 2. The providing more effectual means whereby the local authority or appointed superintendents might ascertain who were and who were not vaccinated; 3. An extension of the age within which vaccination must be performed in those districts in which, from the limited population, etc., vaccination from the arm could only be maintained periodically; and, 4, an extension of the powers of the Privy Council over local arrangements for vaccination, so far as was necessary to secure the more effectual maintenance of local supplies of fresh lymph. He wished to know whether it was the intention of the government to introduce a Bill for an amendment of the law in this or the next session of parliament. Earl Granville said that the government were fully alive to the necessity of something being done, and were considering the best means of effecting an improvement in the law.

Varieties.

Process for the Decortication of Seeds. M. Lemoine suggests the use of moderately strong sulphuric acid, which he agitates with the barley, for instance, for fifteen or twenty minutes, and then washes away, using in the last washing a little carbonate of soda. In the case of barley he assists the operation by the application of a gentle heat. After the grain is dried the husk is easily separated. (*Chemical News.*)

Barber-Surgeons and their Hall. The pole, which even now, in country places, projects over the shaver's shop door, indicated at first that persons might be bled there, as the patient, when phlebotomy was performed, grasped a tall rod, to keep the arm steady. Of course clever men soon appeared amongst the barbers, and in no long time began to practise as medical men—on the whole no doubt with advantage to the humbler classes; their right to do so was quickly recognised by custom, and Henry VIII granted them a charter of incorporation, which for several centuries was the sole document which made their occupation legal. On entering from Monkwell Street, the building shows signs of neglect and disrepair, and first you come into a rather spacious hall, which is not often used, and, though elegant in its proportions, is bare and dirty. Quitting this, you enter an inner hall, probably sixty feet long by thirty wide, full of objects of the highest interest. There are several windows at the back, but the light is principally derived from a circular lantern in the centre, and this is a singularly beautiful specimen of the architect's talent. It is very lofty, and is encrusted at every point with exquisitely delicate carvings of fruit and flowers in every possible variety, "not done in plaster," said our cicerone, "but cut out of the solid wood." The walls are covered with extremely fine original paintings, and they look wonderfully fresh and well preserved, scarcely any of them showing the slightest appearance of decay. (*London Scenes and London People.*)

Bologna Hospitals. Dr. Lee, of Philadelphia, writes thus of the Bologna hospitals:—"In connection with the university are several hospitals; a clinical hospital, a veterinary college, botanical garden, etc.. The *Ospedale della Vita*, or *Ospedale Grande*, is the largest in the city, containing probably fifteen hundred beds. It is situated just on the borders of the city, at its southern suburbs, and is bordered on one side by extensive grounds and gardens, to which convalescent patients are admitted. The buildings are large, and surround a court in which are the usual fountains, etc. Though probably constructed for monastic purposes, they are admirably adapted for hospital uses. The wards are very spacious, clean, and perfectly ventilated, and the same may be said of nearly all hospitals I have seen in Italy, as at Venice, Padua, Vicenza, Verona, Mantua, Reggio, etc. It

is beautiful to see with what tenderness, assiduity, and skill the poor patients are treated, and we learn many useful lessons from these people, whom we are apt to regard as ignorant, superstitious, and bigotedly attached to all sorts of delusions and errors. I have never seen so much time spent by the visiting physicians in their daily rounds as in Italy, nor such intense devotion to their duties, nor such extreme caution in forming a diagnosis, nor such carefulness in writing out prescriptions, nor such tenderness on the part of nurses. Were I to seek for a cause to explain all this, I should certainly not fail to find it in the cultivation of a deeper religious spirit, a more profound conscientiousness, a quicker sense of duty, a feeling of greater responsibility; and I shall leave Italy with a full conviction that in all that concerns humanity, benevolence, and charity, she stands in the van of nations, and deserves the plaudits of mankind. I observed some typhoid and typhus fever cases in the wards, but the house-physician remarked that the city was unusually healthy, and that they had fewer patients than usual at this season of the year. As to Italian practice it seems to me generally judicious and skilful. Some think they carry the depletory practice too far in some cases, and considering the kind of patients they chiefly have to treat in hospitals, viz., the poorer classes, who often suffer for want of sufficient food, there is probably some foundation for the opinion. The physicians of Italy, however, are well read and habitually studious; they are keen observers, and have logical, philosophical minds, and no one can believe they would pursue a course of practice which their own experience and observation show to be prejudicial. I believe the fact to be, that they deplete far less than is generally supposed. I know from examining the books in different Italian hospitals, that wine is habitually given to more than two-thirds of their patients."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Clay (Manchester), "On the Treatment of Various Obliquities and Prolapsus of Uterus"; Dr. Martyn, "Case of Face Presentation, Sloughing of Bladder, etc."; Mr. Tomlinson, "Tuberculosis of Uterus"; Cases by Dr. Barnes.

FRIDAY. Archæological Institute.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JUNE 20, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 938 / Girls.. 941	1879	1191
Average of corresponding weeks 1853-62		1864	1143

Barometer:

Highest (Sun.) 29.87; lowest (Fri.) 29.38; mean, 29.705.

Thermometer:

Highest in sun—extremes (Th.) 112.3 degs.; (Tu.) 83.3 degs.

In shade—highest (Th.) 72.7 degs.; lowest (Tu.) 66.3 degs.

Mean—58.8 degrees; difference from mean of 43 yrs.—0.6 degs.

Range—during week, 27.3 degrees; mean daily, 18.2 degrees.

Mean humidity of air (*saturation*=100), 79.

Mean direction of wind, Var.—Rain in inches, 1.66.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Several articles are unavoidably postponed this week for want of space.

MR. EVAN THOMAS was on the 23rd instant expelled from the Royal Medical and Chirurgical Society of London.

EXPULSIONS FROM THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Dr. O'Connor remarked, on the occasion of the expulsion of Mr. Evan Thomas from the list of Fellows of the Medical and Chirurgical Society, that he was the second who had been removed in a similar way. The first was Mr. Want, a surgeon of some standing in London. He was admitted in 1810; and his name was removed on the 24th of May, 1815, by vote of the society. The cause of his removal was reporting for publication the proceedings of the society.

THE ARTICLE "EXCISION OF JOINTS," IN THE SYSTEM OF SURGERY. The writer of the article on Excision of Bones and Joints, in the *System of Surgery*, complains that no credit is given to him, in our allusion to the value of his labours, for the possession of "actual experience in the great surgery of the resection of joints." (See BRITISH MEDICAL JOURNAL, June 6th, 1863.) We have it now, on the best authority, that in drawing this conclusion from the general tone and character of that article, we formed an opinion that was incorrect—a very considerable practical experience on the subject having already been the good fortune of the author. But, whilst we thus admit that our inference cannot be sustained on this point, we assert our right to maintain the other expression of our opinion.

THE WING WOMAN'S SUCCESSOR.—The following is the announcement of the successor to the wise woman of Wing, who did a very large "practice" in her neighbourhood. It is taken from the *Leicester Advertiser*.

"Mrs. Sarah Mould (sister of the late Mrs. Woodcock, of Oakham) will be happy to attend to any of her late sister's patients. Mrs. Mould begs to intimate that she was with Mrs. Woodcock when residing at Wing, likewise at Oakham, and assisted her sister, and had the dispensing of the medicines, thereby having an opportunity of obtaining a knowledge of her sister's treatment of all the numerous maladies which came under her notice. Mrs. Mould will continue to give every possible attention to all who may seek her aid. Oakham, June 1st, 1863."

ADVICE AND MEDICINE GRATIS.—SIR: In a market-town in a central county of England, there lives a menical man who is registered as M.R.C.S.E., L.S.A.L., and M.D. He is also a fellow of a learned and scientific society. This man gives "advice gratis", with "medicine" included; and, in order not to allow the poor patients to think he does it on his "own hook", he requires a certificate from a clergyman to inform him that the patient is a respectable person. In the same town there are other practitioners, who, for the large sum of *one-and-twenty-pence* attend an ordinary case of confinement. I have known midwifery cases where they have attended for this magnificent remuneration six miles distant from their own residences. Are not such things a disgrace to our noble profession? Well may parents and guardians seek to deter their sons, and those committed to their care, from entering it, when men condescend to do such low and shabby work. Should not such persons be exposed, and held up to the scorn and derision of all right minded men? Doubtless, some of your readers may corroborate the above statements, which have been truthfully delineated by

June 1863. HOMO LIBER.

COMMUNICATIONS have been received from:—Mr. THOMAS JONES; Mr. S. TOWELL; Mr. R. PROSSER; Mr. H. MARSHALL; Dr. F. K. FOX; Mr. J. N. RADCLIFFE; Mr. A. G. OSBORN; AN OLD LOCAL SECRETARY; Mr. E. CROSSMAN; Dr. W. H. DAY; Mr. JOHN FERGUSON; Dr. W. B. HERAPATH; Mr. T. MARTIN; Mr. RICHARD GRIFFIN; Dr. R. H. CRISP; Mr. HIGGINBOTTOM; C. DE CINQ MAISONS; Mrs. CULHANE; Dr. MITCHINSON; Dr. RADCLIFFE; Dr. W. NEWMAN; Mr. F. WHITWELL; Dr. S. MARTYN; Dr. LIONEL BEALE; Dr. W. H. O. SANKEY; Dr. T. R. MITCHELL; Dr. WILLIAM PRICE; Mr. T. M. STONE; Dr. OGLE; THE HON. SECS. OF THE OBSTETRICAL SOCIETY; Dr. MILLER; and Mr. T. T. GRIFFITH.

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T. RICHARDS, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS.

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WILLIAM O. MARKHAM, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PHYSICIAN TO ST. MARY'S HOSPITAL.

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Remarks

ON

DEPLETION AND EXCESSIVE (?) STIMULATION IN VERY SERIOUS CASES OF ACUTE DISEASE.

BY

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CASE. "He stated that until 2 this morning (Thursday, May 7th) nothing could be more favourable than his patient's progress towards recovery ... but at 2 this morning the general awoke with an acute pain in his side; and, although Dr. —— hoped that it might proceed from neuralgia, he had the greatest apprehensions in regard to pneumonia..... Upon examination, it was pronounced that the symptoms were decidedly those of pneumonia. The doctor proceeded to cup and leech him; from that moment I gave up all hope of his recovery..... May 10th. *Consummatum est.* From the violent bleeding of Thursday last he never rallied." (*Times.*)

CASE I. W. B., a well made man, in good condition, nearly six feet high; of temperate habits (drinking from one to two pints of beer daily). General health good, but he had been much exposed to wet and cold. He was one of the corps of commissionaires. Admitted into King's College Hospital on December 6th, 1862. Face very dusky. Tongue furred. Some dulness at lower part of right lung behind, with crepitation and rhonchus. Urine with a trace of albumen; plenty of chloride. On the third day after admission, there was dulness over lower half of right side of chest, back and front; crepitation; no bronchial breathing. Face very dusky; great distress of breathing; pulse 92; respiration 40.

He was ordered to be cupped to five ounces. Calomel gr. v; sulphate and carbonate of magnesia; liq. ammon. acet. ʒss every four hours. Turpentine stupes to chest.

The following day, there was active delirium; no sleep. Heart's action feeble. Still no bronchial breathing. Pulse 92; respiration 52. To take ʒss of brandy every hour and a half.

On the sixth day after admission, the whole of the right lung was dull, except for an inch below clavicle, where the breathing was very feeble. Bronchial breathing every where audible, except above third rib. He breathes entirely with left lung. Respiration 56; pulse 120.

On the seventh day after admission, the right lung was quite solid throughout, with the exception of a small portion quite at the apex, where breathing was scarcely audible. *Could not answer questions. Tongue dry and brown; face very dusky. Motions and urine passed under him. Muttering delirium.* Profuse sweating. Pulse 120; respiration 70. Calomel gr. iij, to be repeated in six hours. Chloric ether, ammonia, laudanum ɱxv, acetate of ammonia ʒss every three hours. *Brandy, 12 ounces in twenty-four hours.*

Two days afterwards, loud crepitation was heard over the right lung. Dulness and bronchial breathing, as before. Expectoration commenced for the first time; sputa rusty.

Some might consider that this man ought to have been bled freely, in consequence of the low delirium; the motions and urine being passed under him; the great oppression of breathing, which was 70 in the minute; with congestion of the superficial vessels and profuse sweating. It is a fact that the treatment to which he was subjected did not prevent the resolution of the inflammation or destroy life by its effects upon the respiration; although this tall, strong man was breathing with one lung only.

CASE II. On June 4th, a well nourished, temperate man, aged 27, a joiner, was admitted into King's College Hospital with rheumatic pains in several joints and some uneasiness about the region of the heart. Pulse 116; respiration 31. Drachm doses of bicarbonate of potash were given, and one grain of opium every four hours. The day following, the urine was neutral, and contained an abundant deposit of triple phosphate.

Two days after admission, there was a distinct to and fro rub over the heart. Bronchial breathing was heard over a space as large as a five-shilling piece at the back of the left lung. Four ounces of blood were immediately taken by cupping.

The following day, the patient was lower, although he had been taking six ounces of brandy, as well as chloric ether and sal volatile. Pulse 120; respirations 44; the respirations very short and catching; and he could only articulate two short words consecutively.

About eight days after admission, the rubbing sound had disappeared. The cardiac dulness extended to an inch and a half to the right of the sternum, and as high as the third rib; dulness and bronchial breathing from the spine of the scapula downwards to the base of the left lung, extending round to the centre of the lateral region. Dulness and absence of respiratory sounds below the spine of the right scapula. Voice-sounds ægophonic. No vocal fremitus. Breathing in front of both lungs good. Resonance. Pulse 132, feeble, but regular; respiration 43, very short, and but little air introduced at each effort. No delirium. He dozes occasionally. Urine about forty ounces; high coloured; abundance of chloride; numerous crystals of triple phosphate.

Treatment at this Period. Strong beef-tea, two pints.

Brandy, half an ounce every half hour—twenty-four ounces in twenty-four hours.

Dover's powder, gr. x, every four hours:=six grains of opium in twenty-four hours.

Solution of acetate of ammonia, ʒss. Sal volatile, ʒss. Chloric ether, ɱxv every two hours.

An ointment, composed of strong mercurial ointment ʒj, and powdered opium gr. x, to be smeared on lint, and kept constantly applied to heart.

Turpentine stupes. Dry cupping occasionally.

This treatment was continued without variation for seven days.* During this time there had been no delirium. The cardiac dulness had returned to its normal extent by June 16th. The bronchial breathing at the side of the chest had been replaced by the ordinary

* The brandy was kept up at twenty-four ounces for eleven days.

respiratory sound. The physical signs at the back of the chest were the same. Pulse 120; respiration 32. There had been free sweating and moderate purgation. Urine about fifty ounces; large deposit of triple phosphate. During the last two or three days the man has been able to read. He has not at any time felt as if he had taken brandy in any quantity.

There is not the slightest doubt that the man swallowed all that was ordered for him. In seven days he consumed fourteen pints of beef-tea, *eight pints and a half of brandy*, forty-two grains of opium, besides liquor ammoniæ acetatis, sal volatile, and chloric ether.

At the commencement of the treatment, there seemed little hope of recovery. After it had been continued for seven days, the patient's state was most hopeful.

The patient was most carefully watched, and his condition steadily but very slowly improved from day to day.

The stimulant was *very gradually increased* as follows on different days: 4 oz., 6 oz., 8 oz., 10 oz., 15 oz., 18 oz., 24 oz.

It is certain, that neither the very rapid respiration, nor the pneumonia, nor the pleurisy, nor the effusion in the pericardium, were augmented by the brandy.

It is certain, that the respiration diminished in frequency, that resolution of the pneumonia commenced, and that the fluid in the pericardium was absorbed under this treatment.

It is certain, that the brandy did not produce intoxication.

It is certain, the treatment did no harm; but some may hold the opinion that it exerted no influence whatever, and that, if less decided measures had been taken, the result would have been the same.

Some of those who saw the case at the beginning of the week thought that the man would die under any circumstances; and considered at the end of the week that he would have died but for the extreme measures taken. This, it is true, is but an opinion.

That a man suffering from acute rheumatism, complicated with *very considerable effusion in the pericardium*, *pneumonia* of the lower lobe of one lung, and *pleurisy* on the opposite side, with a pulse of 120 to 132, and respiration from 30 to 70, *lived for seven days* while subjected to the above treatment, is a fact.

Although the arguments advanced in favour of depletion in acute inflammations and fevers have again and again been refuted, the idea that blood should be taken in inflammatory diseases still seems to be acted upon. If a patient has too much blood for the requirements of the system, or if the vessels of a particular part are over distended, it is obvious that general or local bleeding to a moderate extent may be of advantage to the patient; but, undoubtedly, there still exists an impression that depletion is the right treatment to be pursued to *combat* inflammation.

It seems to be the opinion of some practitioners that pneumonia should be treated by depletion; nor is the general condition of the patient always considered. Attention is directed to the disease solely; and blood is taken because the practitioner believes that early bleeding will stop the spread of the inflammation, if not cause resolution of that already set up.

The old principles are still to some extent believed and timidly acted upon; but few of those practitioners who hold that bleeding will cut short inflammation will be inclined to exhibit consistency in carrying out their principle. Some will bleed *because* there is pneumonia, and may deplete again *because* the pneumonia has increased; but no one will in these days bleed again and again if the disease continues to advance; nor would any one bleed very largely in what appeared to be a hopeless case from the first, as would have been the practice formerly.

The old theory of the nature of inflammation still continues; and the old practice based on it, although long since proved to be erroneous, is still acted upon to a limited extent; and both theory and practice prevent us from observing clinical facts without prejudice. Though forced to give up the old system of depletion, there are comparatively few practitioners who believe that when a large amount of lung is hepatised, and the patient breathing sixty or seventy in a minute, that it is right to give large quantities of stimulants. There are few who can completely abandon the notion that inflammatory processes are excited by stimulants—that to give stimulants in inflammation is to add fuel to the fire.

Nevertheless, it is admitted in practice that no severe case of pneumonia could be saved by active depletion; for it is known that time is required for the absorption of the matter occupying the air-cells of the lung. In a very severe case, the most momentous subject for consideration is how to keep the patient alive long enough for the process of absorption to take place; not how *the inflammatory process* may be cut short, reduced, or removed. For this purpose a line of treatment the very opposite to depletion must be adopted.

Many cases prove that, what would be called by many, excessive stimulation does not *prevent* the rapid resolution of pneumonia. Stimulants do not increase inflammation, nor do they prevent absorption. Although the whole of one lung may be solid, excessive stimulation does not increase the rapidity or embarrassment of the breathing. In extreme cases, by excessive stimulation, life may be prolonged for a sufficient time to allow of the reabsorption of the matters effused. Disease is not *cured* by stimulants; but the patient may be kept alive long enough to get well. Here and there a life may be saved by giving as much stimulant as is possible; but by carrying the opposite system to extremes, death is a necessary consequence.

In desperate cases of fever, pneumonia, rheumatic fever, and in other conditions where there is intense exhaustion, stimulation may be safely pushed to the utmost extent possible.

I shall not now discuss *how* stimulants in very large quantity influence disease, but shall, in conclusion, beg permission to direct attention to certain clinical facts which have been observed in many bad cases of pneumonia and rheumatic fever, placed under the influence of large quantities of stimulants (*eighteen ounces of brandy and upwards in twenty-four hours*).

1. The pneumonia does not extend.

2. The embarrassment of respiration is not increased, nor is the breathing increased in frequency.

3. The inflammatory products are absorbed, and free excretion goes on.

4. The pulse is not increased; but diminishes in frequency, and increases in power.

5. Delirium is not caused, but may be prevented from occurring; or if present, may diminish or cease.

6. The tongue may remain moist or become moist, and the fever diminish while a patient is taking *twenty-four ounces of brandy in as many hours.*

Original Communications.

CASES OF DIPHTHERIA.

By G. M. Humphry, M.D., F.R.S.; Surgeon to Addenbrooke's Hospital, Cambridge.

Hitherto there has been no epidemic of diphtheria in Cambridge, though isolated cases have occurred from time to time. The following are some of those which I have seen.

Case I. *Albuminuria and Paralysis following.* An undergraduate, tall, thin, and not strong, coming from Norwich in the autumn of 1860, caught cold and had rather severe diphtheria. The tincture of the sesquichloride of iron, wine and beef-tea, gargling and sponging the fauces with solution of chlorinated soda, constituted the treatment. The throat gradually cleared; but he remained weak, and returned home. There the urine became loaded with albumen, almost solidifying under heat, and was of low specific gravity. Partial paralysis of all the voluntary muscles supervened; he could scarcely stand; could not button or unbutton his clothes; deglutition was slow and difficult, and articulation hesitating and imperfect. Most serious apprehensions were entertained by his friends and medical attendant. I advised his immediate removal to the seaside in the south of England, so that he might be taken out into the air several times a day. He went to Hastings, and lived almost in the open air. Improvement began at once. He slowly regained voluntary power and general strength; the albumen decreased in the urine, and finally disappeared; he returned to Cambridge in the spring, and has been well ever since.

Case II. *Tracheotomy affording temporary Relief.* Miss ——, aged about 15, rather delicate, with large tonsils, had severe diphtheria, without apparent cause, in the summer of 1862. The swelling of the tonsils, fauces, and surrounding glands, with thick, dirty white deposit upon the fauces and adjacent parts, caused so much difficulty of breathing that we were meditating removal of the tonsils or tracheotomy. I thought removal of the tonsils, which met in the middle line, would afford some relief; perhaps as much as opening the trachea, because the impediment was evidently in the isthmus faucium. However, the difficulty of breathing had in two hours increased so greatly that it was desirable to resort to the more sure method, if to any. Accordingly, I opened the trachea, and placed a tube in it. At the time of the operation, the breathing was greatly embarrassed, the lips quite blue, and she was scarcely conscious. Chloroform was administered, and did not increase the dyspnœa. After the operation, the breathing was easier; colour and consciousness were restored; she slept; and, for twenty-four hours, hopes of recovery were entertained. These were soon disappointed by a recurrence of the dyspnœa, now depending evidently upon effusion into the bronchial tubes; and shreds and flakes of dirty membranous lymph were occasionally coughed up through the tube. She died about forty hours after the operation.

Case III. *Removal of Uvula; Temporary Relief.* Mr. ——, aged 25, was in the habit of going before breakfast to his garden, and mixing some very fœtid materials composed of urine and other ingredients, for manure The emanations from this used to "stick about his throat" for some time; and, in July 1862, he was attacked with severe diphtheria. He was so nearly choked that he longed for some operation to relieve him; and I saw him with his medical attendant. There were swelling of the fauces, and a thick foul membranous coating upon them and the soft palate. The uvula was much enlarged and coated, and, nearly filling up the isthmus faucium, seemed to be the chief cause of the dyspnœa. I accordingly removed it; and the relief given was so great, that his friends considered the danger was gone; he took food well, and even went down next day into his shop. That night he became restless, and breathing was quicker; and the following day he was weak; respiration was noisy and much embarrassed, apparently from effusion into the bronchial tubes. He died in the night.

Case IV. *Affecting the Larynx and Bronchi only; Temporary Relief from Tracheotomy.* Master ——, aged 14, came home from school in March 1862 with slight sore-throat. This subsided, but was followed by difficulty of breathing. Leeches, aperients, etc., were employed by the medical man; but, the symptoms not diminishing, I saw him. There was nothing abnormal in the throat; but he had cough, thickness of voice, and difficult noisy inspiration; the noise indicating that the difficulty was in the larynx. Slight tenderness about the larynx. The symptoms not being very urgent, we agreed to try soothing applications, in the form of inhalations and external application, and free mercurial inunction. In twenty four hours, the dyspnœa had rather increased, and he was weaker. Accordingly, I opened the trachea, and placed a tube in it. For a few hours he was relieved, and promised recovery. Soon, however, he became restless again and weak, with increasing dyspnœa; and died two days after the operation. We found the mucous membrane of the larynx, and of the trachea and bronchial tubes, large and small, coated with a thin layer of dirty false membrane, not like that in ordinary croup, but similar to that which I have seen in other cases of diphtheria.

Case V. *Affecting Nose, Fauces, Eye, and Pericranium.* An infant, two months old, had what appeared to be severe cold in the nose. This caused a good deal of difficulty in breathing; but a violent convulsive fit was the first serious note of alarm. I saw the child then with the gentleman in attendance. The nostrils were blocked up by whitish, tenacious, semimembranous secretion, which was evidently of diphtheritic character; and, in a day or two, there was a thin film of the like substance upon the edge of the palate. By careful syringing, the nostrils were cleared and the child breathed better; the throat also improved, and she took food pretty well, so that we had good hope of recovery. The improvement, however, did not continue; and after a few days the eyelids of one eye were lined with a yellowish white film, which, in spite of careful removal and frequent syringing with water and mild astringent solutions, spread over the rest of the conjunctiva; the cornea became opaque, and gave way. A periosteal swelling was observed upon the forehead, followed by others upon the temple and occiput. The coating reappeared upon the fauces; the child refused its nourishment, and died two weeks from the commencement of the attack.

Case VI. *Hemiplegia Supervening.* Master ——, aged 11, in a neighbouring village where diphtheria was prevalent, was attacked in March 1863. When I saw him a few days afterwards, on March 7th, the false membrane was beginning to separate from the fauces, under frequent gargling with biborate of soda and liberal diet prescribed by the surgeon in attendance. He had much pain in swallowing; and there was some difficulty in inducing him to take food. He appeared, however, to be

going on well, and the throat was quite clear, when, about a fortnight from the commencement of the attack, he became uneasy in the head, and, during the night, lost the use of the right arm and leg. The difficulty of swallowing was increased, and the speech was affected. He gradually recovered the use of the limbs, but had occasional uneasiness in the head, with somewhat of a wild expression and wandering. There was continued difficulty in swallowing; and, now and then, a violent fit of choking, as though some particle of food found its way into the larynx. It was not, however, clearly made out that this actually happened. I saw him on April 16th, after an interval of several days, and found extreme dyspnœa, caused evidently by mucus in the air-passages which he was unable to expectorate. He died that night. On *post mortem* examination, the fauces and larynx presented nothing very peculiar; the mucous membrane was smooth and pale. The trachea and bronchi, large and small, contained a great quantity of frothy mucus; but there were no other evidences of inflammation here or in the lungs. In the superficial part of the left cerebral hemisphere, corresponding with the upper edge of the temporal bone, was a small suppurated spot, with softening of the adjacent brain-substance.

Case vii. *Sudden Effusion into Bronchi Supervening.* An undergraduate caught cold, and had acute inflammation of the left tonsil, with a diphtheritic patch upon it, and swelling of the neighbouring absorbent glands and adjacent parts. The inflammation was so acute and painful, that I directed a few leeches to be applied, which gave some relief. The membranous deposit spread over the throat and palate, and then gradually cleared off; but the pain in swallowing increased. He could be persuaded to swallow only milk, and very reluctantly gargled or permitted any cleansing of the throat. Still, he held his ground for a fortnight; was able to walk about his room; and went for a drive; so that we hoped he would gradually get better. There was no indication of affection of the trachea or lungs, till one night he was attacked with cough, bloody expectoration, and dyspnœa, with râles all over the chest. In the fluid expectorated, we found some branching strings of tenacious mottled substance, which were evidently casts, in lymph, of the air-tubes. He could not swallow anything; and rapidly sank and died in the middle of the next day.

Case viii. *Anasarca and Albuminuria quickly supervening upon Slight Diphtheria.* Miss ——, aged 3, a healthy girl, had sore throat, with small white patch upon the left tonsil, and swelling of the neighbouring absorbent glands. The white patch excited the apprehension of the surgeon, because it remained, and returned when removed. This was the state when I saw her a few days after. There was very little redness or swelling; but general weakness and unwillingness to swallow. At first, she improved a little under steel, with beef-tea, etc.; but then relapsed. The white patch increased, and the breath became foul. At the same time, albumen appeared in the urine; general anasarca, prostration, and dyspnœa, quickly followed; and she died a fortnight from the commencement of the attack.

In each of Cases No. 2, 3, and 4, the operation prolonged life twenty-four hours. The time thus gained may be dearly purchased by tracheotomy; but is well worth the minor operation of removing the uvula (as in No. 3) or tonsils. The difficulty of breathing is often at first entirely due to the impediment caused by swelling of the fauces; and the question of affording relief by removal of the uvula or tonsils is, in some cases, well worthy of consideration. It is easily done, is unattended with danger, clears the way for the passage of air, so diminishing the labour of breathing, and has the advantage of lessening the amount of foul surface in the throat. It may sometimes answer instead of tracheotomy. I believe that in Case ii, the removal of the tonsils would have given as much temporary relief as was afforded by tracheotomy. Moreover, we must not forget that the irritation caused by the presence of a tube in the trachea may predispose to the extension of the malady in that direction. Nevertheless, the experience of others show that in a few cases life has been saved by tracheotomy.

The occurrence of albuminuria and anasarca have been repeatedly observed by others; and afford an interesting link between diphtheria and scarlet fever; that of *general* paralysis (as in Case i) has also been observed, not unfrequently, and has often been recovered from. Hemiplegia (Case vi) is more rare, and is a more alarming symptom as it commonly indicates a definite lesion of some part of the brain.

The affection of the larynx and bronchi, with scarcely any warning in the throat (as in Case iv), has been observed by others. It is very deceptive. In treating that case, we had no idea that we were dealing with diphtheria. The true nature of the disease was revealed to us only by the *post mortem* appearances. Further experience will probably show the disease commencing at various parts of the body, or modifying the inflammatory affections of various parts.

I have not met with a description of diphtheria of the eye (No. v); though the condition has probably been observed by others.

The extension of the inflammation into the trachea and bronchi, and the consequent effusion of the diphtheritic membrane, or of mucus into them (Cases ii, iii, iv, vi, vii), is one of the most fatal tendencies of this formidable malady.

Cases of diphtheria were occasionally met with in former years. The following took place in the Norwich Hospital, while I was a student there in 1837. A man, aged 24, underwent amputation in the thigh in consequence of acute suppuration in and about the knee, following upon a contused wound. He was in a low, feverish state, and had slight sore throat, when the operation was performed. This increased, was attended with cough, dyspnœa, and delirium, and he died, apparently suffocated, two days after the operation. The soft palate, pillars of the fauces, and part of the pharynx, were covered with a distinct layer of dirty lymph adhering to the surface. The mucous membrane of the larynx, trachea, and bronchi, even to the smallest branches, was also coated with a layer of lymph. The œsophagus was quite free.

THE TREATMENT OF THE EARLY STAGES OF HIP-JOINT DISEASE IN CHILDREN.

By William Price, M.D., Margate.

Having held the appointment of surgeon to the Infirmary for Scrofulous Children at Margate for some years past, I have enjoyed unusual opportunities of observing the varied phases of hip-joint disease occurring in children of strongly marked strumous habit. The object of the present notice is not to adduce a new method of treatment, but to direct attention, through the pages of the British Medical Journal, to the undoubted superiority of one plan of treating the earlier stages of morbus coxæ over all others; viz., the continued employment of the long splint.

Many provincial surgeons now discard the long splint altogether in the early stages of hip-joint disease, giving preference to splints made of gutta percha, leather, or pasteboard; carefully moulded over the buttock, reaching somewhat above the ilium, and extending down the upper half or two-thirds of the femur. They argue that the patient is thereby enabled to take early out-door exercise on crutches, and is saved a strict confinement to the wards of a hospital, which the long splint necessarily entails. That much benefit is derived from the gutta-

percha and leather splints during a more advanced stage of the disease, no one will deny. But how, it may reasonably be questioned, can perfect immobility of a hip-joint be maintained by means of a splint which does not equally prevent movement of the knee and ankle joints of the same limb?

The long splint should reach from midway between the axilla and crest of the ilium to a few inches beyond the external ankle. It is best adapted while the patient is under chloroform; and, no matter how severe the previous pain or muscular contraction about the joint, speedy diminution of the more urgent symptoms, as a rule, ensues. The length of time required for its employment must necessarily vary in each particular case. I have now in the infirmary two children side by side, one having worn a long splint for nineteen weeks, the other but five weeks; in neither case does any trace of original mischief now exist.

In many old standing cases of hip-disease coming under my notice, I observe marks of previous severe counterirritation, produced by moxas, issues, and the like. I have long ago satisfied myself that these measures are not productive of any appreciable benefit, and in my own practice abstain from any external application save the actual cautery. This invaluable agent, applied repeatedly by dotting over the integument of the buttock and surrounding parts (not allowing, however, the heated iron to remain sufficiently long upon the surface to produce an eschar or slough), cannot be too highly extolled, more especially as a means for relieving the pain dependent upon commencing ulceration of the cartilages; the relief thus afforded being singularly marked.

The happy results attending the above plan of treatment in my hands induce me to believe that an earlier discrimination of the first symptoms of hip-joint disease (as a rule, not difficult to recognise), the sedulous employment of a long splint, together with strict attention to a well selected diet, would go far to diminish, if not the mortality, at least the deformities, resulting from advanced stages of a malady so common at all ages and amongst all classes of society.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

COMPOUND COMMINUTED FRACTURE OF TIBIA FOLLOWED BY TETANUS: DIVISION OF INTERNAL SAPHENOUS NERVE: RECOVERY.

By Saml. Wood, Esq., Senior Surgeon to Salop Infirmary, F.S.A., etc.

[*Read Feb.* 13, 1863.]

The cases of recovery after an attack of traumatic tetanus are so rare, that anything which adds to our stock of resources in treating this fearful malady is interesting and valuable.

In the winter of 1859-60, the cold was intense, for some days below zero, and for a long time only a few degrees above it. On December 14th, 1859, William P. Claridge, Esq., of Pitchford Park, aged 30—of strong muscular development, moderate in every respect, accustomed to hunt two or three times a week, and consequently in vigorous health—was standing upon a ladder placed against a rick of wheat, for the purpose of getting some rats out of the thatch, and when he was about eight or nine feet from the ground a rat bolted in his face. This startled him; he shrank back, overbalanced himself, and, to save falling, jumped backwards from the ladder. He thought his right foot had sunk into a hole in the ground; but on attempting to rise, he found his leg broken, the bone protruding through his stocking and trousers, and the blood streaming from the wound. He lay upon the cold ground for nearly an hour, whilst a conveyance was being obtained to take him home, from which he was distant about two miles.

On examination, when put to bed, I found a serious compound comminuted fracture of the right leg, and the tibia and fibula protruding from the wound. Several fragments of bone were removed, and the wound had to be enlarged to reduce the fracture, when a piece splintered up the tibia three inches was found detached, and with some little difficulty removed. The limb was placed on a sling splint rolled up, and a lotion applied.

Dec. 15th. The limb was in good position; there was no discharge. No part of the dressing was removed.

Dec. 16th. There was no discharge from the wound. He said he thought he had taken a little cold from lying so long upon the ground, and his throat felt a little sore. The tonsils, looking redder than natural, were lightly touched with nitrate of silver. The bowels had not been moved. He had slept well.

Dec. 17th. The wound looked well. The lint had separated. There was no discharge. He complained off a little stiffness about the neck; and said the food was tough, and his teeth felt sore.

Dec. 18th. Early this morning, I received an urgent message from his uncle, Mr. Claridge of Pershore, who was staying a few days with him, to say that his nephew had had a most severe convulsion. The pain shot down the wounded limb; his neck and head were drawn back, and his jaws closed. The spasm was over when I arrived; but he was in a state of great alarm, and begged not to be touched for fear of renewing the spasm. Walking across the room affected him, and his agitation was most painful to witness. He said that had the convulsion lasted a minute longer, he must have died. Mr. Claridge, who is a surgeon practising at Pershore, had given our patient a dose of calomel and colocynth, and we followed it up with castor oil and an enema of turpentine. The attack was too evidently one of traumatic tetanus. The fracture was much displaced by the spasm, and the splint tilted to one side. The limb was most carefully replaced in its position. Two grains of muriate of morphia were dusted on the wound, and a warm fomentation of poppy-heads applied. He complained of great stiffness about the neck and down the arms.

Dec. 19th. He had had another spasm. The bowels had been largely and freely moved. The jaws were still stiff; and he had a sensation of numbness down the other leg. A grain of opium every three hours was ordered.

Dec. 20th. The fomentation was still applied. There was no discharge from the wound, which was dusted twice daily with morphia. He was in a great alarm at any one approaching the limb, or walking quickly across the room. From a blacksmith's forge, at the distance of sixty or seventy yards from the house, he could feel every blow of the hammer upon the anvil vibrating through the limb. He had had two returns of the spasm. He thought the opium did not agree with him. Feeling confident that if some means could not be devised to arrest this fearful malady he would quickly sink, I put the question to myself: What nerve is likely to be injured or is irritated by the ends of the fractured bones? Suspecting the saphenous from its proximity to the injury, I examined the course of the anterior crural; and finding a considerable degree of tenderness, I followed it up until I came on the internal saphenous branch; and upon my pressing upon this nerve, he cried out, "that the pain shot right into the wound." Confident I had hit upon the right nerve, I proposed to his uncle to cut down upon and divide it. He agreed with me as to the hopelessness of the case under the present or usual treatment; and having explained our views to the patient, I at once proceeded

to cut down upon the suspected nerve. On dividing it, he screamed out that it went into the fracture, and down to the end of his toes. The wound was brought together with strips of adhesive plaster; but owing to the œdematous state of the limb, union by the first intention did not take place. A good dose of opium was administered.

Dec. 21st. He passed a tolerable night; but owing to the shock the nervous system had sustained, he still felt apprehensive of another attack.

Dec. 22nd. He had had no return of the spasm; the feeling of numbness had left the sound leg, and the arms were better. The bowels had acted naturally. The wound was looking well, and secreted a little healthy pus. His uncle, unable to remain from his practice longer, and seeing he had had no return of spasm since the division of the nerve, left to-day. To satisfy him, I saw him again in the evening.

Dec. 23rd. He was going on well. The stiffness was gradually subsiding.

Dec. 24th. There was no return of spasm.

Dec. 25th. About three o'clock this morning, I was sent for in haste; the message being that Mr. Claridge had had a return of the convulsions. When I reached Pitchford, he was in great alarm. He stated that whilst asleep he felt a great start in the limb, woke up in a fright, and tilted the splint nearly over. The nurse, getting up hastily to his assistance, ran against the splint, shook the limb violently, and further displaced it. After some little time, I calmed him, replaced the injured limb, and sat down to watch him. Believing it to be occasioned by dreaming, I told him so. I remained with him, at his urgent request, three or four hours, and found him repeatedly starting when he dosed; but there was nothing of tetanic spasm like the former.

From this time, he continued to improve steadily; the wound healed readily, and the bones began to become firm; and he recovered without another bad symptom. The photographs of the limb I have now the pleasure of exhibiting were taken more than two years after the accident.*

The cause of this attack of tetanus may, I think, be fairly attributed to his exposure to cold whilst lying upon the ground for so long a time. The period of the attack was early after the injury. The sore throat, the tenderness of the teeth, and stiffness of the neck, were looked upon with grave suspicion; but before the spasm on the 18th, there was but slight appearance of the attack. The horror and alarm depicted in his face were most marked.

The purgative, the opium by the mouth, and the morphia to the wound, with warm application, did not arrest the spasms. Although, after the division of the nerve, he had a fright in his sleep, and the limb was disturbed by the splint being struck, no spasm followed; thus I think clearly proving that to the severance of the nerve their cessation is attributable.

Two or three cases are recorded similar to the foregoing; thus, in a case of tetanus following injury to the superorbital nerve, Larrey cut this across, and the patient was cured. In a midshipman, in whom tetanus came on the day after the sole of the foot had been wounded by treading on a rusty nail, Murray divided the posterior tibial nerve, and thus cured his patient. I do not know of any other cases on record.

The treatment throughout, after well clearing the bowels, was opium, beef-tea, and port wine, with brandy and milk. Exactly two months after the accident, he was able to be moved on to a sofa. In two weeks after this, he was able to be moved down stairs. In eleven weeks after the accident he was out of doors again.

* A photograph may be had, if desired, on application to the author of this paper.

BATH AND BRISTOL BRANCH.

PRESIDENT'S ADDRESS.

By Francis Ker Fox, M.D., Brislington, Bristol.

[*Delivered June 18th*, 1863.]

Gentlemen,—As my professional career has been almost exclusively devoted to the treatment of insanity, I had at one time much doubt if it was proper for me to venture to preside over a society whose functions are so varied and comprehensive as those of the British Medical Association; but, upon further reflection, it seems to be desirable that each special branch of our profession should in turn be represented in this chair; and that I may regard this as a legitimate occasion for intruding upon your notice a few remarks upon that topic with which I am most familiar, especially if the subject upon which I propose to touch should prove to be one of general interest to the profession.

But, before we enter upon these matters, it will not be unbecoming if I call upon our society to unite with the unanimous voice of the nation in cordial congratulations to Her Majesty the Queen, upon the twofold events which have occurred in her family during the past year; namely, the majority and the marriage of the Prince of Wales. It is not the lot of the medical profession to take an active share in the management of the body politic, nor to participate in its high dignities; but we who at a distance calmly survey the scenes and actors upon life's busy stage, are generally the best judges of the objects of the one and of the merits of the other. The *rôle* of the heir apparent to the British throne must be one of the deepest importance; and we are justified in forming the most sanguine expectations of a high and noble career, when we reflect upon his judicious education, and upon the general bent of his hereditary tendencies. For among the moral infirmities and the various diseases which are bequeathed from father to son, observation has taught us that hereditary virtues will also not seldom crop up; and if we look to the cool and dispassionate judgment, the aptitude for business, and the philanthropic energies and purposes of his lamented father, and if we balance these qualifications with the sanguine temperament, the acute perceptions, the generous nature, and the conscientious discharge of her numerous duties which characterise his exalted mother, does not the commixture of such mental and moral qualities justify the psychological observer in predicting that, whenever his Royal Highness may be called to succeed to the throne of these realms, he will also succeed to those virtues and to those lofty purposes which have in these latter days adorned and dignified that throne?

With reference to matters of more special interest to our own body, I may congratulate the Bath and Bristol Branch upon its numerical force, upon the various interesting papers which have been contributed by its members during the past year, and upon the average number of members who have attended at the quarterly meetings. On one of these occasions, and when no special attraction existed, more than seventy members were present; and it is evident that, if the vitality of our society depends upon its members, there is no cause for anxiety on that head. During the last year, we have not had to deplore the loss of any prominent member of the Bristol Branch; but we have to record the death of three members of the Bath Branch, viz., Mr. Boult, Mr. John Smith Soden, and Dr. Dyke of Chippenham.

Mr. Soden had been one of the earlier Presidents of this Association, and it would have been a grateful task to me to have adverted largely to his character; but our Journal contained such a fair and unexaggerated sketch of his history and career, that I will not repeat what must have been read with interest by all who, like myself, had enjoyed his acquaintance. In a fashionable

city, where our profession had at one time some difficulty in maintaining its claims to a social position, Mr. Soden never forgot the respect which was due to his own person and character; and, as he had formed an enthusiastic estimate of the high calling of our profession, so he ever endeavoured still more to elevate its tone, and to promote a spirit of concord and good fellowship among its members. With this view, he was one of the founders and a steadfast supporter of the British Medical Association; and, having earned a name which will long be venerated in Bath, it was his singular happiness to bequeath his practice and his reputation to a son who has extended the one and enhanced the other throughout the west of England.

During the past year, our profession has held on its course without any unseemly or scandalous occurrence within its ranks. It has not been our painful duty to ostracise an unworthy member, nor to cut off a rotten branch. If we have been happier in this instance than the English bar, with whose sons we are so often brought into rude contact, let us not assume too much credit to ourselves, but rather emulate that lofty tone of feeling which determined the legal profession rather to amputate one of its most important members than to suffer the whole body to be tainted by his vicious example. Hitherto, our want of coherence and of central action has prevented us from maintaining a similar discipline; but I fondly look to the growing influence of this Association as an agent, which, at no distant date, may be able to improve the constitution of our profession, and to enforce the observance of its own laws.

For this purpose, it is an obvious and laudable duty to recruit our society with fresh blood; but still I submit that new admissions should not be made indiscriminately or rashly; and I question if membership will ever become an object of ambition, while a new member can be proposed and elected in one breath without a formal inquiry into his attainments and previous professional character.

But, while we may congratulate ourselves that no public scandal has attached itself to the medical profession during the last year, I wish it could be added that no public injustice has been committed upon its individual members. This meeting will agree with me, that on more than one occasion verdicts most detrimental to the character and interests of medical men have been carried against them; and, alas! mainly through the apparent readiness with which some members of our profession have helped by their testimony to exaggerate the errors or the omissions of a brother. When we are compelled to give evidence on such occasions, no one would think of suppressing an important fact, or of not helping to bring home guilt to the guilty or neglect to the negligent; but it is another thing to show a readiness, an overstrained eagerness, to express adverse opinions on the mistakes of a brother in adversity, who may have met with some one of those untoward contingencies to which all of us are liable. The whole subject of medical evidence is in fact in an unsatisfactory position; and until medical men can be brought to relate the facts or the opinions upon which their evidence may be founded without any spirit of partisanship, I do not hesitate to avow myself to be one of those who would advocate the appointment of experts on the part of the crown, to examine into any questions which may be brought before a jury, whether those questions related to toxicology, surgery, midwifery, or lunacy. Legislation has done but little for us during the last one or two sessions, and what little has been done has been of a questionable nature. It has been well said that "these are times when the human intellect seems unaccountably to go back; when truths, which appeared firmly established, lose their hold upon mankind; and when progress, that was thought to have been secured for ever, without notice, and often without explanation, is reabsorbed by the returning flood of ignorance and error." (Bonamy Price, in Macmillan's *Magazine* for June 1863.) Without stopping to inquire whether the alterations which have recently been introduced into the preliminary branches of medical education may not afford an example of this fact, I can provide you with one striking illustration of it in the dictum of the Lord Chancellor, who declared in the House of Lords that "the introduction of medical opinions and medical theories into the subject of insanity, has proceeded from the vicious principle of considering insanity as a disease; whereas the law regards it as a fact which can be ascertained by the evidence as any other fact. Therefore, we empannel a jury of *ordinary* men, and call upon *them* to try the question by proof of the habits, demeanour, language, and acts of the alleged lunatic."

The Lord Chancellor is the legal guardian of all the insane in England, and ought therefore to be an authority on insanity; but it will be in the recollection of this assembly that several trials for murder within the last twelve months must have supplied his lordship with some happy illustrations of the extraordinary principles which he has propounded, and of the psychological acumen of his twelve ordinary men. I wish to recall the recollection of the meeting to the case of Hall *versus* Semple, which was an instance in which a medical man involved himself in a severe legal penalty by permitting his judgment in a case of alleged insanity to be formed upon the *ex parte* statements of the patient's wife. The common symptoms of mania with its frantic impulses and its incoherent raving, or of melancholia with its suicidal or homicidal tendencies, are known to all men; but there are many more obscure forms of mental disease, which may be incautiously and insensibly revealed to the daily associate, to the bosom friend of the patient, but which are by no means so obvious when the individual becomes conscious that he is under the eye of a medical examiner. Dr. Semple probably found himself in this dilemma, and, with the best and most amiable motive, trusted too much to the good faith of the wife. The severity of the verdict against him will induce more general caution, and has indeed already had the effect of rendering some men reluctant, under any circumstances, to incur the ill-paid risk which attends the execution of a medical certificate of insanity. But the responsibilities of our profession can never be evaded without the loss of our legitimate influence and of our self-respect; and therefore I take leave to submit a few suggestions to the society, which I hope will enable every man to act firmly and legally when called to pursue such an investigation.

Insanity may exist in various degrees, and is sometimes so slight, so much combined with eccentricity, humour, or disposition, as to render it difficult to distinguish the one from the other. But whoever ventures to sign a document which is to deprive a fellow creature of liberty, will require something more definite than this, some demonstrative proof of the unfitness of the individual to be trusted with the management of himself, and of his own affairs; for, although a man may be thoughtless, ridiculous, and extravagant, yet the law of England provides no controlling power over such a case, and people like Mr. Windham may still be allowed with impunity to dissipate their paternal acres in the most reckless and puerile manner. It was laid down by Sir John Nicol that the absence or presence of delusion—so understood—forms the true and only test or criterion of absent or present insanity; that delusion and insanity are convertible terms; and that in the absence of delusion (with whatever extravagancies a supposed lunatic may be justly chargeable, and how like soever to a real madman he may either speak or act on some or on all subjects), still, in the absence of delusion, the supposed lunatic is not properly or essentially insane. Now this is a lawyer's definition of insanity; and, if such a doctrine could not easily be controverted, Sir J. Nicol would in-

deed have provided us with an infallible test, and with an unerring guide in the prosecution of our inquiries. But it is unnecessary to remind you of the frequent cases of partial or of general dementia which occur in practice, where the mental faculties have been so subverted or so confused as to destroy those powers of comparison or imagination, whose action would be required to constitute a delusion. And, while I submit that an unsound mind may exist without any one such evidence of its morbid condition, we must not forget that a mind capable of the most sustained efforts, and in all respects well balanced, may nevertheless hold one cherished delusion; and thus, while such a person was capable of performing all reasonable actions and social duties, in the eye of the law he must be held to be insane. We must look, then, for a different test for the analysis of the more obscure forms of mental disease; and there are some physical and some psychological symptoms, several of which will almost invariably be found in every instance of insanity. Among the former, any deviation from composure of countenance, dignity of gesture, or from the natural tone of voice; any novel peculiarity in manner, dress, and in those muscular actions which impart expression to the thought independently of speech —violent and unaccountable gesticulation, rapidity of utterance, a restless uncertain gaze, a disinclination to look the questioner in the face; the pin-head contraction of the iris; unusual sensibility of the skin, and a fœtor proceeding from the body, which is indescribable and *sui generis;* a low quick pulse; a dry white quivering tongue and constipated bowels—these form a train of symptoms, several of which are usually to be found in cases of mental alienation. But if to these be added impaired memory, unusual and uncontrollable emotion, uncertainty of purpose, hasty decisions, a tendency to reverie or to soliloquy, inflated and extravagant opinions and conduct, and a sudden suspicion or dislike of those to whom the individual was previously attached, I conceive that no practical medical observer could hesitate to pronounce such a person to be insane, even if no delusions could be proved to exist. But when one, and only one delusion can be detected, and the patient proves to be deaf and impervious to argument upon that one point—or when one, and only one delusion of the external senses can be shown to exist, the examiner may feel tolerably confident that he only requires time and opportunity to detect others, and that most of the cases of monomania which are recorded, would, upon closer and more minute examination, prove to be cases of general insanity.

Some few words I would add respecting the tone of mind and the manner with which a practitioner should enter upon such an examination. Let him recollect that lunatics, like children, are often shy and timid; that, like them, they have a high appreciation of truth and fair dealing; and that any attempt to deceive or mislead them, even for some good purpose, is apt to recoil upon the head of the offender. Although some cases are capable of great reticence, and of deep combinations, still popular opinion has attributed to the lunatic far more cunning than he generally possesses. So far from any such quality being necessary in the examiner, I would urge him to avoid all subterfuges, and, if challenged as to the object of his visit, rather to admit his purpose, than to risk the loss of that moral ascendency, which will be his vantage ground in contending with the difficulties of the case.

The annual meeting of the parent Association draws near; and, when we recollect the philosophical character of the addresses which were read at the gathering last year, as well as the enlarged hospitality which provincial members received from their metropolitan brethren, the Bristol branch may be excused for feeling some little distrust of its power to follow such a bright example. The addresses in medicine and surgery have, however, been allotted to men not unknown to fame, whose frequent contributions to science afford the best guarantee that these gentlemen will reflect credit upon the selection of the Council, and who possess this especial recommendation, that each of them, Dr. W. Budd and Mr. Prichard, are men of eminently practical minds. And, although the subjects of obstetrics and of chemistry will probably attract the attention of a more special audience, we feel assured that the authors of those addresses will illustrate their several papers with every novelty which recent scientific researches may have brought to light; that the more frequent practice of ovariotomy, and the unlimited application of the speculum will not escape the notice of Dr. Swayne, and that the practice of medical chemistry will be sanctioned and advanced in the address of Dr. Herapath. Our highest expectations, however, are built upon our intimate knowledge of the mental resources of our learned President, of whom we may truly say that, although he be a provincial physician, he is *haud ulli secundus;* and I may add without flattering, that this Branch reposes perfect confidence in the philosophical and enlightened character of his address, and in the enlarged hospitality with which he proposes to inaugurate the meeting.

SOUTH-EASTERN BRANCH.

PRESIDENT'S ADDRESS.

By John Armstrong, M.D., Gravesend.

[*Delivered June 24th*, 1863.]

Gentlemen,—The position in which you have placed me as President of this large and important Branch of the British Medical Association, unsought and unexpected as it has been by me, is one for which I feel I am unfitted; and I am especially conscious of this, that when we remember the able men who have preceded me, you will at once yourselves feel that

"Sequiturque patres non passibus æquis."

As, however, a man is not responsible for what he hath not, but for what he hath, I shall endeavour to discharge the duties of the office to the best of my power; knowing that I shall be well sustained by kind and judicious friends, and that considerateness and sympathy will cause you to regard my errors with forbearance and partiality. I propose, then, to begin my duties by a short review of the origin and some of the results of the British Medical Association.

The origin of the British Medical Associntion in 1832 was mainly the result of observation on the social and scientific condition of the provincial practitioner; and the clear and far-seeing man to whom we are indebted for its formation, Sir Charles Hastings, had soon the happiness to perceive that he had inaugurated an Association which must go on uniting into one brotherhood the practitioners of medicine and surgery in these kingdoms. The Association, as you know, has passed through several phases; it has been cradled in storms; and the rough blasts which have howled around it, as around a young oak one day destined to be the king of the forest, have only caused its roots to spread deeper and wider. And now Sir Charles Hastings can rejoice in a glorious prospect. Never before in this country has there been so much cordial friendliness among the members of our profession as in the present day. And to what is this attributable? I answer unhesitatingly, to the influence which the British Medical Association exerts; for I am persuaded its influences are felt not only among its own members, but imperceptibly, though certainly, by others who are not enrolled among its associates. I think I express a feeling which is uniformly experienced when I say that, when a man becomes an associate, he feels that he becomes a stronger man; that he has friends whom he had not before; and

that a regard for his fellow-associates and every well conducted member of the profession, their families, and all that concerns them, arises within him, elevating his spirits and ennobling his nature, and causing him to feel that, in joining the Association, he has broken through a net of prejudices and follies.

But this is only one aspect under which we may view the Association. There is another equally valuable, and which has assuredly resulted from the operation of the Association. I take up the JOURNAL week after week, and I read reports of papers, discussions, meetings, on professional subjects, in different parts of the country. I know that before the formation of the Association, in some of the large towns, meetings for scientific purposes were held; but these were few and far between, and generally died out when the leading mind or minds who inspired them were removed. But now we have an extent of associations and meetings which are bringing out the stores of knowledge and experience of many a shrewd practitioner; and the stimulus to observe, record, and narrate is so general, that the tone and character of our profession is becoming every year more clear and philosophical.

I should trespass too much on your time were I to bring under your notice the various beneficial effects, social and scientific, which are the obvious results of our Association; but I think you will pardon me if I refer to an instance or two in which these effects are most obvious. Foremost among them I place the annual meetings; and first among these the annual meeting of last year held in London—a conference of our choicest men from the great centres of knowledge in these kingdoms with the men in general practice in the rural districts, held in the hall of that august body, the College of Physicians, the spirits of whose illustrious dead would rejoice over the brotherly assemblage of their sons, the first outline of a real one-faculty qualification. The cordial welcome of the President, the presence of so many of the *élite* of the profession, gave an importance to the meetings such as has rarely been seen; and whether we refer to the papers and discussions, or to the addresses, our minds are equally impressed with this feeling, that such are some of the results of the British Medical Association. I cannot forbear alluding to the addresses more particularly, having enjoyed the high privilege of hearing them; for, whether we admire eloquence and logic with beautiful elocution, or practical sagacity, or profound and comprehensive philosophy, or, as I apprehend most of us do, all combined, these were then presented to us; and we must add, that the addresses were worthy of the great teachers of our noble art in the great metropolis of the world. But these references to that grand meeting would be sadly deficient if I did not allude to the princely hospitality, or rather hospitalities, with which our metropolitan brethren entertained the Association. Beginning with the *soirées* at the Colleges of Surgeons and Physicians, the bountiful open house in true baronial style at the College of Physicians, and the warm-hearted invitations to dinners tendered by so many of the men of the profession in London to those coming from a distance, instead of the old stiff formalities of former days—when we look at all these matters, we see evidence of an influence harmonising and strengthening the Association throughout its whole extent, and reflecting imperishable lustre on the large-hearted noble-minded members of the Metropolitan Branch of the Association.

As another result of the Association, I would for a minute or two advert to the JOURNAL. At first, as you are aware, *Transactions* were published; and then a JOURNAL was published in the country, and subsequently removed to London, ultimately assuming its present form. Now, I apprehend, one can scarcely look back over the progress of this department without feeling that we have advanced with the times, and that we have a JOURNAL replete with interesting matter, exerting a beneficial influence on the members, and keeping a watchful eye on all the naughty boys of our profession. I have never myself come under the editor's lash; and hope I never may, because I fancy those who do must writhe and wriggle considerably. I like a straightforward, honest man, who calls a lie a lie; and I say, all honour to our editor for the honest fearlessness with which he denounces everything that is mean, quackish, or disreputable. I know a great many objections have been made against our JOURNAL; but I think the gentlemen who make them will feel that we should have an organ; and that an Association so large, in such railroad days, requires a JOURNAL at least once a week. And I do not think our JOURNAL interferes with the success of other periodicals. I have been a reader of the *Medical Times* and *Lancet* from the first day of their publication, and I could not do without them. Such, I believe, is the general feeling: we want them all. There is room enough for them all; and all I have to say is, I hope they will think so, and not quarrel and call each other bad names.

I have trespassed too long, and must conclude these remarks by a reference to another result, which I shall make the last evidence (although I could easily enumerate many others) of the great benefits the British Medical Association has conferred upon the profession. Of course, I refer to our own social and scientific meetings. I have been connected with these gatherings from their commencement. I have watched them carefully; and I have no doubt you will agree with me that they have conferred a large amount of benefit on those who have attended them. They have been the means of inducing such men as Mr. Fry and Dr. Martin to open their precious stores and place them before us; and many men have read papers of great interest, who, but for these meetings, would never have done so. Many a hint has been received for future practice; and the occasional criticisms and discussions have quickened our energies, sharpened our logic, and corrected some long cherished delusions. It has been said that none can dispute like Englishmen; for, when the heat of debate is passed, the previous friendship is undisturbed; and so I trust it shall ever be with us. I like a good hearty discussion; and I like also to see the disputants maintain their temper, and esteem one another all the more for the contest. I should rejoice, and do rejoice, to find the young men of our profession joining us. I should rejoice also to find them producing their papers or cases, and taking full share in the discussions. Adam Smith, that great and original thinker, wrote a work on the *Moral Sentiments*, in which he referred all our motives to sympathy. Some years afterwards he produced his great book, *The Wealth of Nations*, which referred almost all our acts to selfishness. These appear at first sight contradictory; but they are not so, and a little reflection will convince any of us that all our acts are traceable to one or other of these principles. I say, then, to our young friends: to whichever your inclinations may lean, sympathy or selfishness, or both, come with us, and we shall afford you ample opportunities for the gratification of either or both. You can serve your profession in its families, its members, in their afflictions, their losses, their bereavements; and should you have only the little soul which lives for its own selfish benefits, even then we shall do you good, and your advantages will far exceed all the expenditure you may have incurred; and you will not live long among us without having your sympathies awakened and your heart enlarged with feelings of esteem and regard for your brethren.

Gentlemen, unity is strength. Would that every member of the profession acted on this principle! How different then would be the aspect which we should present to those out of doors! There would be no men who, for the sake of a few paltry pounds or a little tem-

porary notoriety, would appear in courts of justice to assist the designing and wicked in extorting money from, or fastening disgrace on, our esteemed brethren. I hold that the British Medical Association presents the centre for this union. Its principles, its organisation, are admirably adapted for this purpose; and I rejoice to think our numbers are greatly increasing; and when we can unite the profession into one compact phalanx, then will our voice be heard in the country and the senate, and our claims will be recognised and our rights obtained, and our profession assume its place in the land, inferior to none in rank, intelligence, and usefulness.

You will perceive from my remarks that I regard my position as President of the South-Eastern Branch with no little awe. I shall do my best to discharge the duties of my office so as not to bring discredit upon it. I shall endeavour to devote myself during my year of office to the faithful discharge of the duties, and shall hope for the support and sympathy of those gentlemen who are associated with me; and I trust, by God's blessing upon our efforts, to maintain the dignity of this department of professional duty.

LANCASHIRE AND CHESHIRE BRANCH.

PRESIDENT'S ADDRESS.

By J. R. W. Vose, M.D., Liverpool.

[*Delivered June 24th*, 1863.]

Gentlemen,—The meetings of the British Medical Association and of its affiliated branches have been now so numerous, that it has become very difficult to announce anything new—we mean, of course, anything that shall be true as well as new—from our pulpits. We might, doubtless, condole with you upon the shortcomings of the Medical Act; but this would be only an attempt to perpetuate a wail which has already perhaps been prolonged to satiety. We might, with a pedantic particularity more suited to a Nisi Prius court than to a scientific audience, enter upon a solution of the vexed question—Who is now a doctor? We should rather say, who is not a doctor now?—pointing out that while one man may be a physician without being a doctor of medicine, a second man may be a doctor of medicine without being a physician; while yet a third man may offer to us the variety of being both a physician and a doctor of medicine in one; a jumble, as we know, more apparent than real; for although the thing may not be clear to the public, it is perfectly obvious to us. These and congener commonplaces might be dwelt upon. But as it is my duty to avoid, as far as possible, drenching you with any of the "drowsy syrups of the East," we refrain from inviting you to travel with us upon these dusty and already furrowed roads; and we propose to enter, for the few minutes which are all that can be spared to us, upon a subject pregnant with interest at all times—we mean the hopes of medicine. Our hopes of medicine are so multifarious, at the present point of time, that we can only touch upon a few of those that would appear to be among the most prominent of them.

First, then, let us hope that we shall not be kept waiting much longer for the promised national *Pharmacopœia*, wherein the therapeutic weapons, hitherto scattered through England, Scotland, and Ireland, shall be gathered together from these three kingdoms, and arranged in one imperial armoury; where, unless the ridiculous redundancies which have so long disfigured our pharmacy shall have been subjected to a vigorous Procrustean pruning, of which we are far from feeling sanguine, we hope that a very considerable portion of them will be left, by those at least whose aim it is to practise medicine as an enlightened science, to rest and to rust in peace, to the great simplification of our art, and to the consequent advantage of society. We use the phrase ridiculous redundancy advisedly; for when we remember that at present there are offered to our selection, on pharmaceutic authority, upwards of forty preparations of iron, upwards of thirty preparations of mercury, and upwards of thirty preparations of opium—thus giving upwards of one hundred preparations of only three among our innumerable drugs—while the most whimsical practitioner probably never handles even half-a-dozen forms of any one of them, we venture to think that we are fully warranted in expressing ourselves as we have done. It appeared to the philosophical mind of Alison, as shown in his *History of Medicine during the Present Century*, that we must look for future progress in the practice of the art to the improvement of medical education, to a further discovery of specifics, and to the investigation of the causes of disease. Yet the improvement in the treatment of pulmonary consumption, which has been going on for some time past, and which has been detailed in so interesting a manner in the Lumleian Lectures for 1862; and the late improvement in the treatment of acute rheumatism, of pneumonia, and of inflammation of the membranes of the heart, to say nothing of other diseases, seems to justify the hope that the eminent and admirable man whose name has been just mentioned took too limited and desponding a view of the prospects of practical medicine, and that it is susceptible of great advancement by new modes of applying old remedies. In the Lumleian Lectures for 1862, "On the Successes and Failures of Medicine," to which we have just alluded, and to which we again refer as one of our most recent as well as most valuable publications, on account of the large experience of their author in the diseases of which he treats, we find the unqualified statement that bleeding is still to be regarded as the best treatment of the first stage of inflammation of the lungs; and, further, that because double cupping, blister, and mercury, failed to save a patient labouring under pleuroperipneumony of both sides, with pericarditis, whose pulse was 140 when thus prescribed for, and who said he felt dying, we have an illustration, in an exhaustive sense, of the helplessness of medicine to avert death under such circumstances. We demur, in the present state of our therapeutic knowledge, to this conclusion, as being widely contrary to the experience of many others, among whom I crave leave to enrol myself. For we answer that Andral, who relied upon bleeding in pneumonia under all circumstances, lost more than half of his cases; while Dietl, by a purely expectant method, lost only one in 13; and Bennett, who trusted to salines, light nourishment, and stimulants, lost only one in 35 cases. Let us express an earnest hope, then, that the strong conservative element which has so long been one of the noblest attributes of English surgery is about to be as marked a characteristic of English medicine. The present generation of physicians has seen the doctrines of the elder Hamilton, the enormous doses of tartar emetic recommended by Rasori, the lavish depletions of Armstrong and of many others, the prodigal use of mercury as advised by Elliotson, and the rigorous starving of Broussais, abandoned; and not only with safety, but with unquestionable advantage, as we not only hope but thoroughly believe.

The satirists of divers nations have, from all time, fallen with telling effect upon sundry weaknesses of the profession. Mysterious gravity of demeanour, preposterous specialities of costume, the display of an inflated technical diction, have not escaped them. Why we should be mysteriously grave, why we should be peculiar in dress, why our diction should be obtrusively technical, appears to be inexplicable. But learned bodies should be ever on their guard against making themselves ridiculous in the eyes of men of the world. Gravity has been defined by one of the shrewdest observers of human nature to be "a mystery of the body, invented to conceal the deficiencies of the mind." The less parade, then, of gravity the better, perhaps. Preposterous specialities of costume are now nearly restricted to the other sex. But

our love of an inflated technical diction, which has been so severely commented upon by men of taste and of high education, seems to be luxuriating in our own ranks more vigorously at present than at most former periods. Whether this is in any way connected with the decay of sound classical scholarship and with the neglect of elegant literature amongst us of late, we cannot pause to inquire; but true it is that our testimony in courts of justice, our professional discourse, and our writings, are too often disfigured by a display of puerile pedantry which would have bewildered our predecessors, and which make us the object of much damaging pleasantry. We now hear of basic murmur in reference to the heart; of spanæmia and of hyperinosis in reference to the blood; of instrumentation, which, perhaps, explains itself; of angioleucitis in reference to we really know not what. The old term craniotomy, which seemed barbarous enough, is now likely to be superseded, it appears, for we hear of cephalotripting the fœtus in its place—while such things as pneumatoscopes, pneumatothermanters, stethophones, sphygmoscopes, and even sphymgosphones are spoken of; although it must be abundantly obvious that we can never acquire a correct knowledge of their pronunciation. Not long ago a very interesting paper was read in this institution, and I was twitted with showing a want of zeal for scientific progress because I ventured to protest against the title of the paper, which was "On the Galactagogue properties of Faradisation." Let us hope that the fabrication of this grotesque jargon, which can be coined with such fatal facility, may speedily come to an end; and that we may seriously address ourselves to the elimination from our style, both oral and written, of so uncouth and ludicrous a fault. Physicians and surgeons of the highest class have been remarkably free from the taint of pedantry; it might be well to take them for our model in this as in other matters.

To address the members of the British Medical Association, without bringing in the subject of quackery somewhere, might be thought as dangerous an innovation as to discontinue dividing discourses into three parts, although many discourses would be improved by not dividing them into three parts. The quackery which exists without the pale of the profession, and with which we have nothing to do here, may be left to the fostering care of its principal patrons, the educated classes, as they are called. "In the meantime," as our JOURNAL says, "one thing we may do, and that is, suppress all quackery within the profession itself—the most dangerous of all the enemies which we have to encounter in this line; the quackery of advertisements, whether by newspapers or public appointments; the quackery of pretending to cure, while we only administer to nature; the quackery of competition; the suppression of these and of a dozen such anomalies which we could mention will, we suspect do more to elevate our profession and to put down outside irregularities than any Act of Parliament will ever do for us." The quackery by advertisements has attained such proportions of late years, and is practised by a class of medical men, both in and out of the metropolis, from whom we have a right not only to expect, but to demand, better things, that we think it to be our duty to single it out for special reprehension on this occasion. Popular periodicals, local penny newspapers, illustrated prints, many of which never get beyond the nursery or the butler's pantry, are invaded by large numbers of learned gentlemen, who systematically advertise themselves and their writings therein. Now, although we sympathise sincerely with them in their desire to meet their household expenses by bringing themselves before the public, we submit that this is an illegitimate and an odious way of endeavouring to give a practical result to so righteous an aspiration. Indeed, there would be scarcely any further loss of dignity if these people would set a van in motion, and it would be seemly to give the press some rest. We fervently hope that the high-minded members of the medical profession will henceforward mark their contemptuous disapprobation of such men in some more emphatic way than has hitherto been done.

Perhaps one of the heaviest and most unlooked-for blows which the profession has ever received, it has received lately; and, strange to say, more than once. That blow has been suicidal, or self-inflicted. We advert, of course, to medical men exerting themselves to consummate the destruction of their brethren, when these last have had the misfortune to be assailed by the Philistines. This matter is too fresh to need setting forth here; a circumstance for which I am thankful, as I could not trust myself to enter upon it with becoming calmness. We hope, however, that the profession will ponder on this great iniquity well, and visit it with all the penalties which it merits, both now and on every future occasion, should any, whatever may be their position among us, ever dare so to sin again.

The last hope which we propose to express we approach in an earnest and solemn spirit, indeed. Since this Branch of our Association met at Manchester, the most eminent man in the medical sciences, the only surgeon who was ever raised to the chair of the Royal Society, has paid the debt of nature. Whether we regard it from a personal, a professional, a literary, or a scientific point of view, the character of Sir Benjamin Brodie is equally deserving of our most careful study. We hope that so remarkable an example of what we ought to be will not be lost to the present generation, or to those who are to follow us. In him the philosopher and the practical man were combined, as they are seldom found to be combined. Amid the disappointments and the mortifications inseparable from professional life, we may derive consolation from contemplating a career such as his was; and in hours of disquietude and of despondency, arising out of the very nature of the pursuits in which we are engaged, let us recall that sententious saying of his—"Medicine is an indifferent and an irksome trade; but it is a noble and interesting science."

Reviews and Notices.

DER KEHLKOPFSPIEGEL UND SEINE VERWERTHUNG FÜR PHYSIOLOGIE UND MEDICIN. Eine Monographie von Dr. JOHANN N. CZERMAK. Zweite Auflage. Leipzig: 1863.

[THE LARYNGOSCOPE AND ITS EMPLOYMENT IN PHYSIOLOGY AND MEDICINE. A Monograph. By J. N. CZERMAK, M.D., etc. Second Edition. Pp. 132. With Three Plates and Thirty-six Woodcuts. Leipzic: 1863.]

THE value of the laryngoscope, as a means of prosecuting physiological inquiries into the functions of the vocal apparatus and of determining the nature of the various lesions affecting the structures concerned, is now so generally recognised that it is to be regarded as a *fait accompli* in medical science. Without it laryngeal disease is a mystery; and medical men interested in the advancement of their profession owe great thanks to Professor CZERMAK for the perseverance with which he has sought to popularise this valuable aid to physical diagnosis. We have so often referred to his labours that we need not, on the present occasion, do more than bring under the notice of our readers the fact of a second edition of his monograph on the Laryngoscope having appeared, and urge upon those who have not yet made themselves acquainted with his

researches and the instrument itself to do so without delay.

The present edition is not materially different from the first; but it contains copious allusions to those workers in different countries, who, at the instigation of Professor Czermak, have prosecuted inquiries by the aid of the laryngoscope, and have added strength to the conclusions at which he has arrived.

British Medical Journal.

SATURDAY, JULY 4TH, 1863.

PHYSICIANS' FEES.

As antithetical to a case elsewhere noticed, we turn with pleasure to an instance—somewhat remarkable—in which three physicians, distinguished members of the Association, and leading members of the profession, have signally dignified themselves and the profession by their action. It is, indeed, the too frequent examples of conduct contrary to that adopted by Dr. Vose, and sustained and sanctioned by Dr. Watson and Dr. Latham, which has so much tended to reduce our profession to the level of a mere trade in the eyes of the public. The case is this.

Dr. Vose of Liverpool is summoned to go to Aberdeen to visit one Mr. George Grant, an old patient of his. He obeys, brings back Mr. Grant to Liverpool; and subsequently attends him for some time, in fact until his death. The executors of Mr. Grant subsequently apply to Dr. Vose for an account of the fees due to him. Dr. Vose replies that his fees are 205 guineas, being 186 guineas for the going to Aberdeen (372 miles)—at the rate of half a guinea a mile—and nineteen guineas for ordinary visits. Hereupon, he is told that his charges are quite too high; and it is thrown in his teeth that Dr. Latham had once visited Liverpool for one hundred guineas, and returned fifty of them because the patient died immediately on his arrival. Also, is thrown at him the tariff "adopted in Edinburgh",

"As stated to me," writes Mr. Gladstone, one of the executors, "by Professor Miller, in 1852, in these words, 'As to the railway tariff, some time ago an arrangement, somewhat to the following effect, was come to as to distant visits: 1. When occupying the day only, £25. 2. When night is included as well, £30.'"

The executors wind up by offering Dr. Vose £100 in full of all demands.

Dr. Vose rejoins to the offer of this "liberal remuneration," as it is called, that in England we are not guided by Edinburgh tariffs in such matters. He might have added that Scotchmen change their tariff, when they practise south of the Tweed—that the Fellows of the Royal College of Physicians of London have laid it down that the fee shall not be less than two-thirds of a guinea per mile when railways can be used, and one guinea when post roads are to be used; and that he (Dr. Vose) had, in this instance, charged only half a guinea a mile, for the reason that he had long been the deceased gentleman's physician.

In the correspondence which ensued, the executors, Mr. Kelso, Mr. R. Gladstone, and Sir T. Gladstone—the latter, at all events, we believe, a man of enormous wealth—amusingly take upon themselves to decide what the proper travelling fees of doctors should be; which, we suppose, is much the same kind of thing as the doctors taking upon themselves to decide whether 50, 200, or 500 per cent. is the proper profit which Sir T. Gladstone (for example) should accept on any given mercantile transaction.

The reasonings of these Liverpool gents is amusing. One takes up his ledger, and says, You were only away, I think, two days; and, even at half a guinea a mile, you have asked a fee which represents a practice of about £36,000 *per annum*. The other comments thus: "The saving of time by railway travelling has rendered necessary a large reduction in the charges made by medical men"; and he repeats the rumour of Dr. Latham and the £50. Besides, he says, you were employed "rather in the nature of a travelling companionship" than as a medical man; and certainly we should never have employed you if we had known your charges were so high. The baronet then discusses the relative position of London and Liverpool doctors; and he does not admit that the fees of one can guide the fees of the other. He thinks it a very hard case. The reduction of the guinea to one-third, or even half, is not enough now-a-days, and

"Confers undue advantage on the medical man, and, in my opinion, is, as it strikes me, barely creditable to such members of the profession as attempt to act upon it. I cannot doubt that Dr. Vose will reconsider his charge; and hesitate to take a course that would tend to discourage the public from obtaining the aid of medical men at a distance, and is at variance with the system of Edinburgh, and frequently that of London also."

In a P.S. he adds, that he cannot see how being a Fellow of the College of Physicians entitles a country practitioner to charge the London fees. He winds up with the opinion that one hundred guineas (an advance, by the way, of £5 on the first offer) was a very liberal offer.

Dr. Vose says to all this: If, on application to any high medical authority, the heirs of Mr. Grant find that Dr. Vose's charge is incorrect, he will gladly rectify it; and adds:—"That, as a Fellow of the Royal College of Physicians of London, I make no *demand* for professional services."

After this, the executors return to the charge, evidently discomfited by the firm and dignified position assumed by Dr. Vose. They appear to have deliberated amongst themselves, and then they write to their agent and say, that to make things pleasant, and save all future annoyance to the heirs, they re-

commend that 120 guineas—a further spring in the offer, as they would say on 'Change—be tendered to Dr. Vose.

Now, here comes a most amusing *contretemps* between these mercantiles. Mr. Gordon, the agent, we presume, expresses his entire

"Concurrence in your recommendation that the sum 170 guineas (*sic*) should be tendered to Dr. Vose. . . . I consider that sum to be a just and liberal remuneration for the services rendered by Dr. Vose."

This he says in answer to the question,

"Let us know, by a few lines, whether this suggestion" (of 120 guineas) "does or does not coincide with your view as to what is liberal, and just, and fair to Dr. Vose."

Evidently, the inditor of the executors' epistle to Mr. Gordon is a bad hand at writing; so bad and unlucky, that Mr. Gordon reads 170 instead of 120! and entirely concurs with those who offer the 120, that the offer of 170 guineas (as he reads it) is just the proper figure. Never were a set of biters more neatly bit. No doubt Mr. Gordon had written and committed himself to Dr. Vose before the error was discovered. However, here, one way or another, we find the Liverpool gents. haggling over the fee, and running up their offer thus: £100, £105, £126, and £178 : 10!

When this last offer (unwittingly, of course) is made to Dr. Vose, Dr. Vose replies, "That he has really nothing more to say upon the subject." And the executors end by saying that they must now reluctantly wind-up the accounts, and regret that "they must close the accounts without introducing your claim into them."

So ends this correspondence. We do not, however, for a moment suppose that the shabbiness of the executors will be eventually carried out in practice and endorsed by the heirs. The heirs cannot repudiate, as the executors have done, on the pretence of duty and disinterestedness.

Appended to the correspondence, are two letters well worthy of especial note, from Dr. Watson and Dr. Latham. They point out distinctly what is the line of practice in cases of this kind. We are quite unable to understand how Sir T. Gladstone, who quotes medical authorities (of Edinburgh) can honestly resist these English authorities; nor how he can resist the evidence of Dr. Latham, which he formerly misquoted against Dr. Vose. If Dr. Latham's authority misquoted and the Edinburgh authority of Professor Miller are worthy of note, surely equally so are the London authority of the President of the College of Physicians and of Dr. Latham truly quoted. The baronet cannot have it both ways; if he selects his own knife for cutting, he cannot complain if it cuts his own fingers. Dr. Watson says:—

"Assuming that the *honorarium* expected by you for the distant visit did not exceed what is customary in the profession out of London, but in England, I do not hesitate to say that your share of the correspondence in question has been strictly correct in principle—temperate, forbearing, and dignified in tone.

"For at least thirty years it has been the habit with London physicians to look for, and to obtain, two-thirds of a guinea per mile, for every professional visit into the country, performed by railroad.

"These terms were settled by the leading physicians and surgeons here after the fullest consideration; and, to the best of my knowledge and belief, the rule has been, and is, observed by all the 'men of eminence' among us.

"The fees thus settled are undoubtedly large. The temptation of the large remuneration is strong; but its receipt scarcely compensates the great and inevitable inconvenience, and the possible, even probable, injury to the physician, which such visits involve. His unexpected absence disappoints and brings distress to some of his London patients, and is the occasion of offence, and sometimes of alienation, to others. The confusion and trouble consequent upon the derangement of his existing engagements are very great, and are not soon or easily rectified. I say nothing of the fatigue and the risks of the journey itself, though these are neither imaginary or slight. Several medical men have been hurt when proceeding on such errands—and it is notorious that one eminent physician has lost his life—by accidents on the railroad. So that the remuneration, though large in amount, is not, in my judgment, excessive; and I feel sure that the physicians in London, whose services are most in request, will not consent to undertake long journeys into the country, if such journeys imply any risk of subsequent uncertainty or haggling about the usual *honorarium*. Fortunately for us, the question of 'a large reduction,' which one of your correspondents affirms to be 'necessary', rests with ourselves.

"After all, the matter, to my mind, is a very simple one. The patient, or the friend who acts on his behalf, is bound to do one of two things; either to ascertain beforehand the terms on which the desired visit will be made, and to accept or decline the visit accordingly; or else having neglected to obtain this information, he is bound in honour to discharge, *in full*, the pecuniary return which is customary for such a visit."

Dr. Latham thus, in a letter to Dr. Watson, repudiates the tale so repeatedly told by the executors of the £50 fee. He says:—

"As a matter of fact, or even of fair inference, there is not a word of truth in any or all of these statements put together" (relative to the fee). "On February 23rd, 1848, I was summoned down to Liverpool by electric telegraph, to see a young man. But what of the fee? Certainly, no 'charge' was made by me; I doubt whether I ever made a charge by way of previous agreement in my life. When the family had recovered from the awful shock they had experienced, they sent me one hundred guineas; so the matter stands recorded in my book of professional receipts for 1848. Thanks to two or three documents written at the time, and luckily preserved, I escape the imputation of that spurious liberality which the executors would hold up for imitation; and I escape too all suspicion of shabbily undervaluing the services of physicians, and denying the right of Dr. Vose to the just remuneration which he claims."

There is one argument in favour of high fees in cases of this kind which has not been alluded to by Dr. Watson; but in our opinion it is one of especial value. The high fee assists in preventing a great injustice from being done to the country practitioner. It provides against the unfair introduction of other practitioners into his district. The high fee en-

tirely does away with the chance of the medical man in the country having a rival in London. Once reduce these fees, as Sir T. Gladstone and Co. would have them reduced, and peripatetic doctors might rise up amongst us in London, and become positive rivals to the country doctors.

In conclusion, we are sure the profession will warmly support Dr. Vose for thus so highly upholding the character and position of the profession.

THE WEEK.

Mr. Bottomley cannot with justice accuse us of acting unfairly towards him. He comes forward as a public man, and as a public man we discuss his acts; and the more prominent the position of a medical man, the more necessary is it to discuss his public acts. That he has done an injury to his professional brethren by the views which he has publicly stated in reference to vaccination, appears to us evident. That those views are erroneous we are fully certain; and therefore we consider it our duty to expose their fallacy; for we should much regret to see them elsewhere repeated. The injury done thereby has already been shown. Since we last wrote, we find that the Croydon Board of Guardians have again met, and that an attempt was made by one of the guardians to have the fee for vaccination raised from 1*s.* 6*d.* to 2*s.* 6*d.* and 3*s.* 6*d.* But the proposal was rejected; and, as grounds for the rejection, Mr. Bottomley's words were prominently quoted. One guardian said:

"Mr. Bottomley told them that 1*s.* 6*d.* was amply sufficient for vaccinating; and he moreover said that every medical man, for his own and family's sake, and for the sake of the nation at large, would see that every one was vaccinated who was brought to him, and not simply for the fee. He (Mr. Bottomley) was the oldest practitioner in the town; and he" (Mr. Pocknell) "would accept his opinion as the most indisputable authority. [*Hear, hear.*]"

Moreover, under the same inspiration, amidst *applause* and "*hear, hear,*" the same guardian—Mr. Pocknell—adds:

"On whom did the responsibility rest? He said, upon every medical man in England [*applause*]; and if there had been any neglect or carelessness, it was amongst those gentlemen. [*Hear, hear.*] He thought the motion of Mr. Close might have stood over till their own medical officers had asked for an increase."

Till their own officers asked for an increase, indeed! Why, the smallest suggestion of such a thing from them would be the choice of instant dismissal or silence. We all know what happened to Oliver Twist when he had the audacity to "ask for more." One guardian, however—Mr. Fuller—had, we are glad to see, common sense enough to recognise the plain fact that doctors should be paid as well as other men for their work.

"It did not appear to him that every medical gentleman was bound to step out of his path and vaccinate people free from charge simply because of his profession. He did not know that medical men should be obliged to vaccinate for nothing, no more than they, as professional men or tradesmen, should carry out matters of business without being paid for such transactions."

So here we have, in fact, the good sense of a Poor-law guardian—a desire to see justice done to our profession—opposed and thwarted by the sentiments of one of our own profession! The result of the whole matter is, that the Poor-law doctors in Croydon are told they are well paid for their services at the rate of 1*s.* 6*d.* per *successful* case of vaccination; that it is their business to vaccinate every child brought to them, pay or no pay; that doctors are above the meanness of desiring to receive pay for such a work of humanity; that guardians need have no fear of their not doing their vaccinating duty up to the mark; and that Poor-law doctors are sure to vaccinate efficiently, in order to save themselves from the future trouble and risk of attending small-pox cases. For all this the guardians say that they have the ananswerable authority of the leading medical practitioner in Croydon. Are we not justified in saying that Mr. Bottomley has much injured his professional brethren in this matter?

Since the above lines were written, we note that the proposed fee in the Vaccination Bill for Scotland, which has just passed the House of Commons, was by an amendment reduced from 3*s.* 6*d.* and 2*s.* 6*d.* to 1*s.* 6*d.* and 2*s.* 6*d.*! For all we know to the contrary, the author of this amendment—*affecting all Scotland*—might have taken his inspiration from Croydon proceedings!

We have no hesitation in replying to the question which has been put to us: Has a Licentiate of the King and Queen's College of Physicians in Ireland a right to append M.D. to his name? We consider that he is *justified* in doing so. Whether he has or has not the legal right to do so is quite another affair, and one about which we offer no opinion. This College claims the possession of a power of granting the degree of M.D. Its authorities publicly assert the possession of such a right, and they publicly give to their Licentiates the title of M.D. More than this, they engage themselves to protect all their Licentiates against any one who may dispute the right of which they assert the possession. The Licentiates of this College, therefore, stand on a very different footing from that of the Licentiates of the London and the Edinburgh Colleges. These Colleges do not claim any such right. The London College distinctly forbids the assumption by its Licentiates of the title of M.D., if they possess no university diploma; and the Edinburgh College has told the world that its license gives no such powers. We can only add, it is very much to be desired, and

above all for the sake of the Licentiates of the Dublin College, that the question should be finally decided, so that it could be no longer made subject of dispute. We suppose that the way to do this would be for the Dublin College to demand the insertion of the M.D. title by the Registrar on behalf of one of its Licentiates. This would decide the legal validity of the claim.

How fully justified we were in rebuking Mr. Cosmo Logie for rushing into the *Times* as a puffer of the sarracenia as a remedy in small-pox, is shown by a paper lately read by Mr. Marson of the Small-Pox Hospital. Mr. Marson has carefully tried the so-called remedy, and found its effects what we suggested they would probably be—absolutely *nil*. We recommend the report of Mr. Marson to our readers; and the lesson to be learnt from hasty drawing of conclusions on insufficient data to the consideration of that rather numerous class of medical men who are always on the look out for new remedies, and who have not time to discriminate between the *post hoc* and the *propter hoc* in the matter of drugs-administration.

A CORONER'S jury, as we read in the papers, a few days ago, delivered the following verdict :—

"'Death from natural causes'; and the foreman stated that the jury were of opinion that there was great want of feeling on the part of Dr. Elliott, in refusing to go upstairs to see the deceased when informed of the state in which she was when he was in the house."

For such verdicts as these we have to thank our system of gratuitous medical services, and those members of the profession who think it is the doctor's duty to work gratis. The evidence showed that the woman was so badly treated in a workhouse that she left it and went into lodgings. Here she injured herself, and

"A visiting lady, Mrs. Hertner, who called, left a message requesting Dr. Elliott, the medical officer of the district of St. Mary Axe, to come upstairs to see deceased when he visited a little boy who was ill in a room downstairs in the same house. Dr. Elliott replied, 'The idea of these visiting ladies leaving these messages for me! I shall not go without an order.' He was told that deceased was very bad; but he still refused to go; and said, 'Get an order and bring it to me to-morrow morning, and I will see her.' No order could be got that day, because none were issued after nine in the morning. Deceased died during the night."

Now, if any one is to blame here, it is clearly the system under which no order is given after nine A.M. If the woman were so exhausted, why did not this good visiting Samaritan take care to have a doctor properly sent for? What earthly claim was there on the services of a wretchedly paid union doctor? The neglect lies at the door of society; and we sincerely trust, in the very cause of humanity, that our medical brethren will resist this constant attempt to obtain their services without pay. There would be no neglect in any case of this kind if society did its duty; and it is our business to impress this fact upon juries and coroners. If there were any neglect at all, the neglect lay as much at the door of the sapient jury as of any other person. Let the jury, as members of society, instead of bringing empty verdicts like these to salve over their own shortcomings, see that proper provision is made by the community at large for due medical attendance in such cases as these.

THE election of three members of Council of the Royal College of Surgeons of England, in the room of Messrs. Cæsar Hawkins and Tatum (retiring by rotation), and Mr. Coulson (resigned), took place on Thursday last. After a long contest, the numbers polled for each were declared to be as follows :—

Lane . . .	199	Hawkins . .	126
Busk . . .	168	Curling . .	91
Hancock . .	153	Tatum. . .	88

The first three gentlemen on the list—all new men in the Council—were, therefore, elected.

THE Universities of Berne and Kiev have been added to the Universities qualifying candidates for admission to the examinations of the Royal College of Physicians of London.

Statistics state that there have been 107 cases of hydrophobia in France in six years. In the Department of the Seine there have been received into the hospitals 94 cases during the last forty years. M. Boudin's researches lead him to conclude, with Hunter, that not more than 5 per cent. of persons bitten by rabid animals become hydrophobic. The accounts kept at Alfort and elsewhere show that, of 100 rabid dogs, only 7 per cent. are of the female sex; but this fact, when investigated, does not seem to be of so great importance; for it would appear that dogs are much more numerous than bitches, and that bitches are generally more often chained up than dogs.

The air of Madrid has a bad reputation. An old Spanish proverb says of it :

"El aire de Madrid es tan sotil,
Que mata a un hombre,
Y no apaga a un candil."

"The air of Madrid is so subtile that it will kill a man, and yet not put out a candle." The air of Valencia is, on the contrary, soft and moist, and mild and depressing; and the vegetation is most luxuriant. The effect of the climate on animal life is described in the proverb :

"Carne es verdura;
Verdura es agua;
Hombres son mujeres;
Y las mujeres son nada."

"The meat is vegetables; vegetables are water; men are women; and the women are nothing."

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

A SURGICAL operation at the *Royal Infirmary*, in the early part of last month, is of such unusual interest and importance, that, deviating from my ordinary practice of reporting those cases only which I have witnessed myself, I am induced to relate it from the narration of a friend who was present on the occasion. It was an example of that exceedingly rare kind of aneurism called fusiform, consisting of a dilatation of a considerable portion of the axillary artery. The subject of the disease was an artisan about forty years of age, who came into the hospital on the evening of the 7th of May, complaining of a large pulsating tumour which filled up the left armpit, distending the pectoral muscles, and lifting up the shoulder towards the ear. The patient had noticed, several months previous to admission, the existence of a swelling of about the size of an orange, which pulsated strongly, but which caused no particular distress or uneasiness until a few days before his admission, when he was seized one night with severe pain in the arm, and discovered that the swelling had suddenly become greatly increased. It was evident that an aneurism existed, which had burst its sac and become diffused. The arm was now œdematous, and the distension and enlargement were increasing rapidly. The arm was bandaged with flannel, and the patient kept quiet in bed until the next morning, when the tumour was found to be still farther enlarged, so that the shoulder was pushed up towards the ear. There was considerable ecchymosis, with dark livid spots on the skin of the armpit. The pulsation in the tumour had entirely disappeared. Impending external rupture of the tumour, with inevitable fatal hæmorrhage as a consequence, indicated that an immediate operation was imperative. Under these circumstances, as it appeared almost impracticable to reach and tie the subclavian artery in the usual position, Mr. Bickersteth, who had charge of the case, after a consultation with his colleagues, determined to follow a mode of proceeding which has been adopted by Mr. Syme, and which is, in fact, the original operation for aneurism as practised previous to the improved method introduced by John Hunter—namely, to lay open the sac, empty out its contents, and tie the vessel above and below the opening.

Notwithstanding the formidable difficulties which must necessarily attend this plan of procedure, it seemed, under the circumstances, to be the only practicable method of dealing with the case. The steps of the operation were as follows. An incision was made along the outer edge of the sterno-mastoid muscle and through the cervical fascia, enabling an assistant's finger to be placed on the subclavian in the usual position. When the artery was commanded by compression, a free incision was made into the tumour, and the clots cleared out. Owing to the admirable and efficient manner in which this somewhat difficult and critical task of commanding the artery was effected by Mr. Fletcher, very little blood was lost. After a careful examination of the interior of the aneurism with a view to ascertain the point at which the artery opened into the sac, the operator discovered what, of course, could not have been previously found out, and which materially augmented the difficulties of the case—namely, that the aneurism was fusiform, the dilatation extending from the first rib to the commencement of the brachial artery. In order to obtain access to a sound part of the artery above the dilatation, it was necessary to divide the pectorales major and minor. An aneurism-needle was then passed round the artery about half an inch below the point where it crosses the first rib, after which it was requisite to tie each of the several branches of the artery given off from the sac or dilatation, including the subscapular, the posterior circumflex, and the brachial, all of which bled profusely into the sac until the ligatures were applied. Yet considering the formidable nature of the operation, which occupied from first to last about forty minutes, the amount of hæmorrhage was inconsiderable; and, by one of the boldest efforts of surgery, the patient was rescued from a position of imminent peril to one of comparative safety.

A short time after the operation, numbness of the hand and forearm came on; and in three or four days it was evident that the hand would be sphacelate—a result which might naturally be expected from the fusiform character of the aneurism, which necessitated ligature of all the anastomosing arterial branches upon which the surgeon depends for the reestablishment of the circulation after tying the subclavian. The subsequent progress of the case was as favourable as could be anticipated. All the ligatures came away between the twelfth and fifteenth days; the wound contracted well, and is now nearly healed; and the patient is sufficiently recovered to leave his bed and walk about the ward. The hand and the lower third of the forearm are black and dried up, in the condition analogous to that of senile gangrene. This portion of the limb is, of course, doomed; but for the present, at least, the patient is out of danger, and he lives a striking example of what surgical dexterity and skill is sometimes capable of effecting for suffering humanity towards rescue from the very jaws of death.

I am happy to be able to report the satisfactory progress of the Waters Fund. The Liverpool subscription-list has increased from £70, as noticed in my last communication, to about £110; and it is hoped it may ultimately reach from £120 to £150. It is only due to Dr. Stookes, the treasurer, to say that, without at all detracting from the liberality and promptitude with which the profession have responded to this call, the success already achieved is in a great measure owing to the tact and energy with which he has discharged his duty, sparing no pains or trouble in bringing the subject under the notice of our brethren here, and thus affording all who were so disposed an opportunity of contributing. I have heard that at Chester about £100 has been collected from members of the profession, and £300 from the laity (if I may use the expression); at Birkenhead, nearly £20; and at Manchester, about the same sum has been raised; making, at present, a total of about £550 from this district. As it is understood that

the actual expense which will fall upon Dr. Waters is not less than £700, it is evident that, unless further aid can be obtained from the profession in other parts, the original object of the movement—to compensate him to the full extent of his loss—will not be carried out, to say nothing of the proposed testimonial. Although this result cannot be otherwise than a subject of regret, it must nevertheless be consolatory to Dr. Waters himself, as well as to his friends and to all who are interested in the matter, to reflect that, in the neighbourhood where all the parties and circumstances are best known, there has been a most liberal, general, and spontaneous response to the appeal for sympathy and assistance.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

President—GEORGE BURROWS, M.D., F.R.C.P., F.R.S, London.

President-elect—JOHN ADDINGTON SYMONDS, M.D., F.R.C.P., F.R.S.Ed., Clifton.

All the meetings will take place at the Victoria Rooms, Clifton.

WEDNESDAY, *August 5th.*

1 P.M. Meeting of Committee of Council.

2.30 P.M. Meeting of the General Council.

4 P.M. First General Meeting of Members. The retiring President (Dr. Burrows) will make a few remarks. The new President (Dr. Symonds) will deliver an Address. The Report of Council will be presented, and other business transacted.

9 P.M. Through the kindness of the Committee, a *Conversazione* will be held at the Literary and Philosophical Institution, Bristol.

THURSDAY, *August 6th.*

11 A.M. Meeting of the Members of the New Council.

12 NOON. Second General Meeting of Members. The Address in Medicine will be read by WILLIAM BUDD, M.D. Papers and Cases will be read.

3.30 P.M. The Address in Surgery will be read by AUGUSTIN PRICHARD, Esq.

The Report of the Medical Benevolent Fund will be presented.

Papers and Cases will be read.

9 P.M. By the kind invitation of the President (Dr. Symonds) a *Soirée* will be held at his residence, Clifton Hill House, Clifton.

FRIDAY, *August 7th.*

12 NOON. Third General Meeting of Members. The Address in Chemistry in its Relations to Medicine will be given by WILLIAM B. HERAPATH, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. Dinner at the Victoria Rooms. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice, as soon as possible, to Dr. MARSHALL, 8, The Mall, Clifton.

Members are requested to enter, on arrival, their names and addresses in the Reception Room at the Victoria Rooms, where cards will be supplied which will secure admission to all the proceedings.

Refreshments will be provided in the Victoria Rooms during the Meetings.

Members who wish for previous information may communicate with Dr. MARSHALL, 8, The Mall, Clifton.

Papers have been promised by T. S. Fletcher, Esq. (Bromsgrove); Graily Hewitt, M.D. (London); Lionel Beale, M.B., F.R.S. (London); G. F. Burder, M.D. (Bristol); W. O. Markham, M.D. (London); B. W. Richardson, M.D. (London); A. P. Stewart, M.D. (London); R. W. Coe, Esq. (Bristol).

Papers and Cases will be read in the order of the dates at which notice of them has been received by the General Secretary.

Alteration of Laws. Notice of the following new Laws has been given by W. O. MARKHAM, M.D.

At each Annual Meeting of the Association, the Secretary shall lay before the first meeting of the Council a List of the Members of the Association, together with a separate List of all Members whose Subscriptions are in arrear, and the amount of Subscriptions due from each Member.

This List shall be at once referred to a Committee, consisting of four or more Members of the Council (three of whom shall form a quorum), together with the President and the Secretary. The Committee shall thereupon proceed to settle the List of Members for the ensuing year, retaining or erasing, as they may think fit, the names of any Members who are in arrear: provided always, that no person shall remain a Member of the Association who is more than two years in arrear. The List of Members thus corrected shall be presented to a subsequent Meeting of the Council, and shall, with their approval, be published immediately after the Annual Meeting.

The Secretary shall in each year, during the first week of June, supply the Editor of the JOURNAL with the names of all those Members of the Association whose Subscriptions have not been paid up to the 31st day of May in each year.

Notice of the following alteration has also been given by Dr. Markham.

In Law 15, for the words "twelve months", to substitute the words "five months".

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, June 30th, 1863.

METROPOLITAN COUNTIES BRANCH.

THE Eleventh Annual Meeting of this Branch will be held at the Crystal Palace, Sydenham, on Tuesday, July 7th, at 3.30 P.M. President-elect: Francis Sibson, M.D., F.R.S.

The members will afterwards dine together.

A. P. STEWART, M.D.,
ALEXANDER HENRY, M.D., } *Hon. Secs.*

London, June 11th, 1863.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

THE Annual Meeting of these Branches combined will take place at the Infirmary, Peterborough, on Thursday, July 9th, at 1 P.M. President-elect: William Paley, M.D.

Gentlemen intending to read papers or cases will oblige by forwarding the titles as early as possible to the Honorary Secretaries,

JOHN M. BRYAN, M.D., Northampton; or
G. M. HUMPHRY, M.D., Cambridge.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 7, 3.30 P.M.
NORTH WALES. [Annual.]	Royal Hotel, Rhyl.	Tuesday, July 7, 1 P.M.
SOUTH MIDLAND & CAMBRIDGE & HUNTINGDON. [Annual.]	Infirmary, Peterborough.	Thursday, July 9th, 1 P.M.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Philosophical Institution, Bristol, on Thursday, June 18th, 1863, at 4.30 P.M. There were nearly sixty members present.

The chair having been taken by W. J. CHURCH, Esq., President for the past year, the minutes of the last annual meeting were read and confirmed. Mr. Church then resigned the chair to Dr. FRANCIS KER FOX, President for the ensuing year, who delivered an address, which is published at page 6.

Dr. SYMONDS proposed a vote of thanks to Dr. Fox for his address, which was carried with acclamation.

New Member. Dr. PAINE proposed, and Dr. BURDER seconded—

"That George Robert Cubitt, Esq., of Stroud, be elected a member of the Association and of this Branch."

Mr. Cubitt was duly elected.

Report of Council. The Bristol Secretary, Dr. MARSHALL, read the following Report of Council:—

"The Council have again the satisfaction of giving a report of the prosperous state of the Bath and Bristol Branch of the British Medical Association.

"The attendance of both members and visitors at the ordinary meetings has been larger than in any previous year; while the contributions of papers have been so numerous as to exclude the possibility of their being all read.

"The Branch has to lament the death of three of its oldest members: Mr. Soden of Bath (who formerly held the presidential chair); Mr. T. L. Surrage of Clifton: and Dr. Dyke of Chippenham. The Council have further to report the loss of seven members from resignation or nonpayment of subscriptions; but this has been more than compensated for by the addition of thirteen new members, including whom the Branch now numbers 132 associates.

"The following balance-sheet for 1862 shows that the funds of the Branch are in a satisfactory condition:—

Receipts.

Balance from 1861	8	18	2
Subscriptions, 1862	15	4	0
	£24	2	2

Disbursements.

Hire of rooms for meetings.	4	16	0
Printer's bill	2	11	0
Postage stamps and sundries	3	19	0
Donation to Medical Benevolent Fund	5	0	0
	£16	6	0
Balance in hand	7	16	2
	£24	2	2

"The annual meeting of the parent Association having been announced to be this year held in Bristol on the 5th, 6th, and 7th of August, the Council beg to express a hope that the members of the Branch will cordially unite in doing all that lies in their power to render the meeting successful and agreeable.

"The following gentlemen have been elected to fill up the vacancies in the Council:—*For the Bath District*—C. Coates, M.D.; J. Parsons, Esq.; W. Davies, M.D.; W. Bush, Esq. *For the Bristol District*—A. Prichard, Esq.; W. Morgan, Esq.; J. G. Swayne, M.D.; T. Green, M.D.

"During the past year, the following papers and cases have been communicated:—

"1. On Practical Difficulties in the Diagnosis of Acute Phthisis. By E. L. Fox, M.D.

"2. Five Years Midwifery Experience. By J. Hinton, Esq.

"3. Case of Staphyloraphy. By F. P. Lansdown, Esq.

"4. Case of Sphacelus of the Tongue. By A. Prichard, Esq.

"5. Case of Retroflexion of the Uterus. By W. M. Clarke, Esq.

"6. Peculiar Case of Injury to the Subclavian Artery. By J. Soden, Esq.

"7. Case of Wound of the Vertebral Artery. By A. Prichard, Esq.

"8. Case of Monstrous Birth. By J. Hinton, Esq.

"9. Case of Obstruction of the Bowels. By J. Beddoe, M.D.

"10. Case of Cæsarian Section. By R. W. Coe, Esq.

"11. Cases of Puerperal Convulsions; with Remarks. By J. G. Swayne, M.D.

"12. Case of Puerperal Convulsions. By S. H. Swayne, Esq.

"13. On the Use of Metallic Ligatures. By W. M. Clarke, Esq.

"14. On a Recent Case of Arsenical Poisoning. By W. B. Herapath, M.D.

"15. Case of Wasting Palsy. By J. K. Spender, Esq.

"16. On the Recent Prevalence of Typhus Fever in Bristol. By S. Martyn, M.D.

"17. On the Prevalence of Itch. By W. Budd, M.D."

It was moved by Mr. BARTRUM, seconded by Dr. HERAPATH, and carried unanimously—

"That the report and financial statement just read be adopted."

President-elect. Mr. BUSH proposed, and Mr. CHURCH seconded—

"That Dr. Falconer be elected President-elect of the Branch."

The resolution was carried with acclamation.

Votes of Thanks. A vote of thanks to the Retiring President, Mr. Church, was proposed by Dr. DAVEY, seconded by Mr. STONE, and carried unanimously.

A vote of thanks to the Council was proposed by Dr. BURDER, seconded by Dr. E. L. Fox, and carried unanimously.

Dr. DAVEY proposed, and Dr. BRITTAN seconded, a vote of thanks to the Secretaries of the Branch, Mr. Fowler and Dr. Marshall, for their services during the past year; and that they be re-elected for the ensuing year. This was carried unanimously.

Alteration of Law. Dr. MARSHALL brought forward a proposition of the Bristol Council to the effect that there should be six ordinary meetings of the Branch held annually, instead of four as at present. After some discussion,

Dr. MARSHALL proposed, and Dr. HERAPATH seconded—

"That the seventh law of the Branch, relating to the Branch meetings, stand as follows:—

"'That the meetings of the Branch shall consist of six ordinary meetings, to be held at such times as the Council shall direct; and an annual meeting in the summer.'"

This was carried unanimously.

Representatives in the General Council. The following gentlemen were elected representatives of the Branch in the General Council:—J. S. Bartrum, Esq. (Bath);

W. Budd, M.D. (Clifton); W. J. Church, Esq. (Bath); R. W. Falconer, M.D. (Bath); H. Marshall, M.D. (Clifton); and A. Prichard, Esq. (Clifton).

Medical Education and Provincial Hospitals. Dr. FALCONER proposed, and Dr. GREEN seconded, the following motion:—

"That the Councils of the Bath and Bristol Branch be requested to take into consideration the propriety of memorialising the Medical Council as to the present system of medical education, and its injurious effects upon provincial hospitals, not being recognised schools of medicine."

This motion, being put from the Chair, was carried.

The proceedings terminated with a vote of thanks to the Chairman.

Dinner. The dinner was held at the Volunteer Club, at half-past six o'clock. Forty-seven members and visitors were present. The usual loyal and professional toasts were given and responded to.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch took place on June 19th, 1863, at the Hen and Chickens Hotel, Birmingham; ALFRED BAKER, Esq., President, in the chair. There were also present thirty-one members.

Mr. DUNCALFE, the retiring President, thanked the members for their courtesy during his year of office, and introduced his successor, Mr. Alfred Baker.

Vote of Thanks to the Retiring President. It was moved by Mr. CLAYTON, and seconded by Dr. WADE, and carried unanimously—

"That the best thanks of this meeting be presented to Henry Duncalfe, Esq., for his courteous conduct as President during the past year."

Report of Council. Mr. OLIVER PEMBERTON, the Hon. Secretary, read the following report of the Council:—

"The Council of the Birmingham and Midland Counties Branch of the British Medical Association, in presenting its record of the working of the society during the past year, has to congratulate the members on the further development of its scientific position. The bi-monthly meetings have been entirely devoted to the consideration of subjects connected with medical science. The following is a list of the papers read:—

"1. Observations on a successful Case of Compound Comminuted Fracture of the Patella, and of Compound Comminuted Fracture of the Os Calcis. By Mr. J. Houghton.

"2. A Demonstration of the Use of the Laryngoscope. By Mr. F. Jordan.

"3. On Encephaloid Cancer of the Breast. By Mr. O. Pemberton.

"4. On a remarkable Case of Gunshot Wound. By Mr. West.

"5. Historical and Clinical Inquiry into the Relative Merits of the different Methods of Treating Fractures of the Limbs. By Mr. Gamgee.

"6. On the Diagnosis of Retrouterine Hæmatocele. By Dr. Wade.

"7. On two Cases of Cyanosis. By Dr. Foster.

"8. On Excision of the Os Calcis. By Mr. Pemberton.

"9. On the Action of Medicines, singly and combined. By Dr. Nelson.

"10. On Extraction of Bullets. By Mr. Redfern Davies.

"These papers formed only a part of a much larger number offered by the members for reading and discussion. Many valuable contributions to practical medicine and surgery had, therefore, to be postponed, greatly to the regret of your Council. Under these circumstances, it was thought advisable to recommend that more frequent meetings should be held; a suggestion that was unanimously adopted by the members of the Branch in April last. During next session, commencing from October, this important change will come into operation, and meetings will be held for the future during all the winter months. Your Council cannot but anticipate that this new feature in the arrangements will tend greatly to increase the value of the society in the estimation of the profession.

"In medical politics during the past year, there have been few events to which it may be deemed necessary to direct your attention. Perhaps the one most vitally affecting individual interests is that involving the social position of the medical man, as evidenced in the base and cruel prosecutions to which members of the profession have been subjected by their patients. The cases of Mr. Adams and Dr. Waters will long serve to illustrate the painful experiences that may arise in the practice of our calling; and will teach us, that at times no position however eminent, no conduct however blameless, can escape those assaults which emanate from weakness and depravity on the one hand, and from improper countenance and support from amongst our own ranks on the other. Happily, in both these instances, justice triumphed; but no one will fail to appreciate the momentous character of the ordeal through which these eminent men had to pass, or omit to sympathise with those wounded feelings of honour which their unmerited sufferings called forth. In the face of these things—when no one is safe—it may become necessary for the members of this Branch to signify their assent to a movement which shall provide for the better security of the profession against direct attacks.

"From these considerations, your Council pass on to ask you to award to the editor of the BRITISH MEDICAL JOURNAL that high praise which his efforts to support the profession in these and other trials so justly merit, and to acknowledge that ability which has raised the organ of the Association to the foremost rank of journalism.

"In conclusion, your Council records with deep regret the loss of two members by death during the past year—Mr. Howard Chavasse of Sutton Coldfield and Mr. J. Prowse of Nuneaton. In lamenting the untimely removal of Mr. Howard Chavasse, an expression of earnest sympathy is proffered to his father on the loss he has sustained."

Dr. JEAFFRESON moved, Mr. MALE seconded, and it was resolved,

"That the report of Council now read be received, approved, and entered on the minutes."

Treasurer's Account. The account for the last year, read by the Treasurer, Mr. T. W. Williams, showed a balance in hand of £26 : 17.

On the motion of Dr. FAYRER, seconded by Dr. WADE, it was resolved,

"That the financial statement of the Treasurer now read be received, approved, and entered on the minutes."

Election of Officers. Mr. BARTLEET moved, and Mr. GAUNT seconded,

"That Mr. Henry Douglas Carden of Worcester be elected President-elect for the ensuing year."

The voting lists having been handed in to the President, the following gentlemen were elected members of the Council for the ensuing year:—*Country Members*—E. Bartleet, Esq. (Campden); B. S. Browne, Esq. (West Bromwich); E. H. Coleman, Esq. (Wolverhampton); G. Fayrer, M.D. (Henley); J. S. Gaunt, Esq. (Alvechurch); J. H. Lakin, M.B. (Sutton Coldfield; G. Lowe, Esq. (Burton-on-Trent); J. E. Male, Esq. (Leamington). *Town Members*—S. W. Burbury, M.D.; M. H. Clayton, Esq.; F. Jordan, Esq.; J. B. Melson, M.D.; L. Parker, Esq.; J. V. Solomon, Esq.; W. F. Wade, M.D.; C. Warden, M.D.

The following gentlemen were elected representatives

of the Branch in the Council of the Association for the ensuing year:—Alfred Baker, Esq.; E. Bartleet, Esq.; H. D. Carden, Esq.; M. H. Clayton, Esq.; H. Duncalfe, Esq.; G. Fayrer, M.D.; J. J. Hadley, Esq.; T. W. Williams, Esq.; O. Pemberton, Esq. (*ex officio*).

Mr. T. W. Williams was elected Treasurer, and Mr. Pemberton Secretary for the ensuing year.

New Members. The following gentlemen, members of the Association, were unanimously elected members of the Branch:—Dr. Anderson, General Hospital, Birmingham; J. R. Brunton, Esq., Redditch; J. Rudd, M.D., Scots Greys; J. R. Roberts, Esq., Children's Hospital; J. Francis Woody, Esq., Tamworth.

President's Address. The President then delivered an address to the members. At its close, Mr. Baker was requested to publish it in the JOURNAL; and a vote of thanks was unanimously passed to him for his admirable address and courteous conduct in the chair.

The members afterwards dined together at the Hotel, under the presidency of Mr. Baker; the vice-chair being occupied by Mr. Carden.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE twenty-seventh annual meeting of this Branch was held at the Medical Institution, Mount Pleasant, Liverpool, on Wednesday, June 24th, at twelve o'clock noon; J. R. W. VOSE, M.D., President, in the Chair. There were also present fifty-two members and two visitors.

Report of Council. The following Report of the Council was read by the Honorary Secretary, Dr. A. T. H. WATERS.

"In accordance with the usual custom, the Council have to present the members with a brief statement of the present condition of the society, and of their own proceedings during the past year.

"With reference to the first subject, they have the satisfaction to state that the Branch still continues large and prosperous. Several members have been lost during the past year from death and other causes, but these losses have been more than counterbalanced by the number of new members who have joined the society. The present number of members is 214.

"With regard to their proceedings during the past year, your Council have to report that they held a special meeting to consider the resolutions referred to them at the last anniversary. The first of these resolutions related to the proposed institution of an annual course of lectures, to be delivered alternately in Manchester and Liverpool. The Council were unanimously of opinion that the interests of the society would be promoted by the adoption of the proposed plan; and they have accordingly made arrangements for the delivery of the first course of lectures in Liverpool during the ensuing autumn. The second resolution referred to the Council requested them to take into consideration the propriety of appointing a subcommittee, whose duty it should be to encourage a weekly registration of disease in large towns. A committee was accordingly appointed, and a report has been received from them. No practical results have as yet followed their labours, for they have hitherto met with insuperable difficulties in finding members of the profession in the various towns who would undertake to make the necessary returns for carrying out the proposed object. The committee, however, are not without hope that eventually some good result may follow from their exertions. In accordance with a third resolution passed at the last anniversary, your Council considered the desirability of holding district meetings for the reading of papers on medical subjects, and they decided that two such meetings should be held. These meetings took place—one at Chester in December, and the other at Manchester in March. On these occasions several valuable communications were made. Another resolution which was referred to the Council requested them to take into consideration the propriety of memorialising the General Council of Medical Education and Registration with reference to the publication *in extenso* of the proceedings of the latter body. After giving the subject careful consideration, your Council are of opinion that it is not desirable at present to take any steps in the matter.

"Mindful of the importance of extending the sphere of usefulness of the society, your Council have endeavoured during the past year to procure members from some important towns in the district which have been hitherto but little represented in the society. Their efforts have to a certain extent been attended with success; and they are happy to say that one result of their endeavours has been that they have received an invitation to hold the annual meeting in Lancaster next year, and a proposition to that effect will be laid before you.

"Your Council have to regret the loss, by death, during the past year, of one of their most valued members and a very old friend of the society, Dr. Duncan, who on one occasion filled the office of President; and, although, from failing health, he had not been able to take an active part in the affairs of the society for some years, always showed a warm interest in its welfare.

"Your Council have received a notice of the resignation of the present Honorary Secretary. It will, therefore, be necessary to proceed to the election of a successor.

"In accordance with the new law passed at the last annual meeting, five members of the Council retire annually. The names of the gentlemen who retire this year are, Dr. Duncan, Dr. Dickinson, Dr. Noble, Mr. Sharp, and Mr. Ellis Jones. The four latter gentlemen are eligible for re-election."

Financial Statement. From the financial statement, it appeared that the balance in hand last year was £20:11:4; received since, £21:11; making a total of £42:2:4. Ordinary expenses, £21:17:7; leaving a balance in the hands of the Treasurer of £20:4:8.

Resolutions. The following resolutions were passed.

1. Moved by Mr. BATTY (Liverpool), and seconded by Dr. MCNICOLL (Southport)—

"That the Report of the Council now read be adopted and printed, together with the proceedings of this meeting."

2. Moved by Mr. STEELE (Liverpool), and seconded by Mr. DAWSON (Liverpool)—

"That the best thanks of the meeting be given to G. Southam, Esq., the late President; to T. Davies, M.D., and W. T. Callon, M.D., the late Vice-Presidents; and to the Honorary Secretaries and other members of Council, for their services during the past year."

3. Moved by Dr. WILKINSON (Manchester), and seconded by Mr. ELLIS JONES (Liverpool)—

"That the next annual meeting be held in Lancaster; and that E. D. DE VITRÉ, M.D., be appointed President-elect; and T. Howitt, Esq., and A. T. H. Waters, M.D., Vice-Presidents-elect."

4. Moved by Dr. A. T. H. Waters (Liverpool), and seconded by Mr. SOUTHAM (Manchester)—

"That Dr. W. Roberts of Manchester be appointed General Secretary for the ensuing year; the appointment to commence from the second day of the annual meeting of the Parent Association in August next."

5. Moved by Dr. CALLON (Liverpool), and seconded by Dr. MACINTYRE (Liverpool)—

"That the following gentlemen be appointed Local Secretaries for the ensuing year:—W. H. Manifold, Esq. (Liverpool); J. Sharp, Esq. (Warrington); J. P. Scowcroft, Esq. (Southport)."

6. Moved by Mr. DAGLISH (Wigan), seconded by Dr. MACNAUGHT (Liverpool)—

"That the following gentlemen be appointed representatives of the Branch in the General Council:—J. Dickinson, M.D.; T. Howitt, Esq.; Ellis Jones, Esq.; A. Stookes, M.D.; H. Simpson, M.D.; G. Southam, Esq.; J. Vose, M.D.; A. T. H. Waters, M.D.; A. Waters, M.D.; A. E. Wilkinsoo, M.D.; and W. Roberts, M.D., Secretary."

7. Moved by Mr. TURNER (Manchester), and seconded by Mr. BATTY (Liverpool)—

"That this meeting accepts with regret the resignation of Dr. A. T. H. Waters as Honorary Secretary of the Branch, and is of opinion that the best thanks of the Branch are due to him for the valuable services he has rendered during the six years he has held the appointment."

Officers and Council of the Branch. The following gentlemen were appointed members of Council for the year, in addition to the President (Dr. Vose), the Vice-Presidents (Drs. Martland and G. Turner), and the Honorary Secretary (Dr. W. Roberts):—W. T. Callon, M.D. (Liverpool); T. Davies, M.D. (Chester); L. E. Desmond, Esq. (Liverpool); J. Dickinson, M.D., F.R.S. (Liverpool); R. Flint, Esq. (Stockport); H. Halkyard, Esq. (Oldham); Ellis Jones, Esq. (Liverpool); E. Lund, Esq. (Manchester); P. Macintyre, M.D. (Liverpool); G. Mallet, Esq. (Bolton); T. Mellor, Esq. (Manchester); D. Noble, M.A., M.D. (Manchester); A. Ransome, M.A., M.B. (Manchester); J. Sharp, Esq. (Warrington); H. Simpson, M.D. (Lymm); L. Spencer, M.D. (Preston); A. B. Steele, Esq. (Liverpool); J. Vose, M.D. (Liverpool); A. T. H. Waters, M.D. (Liverpool); M. A. E. Wilkinson, M.D. (Manchester).

Papers. The following papers were read.

1, Observations on Thoracic Aneurism, with Cases. By A. T. H. Waters, M.D.

2. On a Case of Popliteal Aneurism cured spontaneously. By J. Hakes, Esq.

3. On Vaccination and Revaccination. By A. B. Steele, Esq.

4. On the Treatment of Rheumatic Fever. By J. B. Nevins, M.D.

5. On a Case of Suppression of Urine. By T. Turner, Esq.

Votes of Thanks were passed to the readers of papers, and to the Council of the Medical Institution for the use of their rooms.

Dinner. The members subsequently dined together at the Adelphi Hotel; Dr. Vose in the Chair. About fifty gentlemen sat down.

EAST ANGLIAN BRANCH: ANNUAL MEETING.

THE annual meeting of the East Anglian Branch was held at the Town Hall, Yarmouth (by the kind permission of the Mayor), on Friday, June 26th. Twenty-six members were present.

SPENCER FREEMAN, Esq., commenced the business by introducing Dr. COPEMAN of Norwich, the President, who thanked the meeting for the honour conferred on him, and assured them of his intention to perform his duties to the best of his ability. He then remarked on the importance of intellectual culture in raising the status of the medical profession, and gave an address, which will be published.

Report of Council. Mr. J. B. PITT of Norwich, the Honorary Secretary, read the following report:—

"In presenting their accustomed annual report, the Council congratulate the members on assembling for the first time in the interesting town of Great Yarmouth; and hope that at some future period, when they again meet in this town, a resident member will fill the office of President.

"Your Council deem it their duty to express their satisfaction with the manner in which the JOURNAL of the Association continues to be conducted; and your Council have also the pleasure to state that the Branch still continues to enlarge, and they feel that a little exertion on the part of members would be the means of increasing the society, and earnestly impress upon them the importance of their endeavouring to procure new associates."

Resolutions were passed as follows:—

1. Proposed by Dr. DURRANT, and seconded by Mr. CROSSE—

"That the thanks of this meeting be given to Spencer Freeman, Esq., the retiring President, for his services to the East Anglian Branch of the British Medical Association during his year of office."

2. Proposed by Mr. CADGE, and seconded by Dr. VORES—

"That the members of the Council elected by the Branch be continued; and that the name of C. C. Aldred, Esq., of Great Yarmouth, be added; the President and President-elect being the representatives in the General Council during the year."

3. Proposed by Dr. KIRKMAN, and seconded by Mr. CLOUTING—

"That the best thanks of this meeting be given to the members of the Council and the honorary secretaries for their services."

4. Proposed by Dr. RANKING, and seconded by Dr. CHEVALLIER—

"That the next annual meeting be held at Bury St. Edmunds; and that W. E. Image, Esq., be President-elect."

Papers. The following papers were read:—

1. Case of Encephaloid Disease of the Bladder, with remarks on Hæmaturia, its Semeiotic Value and Treatment. By W. H. Ranking, M.D.

2. Two Cases of Excision of the Knee-Joint in Children. By T. W. Crosse, Esq.

3. Remarks on Traumatic Gangrene. By W. Cadge, Esq.

4. Observations on the Value of Diagnostic Signs of Incipient Phthisis; and on the Remedial Management of the Disease generally. By C. M. Durrant, M.D.

5. On the Management of Flooding in Placental Difficulties. By R. Martin, Esq.

6. Case of Double Amputation of Legs and Feet in a Little Child; showing the great Power of Reparation at a very Early Age. By C. B. Rendle, Esq.

These interesting papers and cases gave rise to considerable discussion. A vote of thanks was passed to the readers, with a request that they would allow their papers to be published.

Several letters were read, and the meeting separated.

Dinner. A large party afterwards dined together at the Royal Hotel, when the usual toasts of loyal and professional character were drank, under the able presidency of Dr. Copeman.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, JUNE 1ST, 1863.

B. G. BABINGTON, M.D., F.R.S., in the Chair.

REPORT OF THE TRIAL OF SARRACENIA PURPUREA, OR THE PITCHER PLANT, IN SMALL-POX. BY J. F. MARSON, ESQ.

MR. MARSON's communication was as follows.

A communication, seemingly of great promise, from Mr. Chalmers Miles, of the Royal Artillery, was read some time since before a meeting of this Society, on the Use of Sarracenia Purpurea in Small-Pox. The specimens of the plant which accompanied the communication, were submitted to me for trial at the Small-Pox Hos-

pital; the root being the part of the plant particularly recommended for use.

The public generally and the profession ought to feel very much obliged to Mr. Miles for the great trouble he took in bringing the subject before them; and although I shall not, unfortunately, be able to report favourably on the use of this plant in small-pox, I feel that Mr. Miles is just as deserving of our thanks for the great trouble he has taken, and for the expense, I have no doubt, he has been put to, in gaining the particulars stated in the communication in question, as if the remedy had succeeded ever so well.

The root was said to be the part of the plant that when made into a decoction afforded the best form of giving the medicine. There was about enough for three persons only in the canister transmitted by Mr. Miles to this country from Nova Scotia, and given to me. I had, therefore, to make up my mind what were the most desirable cases of small-pox to test its efficiency in. I fixed on, first, a malignant case—one of those attended with hæmorrhage from the mucous surfaces; second, a severely confluent case, such as my experience has taught me usually dies, owing to the great amount of eruption; and third, if possible, a corymbose case—one of those rather rare and nearly always fatal cases of small-pox.

To give the remedy a fair trial, it was necessary to have the case on which to try it in the early stage of the disease, during the first few days of eruption.

There was but little small-pox in London at the time when the plant was first submitted to me for trial; and although I was on the watch for such cases as I have mentioned, several months elapsed before I had a suitable opportunity of trying the efficacy of the alleged remedy. Of course, I wished to meet with the cases I had fixed on, free from any suspicion of their having been vaccinated. This was absolutely necessary; because I know what great influence vaccination has in altering what may be called the normal course of small-pox by modifying it.

After several disappointments, unnecessary further to detail, small-pox became epidemic in the autumn of last year, and the opportunities became numerous of trying the sarracenia.

About the same time, Mr. Miles returned to this country, and he was good enough to write to me, and place at my disposal any amount of the sarracenia I might require, to be forwarded through the agency of Messrs. Savory and Moore.

I tried the decoction of sarracenia, made from the root by simmering an ounce in a pint and a half of water for four hours, until reduced to a pint; and a quarter of a pint was usually given for a dose twice a day, for two days or more. I also gave in some cases the liquor sarraceniæ supplied by Messrs. Savory and Moore. In all, fifteen patients have been treated with the sarracenia; such cases having been selected for their severity as, I believe, would not get well under ordinary treatment. They have all died.

The cases were selected on admission in the early stage of the disease, on account of the severe symptoms manifested, and because I felt it was of no use to try the efficacy of the sarracenia on mild cases, or vaccinated cases, which I knew very well would recover without anything being done for them beyond the ordinary care of such cases—by giving salines, if required, occasional aperients, and suitable diet, etc.

I cannot say that the sarracenia had any effect whatever. It did not save life; it did not modify in the least the eruption of small-pox; it did not influence any of the secretions; it did not increase the secretion of urine; in only one instance it seemed to act on the bowels; the seeming effect might, however, easily have been from other causes.

The particulars of the fifteen cases taken daily at the time of the trial of the sarracenia, are appended to this report. They would be perhaps rather tedious to the members of the Society to read in detail; but I will run over two or three of the cases, to show how the notes were taken.

Two cases have been admitted into the Hospital that had taken a decoction of the leaves and stems of the sarracenia before admission. The first, a very mild case, having four vaccine cicatrices, was highly modified, I believe, by the vaccination. The second case was confluent, without vaccination; it was not severely confluent, and was wholly unmodified. They both recovered. The recovery might perhaps by some be attributed to the sarracenia; but I believe it had nothing to do with it. The vaccinated case was, as I have said, very mild, in consequence, I believe, of the vaccination. As to the second case, about half our confluent unvaccinated cases recover with ordinary treatment.

In conclusion, I may state that, had I found the sarracenia do any good, I should have taken an earlier opportunity of reporting the fact to the profession; as it failed, I thought it well to defer this report, that others might, without bias, try the plant during the present epidemic of small-pox, and favour us with their opinion of its reputed power of controlling the course of small-pox in its severe forms.

A paper was also read by Dr. E. R. Harvey, "On the Outbreak of Typhoid Fever at the Village of Wing, Berks."

In the discussion which followed the reading of these papers, Dr. Waller Lewis, Dr. Logie, Dr. Chowne, Mr. J. C. Agnis, Mr. Acton, Dr. Copland, Dr. Buchanan, and Mr. Radcliffe, took part.

Correspondence.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—Permit me space to inform the Poor-Law Medical Officers that the Select Committee on Poor Relief has again been nominated, and it consists of the same members as last year. I have forwarded to the House of Commons a statement in reference to the evidence delivered by Mr. Cane last Session; and I feel convinced that, after its perusal, the most sceptical must admit there is great need of considerable changes being made in the medical relief of the poor.

Since my last letter, nine Poor-law medical officers have sent subscriptions; and I hope now that the Committee has been re-appointed, a little more life will be infused into our proceedings, and that I shall be placed in a position to call a public meeting at any moment, should it be deemed necessary; but, with a debt of about £25, I do not feel justified in incurring further personal liability; and therefore, the responsibility of further active measures must depend upon the liberality of the Poor-law medical officers themselves.

I am, etc., RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, June 23rd, 1863.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

SIR,—Having this day read your editorial remarks upon the assumption of the title of M.D. by non-graduates, which appears to me to have been written in a fair and kindly spirit, I am induced to ask your advice under the following circumstances.

Some four years ago, I passed the King and Queen's College of Physicians in Ireland. I surrendered my

Apothecaries' License, as bound to do by the laws of the College, and received a diploma, in which I am told I am a Doctor of Physic. I every year receive the official register of the College, directed to me as M.D., and adding M.D. to my qualification (see enclosure).

In answer to an inquiry some time ago, addressed to the President, as to the responsibility of assuming the title, I am informed by letter, bearing the College seal, that I am entitled to call myself M.D., and that the College will protect me, and try the question against all comers who may feel disposed to dispute the point.

Now, sir, without asking you to give a legal opinion as to the right of the College to do this or that, am I, *in your opinion*, as an English gentleman, and a member of an honourable profession, justified in signing after my name the words M.D.?

I am, etc., A PHYSICIAN.

Lincoln, June 20th, 1863.

MR. BOTTOMLEY AND VACCINATION.

LETTER FROM ALFRED G. ROPER, ESQ.

SIR,—At the annual meeting of the South-Eastern Branch of the Association, held at Rochester on Wednesday last, Mr. Bottomley is reported in the *Croydon Chronicle and Surrey Standard* to have expressed himself in the following terms:—

"I maintain that it is the duty of every medical man connected with Poor-law Guardians to vaccinate without fee or reward"; and that "he never received a penny in his life."

In the published statement of the accounts of the Croydon Union for the year ending Lady-day 1847—Mr. Bottomley being at that time medical officer—I find the following entry:—

"Vaccination fees: G. Bottomley, £10:11:0."

I think it but fair to Mr. Bottomley that he should have the opportunity of explaining this apparent discrepancy between his past practice and his present views and statements. I am, etc.,

ALFRED GEO. ROPER.

Croydon, June 30th, 1863.

TREATMENT OF "HOUSEMAID'S KNEE".

SIR,—I have lately had a case of enlarged bursa of the knee. On my first visit, I punctured it with an exploring needle, and let out a quantity of serum. This had not the effect of reducing the size materially. Pressure was then applied by means of leather strapping and bandage. On my way home, it occurred to me that I had read of some successful treatment of "housemaid's knee" in the BRITISH MEDICAL JOURNAL; and, upon referring, I found the article by Mr. R. W. Martyn of Martock. I resolved to give it a trial; and, in ten days after puncturing, I took off the strapping, and found the bursa still of considerable size. I then applied the ammoniacal plaster as recommended by Mr. Martyn, and allowed it to remain about a fortnight; and, upon removing it, found the swelling entirely gone, and a small substance remaining, which felt like a small piece of cartilage of about the size of a bean. Strips of plaster of ammoniacum on leather were again placed over the knee; and, at the end of another fortnight, every vestige of disease had disappeared.

As I am indebted to Mr. Martyn for the successful result of this case, I think I may beg a small space in the JOURNAL for its publicity, as much benefit may be derived by suffering humanity if gentlemen be induced to make successful treatment in troublesome cases known.

I am, etc., S. F.

Milverton, Somersetshire, June 19th, 1863.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Thursday, June 25, 1863, the following gentleman, having undergone the necessary examination, were duly admitted members of the College:—

Day, Edwin Edmund, 42, Curzon Street, May Fair
Dickson, Jno. Robinson, M.D. New York, Kingston, Canada West
Falls, William Stewart, M.D.St. And., Bournemouth
Head, Edward A. H., M.B.Lond., 44, Harley Street
Johnston, William Woods, M.D.Edin. (of Java), 21, Clifton Gardens, Maida Hill
Playfair, Wm. Smoult, M.D.Edin., 8, Princes St., Hanover Square

APOTHECARIES' HALL. On June 25th, the following Licentiates were admitted:—

Butler, James, Great Bridge, near Birmingham
Cox, Albert George, Crewkerne, Somerset
Moore, Thomas, Wilmslow, near Manchester
Thomas, Richard

At the same Court, the following passed the first examination:—

Grewcock, George, University College
Shorts, William Burt, Charing Cross Hospital
Snow, William V., University College

APPOINTMENTS.

LEISHMAN, William, M.D., appointed Professor of Medical Jurisprudence in Anderson's University, Glasgow.
MCDOUGALL, John, M.D., appointed House-Surgeon to the Greenock Hospital.
WESLEY, John S., Esq., elected Resident Medical Officer to the St. Pancras and Northern Dispensary.

POOR-LAW MEDICAL SERVICE.

DAVYS, Frank J., L.K.Q.C.P.I., to the Swords Dispensary District of the Balrothery Union, co. Dublin.
WOOD, Henry B., M.D., to the Cranbrook District and Union House of the Cranbrook Union, Kent.

ARMY.

BARRON, Staff-Surgeon L., M.D., to be Staff-Surgeon-Major, having completed twenty years full-pay service.
CALVERT, Staff-Assistant-Surgeon G., to be Staff-Surgeon, *vice* C. Martin.

ROYAL NAVY.

DAVIDSON, James, M.D., Surgeon, to the *Revenge*.
HUTCHINSON, James, Esq., Acting Assistant-Surgeon (supernumerary), to the *Euryalus*.
ROSS, W., M.D., Surgeon, to the *Meanee*
SUTHERLAND, G. W. J., Esq., Assistant-Surgeon, to the *Rifleman*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BURD, E., M.D., to be Assistant-Surgeon 1st Shropshire A.V.

To be Honorary Assistant-Surgeons:—

BAYLEY, J., Esq., 1st Shropshire A.V.
SPURRELL, F., Esq., 12th Kent R.V.

MILITIA.

MIDWOOD, W. B., Esq., to be Assistant-Surgeon 6th Regiment Lancashire Royal Militia.

DEATHS.

HALL. On June 27th, at Neckinger House, Laura, wife of Nathaniel F. Hall, Esq., Surgeon.
*JONES, John, Esq., at Derby, aged 75, on June 23.
*KEMP, Charles G., Esq., of Leicester, at Kirby Muxloe, Leicester, aged 32, on June 25.
MARTYN. On June 26th, at 6, Trevor Terrace, Knightsbridge, aged 2, Herbert R., third son of William Martyn, M.D.

MR. ADAMS'S EXPENSES. The law expenses of Mr. Adams's action are stated to be £1,011:9:4. The subscriptions at present received do not yet amount to £400.

THE BRITISH ASSOCIATION. The Prince of Wales regrets that he is unable to attend the meeting of the British Association at Newcastle, in August. The meeting opens on August 26th; Sir W. Armstrong being president.

The Gloucester Asylum. Dr. Williams has been forced to resign the office of superintendent of the Gloucester Lunatic Asylum, in consequence of injuries received some years ago through the bite of a patient.

The Lock Hospital. Mr. Gascoyen will, as a matter of course, succeed Mr. H. Lee at the Lock Hospital. The following gentlemen are, we understand, in the field for the vacancy thereby occasioned: Mr. Maunder, Mr. Shillitoe, Mr. De Méric, and Mr. Fairlie Clarke.

Mr. Ewart's Bill for decimalising the existing system of weights and measures, and establishing an accordance between them and those of foreign countries, on Wednesday last passed a second reading in the House of Commons, amidst much cheering.

Sheep, etc., Contagious Diseases Prevention Bill. On the motion of Mr. Holland, on Wednesday last, the order for the second reading of this bill was discharged, the government undertaking to introduce a bill continuing the present Act until next session.

The Queen's Hospital, Birmingham. Mr. Sands Cox's term of office as surgeon to the Queen's Hospital having expired, a vacancy occurs in the surgical staff. Mr. Furneaux Jordan, assistant-surgeon to the hospital, and Professor of Anatomy at the Queen's College, is the unopposed candidate.

Prevention of Accidental Poisoning. A bill for the prevention of accidental poisoning has just been printed. It enacts that all substances of a poisonous nature shall be sold in glass bottles, on which labels are to be affixed with the word "Poison," and directions for use distinctly marked thereon.

Milliners and Dressmakers. The Earl of Shaftesbury gave notice in the House of Lords on Monday last, of his intention to move an address to the Crown praying that an inquiry into the physical and moral condition of milliners and dressmakers be made by the Royal Commission now sitting, on the state of children and young persons in trades and manufactures not regulated by law.

Royal College of Physicians. At a general meeting of the Fellows held on June 25th, the following officers were elected for the ensuing year:—*Censors*—G. O. Rees, M.D.; E. L. Birkett, M.D.; C. West, M.D.; C. Handfield Jones, M.B. *Treasurer*—James Alderson, M.D. *Registrar*—H. A. Pitman, M.D. *Examiners*—(*a*) *On the Subjects of General Education*, J. Spurgin, M.D.; W. A. Guy, M.B.; R. G. Latham, M.D.; (*b*) *On the Subjects of Professional Education:* Anatomy and Physiology, F. Sibson, M.D.; W. S. Kirkes, M.D; Materia Medica, Chemistry, etc., A. B. Garrod, M.D; W. Odling, M.B.; Principles and Practice of Medicine, W. E. Page, M.D.; J. R. Bennett, M.D.; Principles and Practice of Surgery, J. E. Erichsen, Esq., F.R.C.S.; F. Le Gros Clark, Esq., F.R.C.S.; Midwifery and the Diseases peculiar to Women, A. Farre, M.D.; H. Oldham, M.D. *Librarian*—W. Munk, M.D. *Curators of the Museum*—J. Alderson, M.D.; P. Black, M.D.; W. Wegg, M.D.; F. Sibson, M.D.

Bethlehem Hospital. In the House of Lords, on June 26th, the Earl of Shaftesbury presented a number of petitions in favour of the removal of Bethlehem Hospital from its present site, and proposed a return of the annual amount of the revenues during the last ten years administered by the authorities of Bethlehem Hospital; secondly, the total amount of money received by the hospital from parliamentary grants; thirdly, the average number of patients in the hospital in each year of ten years, apart from the criminal patients; fourthly, the total number of the governors; fifthly, the number of special meetings since January 1863, in reference to the removal of Bethlehem Hospital, and the number of governors present on each occasion; and, sixthly, the questions proposed and the divisions taken. He said he brought the question forward because the property and the administration of it were not private, but altogether of a public nature, and open to observations in the legislature; and proceeded to point out the absolute necessity of steps being taken to remove Bethlehem Hospital from the site now occupied by it. He pointed out objections to the present site of the building, and to its construction. Another point was that a very great increase had taken place in the number of lunacy cases, and this was an argument for increased accommodation. The medical profession, with one mind, were of opinion that Bethlehem should be removed; and this removal was extremely desirable as affording facilities for establishing a medical school of lunacy. He maintained that their lordships could not do wrong to a single individual by acceding to the prayer of the petition, which represented the claims of half a million, but it might do wrong by declining to accede to its prayer. In conclusion he begged to move for the returns of which he had given notice. Earl Granville said there could be no objection to the production of the papers asked for; most of the statements made by the noble earl were so consistent with good sense that he did not anticipate that any reply to them could be made. Indeed, the fact that, although many of the governors of Bethlehem Hospital were members of their lordships' house, not one of them stood up to contradict his statements, showed that they were supported by the force of public opinion. He hoped sincerely that the speech just made would have an effect so as to produce a wholesome influence which would react on the governors of the hospital. The motion was agreed to.

Cinchona Plants in India. The advantages which the important and beneficial measure of introducing cinchona cultivation are likely to confer upon India may be considered under three heads:—1. In their bearings in relation to the State, by providing an abundant and certain supply of bark for the use of hospitals and troops, and effecting a saving of many thousands of pounds. 2. As a commercial speculation, and a means of adding to the resources of the country. And, 3, though not least, as a boon to the people, by bringing the remedy within the reach of frequenters of jungles, and of the native population generally. The government, by working their own plantations, will eventually save at least £20,000 a year, while they will secure a large and unfailing source of quinine supply for their own servants, the importance of which it is impossible to exaggerate. Dr. Macpherson, of Calcutta, tells us that since quinine has been extensively used among the troops in India, there has been a steady diminution of mortality; and whereas, in 1830, the average percentage of deaths to cases of fever treated was 3.66, in 1856 it was only 1 per cent. in a body of 18,000 men, scattered from Peshawur to Pegu. We next come to the consideration of cinchona cultivation, in its commercial aspect, and as a good investment for capital. Private enterprise will be supplied with plants from the government nurseries on the Neilgherries; 20,000 are to be sold this year, at four annas (sixpence) a piece, and next year a much larger quantity will be available. As many as 35,000 have already been ordered by companies and private planters, and there can be no doubt that, as soon as land can be had, the demand will be almost unlimited. When it is considered that it will not cost more than two annas (threepence) to produce a pound of red bark, which is now selling at from half-a-crown to eight shillings in the London market, there is every reason to think that men of business will not overlook so promising an investment, and that the great difference between the cost of production and the value of the produce will give cinchona cultivation a good name as a safe speculation, in combination with coffee, the former beginning at the upper limit of the latter in the same clearing. (*Social Science Review.*)

Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VII.—On Pleurisy.

Serous Inflammations point to Blood-poisoning. Case I. *Prognostic Value of Change in Physical Signs. Ægophony dependent on Thickness of Fluid. Ægophony remaining after Absorption of Fluid; its Explanation. Increased Depression of Intercostal Spaces in Receding Hydrothorax. Ægophony not generated at Edge of Fluid.*

The subject of to-day's lecture, gentlemen, is one which I think very well illustrates the general truth that Pathology is subordinated by Physiology—that the latter dominates the former—that the circumstances that determine the diseases to which a part is liable, and the particular kind of morbid agencies to which it is obnoxious, are the physiological anatomy of that part, and the function which it fulfils. Parts that are physiologically analogous are affected with similar morbid tendencies; and thus a natural physiological scheme becomes a natural, and the only natural, nosological one.

If I were asked what was the commonest morbific cause, which, above all others, had a tendency to generate serous inflammations, I should say, without hesitation, some state of blood-poisoning. We have serous inflammation from uræmia; we have serous inflammation from pyæmia; we have serous inflammation from the specific toxæmias of the eruptive fevers; we have serous inflammation from the presence in the blood of the *materies morbi* of rheumatic fever; and in the cases before us we have serous inflammation from a condition which I shall show you presently is, essentially, a veritable blood-poisoning.

The cases to which I wish to direct your attention are cases of pleurisy; by which we mean, as you know, inflammation of the membrane that lines the cavity and covers the viscera of the thorax. One case is that of a man lying in bed No. 8 of Robertson Ward; the others those of a young man and young woman whom we have seen among the out-patients, and who have refused to come into the hospital.

Case I. George Franklin, aged 32, by occupation a wine-cellar-man, engaged in washing, corking, and packing bottles in a damp cellar; married; has had two children; is what he calls moderately temperate—that is, is not frequently drunk, but thinks he averages a bottle of wine a day, which his occupation gives him great facilities for obtaining;—in fact, the men engaged in his business are not limited as to what, or how much, they drink, as any attempt at restricting them would be in vain. His health has always been good, with the exception of severe colds, to which he has for some years been liable, and which he attributes to his occupation, which exposes him to great alternations of temperature, throwing him into sweats from the loads he carries, and then plunging him into cold damp cellars to pursue his amphibious occupation of bottle-washing.

Six weeks ago, in this way, he caught one of these colds, was feverish, with pains in his back and limbs, and suffered from cough, spitting, and shortness of breath. He worked on, however, through it for a week, but was then obliged to give over; and, after applying to a hospital and obtaining no relief, went home, took to his bed, and placed himself under medical treatment. In a fortnight he was sufficiently well to resume his employment, though very weak. On returning to his work, he was seized with stabbing pains in his right side, and an increase of the shortness of breath he has suffered from from his first cold. The pain was not constant, but only occasional, and was chiefly brought on by exertion and attempting to take a deep inspiration. It was as if two knives were plunged into him, one beneath the right floating ribs, between them and the crest of the ilium; and the other just to the right of the right nipple. The pain was so sudden and so severe that it would cause him to cry out, and bring him short up, whatever he might be doing. In the morning he could hardly get out of bed on account of this pain, and, when out, it was some time before he could get himself upright. He went on working for ten days in this way, and then was so bad that he applied to this hospital, and was admitted, eleven days ago—that is, last Friday week, May 8th.

I did not see him until the following Sunday afternoon, two days later, when, happening to be in the Ward, my attention was attracted by a man who was constantly yelling out and starting with pain. This man was the patient, and this was my first introduction to him; I found that he was placed under my care. I immediately set to work to discover what was the matter with him, and found I had not far to search. From his rapid breathing, and from the temporary stoppage of his breath that each plunge of pain produced, it was quite clear that his malady was respiratory. I at once stripped him, and discovered the following physical signs:—Absolute dulness over the whole of the back of the right lung; no respiratory sound whatever in this situation; no vocal fremitus; voice-sound distant and hardly audible, but not otherwise modified; no ægophony. In front on the same side, the dulness extended as high as the fourth rib, up to which situation the voice was ægophonic; above this point percussion was resonant, and the voice-sound natural or slightly bronchophonic; but there was hardly any breath-sound of any kind. On the left side, the breathing was in every way natural, except that it was compensatory, and that at the lower margin of the lungs behind there was a fringe of moist subcrepitus. Decubitus dorsal; can lie neither on the right side nor on the left. Expectoration small in amount, and large bronchial in character—firm grey mucus. Cough but slight; pulse 115; respiration 31, superficial; tongue dry; thirst; no appetite; physiognomy anxious and exhausted.

The physical signs left no doubt that the right pleura was full of serum, the result of acute pleurisy, from which the man was still suffering. I ordered him ten minims of tincture of opium, the same quantity of chloric ether, and a grain of quinine, every four hours; turpentine fomentation to the right side and back night and morning.

May 11th. Much the same; complains of feeling light-headed, and of seeing a lot of people sitting down and talking to him whenever he dozes. Pain a trifle better. A trace of ægophony could be heard at the top of the right lung behind.

May 12th. Pain decidedly better. Ordered to take the sedative only three times a day, instead of every

four hours as before. On examining the right lung behind, a considerable change is found to have taken place. Ægophony is heard over nearly the whole of it, passing at the apex into bronchophony, and at the base into loss of all voice-sound; bronchial breathing of flat pitch, characteristic of hydrothorax, coextensive with it, and the dulness of percussion considerably reduced in the supraspinous region. Crepitus at base of left lung increased. Dyspnœa less urgent.

May 13th. The patient has now had on five turpentine fomentations—on Sunday night, Monday morning, Monday night, Tuesday morning, and Tuesday night; and so effectually have they acted that they have taken the skin off his back. The pain is nearly gone, but still gives him occasional stabs when moving or taking a deep breath. Still feverish and semi-delirious if he dozes. Physical signs much the same.

On the 15th, the report of the physical signs was as follows:—Percussion dull in the lower two-thirds of the right side behind; ægophony from the base of the lung to a point opposite the posterior border of the scapula, midway between the inferior angle and the base of the spine; breathing highly bronchial coextensive with the ægophony; on the left side, respiration above compensatory, below accompanied by slight moist sounds.

On the 16th, the report is, that the other physical signs being much the same, the level of the limit of ægophony has receded nearly to the inferior angle of the scapula. Compound iodine ointment to be rubbed into the left side of the back night and morning.

On the 18th, the report is, that, the area of dulness is rather less, and that the level of the limit of ægophony has subsided still lower. Pulse 90; respiration 24. Ordered—the opium to be reduced from ten minims to five, to be taken with two grains of quinine and half a drachm of compound sulphuric ether three times a day.

May 20th. The bronchial breathing of the affected side has nearly disappeared, and in its place normal respiratory murmur is gradually emerging. In the lower part of the lung, there is still no breathing. Percussion-dulness undiminished. The ægophonic twang not so marked, but its area undiminished—distinctly heard as high as between the lower angle and spine of the scapula. Vocal fremitus still abolished below, but exaggerated in the upper fourth of the lung. The signs in front are the same as behind, but at a lower level. In his general condition, the man is improved in every way. Pulse 84; respiration 20.

There are several interesting points in relation to the physical signs in this case.

1. The *order* in which these physical signs have changed, and the prognostic value of these changes. When I first saw this man on the Sunday afternoon, there was a general negation of everything on the right side of the chest—no heart-sound of any kind, no vocal fremitus, no voice-sound, and dulness absolute and everywhere, except at the apex in front. Soon, however, the voice-sound has reappeared, but found to be of a peculiar character, having a bleating twang which we call *ægophony;* respiratory sound is again audible, but it is a tube-sound, and not a parenchyma-sound, and shows merely that there is a certain air-tide in the bronchial tubes, and not that the spongy lung is re-inflated; at the apex vocal fremitus has reappeared, while percussion-dulness has receded from it. Still later, true respiratory murmur has emerged from its temporary obscuration, while the tube-sound that had supplanted it has vanished; nevertheless, the percussion-dulness has hardly appreciably diminished, and the ægophonic twang, though less marked, and the absence of vocal fremitus, still continue. Thus, as far as this case has progressed, we may divide the physical signs into three stages:—

First Stage.

Percussion—Absolutely and universally flat.
Palpation—No vocal fremitus.
Voice—Distant, hardly audible; no ægophony.
Breath—No breath-sound of any kind.

Second Stage.

Percussion—Still dull over lower three-fourths of chest.
Palpation—Fremitus reappearing above; none below.
Voice—Ægophony well developed.
Breath—Bronchial blowing of flat pitch.

Third Stage.

Percussion—Dulness receding, but very little.
Palpation—Fremitus exaggerated above, still none below.
Voice—Ægophonic twang less strong.
Breath—Respiratory murmur reappeared. Bronchial breathing nearly gone.

Now what do we learn by all this?

We learn, in the first place, that an absence of normal sounds indicates a worse state of things than a modification of them; that the worst of all physical signs are negative ones; that a total absence of voice-sound indicates a more aggravated condition than ægophony, and a total absence of breath-sound than bronchial breathing. When I listened to this man's chest on the Sunday afternoon the serous effusion was so extensive—the stratum of fluid between the lung and the parietes of the chest so thick—that no breathing sound could penetrate it, and probably the lung was so pressed upon that very little air entered it at all, and so no breath-sound was produced, even if it could have been conducted to the surface. But by the Tuesday, two days later, so much of this fluid had been absorbed that the lung had regained a good deal of its lost volume, and was able to follow the respiratory movements of the thoracic parietes. Thus the respiratory tide was re-established in the bronchial tubes, while the stratum of fluid surrounding the lung was so thinned that it was able no longer to isolate the sounds within the lung, but conducted them with a peculiar modification to the chest-wall. Just the same explanation applies to the appearance of the ægophony three days after the man's admission. On the Sunday afternoon, with all the signs of abundant serous accumulation within the pleura, there was no ægophony; on the Tuesday, when the physical signs indicated a diminution of the effusion, ægophony was strongly developed. Hence we learn that the absence of ægophony does not show the absence of pleuritic effusion, but, on the contrary (if other signs exist) asserts it more strongly than its presence, and that the very excess of the condition to which the sign points extinguishes the sign. Thus, ægophony, in a case of hydrothorax, instead of being a bad sign, may be a good sign—a *redux* sign, pointing towards a restoration to a state of health; and there can be no doubt, in the case of this man, considering the physical signs he presented on the Sunday, that the appearance of the ægophony on the Monday, and its full development on the Tuesday, was the very best sign that could possibly have shown itself.

We learn too, I think, from this case, that there is a certain thickness of the stratum of fluid that

gives rise to a maximum development of the ægophonic twang. The sound was most strongly developed at a certain zone, above which it diminished and below which it diminished—above, as the stratum of fluid got thinner, fading into the natural voice-sound with a slight bronchophonic character; below, as the stratum of fluid got thicker, becoming fainter and more distant, but still retaining the ægophonic character. As the effused fluid has been gradually lessening in quantity this zone of maximum ægophony has gradually descended, because the point at which the stratum of fluid was of the exact thickness for its highest development has also gradually descended. What is the thickness of the layer of fluid that most powerfully generates this peculiar sound I cannot say, and to determine it would be a problem of very difficult solution.

From what I have just told you, we see that normal breath-sound obliterated by hydrothorax is restored *viâ* bronchial breathing, and that normal voice-sound obliterated by hydrothorax is restored *viâ* ægophony, just as normal breath-sound obliterated by hepatisation is restored *viâ* crepitation.

Again, we learn from this case, if we look at what I have called Stage 3, that the respiratory murmur may be resumed, and therefore the lung have acquired its normal volume and inflation, and therefore the fluid from that situation have disappeared, and yet ægophony remain. Now what does this seem to show? That the presence of fluid is not necessary to the development of ægophony. To-day, as I have read to you in the report of the case, there is very fair vesicular breathing over the middle two-thirds of the affected side; in some parts so clear and strong, and so evidently immediately beneath the stethoscope, that it is impossible to believe that there is any fluid there, and yet at this very spot—yes, and even above it—there is unmistakable ægophony. How is this to be explained? Thus, I think: The pleural surfaces are generally covered, to a thickness proportionate, I believe, to the length of time the effusion has existed, with a gelatinous leathery coating of fibrine. When the effusion subsides there still intervenes a double layer of this gelatinous material between the lung and the normal elements of the chest-wall; and as this material is saturated with fluid, it may, I think, be sufficient to generate the ægophonic tremor. This is merely an hypothesis; but I think it not an unreasonable one. The necessity of adopting it turns, of course, upon whether the presence of ordinary respiratory murmur negatives the possibility of there being fluid over the seat of it. If it does, as I cannot but believe that it must, then a layer of free liquid is not necessary to generate ægophony. If, on the other hand, ægophony inevitably implies the presence of a stratum of free liquid at the point where it is heard, then you may have respiratory murmur of natural character beneath pleuritic effusion. On the showing of this case, there is no escape from one or other of these alternatives.

You might have observed in this man that not only was there an absence of that fulness of the intercostal spaces which is generally described, and which often exists in cases of abundant pleuritic effusion, but that during forcible inspiratory efforts the lower intercostal spaces of the affected side were conspicuously more drawn in than on the sound side. This arose from the resistance which the fluid contents of the diseased half of the chest offered to the sudden enlargement of its cavity. In healthy breathing the rising of the parietes in inspiration is immediately followed by, or rather simultaneously accompanied by, the easy and unresisting expansion of the lungs. But when the pleural cavity is occupied by fluid, this easy enlargement of the thoracic contents in obedience to the inspiratory movements is no longer possible, because, in proportion to the serous accumulation, in proportion as the lung has been supplanted by fluid, in such proportion has an expansible been substituted by an inexpansible material. The effused fluid is absolutely inexpansible; the compressed lung no doubt retains a considerable degree of expansibility, for unless it did no air-tide could be generated, and not even bronchial breathing would be audible; but the expansibility is always greatly inferior to that of healthy lung, and sometimes, when the compression has been considerable and of long duration, almost annihilated. Thus, partly by the diminished expansibility of the lung, and partly by the composite nature of the thoracic contents, a drag is put on the inspiratory movements, and the intercostal spaces are sucked in, so to speak, at each inspiration.

You must be prepared then to find that not only will there often be no filling out or bulging of the intercostal depressions in cases of hydrothorax, but that they will be more depressed and conspicuous at inspiration on the affected than on the healthy side; and that thus not an effaced condition but an excessive conspicuousness of these spaces may point to pleuritic effusion. This is a sign that is necessarily more marked in a diminishing than in an increasing hydrothorax, and therefore is not without prognostic import.

The whole bearing of this case favours most strongly Laennec's theory of ægophony. With the single hypothetical exception I have mentioned, the one thing that seemed to regulate it was the presence and quantity of the fluid; when the effusion was too great in quantity there was no ægophony, when it diminished the ægophony appeared, when it got down to a certain standard the ægophony was at its maximum, and as it subsided the ægophony descended. And even supposing, as I have suggested, that a gelatinous coating of fibrine may be adequate to the production of the ægophonic quake, it seems to me no violation of Laennec's view, for such a material is mainly fluid, and may be capable of experiencing vibrations similar to those of a fluid.

This case also clearly shows that the ægophonic twang is not generated at the *edge* of the effused fluid, as some have supposed, for it was the most marked a good two inches, I should say, below the level which the physical signs pointed to as that of the edge of the serum.

[*To be concluded.*]

Medicated Cigarettes. *Mercurial Cigarettes.* Dissolve three drachms of red precipitate in three drachms of nitric acid, and add enough water to make up the quantity requisite to saturate 100 slips of paper. They will contain about three grains of the nitrate of mercury. *Nitre Cigarettes.* Dip the paper in a saturated solution of the nitrate of potash before rolling. *Balsamic Cigarettes* are made by giving the dried nitre cigarettes a coating of tincture of benzoin.

Original Communications.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page 504 of last volume.*]

Paralysis from Effusion and Compression of the Spinal Cord.

The elaborate mechanism for the transmutation of the impressions of sense into springs of action, which the minute anatomy of the brain and spinal cord reveals to us, acquires a supplementary interest when we come to investigate it as the focus of morbid phenomena. We recognise its importance in the various degrees of arrest which are sometimes observed in its complete development; congenital defects which are seldom, if ever, compatible with the maintenance of life. We see it, too, in one of the earliest, as well as in one of the latest diseases to which human beings are subject; and in both cases paralysis is generally the result.

Hydrorachis, the consequence of a defective development of the vertebral arches, can appear as a congenital disease only; and although such arrest of genesis may not interfere with intrauterine life and growth, it is in almost all cases fatal shortly after birth. Whether associated with hydrocephalus or not, it generally occasions paraplegia, which extends to the sphincters of the rectum and bladder, producing incontinence of fæces and urine.

This is not the place to dwell at length on the anatomy of tumours produced by hydrorachis, beyond the fact that they communicate with the cerebro-spinal fluid which is contained in the vertebral canal; that it is generally between the arachnoid and pia mater, which are not, in their healthy state, in such close apposition in the spine as they are within the skull; and that the paralysing influence is occasioned by the pressure of the fluid on the spinal cord.

On these considerations, various expedients have been suggested for the treatment of spina bifida; and, in some few instances their practical application has had a successful result.

Desault recommended a seton to drain off the fluid; but, in every case thus treated, inflammation and constitutional irritation have terminated in death.

Abernethy suggested small and repeated punctures for the same purpose; and two successful cases are recorded by Sir Astley Cooper, together with a graceful homage to the author of the proposition. (*Medico-Chirurgical Transactions*, vol. ii, p. 322.)

In one of these cases, the risk of puncturing the tumour and setting up constitutional irritation was not incurred, but the disease was treated like a hernia, and the truss was kept applied to prevent the descent of the fluid. At two years of age, the child could walk alone, talked, eventually went to school, and ran, jumped, and played about like other children. He passed well through measles, small pox, and hooping-cough, and continued to wear the truss, by means of which the fluid was kept entirely within the channel of the spine, but the tumour very soon acquired the size of half a small orange, when the truss was removed. In the second case, Abernethy's suggestion was carried out; the inflammation which ensued produced adhesion of the sides of the sac, which closed the opening from the vertebral canal, and the disease was cured a little more than four months after the first puncture was made.

In neither was there paralysis; and Sir Astley Cooper considered that complication as a reason for not attempting either method of treatment; but Rosetti has reported a case complicated with paraplegia, which was cured, and the motion of the legs restored, by repeated punctures and compression. The palsied state of the sphincter muscles, however, adds immeasurably to the danger and difficulty; for, of all things it is most important to keep the tumour clean and dry, seeing that under the most favourable circumstances the tense skin is apt to become inflamed.

The treatment of spina bifida by iodine injections has lately been proposed to the profession; first by Velpeau, and in 1858, M. Debout, in a treatise on the *Therapeutics of Spina Bifida*, gave the details of several cases in which iodine injections have been successfully used. In the following year, Dr. Brainard, of Chicago, recorded the particulars of ten cases, treated by himself and other surgeons, of which four were successful. Again, in 1860, Dr. Gross, of Philadelphia, reported two cases in the *North American Medico-Chirurgical Review*, one of which terminated successfully. In each case Dr. Gross punctured the tumour about an inch and a quarter from its base, by means of a small flat curved needle which he directed subcutaneously into the sac. Then, through a small cannula he allowed the escape of a drachm of fluid, and injected a solution of one eighth of a grain of iodine, and a quarter of a grain of iodide of potassium. He then closed the puncture by a twisted suture, and coated it over with collodion. Three drops of laudanum were given, and the child was directed to be kept lying on its face. Dr. Gross does not write encouragingly on the operation; still it must be admitted that the general results are favourable. In operating, the puncture should be very small, and the injection very weak at first, the object being to excite a slow process of inflammation in the cyst. It must be confessed, however, that if the life of the child be saved, paraplegia is apt to remain, together with involuntary defæcation and micturition.

Lesions of Sensation and Motion from Congestion of the Spinal Cord.

Spinal congestion is in almost all cases, a result of some specific form of disease; but, as Rokitansky has observed, it also comes on idiopathically. "It then usually pervades the whole cord and its membranes, as well as the brain, and is most frequently met with in early childhood." (*Pathological Anatomy*. Translated by Moore, vol. iii, p, 448.)

In old people, the veins of the spinal cord which accompany the anterior and posterior spinal arteries, are often found dilated and distended with blood. This, in many instances, may be mere hypostatic engorgement; but cases also occur in which premonitory symptoms lead on to lesions of sensation and motion, which can only be attributed to a congested state of the spinal vessels, and perhaps to effusion into the vertebral canal.

Case. A gentleman, aged 76 years, consulted me in May 1849, in consequence of a sense of heaviness and great weakness of the lower extremities, by which he had been inconvenienced for nearly six years, and for which he had taken a brisk purgative every second or third week, with considerable relief. For a month or more, however, the left foot and leg had become somewhat numb and slightly œdematous, and he also experienced so much difficulty and pain in raising and rotating the thigh outward, that he had a room on the ground floor converted into a bedroom. A series of blisters, one every fourth day, over the sacrum and loins, restored very much power to the lower extremities, and enabled him to use the psoas and iliacus muscles without pain. He had, moreover, a respite from any aggravation of the

symptoms for some three or four months; still they recurred, but were always more or less relieved by counter-irritants and purgatives until he died of bronchitis, in 1860.*

M. Ollivier relates the case of a locksmith, aged 20, who, during convalescence from gastric fever, was suddenly seized with paraplegia of the lower extremities. A tingling and pricking sensation extended over the skin from the feet to the epigastrium; and an acute pain extended from the bottom of the back to the sixth dorsal vertebra. On the fourth day, a sloughing sore appeared on the sacrum, and the pain extended to the neck and arms, which were numb and weak. The treatment consisted in the application of blisters; by degrees, the extremities regained their healthy sensation and motion, and in less than a month the patient was discharged cured.

It is perhaps impossible to determine the precise condition of the spinal cord and its vessels which may have occasioned the peculiar symptoms in the two preceding cases. Simple congestion of valveless veins at once suggests itself as a cause of the upward course of the morbid action which was manifested in both; but it is improbable that such a state would yield so readily to the influence of a counterirritant, although it certainly does sometimes happen that the progress of an internal disease is arrested by a cutaneous eruption, and the veins of the spine communicate with the superficial veins, either directly or indirectly throughout the whole extent of the vertebral column. Still, the venous sinuses and the veins which accompany the anterior and posterior spinal arteries diminish considerably in the sacral region; and it is scarcely probable that the functional lesion from congestion would first manifest itself where the veins are smallest.

If, however, the symptoms be attributed to effusion of serum, they admit of a satisfactory interpretation, by the fact that the lowest part of the spinal canal is that to which the fluid naturally gravitates; and there the pia mater, the medium of nutrition to the nervous matter of the cord, would be first exposed to injurious pressure.

Irrespectively, however, of pressure from effusion, there is one circumstance connected with the peculiar mechanism of the vertebral column which is worthy of consideration in cases of spinal congestion, and it is this: that the spinal cord more completely fills the vertebral canal in the dorsal region than it does either above or below, and that, therefore, symptoms of compression of the dorsal portion of the cord may present themselves at a very early stage of the disease; but as this fact is, if possible, of still greater importance in relation to myelitis, I will again refer to it.

We may be too ready to attribute morbid phenomena of the nervous system to the influence of pressure from effusion, seeing that in the healthy condition the cerebro-spinal fluid serves as a support and protection to the spinal cord and nerves. In old age, too, there is a disposition in the cord to shrink, and the transudation of serum proceeds *pari passu* with the diminishing bulk of the organ. So far, therefore, it is a conservative action; but the increased mass of fluid must necessarily produce a sensible effect on the pia mater which surrounds a diminished cord; and it is just in this state of things that we are most likely to obtain relief by the local evacuating influence of blisters.†

* One marked symptom of which the subject of the above case invariably complained, was the great difficulty he experienced in walking on first rising after a night's rest; and this is generally a feature of spinal congestion.

† In the treatment of spinal congestion, the ergot of rye has obtained great celebrity within the last few years, in consequence of the property which it appears to possess of acting on the vaso-motor nerves, and thereby diminishing the supply of blood to the spinal cord. To this, also, I shall revert in reference to the treatment of myelitis.

Paralysis from Meningitis of the Cord.

In meningitis of the spinal cord paralysis does not occur, except from pressure produced by exudation of fluid, or by the extension of inflammation and disorganisation of the cord itself.

M. Ollivier has given an interesting case of spontaneous spinal meningitis, in which the symptoms accorded very entirely with the structural lesions. (*Traité de la Moelle Epinière*, tome ii, p. 551, 2me edition.) The patient, a man, aged 24, was admitted into the Hôtel Dieu with obscure symptoms. On the fifth day of the disease, he had paraplegia, with hyperæsthesia of the lower extremities. Three days afterwards, the arms became partially paralysed, semiflexed, and stiff; the right pupil was more dilated than the left; the association of ideas was slow. Two days subsequently, he died. The cellular tissue which surrounds the dura mater of the spinal canal was filled with vessels injected with blood. The spinal cord was enveloped in a layer of gelatinous yellow matter, between the arachnoid and pia mater. It was most abundant over the lumbar enlargement, and extended as high as the third cervical vertebra. It was thickest where it covered the posterior columns of the cord.

In more tractable cases, after the intensity of the inflammation is subdued by blood-letting and other means calculated to overcome excited action, the paralysing effusion may be drained off by the derivative effect of blisters.

Internal remedies, however, are not to be disregarded; and of these none promise to be more effective than the secale cornutum and the iodide of potassium. The external application of belladonna and chloroform will be found of great service in diminishing the violent pain which accompanies meningitis of the cord. Dr. Ramskill has reported two interesting cases of spinal meningitis, in one of which, paraplegia supervened from rapid effusion of spinal fluid. In both, the iodide of potassium was used, and apparently with good effect; but in the case which manifested no complication of spinal effusion, the ergot of rye was employed in combination with the iodide of potassium. (*Medical Times and Gazette*, August 31st, 1861.)

Paralysis may result from pressure occasioned by the deposit of cartilaginous or calcareous matter, from consecutive portions of fluid poured out during several mild attacks of spinal meningitis. M. Barbier has recorded a case of paraplegia from such cause. According to Rokitansky (*Manual of Pathological Anatomy*, vol. iii, p. 440), this deposit is frequently found in the form of scales or laminæ on the inner or visceral surface of the arachnoid, giving rise to what is called ossification of the spinal arachnoid. It seldom happens, however, that the cord is actually compressed by this bony matter; consequently, irritation and affections of a convulsive character are the ordinary forms in which these adventitious growths manifest themselves.

[*To be continued.*]

Hospital in Constantinople. Letters from Constantinople speak of the great success of the hospital of Faidar Pacha, established there on the French system, and managed by French and Italian professors. The Sultan having recently visited the institution quite unexpectedly, was so delighted with it that he sent for Marco Pacha, Faik Pacha, and Della Suda (an Italian), and, having congratulated them on their management, requested to know what he could do in aid of the hospital. In consequence of their representations, the Sultan has granted a large piece of ground for the erection of a museum and botanical garden, the plants for which are already supplied by the Museum of Natural History in Paris.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

ON THE RECENT OCCURRENCE OF TYPHUS FEVER IN BRISTOL.

By Samuel Martyn, M.D., Senior Physician to the Bristol General Hospital.

[*Read April 30th*, 1863.]

During the past six months, several cases of typhus fever have come under my notice in Bristol or its suburbs. It is perhaps unnecessary to say that I mean *typhus proper*, the distinctive character of which, and its non-identity with "gastric", "typhoid", "enteric", "intestinal", or "pythogenic", etc., may, I suppose, be considered as set at rest. Several years having elapsed since any case has been under my care which I felt justified in registering as "typhus", I regarded these few cases with peculiar interest, and have made various inquiries with a view to discover whether they represented a part of an epidemic. For last year there was a considerable amount of typhus in England, as in the autumnal outbreak at Preston; and, further, in London there really occurred an epidemic very far exceeding any which has been witnessed during at least fifteen years, the admissions from typhus at the London Fever Hospital reaching the number 2,699, or 1,000 more than in any year on the records. But the number of typhus cases of late years has been extremely small; and this applies to most if not all cities in Great Britain. Dr. Gairdner, lecturing in the Edinburgh Infirmary last year, says: "Typhus fever seems to have vanished from the list of our epidemics for the present"; while at the time he could find but one case to show to the students, some of whom "had never seen the eruption before". In Bristol the same thing has been observed; and those engaged in hospital, dispensary, or union practice have not of late seen many cases of true typhus. Those who remember the years 1826 to 1829 at the Bristol Workhouse tell me that the presence of typhus was the rule; that it raged with a severity comparable to that observed in Ireland, often assuming characters like those of "plague"; and that most nurses and pupils exposed to it suffered at least one attack. There was, and is still, a notion that the cholera epidemic of 1832 was the turning-point; and that typhus fever from that time became rapidly rarer, being replaced by the previously little known and understood typhoid. However that may be, the London outbreak of last year showed that the giant was not dead; and the occurrence of even a few cases in Bristol seemed to deserve inquiry, as they might be the indices or the harbingers of a wide-spread epidemic.

To obtain some idea as to the fatal results of typhus in Bristol last year, I examined the registers of the city and its suburbs. The result of this examination was gratifying enough in one way; for, out of *about* one hundred deaths which occurred, from some kind of continued fever, from March 25th, 1862, to March 25th, 1863, in the various parishes, only sixteen were registered "typhus", while thirty-eight appeared as "typhoid" or "gastric"; the remainder being simply mentioned as "fever", or with some prefix indicating its general nature. These figures set aside the idea of a true prevalence of typhus; but I was very much impressed with the great loss sustained by the public from the extremely loose way in which the death-causes are commonly certified. I know that the *Instructions to Registrars* group together all fevers under one head; and, for practical purposes, it seems as well that a layman should, in commenting on an unusual mortality, simply return "fever"; but it seems strange, in the present advanced state of diagnosis, that so large a proportion of deaths should be registered as "fever" merely, or with additions which do not assist, as, *e.g.*, "febris pulmonalis", and the like! I next inquired into the particulars of each or nearly each of the cases marked "typhus", and found reason to believe that about half were cases of veritable typhus, and not merely obscure cases of typhoid or other diseases.

My inquiries of gentlemen connected with the public institutions elicited the general impression that for years no cases of *typhus* have been seen, and last year a few only. Thus Mr. Henry Grace reports a violent outbreak of typhoid last summer, but no case of typhus, in the Bristol Workhouse. It was interesting to know that, amongst these typhoid cases, in one ward nearly all the women were simultaneously attacked, of whom five were giving suck; and that the children being removed and weaned, not one of them was affected with fever. At the Bristol Dispensary, Mr. Norton has not seen more than one case of true typhus for many years; and then it was an Irish patient, who came, already infected, from Liverpool. Several cases have, however, been mentioned to me as occurring during the last six months—five or six in the practice of the Infirmary, two in- and several out-patients at the General Hospital, and one case (Mr. H. Wilson's) in the Dispensary. It would be extremely interesting to trace the history of each case; but this I have only been able to do for those which chanced to come under my care, or which belonged to a certain local outbreak, and the only one, as far as I have made out of any extent, in the practice of Mr. Davies of Queen Square. Mr. Davies recognised the fever at once, although, as he told me, it was fourteen years since he had seen similar cases.

Case I, under my own care, was the wife of a Great Western Railway policeman, a tolerably healthy woman, 22 years of age, who was admitted into the General Hospital on November 1st, 1862. Her case was typical typhus. The elaborate record of it by my clinical clerk, Mr. James, occupies fourteen closely written pages of large quarto; my reason for mentioning which will presently appear. The disease commenced with shivering and confused intellect. On the fourth day, she was covered with typhus rash. On the sixth day, she had typhomania, with a feeble pulse of 129, dry tongue, and bleeding lips. On the ninth day, the pulse was 150, and the delirium muttering. On the twelfth, she answered questions, but incoherently; pulse 130; conjunctiva injected; and she had very little sleep. On the twenty-first day, pulse 117; tongue red; legs œdematous; urine albuminous. On December 13th, she was quite well.

This case was treated simply according to the predominant apparent mischief. When low, she took for many days the mistura vini gallici. The bowels required sometimes an astringent, sometimes a purge; and beef-tea with milk were the chief articles of diet. I remarked that she was much worse on taking some meat, when convalescence approached, but when the elimination of urea still remained deficient. A slight relapse of head-symptoms was instantly relieved by two leeches to the temples.

This poor woman's case was the only one in a healthy neighbourhood; and at first I supposed it might have been sporadic. I find, however, that fever of some kind or other was present in the same small street; and also that her husband had been not long before on an excursion to London, where he remained several nights. My next case seemed equally isolated; but inquiry showed that there was positive evidence of direct contagion.

Case II. On November 3rd, 1862, I was called to see a lady living at Kingsdown, in a very high, airy locality, and a perfectly healthy house. She was unmarried, robust, of sanguine and nervous temperament, and 35 years of age. She had been feeling low, nervous, and cold, but alternately excited or flushed, for a week; consequently she had taken aperients, and been two days in

bed. Her tongue was moist and large; pulse 80; her manner excited (looking like hysteria); she talked fast, with a surprised expression of face, and eyes observantly and defiantly open. There was no pain; no spots nor other symptoms. The first sign of illness noticed by her family had been an over-excited mannerism at the pianoforte, with confusion and flushing. Although I was assured she had not been exposed to contagion, I ventured a diagnosis of "fever"; in truth, rather glad to escape remarking what the state was quite as much like —namely, acute mania.

On Nov. 6th, the front of the trunk was covered with dusky red and purplish spots. She was now quite maniacal at night, quiet in the morning. Pulse 100 during the paroxysms of mania, when five persons could but just keep her on the bed; but 80 during the remissions. The bowels were obstinately confined. There had come out now that she returned about ten days ago from staying with a family near Bath, of which one of the young gentlemen had just returned from Manchester convalescent from fever affecting his head.

Nov. 13th (fourteenth day of fever). There was fully developed "delirium ferox". Pulse as before. She took beef-tea and milk. Alcohol increased the excitement frightfully, and opium had no effect. Some sleep at night appeared to be obtained by half a grain of antimony and tincture of hyoscyamus in drachm doses every two hours. Ice on the shaved scalp cooled the head apparently too much.

Nov. 19th (twenty-first day). There was no return of reason, no improvement. From this time the struggles and talking became feebler. There was great emaciation. Bed-sores and black tongue followed. Hemiplegia came on; and she died on the twenty-seventh or twenty-eighth day of the illness, violent delirium having persisted for eighteen days. No one took fever.

Case III is that of a respectable though poorly nourished shopkeeper, living in an airy house at Clifton. On new-year's eve he returned home, past midnight, through the long suburb of Bedminster. I saw him first on the 4th of January. He was attacked with intense vomiting within a few days; his limbs were covered with typhus rash. His case was one of great interest from an independent point of view, as it assumed a true relapsing character, weekly or fortnightly; ending, as relapsing fever so often did, by a critical sweating, followed by frantic delirium, extreme prostration, and death (on March 2nd), preceded by gangrene of the lungs.

Case IV was that of a poor boy brought as an out-patient to the hospital, and whom I lost sight of when he was too ill to be carried up. He had wandered much about the courts and alleys of Bedminster.

Case V. Mr. James. On February 2nd, 1863, I was asked by Mr. Davies in Queen Square to see his apprentice, who was at the same time my clinical clerk at the hospital. He had been poorly for a week, but well enough to visit some private patients for Mr. Davies, and to attend in my out-patients' room three days before. He was then, however, so much out of order that I sent him home to keep quiet. He traced his attack to a visit paid to a family in which three members had true typhus. He lay, with a very heavy and dull expression, flat on his back, but had no pain. The surface was hot; the tongue covered with thick fur; the conjunctivæ rather pink; the arms and trunk were covered with typhus rash (not confluent, nor disappearing on pressure); pulse 120. He took nothing but milk and water.

Feb. 11th. From day to day he had presented a slow but steady amendment. No diarrhœa. The pulse came down a few beats daily.

His treatment consisted of rest, ventilation, a saline, two aperient doses, with milk, oranges *ad libitum*, and beef-tea.

Feb. 13th. He was sitting up, convalescent.

Mr. James, it will be remembered, had two months before spent many hours by the bedside of Case I without taking the fever. Now, however, by visiting patients in their own badly ventilated houses, he received the poison in a form concentrated enough to inoculate him. The attack belongs to those of so mild a character as to have suggested to Dr. Gairdner the possibility of a true change of type. Mr. Davies's house is admirably ventilated, and no one in the family suffered.

I now come to the cases from which Mr. James caught fever, the notes of which I owe to him and to Mr. Davies. These cases were situated in the crowded locality of Water Street and Leek Lane; most of the houses being ill drained, very badly ventilated, and thickly populated. The sequence I have made out to be as follows.

Case VI. F. R. (Kington Court), a boy of 15, rather weak in body and mind, took it into his head to walk about the country and get a living. He thus wandered to London, Edinburgh, and other places. On his return, in August 1862, he became ill with a continued fever, for which he was ultimately placed in the infirmary. Head-symptoms predominated, and his case was pronounced to be typhus. In five weeks he had recovered.

Case VII. T. R., aged 43, a flyman, father of the last mentioned case, was next taken ill. Mr. Davies informs me that this was undoubted typhus, though neither in this nor several of the cases was there a well marked rash. There was much and early delirium and deafness, but without abdominal symptoms or diarrhœa. He recovered in five weeks.

Case VIII. His wife; ill three weeks with an attack in all respects similar.

Cases IX, X, XI, and XII. Four of their children; all ill successively for a week or two each. All recovered.

Cases XIII, XIV, XV. Three children next door to the last mentioned family. Ill in September, from two to four weeks each; all had brain fever.

Case XVI. G. D., aged 38, residing at 18, Water Street, turner, a strong healthy man; had had no previous disease, except a slight attack of rheumatism two or three years ago. His residence was unhealthy. There was no history of contagion. He attributed his illness to getting wet through on the day of the celebration of Prince of Wales's coming of age, and going to bed with wet clothes on. He had headache, cold, etc., up to Nov. 29th, when he had rigors, and was obliged to leave off work. He was seen by a medical man on Dec. 1st, when the symptoms were headache, loss of appetite, cough, white tongue, and pyrexia. In a few days, the headache became intense on the right side in front; and he complained of something coming over his eyes, so that he could not see. He had a feeling of sickness, but no vomiting; great prostration; dusky countenance; and he was very stupid. There was no pain in the belly nor tenderness. No spots appeared on the skin. The tongue was dry, fissured, and black. Black sordes appeared on the teeth. The conjunctivæ were injected. Delirium prevailed from December 7th up to his death; requiring three or four persons to hold him. His bowels were costive all through the illness. He was partly unconscious; not noticing his wife from the 7th up to the morning of the 11th, at 8 A.M., when he became conscious for about an hour, and then fell back to his former state, and died at 3.30 P.M. He had vomited everything for two days previously to death. He had had no motion since the 7th, and had suppression of urine also from that day up to just before his death, when he passed urine. His treatment consisted of salines, beef-tea, and wine, etc.

Case XVII. C. D., aged 37, wife of the preceding patient, also in good health, was taken ill with giddiness. She was seen by a medical man on January 1st, 1863, when she presented the following symptoms: dusky countenance, tender belly, costive bowels, pyrexia, and quick pulse. She was in bed for about nine weeks, during which period she had no spots on the skin, ex-

cept miliary vesicles. Headache was very great; and there was delirium. She had hemiplegia of the left side, motion only being lost; sensation not being much if at all impaired. The pulse was very quick; the tongue dry, black, and chapped. She had sordes on the teeth. The hemiplegia gradually passed off.

Cases xviii, xix, xx. The three children of the last case; all had continued fever in January; all had the intense head symptoms and constipation.

From these last-named five cases in one family, none of whom had well marked eruptions, there were derived other cases, one of which was that of my clinical clerk; and in the derived cases the typhus-rash was well developed.

Case xxi. A. J., 2, Water Street, aged 43; assisted to lay out the body of the man in Case xvi. He was seized with fever of the most marked typhus kind, with severe delirium, and spots over the whole body. He died on the eleventh day of the fever.

Case xxii. W. S., a fellow-workman of Case xvi, who came to see him. A case like the last. Died on the tenth day.

Case xxiii. Another man; sat up one night with Case xvi, and, though living at a distance, sickened two days afterwards, and had severe typhus, with delirium, severe rash, and constipation. (Case of Mr. H. Wilson.)

Cases xxiv and xxv. Mrs. G. and her child, both living in Water Street. The mother recovered in two months; the infant died in ten days.

Case xxvi. H. W., aged 38, Penn Street (next to Water Street); taken ill Jan. 26 (reported to me by Mr. Davies). Intense stupor, thickly-coated tongue, universal typhus spots, and obstinate constipation. He recovered in three weeks.

Cases xxvii and xxviii. In the same house; suffered from similar fever in slighter degree.

I have memoranda of several cases reported to have happened in the practice of my colleagues at the General Hospital; but not particulars enough to enable me to trace any previous history; consequently I omit all further notice of them.

I have now, including all the cases to which I have alluded, brought out the existence of at least thirty-five instances of veritable typhus fever in Bristol during the months of November and December 1862 and January 1863. Of all these, six died; and of the remainder the result of three is unknown to me.

As to the treatment, the general impression left by the several histories, whether of my own or the other cases, is something like this. Those remedies did most good which relieved the head; and in severe instances the cerebral symptoms were paramount. Thus, a raised position, shaving the head, leeches on the temples, cold to the scalp, purgatives, warmth to the extremities—all did good. The worst cases were not those in which the ventilation was worst, nor in weakly, ill-nourished persons; but in those who either bred or caught a powerful amount of the poison. No doubt, however, ventilation assists the treatment. Quinine apparently distressed the cerebral circulation. Opium sometimes aided sleep, but rarely. Stimulants could by no means be used indiscriminately. Where the fever was very protracted and low, they did most good and least harm. Thus, my Case i took brandy with great benefit every few hours for a week, commencing on the tenth day. Stomach digestion seemed to occasion cerebral disturbance; so that a return to solid azotised food, if not very cautiously managed, caused relapses. Antimony was useful. It seemed to me that the so-called "antiphlogistic" plan was the best suited to most of the cases; of course pursued in the gentlest way. May not this arise from head-symptoms constituting the predominant source of danger? May not this view explain, in many cases, the change in our modes of treatment?

Lastly, as to the origin of these twenty-eight cases, there is not one which was not either in immediate contact with a case of fever, or in proximity to fever cases, or whose immediate relatives has not been so exposed. I think these cases are valuable in this point of view, because they look so very isolated, and, without careful inquiry, must be set down as triumphant instances of spontaneous generation. But that theory here, at least, is inapplicable.

In a disease which (unlike typhoid) is so intensely contagious—for Case vi originated probably twenty-one other cases—it seems to me that the onus of proof of spontaneous generation rests with those who choose to advance that theory. But in the way of this proof there seem to be, amongst others, these insurmountable difficulties; firstly, that an incubation period of some weeks is conceded; and secondly, that typhus fever of the most virulent kind may be disseminated by persons not *obviously* suffering from it—as in the case of the Egyptian frigate at Liverpool. I believe the solution of this problem will be found rather in some kind of metamorphosis than in the spontaneous production of a new *materies morbi*.

READING BRANCH.

PRESIDENT'S ADDRESS.

By George Pound, Esq., Odiham.

[*Delivered July 1st, 1863.*]

Gentlemen,—The year which terminates with us on this day—the seventh of our existence as a Branch of the British Medical Association—invites us to look back and review whatever of social and political importance has occurred during its progress.

There are matters of interest to us as a Branch; perhaps not so many—certainly many—interesting to us as members of a large and increasingly important society; and a great many (of which time will only allow me briefly to notice a few) which are especially of moment to us as members of the body medical.

On such an occasion as this, the general welfare, the present position and influence, as well as the future prospects of our Association, as a matter of course, occupy our more immediate thoughts. For thirty-one years now has this society existed amongst us. As year after year has passed by, its founder and his early friends more especially have watched its upward progress with an anxiety and pleasure known only to those who originate and develope a great undertaking. Its gradually increasing extent and influence, made apparent in the number and strength of its Branches, testify to the wisdom which laid its foundations, and to the bond of union it affords to members of the profession scattered throughout the length and breadth of the empire. Originating in the provinces, it has made its title good to the name it now bears of "British", by having held its last annual meeting in the British metropolis, and within the time-honoured walls of the Royal College of Physicians. Time would fail me if I were even to attempt to dilate on the splendour of the reception awarded to what was once a small Provincial Association. One seems to hear one's brother of the town say to him of the country: "For thirty years you have invited us to share *your* hospitality. You have provided for us bountifully; you have spread intellectual treats for *us;* and you have worked well to maintain dignity and learning amongst yourselves and to diffuse it amongst your fellows. You have altogether worked in the right way. We sympathise with you heartily in your efforts: now let us repay the compliment—come and see us; let us unite hand in hand in a good cause." And, gentlemen, those of us who were happy enough to be able to accept the invitation, can bear testimony with me alike to the cordiality and friendship of the reception, as

well as to the rich treasures of wisdom and science which were brought together for our intellectual gratification. I will venture to say that the generous hospitality of our metropolitan brethren will be long remembered by us. Not the least among the many circumstances which afforded us pride and pleasure on that occasion was this: that so many eminent members of the profession embraced the opportunity of identifying themselves with the objects and interests of the Association by becoming members of it. You all know that I refer, amongst others, to the names of Watson, Mayo, Billing, Lawrence, and also to Sir B. Brodie; and it is a source of peculiar gratification to us, I conceive, that at the close of a long and successful life, in the perfect ripeness of mature judgment, the latter eminent surgeon should thus have recognised the merits and usefulness of this Association—too soon to be cut off from amongst us, yet full of years as of honours. Let us pay a tribute of respect to his memory!

One movement made at this meeting, as it is a new one, and promises to be of practical advantage, may fairly claim a passing notice; and that is, the appointment of a Committee to inquire into and report upon the action of drugs. I hope all the members of this Branch, who have the opportunity, will aid the Committee in this important undertaking by at least filling up and returning the printed forms with which they have been supplied through the medium of the JOURNAL.

Referring to the JOURNAL of March 7th, I find that, up to that date, 176 new members had joined the Association, in addition to 66 who joined at or about the time of the annual meeting. Now, although this, added to the strength of the Association as it existed before, appears a very large number, and is indeed sufficient to make our body of some importance, still it does not amount nearly to the proportion, as compared with the numerical strength of the profession, to which its more ardent friends looked and hoped, nay expected, it would attain. It is difficult to conceive why so many hold back, why so few comparatively can see the advantages to be derived from forming a society amongst ourselves, as members of every branch of the profession, independent of its colleges, licensing bodies, and corporations. We are asked: "To what good result do your meetings lead? and what can you return us for our subscription?" Of course, you and I are persuaded of the good objects and aims of our Association; and I will venture to say that we are to a very great extent satisfied with what it has done; and we feel that we only require a greater numerical strength to give us a more influential voice in all matters, whether legislative or otherwise. Still, if any other and more tangible and more surfacely apparent good could be presented to the body and bulk of the profession, I do not think it would be altogether without result; and for that reason I am glad to see that the subject of health assurance has been proposed and partly discussed in connexion with this society. I am inclined to think that, if it can be made to work practically, it might cause a large accession to our ranks; and it appears to me that the organisation which at present exists amongst us, in Branches and local secretaries, affords a machinery by which the movement might be carried out in the first instance. I think, therefore, that this is, at all events, a legitimate matter for discussion; and if, by and by, any member happen to have thought it over and possess any facts or data bearing on the question, that he will be doing good service by bringing it forward.

Referring to the financial report published in the JOURNAL of March 28th, I have no time to do more than simply congratulate the society on its freedom from debt, with a small balance in the hands of the Treasurer; and also on the probability of a small surplus remaining over and above the expenses of the current year.

With regard to our own Branch, I am not aware of any great change having taken place either in our numbers or in any other particular. We are a comparatively small Branch, and scattered over a wide district; but, when the occasion has arrived, the members have always gathered together, some from a considerable distance, as on a recent occasion, for the purpose of recording their opinions, and have been amongst the first to unanimously express their strong and unqualified protest against some of the crying evils of the day as they affect us as a profession.

Passing now to more general matters: When are we to have a new *Pharmacopœia*—that long expected progeny of our "little Bills", whose own birth, difficult and protracted, was so eloquently, and with something of poetic imagery, depicted in this room some four years ago? With what pleasure did we hail the advent of that remarkable offspring! "Baby was not vigorous in mind or body. Beautiful exceedingly, no doubt; and *so* intelligent; but not *vigorous*; immature; pulpy; helpless, except through its very weakness"; and withal expensive! Nevertheless, we have watched his growth with fond hope and anticipation; and we have looked with keen anxiety that he should bring forth some fruit, give some return for the money and care so freely and ungrudgingly expended in his rearing. But as yet "Bill" is found wanting, and shows little or no sign of potency. We will yet hope, however, that the day will come when we may at last be able to speak of him with paternal pride; that he will yet flourish, to be at once our support and protection.

The past year has witnessed some very important trials in courts of law, in which our profession has taken a conspicuous part, sometimes in the position of defendant, sometimes as plaintiff, and more frequently in the witness-box. This Branch having very recently held a special meeting for the purpose of considering the question of medical evidence in courts of law, and having come to an unanimous decision by a resolution which has been published in the JOURNAL, renders it unnecessary for me to say as much on the subject as I should otherwise have done; but I think I shall not be stepping out of my proper sphere if I briefly remark on one or two trials to which no reference was either made or called for on the occasion to which I have just referred. These cases seem to bring before us with stern reality the responsibilities which beset our every day life; and they teach us how necessary it is for us to walk "circumspectly". Of the most remarkable really, in a certain point of view, was one which took place in a coroner's court, and arose out of the circumstance (one would have thought natural enough, after the details given in evidence) that the medical man concerned—Mr. Buss—required a written promise of payment before visiting a child represented to have become suddenly worse from the effects of an accident. The child having died, as was shown at the inquest, from effusion on the brain, it was sought to be shown also that the delay occasioned by the surgeon's first inquiry as to his remuneration was the immediate cause of the child's death. The conduct of the medical practitioner was denounced by one of the jurors as "mercenary"; and a special verdict, animadversive of the practice (if it be a practice), was entered. Comment is almost unnecessary. The *Social Science Review* says on the subject: "Nothing, in our opinion, could be fairer than the transaction; and the juror who called it 'mercenary' did not know the meaning of the term. If Mr. Clarke, the father of the child, in lieu of wanting a doctor, had wanted five shillings (the amount of the fee claimed) to obtain for his child some necessary that would have helped, as he thought, to save his life; and if, at half-past three in the morning, he had gone to that said juror as a perfect stranger, and had asked the juror to give him five shillings for the purpose named; and if the juror had said, 'Certainly, but you must give me a line of

acknowledgment that you owe me so much',—that juror, in his own mind, would have thought himself a very generous individual, and the world would have thought him so too. But then, Mr. Buss was a doctor; and, instead of supplying hard cash or some other substantial thing, had to supply thought, action, time—unsubstantials, which cannot be calculated in regard to value, and therefore are considered as something essentially different from these commodities, the market value of which may be cast up on the fingers."

Another extraordinary verdict was that found against Dr. Philbrick. The particulars of the case I assume you are acquainted with; they are to be found in the *Lancet* of Dec. 20th last. The verdict was: "That it is the opinion of the jury that there was not that attention paid to the deceased on the part of Dr. Philbrick which the case required; and that he was mistaken as to its being a foot-presentation." This verdict was certainly an unjust one; but it was scarcely the worst part of the trial, after all, which consisted in the circumstance that in this case, as in so many others (I need not now more particularly refer to Bromwich *v.* Waters), medical men were found ready to step into the witness-box and give evidence against their brother practitioner. By referring to the JOURNAL of Dec. 13th, you will find an analysis of a portion of the medical evidence; and it would be difficult to find a more glaring example of dogmatic assertion than is contained in the evidence of one of the witnesses, who gave it as his opinion that the hæmorrhage from which the woman suffered predisposed her to the attack of apoplexy of which she died! Whether Dr. Philbrick was right, in the first instance, in considering the case one of foot-presentation, is beside the question; and it is also doubtful whether or not he (Dr. Philbrick) had fairly taken upon himself the responsibility of the case.

The ignorance of juries, and their inefficiency to decide on questions of a scientific nature, has been long felt and acknowledged; and it is not too much to say that a professional man placed in any degree on his defence will scarcely receive that justice and that intelligent consideration at their hands, to which, of course, he is entitled.

"Twelve men, utterly ignorant of the first principles of physiology, and more than ignorant because filled with most erroneous notions on the subject, are set to determine whether a man who has studied the science for a life-time has rightly or wrongly applied it. True, they are supposed to be informed as to this by experts; but, in practice, the experts on either side flatly contradict each other, and the ignorant jury must judge between them. This is a mockery of justice, discreditable alike to science as to law, and should be prevented, as it may be, by simply permitting the *fact of admission* to the profession to be conclusive evidence of *competency* in a medical man, limiting his *liability for misconduct to negligence* in the exercise of his skill, to be sustained by proof of *actual* misconduct or positive neglect." (*Law Times.*)

The ignorance and incompetence of juries has always been the subject of satire and joke. It was, perhaps, never shown up to greater ridicule than by an eccentric member of our own profession, one Andrew Borde, who is said to have acted as physician in the service of King Henry the Eighth. You will find in Mr. Jeaffreson's *Book about Doctors* the following anecdote related of him.

"Acting as foreman of a jury in a small borough-town, a prisoner was charged with stealing a pair of leather breeches; but though appearances were strongly against the accused (who was a notorious rogue), the evidence was so defective that to return a verdict of guilty on the charge was beyond the logic and conscience of the twelve good men and true. No course seemed open to them but to acquit the knave; when Andrew Borde prevailed on them, as the evidence of stealing the leather breeches was so defective, to bring him in guilty of *manslaughter*. It is needless to say that the jurymen took Andrew's advice, and, finding a verdict to the best of those abilities with which it had pleased God to bless them, astonished the judge and the public not less than the prisoner with the strange conclusion at which they had arrived."

The lapse of three centuries or thereabouts does not appear to have afforded juries sufficient time to improve. As it was in the days of the Henry the Eighth, so it is, or something like it, in these days of Queen Victoria; for I read in a paper the other day of an inquest held in the North of England upon a convict. The prisoner had been sentenced to three years penal servitude. Being of a lazy disposition, he soon began to affect illness with a view of escaping work; and on one fine morning was found dead in his cell, having just hanged himself behind the door. The facts disclosed led the jury to return the following verdict:—"Hanged himself, probably with the intention of being found by the warders and obtaining relief from work and discipline."

We are all of us called on, perhaps often, certainly occasionally, to fill in forms for the admission of patients into lunatic asylums. The case of Hall *v.* Semple will teach us a lesson to exercise due care and precaution; for they are important documents, and we cannot all of us afford to buy experience at so heavy a cost as Dr. Semple would have had to have done personally, had not the profession come forward and given him a helping hand in his dilemma.

It is a source of great regret that I am unable to congratulate the profession that the cause of Poor-law Medical Reform has not made much apparent progress since we last met; but we must still encourage one another, weary and faint by the way though we may be, to persevere in our efforts; for I am sanguine enough to believe that the day will come, when our most just and righteous claims will be allowed and our services more fully appreciated than they are at present; and I hope those who have not forwarded their subscriptions to Mr. Griffin (to whom we really owe so much) for the current year will do so without delay.

It was my intention to have said a few words in advocacy of the claims of the different benevolent institutions and charities in connection with our profession; but I fear I shall have trespassed too far already beyond the time which I may fairly occupy. I shall, therefore, only earnestly commend them to your continued support, particularly the "Fund" which is more especially associated with this Society. But while I thus call on you, and on all other members of our profession, to aid to the best of their ability in the sacred cause of charity, I may perhaps be permitted to point out, especially to our younger members (I am not very old myself, and what I say to them I will also say to myself) the desirability—nay, the absolute necessity—of beginning early to make themselves some provision for those who are dependent upon them. I cannot but come to the conclusion—I hope it is an erroneous one—when I read over the short abstracts of the particulars of the different cases which appeal to our sympathies, whether it be of those who are relieved by the Benevolent Fund, or of candidates for the shelter of the Royal Medical Benevolent College, that the practice of life-assurance is not so general amongst us as a body, as it should be. I cannot but think that we have less excuse for its neglect even than many others, exposed as we are to many sources of danger and infection; so that it becomes more especially important by every means to begin early to provide against times of difficulty and of trouble, that we may be to some extent ourselves, or that those may be whom perchance we love more than even we do ourselves, independent of charity, often sickening with hope deferred to seek after,

and obtained only after much humiliation and sorrow. For, independently of those trials and vicissitudes which await us all, at some time or other, at the hands of the Almighty disposer of events, we surely all of us have experienced that none are more subject to the caprices of an ever fickle and oftentimes ungenerous public; that the favourite of to-day gives place to the favourite of to-morrow; and that charlatanism and sycophancy too often usurp the place of modest merit and manly independence.

"O momentary grace of mortal men,
Which we more hunt for than the grace of God!
Who builds his hope in the air of men's fair looks,
Lives like a drunken sailor on a mast,
Ready with every nod to tumble down
Into the fatal bowels of the deep."

I have now only to thank you for the honour you have conferred on me by electing me to fill this chair, which I am only sorry was not filled by some of those members who are senior to me; and also for the kind attention with which you have favoured me whilst I have so far endeavoured to fulfil the first duty appertaining to the post.

Reviews and Notices.

UNTERSUCHUNGEN UEBER DIE INNERVATION DES HERZENS. Von ALBERT VON BEZOLD, Professor der Physiologie in Jena. Leipzig: 1863.
(RESEARCHES INTO THE INNERVATION OF THE HEART. By ALBERT VON BEZOLD, Professor of Physiology in Jena. Leipzig: 1863.)

PROFESSOR VON BEZOLD has been anxious, as he tells his readers in the introduction to the volume before us, to contribute his share to the elucidation of the great problem which has long agitated physiologists concerning the functions of the nerves of the heart.

The theory propounded by the brothers Weber, that the influence of the vagi is inhibitory, although generally accepted, has been far from meeting with universal favour; and, among its opponents, none rank higher than Professor Moleschott of Zurich. The result of this philosopher's experiments has been to convince him that the vagi and sympathetics are all excitors of the heart acting through the medium of ganglia; so that, if one nerve be irritated, the excitement is communicated to the rest, and thus to the entire muscular structure of the organ; and he argues, as do others with him, that cessation of muscular contraction is due, not to irritation of the par vagum, but to exhaustion consequent upon its over-excitement. To meet these views, von Bezold has entered the field. It would be beyond the intention of this notice to detail the experiments which he has made and here describes: they appear to have been devised and executed with the ingenuity and delicacy that marked his former investigations; and they lead him to the conclusion that Moleschott is wrong; and that the theory, which in this country was pretty well regarded as established, is correct. Irritation of the vagus the author finds always to check the heart's action, while the sympathetic has an exactly contrary effect. The two nerves, in short, instead of being all excitors, are antagonistic the one to the other. The author, however, considers that the nervous physiology of the heart is not yet explained, and he is himself engaged in further investigations. Professor von Bezold, by previous labours, had established a claim to be heard upon any physiological subject; and upon a point where innervation is concerned, his views are certain to be of unusual value, specially connected as is that branch of the science with his studies as a pupil of Dubois-Reymond, and latterly as professor at the University of Jena. We therefore await the publication of his own more original views, at which he only hints in the present work, with no little interest.

OUTLINES OF SURGERY: being an Epitome of the Lectures on the Principles and Practice of Surgery delivered at St. Thomas's Hospital. By F. LE GROS CLARK, Surgeon to the Hospital, etc. Pp. 258. London: 1863.

THIS little work is put forth by the author as simply being what its title indicates it to be.

"The present *Outlines* comprise, for the most part, little more than the notes from which the author's lectures have been delivered, somewhat amplified; and they are offered to the student, in the hope that he may be encouraged to fill in the details from actual observation, and thereby cultivate a habit of self-reliance, instead of depending too much on book-teaching in his early studies..... Beyond this legitimate aim, the present volume can, of course, have no pretensions in common with more comprehensive Systems of Surgery."

The book contains the topics ordinarily treated in surgical lectures; and does not call for any special or lengthened remarks. Of necessity, the subjects are noticed in little more than outline; but the principles and practice inculcated are sound, and the book is likely to be of service to both students and practitioners who will use it in the manner in which Mr. LE GROS CLARK intends that it should be used.

THE WATERING-PLACES OF ENGLAND; considered with Reference to their Medical Topography and Remedial Resources. By EDWIN LEE, M.D. Fourth Edition, with Alterations and Additions. Reissued. Pp. 339. London: 1863.

THE PRINCIPAL BATHS OF GERMANY, FRANCE, AND SWITZERLAND; considered with Reference to their Remedial Efficacy in Chronic Disease. By EDWIN LEE, M.D. Fourth Edition, with Alterations and Additions. First Volume: BATHS OF GERMANY. Pp. 308. London: 1863.

THESE works have been for some time before the profession, and hence do not require much notice in this place. Dr. LEE has made himself known as an able describer of the principal watering-places and baths of this country and the continent; and his works are written in so agreeable a style, and contain so much topographical as well as professional information, that it is not surprising that they should meet with favour.

His object has not been to discuss the theory of the production of mineral waters, or to attempt an arrangement of them, or of climates, according to their properties, as has been ably done by Drs. Althaus and Scoresby-Jackson. He simply, in the work on England, speaks of winter and summer places of resort; and in that on the Baths of Germany, he describes in the first part the baths of Rhenish Germany, and in the second those of Central Germany.

British Medical Journal.

SATURDAY, JULY 11TH, 1863.

THE LATE ELECTION OF COUNCILLORS AT THE COLLEGE OF SURGEONS.

We most sincerely congratulate the profession on the results of the late election. The Fellows have at last become awake to a sense of their duty and of their power; and have shown a determination to exercise their power in the performance of their duty. There can be no mistake about the meaning of an election of this kind. It is full of significance. It is what our French friends call, in the intensity of the term, a *leçon*, and one which we will venture to say will not be readily forgotten.

The snug and quiet dream of the College officials has at length been rudely broken; a very unmistakable hint has been given to them that they must straightway put their house in order; and that the Fellows of the College have at length felt and mean to exert the power which lies in their hands.

We think that we may fairly claim for the JOURNAL of this Association the main share of credit in bringing about this first step to a reform in the management of the Royal College of Surgeons of England. It was in this JOURNAL that the whole history of the abuses of the College was first detailed, and prominently brought under the consideration of the profession at large; and it was, indeed, through this JOURNAL that the anomalous and extraordinary proceedings of the Council and of the Examiners were fully laid bare to the investigation of the Fellows and Members of the College. Throughout our campaign in this direction, we have carefully abstained from making this, in the smallest sense, a personal question. We have looked upon it simply as an attack upon hereditary abuses inherent in the general management of the College, and not as pertaining to the conduct of any particular member of the Council-family. And we still intend to regard the matter in this light. For it is not to be supposed that we have as yet actually obtained any positive reform in the many existing abuses. What the Fellows have as yet done is to declare, that men who will not carry out, nor do their best to assist in carrying out, the terms of the last Charter delivered to the College, are unworthy of, and shall not have, their support. This is a grand step; but it is only a step gained.

Let it, therefore, be fully understood. We are not going to relax our exertions in the matter, until such times as we see the reforms actually carried into practice. Reforming minds have been before this elected into the Council, and when in office have soon undergone a quieting process, which has put an end to all their fine dreams and promises. We know the sort of pressure which has been so often applied to restless members of Council; and the processes under which they have been reduced to a reasonable and sober silence. We shall, therefore, only believe in the perfected regeneration of the Council when we see its regenerated works. We shall believe that the Council has raised itself to an appreciation of its high duties, when we see it take the first step in bringing its proceedings into due accordance with the terms of its Charter—with the spirit of the age in which we live. We shall believe in the Council's honesty when we see them elect an Examiner from the body of Fellows of the College outside the Council and outside the Court of Examiners; when we see them place on the Court of Examiners men fully capable of examining in the anatomy and physiology, and the surgery of the year 1863. We shall believe in them when they cease to re-elect year after year the same retiring hexagenarian and septuagenarian Examiners back into office. We shall believe in them, in fact, when they perform one single one of those many acts of reform prescribed by their last Charter, and of which they have hitherto so carefully and shamefully eluded the performance.

The Council have had their due warning. Let them set their house in order. Every year Councillors retire, and may offer themselves for re-election. But not as heretofore, we must presume, will their re-election be a matter of course. That quiet dream has been dispelled by last week's vote. Those gentlemen in Council, therefore, who look for a long term of life there should show some signs of vitality in office; should give proof to the profession at large (in the way above indicated) that they are worthy of the reward of being re-elected. They should prove that they can take care of the interests of the profession at large as well as of their own. They should let the profession know that they feel the responsibility attaching to the office which they hold.

We cannot, indeed, doubt for a moment that the death-knell of the official life of many of the Council has already been rung; and that, in fact, there are members of Council who need not look with any fervent hopes of success for the day of their re-election.

The result of the election which last week took place is an unmistakable indication of the intention of the Fellows. They mean to have a thorough reform in the management of that rich and heretofore supercilious and selfish Corporation; and truly their intention is simply the performance of their duty.

All other corporations have undergone changes, and have been brought into some kind of accord with the spirit of the age; but this one, buried in a narrow-minded selfishness, has hitherto denied, and

successfully, all the assaults of what it has deemed its enemy.

How different, for example, the conduct of the College of Surgeons from the conduct of the College of Physicians in this respect. The College of Physicians surrendered voluntarily many of its ancient and most powerful privileges—privileges secured by Act of Parliament. The elects voluntarily performed many serious acts of abnegation in order that their College might do its duty to the profession at large; and assuredly the College has had its reward. It has gained the confidence and respect of the whole profession; whilst, on the other hand, the College of Surgeons has not only not initiated any liberal measure of reform, but it has actually strenuously opposed, or rather eluded, the performance of its plain duty as prescribed by the terms of its Charter. And the College of Surgeons has also had its reward. It possesses neither the confidence nor the respect of the profession.

We are sure we need not remind those gentlemen who have even now been elected into the Council of the duty which they owe to those who elected them. We are satisfied that those gentlemen must feel that the confidence of the Fellows was bestowed upon them for a distinct purpose; the Fellows did not place them on that Council simply to do as others there have done before them; viz., to fall into the groove of custom, to be quiet, and obedient to the ancient and powerful spirit of misrule which impregnates the Council-chamber, to bide their time, and, by a satisfactory course of passive obedience to the dominant rulers in Council and at the Examiners' Board, to earn their right to a participation in the future riches of an Examiner's berth. We believe that these gentlemen have all of them both the conscience to remind them of the principles on which they have been elected, and the independence and courage required to sustain them in attempting to carry out those principles within the walls of the Council.

Let it then be clearly understood by the profession, that this election is in itself no act of reformation effected within the Council of the College; that the work has yet all to be done; and that nothing less than an actual practical obedience to the terms and injunctions of the Charter can demonstrate the real regeneration of the Council. What the election of last week has done is this: it shows that the Fellows' intention is to have the Charter carried out.

THE COLLEGE OF SURGEONS: ITS MODE OF ELECTING COUNCILLORS.

A CORRESPONDENT, "F.R.C.S.", writes to reassure the minds of those Fellows who may have been disturbed by our remarks on the above mentioned subject. F.R.C.S. naturally defends the mode of election of its Council adopted by the Royal College of Surgeons. He promises us that the proceeding is very good. We are well aware that the most crying abuses will never want defenders; but are satisfied that, when our friend has had a little more experience in, and has made himself more thoroughly acquainted with, the subject he writes upon, he will be the last to defend the system which he appears now to think as near perfection as things of the sort can be. We have, it is true, denounced the mode of election of Council adopted by the College of Surgeons, as being contrary to common sense; as being possibly very unjust; as being possibly productive of and fostering jobbery and electioneering trickery; and as favourable to the interests of the jobber, and, *per contra*, of course seriously detrimental to the interests of the independent and high-minded candidate. We maintain every one of these positions, because we know them to be true. Thus, it is contrary to common sense; because, under its protection, men may be and are elected into the Council notwithstanding the fact that a large majority of the Fellows *present and electing* actually vote against them! Manifestly, therefore, it may be unjust; because the results of the election are not necessarily a true expression of the opinions of the majority of the voting and electing Fellows. It favours jobbery; because it enables, and therefore encourages, skilful electioneerers, by making a careful book, so to run their man as to give him the advantages of electioneering trickery: and on this score, if F.R.C.S. would like an example of the kind, we will give him a sketch of a College election whereat the following clever jockeying was successfully practised. A., who thought his election pretty safe, agreed to run with B., the friends of each backing the other; but at the last moment it was discovered that, if A.'s backers honestly kept their engagement by voting for B., B. would win. A.'s friends, therefore, who had pledged themselves to split their vote with B., throw B. overboard at the last moment, and plump for A. A, therefore, jockeys his friend B. out of the election. That the mode of election, therefore, is more favourable to the jobber than the high minded man, needs no further demonstration.

But F.R.C.S. says, that this sort of election is just the way things are done all over the country. To this we answer: that we will defy him to mention a single instance of any medical college, royal society, or other learned corporation, wherein such an outrageous method of election is adopted. At the Royal College of Physicians, when the Fellows meet to elect their Council, they follow common sense and justice. Every member of Council is elected separately; and he must have a majority of the votes of Fellows present and electing. The result is, that there is neither trickery nor jobbery at such elec-

tions; and men are not elected Councillors in the teeth of a majority voting against them.

If there are three vacancies in the Council, we maintain that the honest voter will vote for three men to fill them. But we know that many Fellows plump on these occasions; and then, of necessity, it follows that the candidates of the plumping voters get a most unfair advantage over the others. We are sure that F.R.C.S. will not venture to say that this jockeying business of plumping is fair. But if it be not—*i. e.*, if it be unfair—how can he defend the system which permits it?

It is all very well to say that this method of election is as good as another; but we deny that it is; we prove by facts that a worse could not exist. We turn to other institutions where elections are carried on honestly and reasonably, and we there point out good systems in action.

Let us have no cavilling and special pleading. The facts are in a nutshell. The Fellows meet together, bound in duty to elect, for example, *three* fit and proper men to fill vacant seats in Council. Where is the man in the profession who has the courage publicly to declare, under such circumstances, that it is fair, upright, honourable, and in accordance with his duty as a Fellow and a voter, to vote for one candidate only? He who thus votes does so simply for the reason that he cares not who else gets into or is kept out of the Council, if only he can thereby job his own friend in. Certainly, if all Fellows did their honest duty as voters, such tricks could not be played. If all Fellows had a conscience, and felt their responsibilities; if they all met together conscientiously to fill with proper men the vacant seats in Council—then, under the present system, a fair election might be had. But the truth is, all men do not meet and vote under the influence of conscience and to perform a solemn duty; they vote to get a friend into the Council, and they take advantage of the tricks which can be so well played under the present system. And is it too much to ask that a system which admits of such a game should be altered? And, after all, why object to the plain and common sense method adopted by the College of Physicians and other corporations? Why not elect each Councillor separately, and make a majority of half of the votes of Fellows present absolutely requisite? Or why not insist that each voter shall vote for as many candidates as there are vacancies; and that no Fellow shall be elected to the Council who has not a majority of the votes of Fellows electing?

We have thought it right to put down these facts for the benefit of those of our readers who may have, like F.R.C.S., only superficially considered the subject; and we are fully satisfied that he and they will, on further consideration, admit that all we have said of the system of election of Councillors by the Royal College of Surgeons of England is quite correct.

THE WEEK.

The profession will be glad to hear that Sir C. Locock has entirely recovered from his late serious accident.

It is well to note the increasing interest which the Fellows of the College of Surgeons are taking in the management of their College. We doubt whether any member of the Council has ever received so many votes as Mr. Lane received at the late election. In 1861, Mr. Solly, who was at the head of the poll, had 152 votes; in 1862, Mr. Cock had 126 votes; and in 1863, Mr. Lane obtains 199 votes. We believe that at the late election the number of Fellows present and voting was 312. Consequently, Mr. Lane was elected by a majority of 43 votes. Mr. Busk had 168, and had therefore a majority of 12. Mr. Hancock's number of votes was 153, and consequently he was elected by a minority of 3. Of the votes given, 40, we believe, were plumpers—17 of which went to Mr. Hancock, 10 to Mr. Lane, 5 to Mr. Curling, 4 to Mr. Hawkins, 3 to Mr. Tatum, and 1 to Mr. Busk; 25 votes were double votes; the rest, about 244, were treble votes—the only ones which we call fair and proper votes.

The following resolution was unanimously adopted at the meeting of the Yorkshire Branch of the British Medical Association, held in Sheffield on June 18th.

"That this meeting desires to join in the general expression of sympathy with Mr. Adams, exhibited by the profession throughout the kingdom, under the trying circumstances in which he has been recently placed"; and "that the secretary be requested to convey the same to Mr. Adams."

The Surgeon-General of the United States Army has issued an order "striking calomel and tartar emetic from the supply list". Calomel is struck off because of "its abuse by military surgeons". The Surgeon-General says that he is officially informed that "not only profuse salivation has been produced in innumerable cases, but that mercurial gangrene is of not unfrequent occurrence". He finds it impossible to restrict its use, so he has ordered it to be "stricken from the list of remedies". He adds, that he issues such an order with the more confidence, "as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered". Tartar emetic the Surgeon-General has also stricken from the supply table, "for the reason that diseases prevalent in the army may be treated

as efficiently without tartar emetic as therewith". There are, however, "still on the supply table several of the more eligible and useful preparations of mercury. There is the blue mass, mercury and chalk, bichloride, iodide, etc, all much more elegant than calomel, and far more likely to give the beneficial effects of mercury without the unfavourable results."

We are happy to hear that the King of the Belgians continues to improve since our last report of him. There is, we understand, every reason to hope that no fragment of the stone now remains in the bladder; in fact, that Mr. Henry Thompson has been perfectly successful in his operation. Of course, in a case of this nature—phosphatic calculus—it is impossible to say that no new formation of calculus will occur. At all events, it is very gratifying to learn that there are now no existing symptoms indicative of the presence of any fragment in the bladder. There is complete absence of pain during exercise and at all other times; and the royal patient is, we hear, now in excellent health.

A meeting of the medical men residing in Bedford and the neighbourhood was held on Monday last, *in re* Mr. Coombs and homœopathy. The meeting requested from Mr. Coombs a written pledge "that he will not in future practise homœopathy, and that he will discontinue the use of the title of M.D. from a homœopathic College." To the first of these conditions he assented; but refused to relinquish the M.D. Whereupon the meeting passed a resolution congratulating him on his repudiation of homœopathy, but refusing to meet him in consultation until he also relinquished his homœopathic degree. Resolutions against meeting in consultation those who consult with homœopaths, and in disapproval of calling on new comers for the purpose of securing them as patients, were also passed; and a Bedford Medico-Ethical Society was constituted.

M. Gavarret, in the names of MM. Bouillaud, Grisolle, and Béclard, has delivered to the Academy of Medicine a report on the cardiographic apparatus and late experiments of MM. Chauveau and Marey on the movements of the heart. These experiments demonstrate the following conclusions:—1. There is an absolute synchronism between the active and passive movements of the two ventricles; and also between the active and passive movements of the ventricles and the increase and diminution of the heart's pressure against the thoracic walls. 2. There is a regular alternation between the movements of the auricles and of the ventricles; in other words, the active movement of the auricles is executed wholly during the passive movement of the ventricles, and *vice versâ*. From observations made upon a horse, whose pulse beat fifty times per minute, and in whom, consequently, each cardiac revolution was completed in one second and two-tenths, it was found that the cardiac revolution commences with the auricular systole. The contraction of the auricular walls is rapid, lasting one-tenth of a second, and is immediately followed by their complete relaxation, which is also performed in one-tenth of a second. During the rest of the cardiac revolution, *i.e.*, during the following second the auricle is passively dilated by the blood which flows into it from the veins. Then follows another auricular systole, which marks the commencement of another cardiac revolution. The ventricular systole commences at the moment when the auricles are completely relaxed, two-tenths of a second after the commencement of the cardiac revolution; their rapid contraction is effected in five-hundredths of a second, and is maintained during thirty-five hundredths of a second, whilst the auricles are being gradually dilated. During the remaining time—forty-five hundredths of a second—of the cardiac revolution, the ventricles are passively dilated with the blood which enters them through the widely opened auriculo-ventricular orifice. This passive dilatation is prolonged into and during the first two-tenths of a second of the following cardiac revolution which correspond with the contraction and dilatation of the auricular walls. Hence, the auricle is in action only during one-twelfth part of the cardiac revolution; whilst the duration of the contractile action of the ventricles is four times greater, and in fact occupies one-third of the revolution. The impulse of the heart against the walls of the thorax undoubtedly depends upon the sudden contraction of the ventricles.

The *Chemical News* has the following remarks on the proposed clauses in the Medical Act to regulate the practice of druggists and chemists.

"Usurpers have always been found ready with an excuse for their proceedings, and no one therefore will be surprised to read in the preamble of the new Act that it is 'for the safety and protection of the public' that the Medical Council propose to take away the dispensing business from some thousands of chemists and druggists, and probably mulct the remainder in two guineas for carrying on an occupation which is already legitimately theirs. Some persons will find the readiest explanation of the movement in the financial circumstances of the Medical Council. It would seem from the balance-sheets that that learned body is what is vulgarly called 'hard-up.' They find a difficulty—always a painful thing to men of liberal minds—in making both ends meet. The expenses of a Council gathered together at intervals from all parts of the kingdom are necessarily considerable. The regular income is necessarily restricted. The money obtained from the medical profession for the general registration has been spent, and the future looks unpromising. Under these circumstances, it is no wonder that the Council should seek extended sources of income, and nothing more natural than that they should attempt to plunder chemists and

druggists. The xxth section of the new Act is to enable the Council to regulate the education and examination of the chemist and druggist. What this regulation will be it is not difficult to foretell. It will consist probably in compelling attendance on courses of lectures on theoretical and practical chemistry, materia medica and pharmacy, and on botany, and in enforcing an examination on these subjects as well as in Latin and prescriptions. Against the examination, if it were conducted by a proper tribunal, we have nothing to say; but we have a most decided objection to the compulsory attendance on lectures. We have urged before that it is of no consequence to an examining Board to know how, when, or where a man acquired his knowledge; the sole business of the Board is to make sure that he is possessed of that knowledge. The great fault of the medical system is that it assumes to a great extent the possession of the knowledge from the certified opportunities of acquiring it—often a most mistaken interference, as all acquainted with the profession well know. The existence of such a system, however, is easily explained by the fact that all the regulations have been made by lecturers and teachers. To guard against misunderstanding, however, we may state at once that it must not be inferred from our opposition to this measure that we are adverse to the improvement of the intellectual and social condition of the chemist and druggist. Quite the contrary; we should hail with satisfaction any measure which proposed to effect this end in a fair and honourable way; and in a future number we will endeavour to suggest a plan for the purpose."

M. Bouley has pointed out an important circumstance to the Academy, which will doubtless occasion much discussion. A horse was brought to him affected with aphthous stomatitis. He thereupon inoculated the liquid aphthous matter on the teat of a cow, on the 10th of last June. On the 18th, of five punctures, four presented pustules perfectly identical with cow-pox. M. Bouley then inoculated two infants with matter taken from these pustules. In one of the infants, three perfect pustules, identical with vaccine pustules, were developed. This child was presented to the Academy. Moreover, five pupils at Alfort, all previously vaccinated, were inoculated with this new matter, which produced in them a more or less well marked pustulation, similar to that produced by vaccination.

The present meeting of the Society of Scandinavian Naturalists is held at Stockholm, from the 8th to the 15th of the present month.

Professor Scanzoni has gone to St. Petersburg, to attend the Empress of Russia during her confinement.

"Clinical observation", said M. Morel-Lavallée the other day at the Société de Chirurgie, "shows remarkable results. M. Dolbeau is a young man, and he has performed urethrotomy thirty-seven times; whilst I, who have been much longer in practice, have never performed that operation. I am convinced that urethrotomy is much abused." M. Velpeau remarked: "What I think of the matter is this: I am satisfied that dilatation is the most convenient and the safest method of treating strictures; but the treatment is not in all cases successful. I have cauterised and I have incised strictures; but I have not found that these methods succeed better than dilatation; and I should not be surprised if some of M. Dolbeau's patients come back into his hands. I have performed urethrotomy about forty times, and I have seen many of them suffer from fresh strictures. I have seen other surgeons perform the operation, but with no greater success than myself. But urethrotomy is infinitely more dangerous than dilatation. I have lost patients after this operation, and I have known other surgeons to do the same. The section of strictures, therefore, should be regarded as a very exceptional operation."

M. Barral has presented to the Academy of Sciences some remarks of much interest concerning the crust of bread and the gluten contained in it. He had recently shown that, when equally dried, the crust of bread is more highly azotised than the crumb; and he also showed that the crust was more soluble than the crumb in water. M. Payen had, it is true, previously pointed out this greater solubility of the crust, and had ascribed it to the conversion of the starch into dextrine during the baking. But M. Barral's experiments show another important fact. "If", he says, "we exhaust with water an equal quantity of dry crust and dry crumb of bread, we find that the soluble portion of the crust consists of from 7 to 8 per cent. of nitrogen, whilst the soluble portion of the crumb contains only from 2 to 3 per cent. The greater solubility of the crust, consequently, depends upon the transformation which its gluten has undergone under the direct action of the 200° to 220° heat of the oven. The soluble portion of the crust is more highly azotised than the juice of meat." M. Barral added, that he was still engaged with his experiments, which he hoped would throw some new light on panification.

MM. Dechambre and Delpech have still further investigated the subject of the discoloration of tincture of iodine by urine. They have already shown that this test, proposed by Trousseau as a test for sugar in the urine, is of no value. The decolorisation, according to them, depends upon the presence of saline matter in the urine, and particularly of uric acid and the urates. Lately, they have operated with the alkaline urine of carnivorous and herbivorous animals; and they find that the decolorising power of the urine of carnivorous animals is very great, and that of herbivorous animals scarcely appreciable.

There is a class of doctors in France called *médecins des morts*. Their duty is to verify the death of the party, and to judge whether he has or not died in an extraordinary way. The pay of these doctors in Paris is 2 *francs* per verification! This pay is as good as 2*s*. per vaccination; and yet our French brethren are indignant at the price!

THE ADAMS DEFENCE FUND.

Dr. Richardson, Chairman, and Mr. Walker, Treasurer, of the Adams Defence Fund, have called the attention of the profession to the proceedings held at a meeting of the Committee on the 23rd ult.

They invite a perusal of a letter from a relative of the plaintiff in the late action; a letter which the Committee considers to be most creditable to the writer, and a perfectly conclusive vindication of Mr. Adams. This opinion, they are happy to say, is also held by the learned Chief Baron who presided at the trial.

In the second place, they draw attention to the state of the fund. Mr. Adams's legal expenses "amount to £1011 : 9 : 4, a sum which it is felt should not be levied on any professional man in a similar position, without an attempt to meet it by the profession at large. Up to this time, nearly £400 has been subscribed; and the Committee feels sure that if the fact of the existence of the fund were more widely known, it would be supported by every practitioner."

The following is the letter referred to:—

"9, Trinity College, Dublin, May 12th, 1863.

"Sir,—As the executor of the late Rev. Edward Kent, the brother of Mrs. Russell, who has given you so much annoyance, I deem it my duty to communicate to you my opinion and that of her family respecting her conduct.

"The first knowledge I had of the action against you was the trial reported in the Irish papers. Had I known that such an event was to take place, I should gladly have volunteered my evidence against her unjustifiable attempt. But I believe that even now a letter from me may be of some use to you in dispelling the doubts, if any exist, respecting your conduct towards her daughter.

"It seems then, from her own evidence, that she boasted of her connections; but she forgot to state that she had been for years discountenanced and disavowed by them.

"I am nearly sixteen years married to her niece, and I never spoke a word with her, and she never was in my house. Her brother, the Rev. Edward Kent, died in London on the 8th of January, before the trial took place, and yet she knew nothing of it, although he was dying for more than a year. This must prove, at all events, that she was kept at a distance by us.

"I have had a good deal of correspondance, rather *from* her than with her, for I acted as her brother's agent in paying her a small annuity, on condition that she should not correspond, directly or indirectly, with him, who was of a rather excitable temperament; and on several occasions I had to stop her monthly allowance when she acted contrary to his wishes in this respect.

"I have consulted the family, and they request me, in their name, to express to you the indignation which they feel at Mrs. Russell's conduct, their sympathy with you and your family, for the trouble in which your benevolence has involved you, and the assurance that they completely disbelieve the accusations brought by her against your moral character.

"I am, sir, your faithful servant,

"J. G. Abeltshauser,

"*Professor University of Dublin; Rector of Derrylossary, County of Wicklow; Chaplain to His Excellency the Lord-Lieutenant of Ireland.*

"W. Adams, Esq., London.

"P.S. Any information I can give that may be useful to you is at your service."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

President—George Burrows, M.D., F.R.C.P., F.R.S, London.

President-elect—John Addington Symonds, M.D., F.R.C.P., F.R.S.Ed., Clifton.

All the meetings will take place at the Victoria Rooms, Clifton.

Wednesday, *August 5th.*

1 P.M. Meeting of Committee of Council.

2.30 P.M. Meeting of the General Council.

4 P.M. First General Meeting of Members. The retiring President (Dr. Burrows) will make a few remarks. The new President (Dr. Symonds) will deliver an Address. The Report of Council will be presented, and other business transacted.

9 P.M. Through the kindness of the Committee, a *Conversazione* will be held at the Literary and Philosophical Institution, Bristol.

Thursday, *August 6th.*

11 A.M. Meeting of the Members of the New Council.

12 NOON. Second General Meeting of Members. The Address in Medicine will be read by William Budd, M.D. Papers and Cases will be read.

3.30 P.M. The Address in Surgery will be read by Augustin Prichard, Esq.

The Report of the Medical Benevolent Fund will be presented.

Papers and Cases will be read.

9 P.M. By the kind invitation of the President (Dr. Symonds) a *Soirée* will be held at his residence, Clifton Hill House, Clifton.

Friday, *August 7th.*

12 NOON. Third General Meeting of Members. The Address in Chemistry in its Relations to Medicine will be given by William B. Herapath, M.D., F.R.S. Papers and Cases will be read.

3.30 P.M. The Address in Midwifery will be read by J. G. Swayne, M.D. Papers and Cases will be read.

6.45 P.M. Dinner at the Victoria Rooms. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice, as soon as possible, to Dr. Marshall, 8, The Mall, Clifton.

Members are requested to enter, on arrival, their names and addresses in the Reception Room at the Victoria Rooms, where cards will be supplied which will secure admission to all the proceedings.

Refreshments will be provided in the Victoria Rooms during the Meetings.

Members who wish for previous information may communicate with Dr. Marshall, 8, The Mall, Clifton.

Papers have been promised by T. S. Fletcher, Esq. (Bromsgrove); Graily Hewitt, M.D. (London); Lionel Beale, M.B., F.R.S. (London); G. F. Burder, M.D. (Bristol); W. O. Markham, M.D. (London); B. W. Richardson, M.D. (London); A. P. Stewart, M.D. (London); R. W. Coe, Esq. (Bristol).

Papers and Cases will be read in the order of the dates at which notice of them has been received by the General Secretary.

Alteration of Laws. Notice of the following new Laws has been given by W. O. Markham, M.D.

At each Annual Meeting of the Association, the Secretary shall lay before the first meeting of the Council a List of the Members of the Association, together with a separate List of all Members whose Subscriptions are in arrear, and the amount of Subscriptions due from each Member.

This List shall be at once referred to a Committee, consisting of four or more Members of the Council (three of whom shall form a quorum), together with the President and the Secretary. The Committee shall thereupon proceed to settle the List of Members for the ensuing year, retaining or erasing, as they may think fit, the names of any Members who are in arrear: provided always, that no person shall remain a Member of the Association who is more than two years in arrear. The List of Members thus corrected shall be presented to a subsequent Meeting of the Council, and shall, with their approval, be published immediately after the Annual Meeting.

The Secretary shall in each year, during the first week of June, supply the Editor of the Journal with the names of all those Members of the Association whose Subscriptions have not been paid up to the 31st day of May in each year.

Notice of the following alteration has also been given by Dr. Markham.

In Law 15, for the words "twelve months", to substitute the words "five months".

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, June 30th, 1863.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South-Western. [Annual.]	Board Room of the Devon and Exeter Hospital.	Wednesday, July 22nd, 3 P.M.

BATH AND BRISTOL BRANCH: ERRATUM.

Representatives in the General Council. In the report of the annual meeting of the Bath and Bristol Branch, in last week's Journal (page 19, col. 1, line 1), the name of W. J. Church, Esq. (Bath), was by error printed in place of R. N. Stone, Esq. (Bath.)

SOUTH-WESTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of the South-Western Branch will take place on Wednesday, July 22nd, at the Board-room of the Devon and Exeter Hospital, at 3 P.M. President-elect, Samuel Budd, M.D.

Dinner at Pratt's Hotel, Exeter, at 5 P.M.

C. H. Roper, *Hon. Sec.*

YORKSHIRE BRANCH: ANNUAL MEETING.

The Annual Meeting of the Yorkshire Branch was held in the Cutlers' Hall, Sheffield, on June 18th; J. Haxworth, Esq., in the Chair.

Thanks to the retiring President. A vote of thanks was accorded to Dr. Shann for the courteous and efficient manner in which he had performed the duties of President during the past year.

Report of Council. The Secretary read the following report.

"Your Council have great pleasure in again meeting their fellow-members of the Yorkshire Branch of the British Medical Association in Sheffield, at this their anniversary.

"They would, in the first place, congratulate you on the absence of any exciting subject in the arena of medical politics; which, while it relieves them of the necessity of introducing such subjects for discussion into their report, leaves the time and attention of the members free for the more pleasing and profitable consideration of the practical and scientific departments of their profession.

"Your Council have to regret the loss by death of one of their body, Dr. Simpson of York, one of the original and most valued members of the Branch, and one of the Vice-Presidents of the Parent Society; who held the office of President when the Association met at York, during an eventful period of its existence. Dr. Simpson's conciliatory manner, his great conversational powers, and his extensive professional acquirements, rendered him a valued member of this Branch (whose meetings he regularly attended), and will ever endear his memory to those who had the pleasure of his acquaintance; and his name will long be remembered with respect, both by the profession, and by the public who profited so largely by his professional abilities.

"Your Council, ever regarding with deep interest matters concerning the honour and dignity of the profession, feel that some expression of sympathy with Dr. Waters of Chester, under the trying circumstances of his late trial (Bromwich *v.* Waters), should emanate from this meeting; and they beg to call your attention to some resolutions, with reference to some questions of medical ethics resulting from this trial, which are to be brought forward for discussion at the annual meeting of the Metropolitan Counties Branch. Your Council would especially endorse the opinion, 'that no member of the profession is justified in expressing, in a court of law, an opinion as to the treatment adopted by a professional man, when his knowledge of the treatment employed in a given case is derived solely from the non-professional statements of the patient or his friends.'

"Your Council are glad to find that the change in the pharmacopœial weights, against which a protest was adopted at our last annual meeting, has been abandoned by the Medical Council. They are also happy to find that a newly formed *Pharmacopœia* for the three kingdoms will soon be in the hands of the profession.

"The Journal of the Association, under the energetic and judicious management of Dr. Markham, still continues to improve. Your Council feel that it is now an able and satisfactory exponent of the principles of the Association, and a creditable representative of the professional status of its members.

"Bearing in mind the object for which the Association was formed—viz., to promote the progress of medical science, to uphold the honour of the profession, and to improve its social standing—your Council feel that the numbers of its members do not bear a favourable comparison with the number of the profession at large. They recognise the stimulus given by the meeting in London, and acknowledge with pleasure the individual efforts made by our worthy President and his metropolitan brethren to increase the number of our associates; and again suggest, as another means of attaining that object, that we should endeavour to make our Branch meetings more useful and attractive, by securing a supply of interesting papers and cases."

Dr. Hall moved, and it was resolved—

"That the report be received and adopted."

Branch Council for 1863-4. The following members were elected to form the Council of the Branch for the ensuing year:—W. E. Swaine, M.D.; C. Williams, M.D.; G. Shann, M.D.; B. Dodsworth, Esq.; W. D. Husband, Esq.; W. Matterson, Esq.; H. Keyworth, Esq. (York); J. P. Garlick, Esq.; W. Hey, Esq.; T. Nunneley, Esq.; T. P. Teale, Esq.; S. Smith, Esq.; and C. Chadwick, M.D. (Leeds); H. Jackson, Esq.; J. Haxworth, Esq.; F. Branson, M.D.; and J. C. Hall, M.D. (Sheffield); and J. Ness, Esq. (Helmsley).

Representatives in the General Council. W. D. Husband, Esq. (York); C. Chadwick, M.D.; and T. Nunneley, Esq. (Leeds); C. Williams, M.D. (York); and J. Benson, Esq.; and J. Haxworth, Esq. (Sheffield)—were nominated to represent the Branch during the ensuing year in the General Council of the Association.

Votes of Sympathy with Dr. Waters and Mr. Adams. Dr. J. HALL proposed, Mr. S. HEY seconded, and it was resolved—

"That this meeting desires to join in the general expression of sympathy with Dr. Waters exhibited by the profession throughout the kingdom under the trying circumstances in which he has been recently placed; and that the Secretary be requested to communicate the same to Dr. Waters.'

A similar resolution, expressing the sympathy of the meeting with Mr. Adams, was unanimously passed, and requested to be forwarded to that gentleman by the Secretary.

Place of Meeting in 1864: *President-elect.* Mr. H. JACKSON proposed, Mr. GARLICK seconded, and it was resolved—

"That the next annual meeting be held in Leeds; and that Samuel Hey, Esq., be the President-elect."

The Secretary. A vote of thanks to the Secretary was proposed by Mr. H. JACKSON for his past services, with a request that he would continue them.

Communications. 1. Mr. S. Hey exhibited a prostatic calculus of unusual size, extracted by him during life. Its weight was eleven ounces, two drachms, and two scruples.

2. Mr. H. Jackson exhibited a calculus weighing five drachms and two scruples, which had been removed from the urethra of a female by vaginal section. The case occurred in the practice of J. Ward, Esq., of Penistone.

[The particulars of these two interesting cases shall appear in an early number of the JOURNAL.]

3. Mr. Ward mentioned also another case in which surgical interference was not allowed, and in which ulceration and infiltration occurred, and death ensued. The calculus was nearly as large as the one exhibited. No record of so large a stone removed from the urethra of the female had been met with by Mr. Ward or Mr. H. Jackson; and Dr. Aveling stated that he had not been able to meet with one.

4. Mr. Jackson also laid on the table a calculus of considerable size, which had been removed by dilatation from the female bladder by the late Mr. Storrs of Doncaster, and which was exhibited by Mr. Storrs at the first meeting of the Association held in York. The patient recovered well, without any incontinence.

5. Dr. Aveling exhibited a very useful variety of the wire suture, an ingenious contrivance whereby its removal is greatly facilitated. He kindly gave specimens to the members present.

The members and visitors afterwards dined together at the Royal Hotel.

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

THE annual meeting of the South-Eastern Branch was held at the Bull Inn, Rochester, on Wednesday, June 24. Thirty members were present; J. ARMSTRONG, M.D., of Gravesend, President, took the chair, and delivered an interesting and eloquent address, which was published at p. 8 of last week's JOURNAL.

Report of Council. Mr. HALLOWES, in the absence of Mr. Peter Martin, read the following report:—

"The Council of the South-Eastern Branch have much pleasure in meeting their brother members again in North Kent.

"Since the annual meeting held at Chatham in 1856, there has been a large increase in the number of members of the Branch; and this increase has been, to a great extent, due to the establishment of local meetings in this district. The local meetings of the district between Maidstone and Gravesend, having Rochester for its centre, have been always well attended, and have been profitable both as regards scientific discussion and social enjoyment.

"At the annual meeting of the Branch held last year, it was directed that a petition against the present unequal and unjust assessment of the income-tax should be presented during the present session. In accordance with this resolution, a petition was prepared; was signed by the President on behalf of the Branch; and was duly presented by Mr. W. S. Leveson Gower, M.P. No change has yet been made in the assessment of precarious as distinguished from permanent incomes; but the Council feel confident that the income-tax being, as it is certain to be, a permanent institution, the Government will find the necessity of fixing it on a more equitable basis.

"The subject which has been most prominently before the medical profession of late, and which attracts the attention of every one, is the number of actions at law brought against medical men, and the evidence given in such cases by members of the medical profession. This matter has really become a crying evil, to which the Council earnestly directs the attention of this meeting. The question has been ably handled by the editor of the BRITISH MEDICAL JOURNAL; and the Council desires to express its strong approval of the articles in the JOURNAL on the case of Bromwich *v.* Waters. When a case of professional delinquency occurs, it is the duty—no doubt, a painful duty—of any member of the profession to testify as to the facts which may have come under his notice, regardless of anything but of the truth of his statements, the accuracy of his observation, and the reality of his facts. But, unfortunately, we have seen of late men of a position more or less high in the medical world, setting forth their opinions as facts, and bringing these opinions before a tribunal generally quite unable to appreciate their just value, in order to procure the condemnation of their brethren.

"The Council recommends this meeting, in view of the importance of the matter to every member of this Association, to express its strong disapproval of any medical man bringing his hypothetical opinions into the witness-box, adversely to another member of the profession; considering such conduct to be not only contrary to professional etiquette, but to professional morality. Independently of the celebrated case tried at the last Chester Assizes, several actions for malapraxis have been brought during the last two years on the most trivial grounds; others on no grounds at all, but simply as a speculation; but it must be said with regret, that on no such occasion has medical testimony been wanting in support of the charge, however frivolous. It must be confessed that this state of things is discreditable and deeply to be deplored; it may be hoped, however, that it has arisen more from want of consideration as to the nature and effects of evidence than from any other cause; and that the notice now taken of it by the journals and by meetings like the present, may put a stop to the evil."

Mr. FRY (Maidstone), in moving the adoption of the report, said it was highly satisfactory. With regard to that part of it which referred to the JOURNAL, he thought they must all endorse what had been said respecting the admirable way in which it was conducted. The JOURNAL had been very much abused and vilified; but, being in the habit of reading that and the other medical papers, he was in a position to say that it beat all others, and had especially improved since their recent editor's (Dr. Markham's) appointment.

Dr. MARTIN (Rochester) seconded the adoption of the report, which was unanimously agreed to.

Treasurer's Report. The Treasurer's Account was then read; and it appeared that there was a balance in hand of £30 : 11 : 9.

Representatives in the General Council. The Secretary reported that the voting-papers of the members having been received, the following gentlemen were found to be elected:—George Bottomley, Esq., Croydon; Thomas Boycott, M.D., Canterbury; J. Cordy Burrows, Esq., Brighton; Alfred Carpenter, M.D., Croydon; Henry Collett, M.D., Worthing; Frederick Fry, Esq., Maidstone; William Sankey, Esq., Dover; T. Heckstall Smith, Esq., St. Mary Cray; C. M. Thompson, Esq., Westerham; Edward Westall, M.D., Caterham.

Council of the Branch. The following gentlemen were declared to have been elected:—William Addison, F.R.C.P., Brighton; Frederick J. Brown, M.D., Rochester; John M. Burton, Esq., Blackheath; James Dulvey, Esq., Brompton, Kent; Frederick F. Giraud, Esq., Faversham; William Hoar, Esq., Maidstone; George Lowdell, Esq., Brighton; Albert Napper, Esq., Crawley; Frederick H. Sankey, Esq., Wingham; Charles Trustram, Esq., Tunbridge Wells.

New Members. The following gentlemen were unanimously elected members of the Association and of the Branch:—Dr. Allfrey, Chiselhurst; Dr. Saunders, Gravesend; Dr. Martin, jun., Rochester; Dr. J. V. Bell, Rochester; Dr. Kinnear, Melville Hospital.

Election of Officers. It was proposed by Mr. J. Cordy Burrows (Brighton), seconded by Mr. Pinching (Gravesend), supported by Mr. Sankey (Dover), and carried unanimously—

"That the annual meeting for 1864 be held at Brighton, and that E. L. Ormerod, M.D., be President-elect for the ensuing year."

Messrs. George F. Hodgson (Brighton) and F. Abell Humphry (Brighton) were chosen Vice-Presidents elect for the ensuing year.

On the motion of Mr. T. Heckstall Smith, seconded by Mr. Trustram, Mr. Peter Martin and C. Holman, M.D. (Reigate) were elected Joint Secretaries.

Donation. It was proposed by Mr. Sankey (Dover), and seconded by Mr. Trustram (Tunbridge Wells), and carried—

"That a donation of £10 : 10 be made to the Medical Benevolent Fund."

Medical Evidence. It was proposed by Mr. T. Heckstall Smith (St. Mary Cray), and seconded by Mr. J. Cordy Burrows—

"That the members of the South-Eastern Branch have seen with disapprobation much of the medical evidence which has been given in recent trials affecting the character, either moral or professional, of medical practitioners.

"That they consider it the bounden duty of medical men called as witnesses, whilst delivering themselves most fully of the truth as to facts, to speak with friendly caution on all matters not absolutely within their own cognisance; and if called upon to give an opinion based on hearsay or on hypothetical grounds, expressly to state that such an opinion is not to be taken as fact."

The motion was supported by Dr. Carpenter (Croydon), Mr. Pinching (Gravesend), and others, and carried unanimously.

Vaccination. Mr. Bottomley (Croydon) addressed the meeting on the vaccination question. He regretted that in the present day the question was in a state of confusion, disagreement, and uncertainty, which he attributed to the act of Lord Lyttelton. In 1854, he proposed that the Registrar-General should be placed at the head of the organisation for carrying out vaccination; that the fee of the vaccinators should be paid by certificate. He thought that a board, like a Board of Guardians, ought to have nothing whatever to do with the matter; for quarrelling with Boards of Guardians, as to whether the fee to be paid should be 1s. 6d., 2s. 6d., or more, appeared to him (Mr. Bottomley) to be a complete waste of time. But the act was left in the hands of the Poor-law Commissioners and Boards of Guardians who had to carry out its provisions. From the time of passing the act to the present, there had been no effort made to alter that state of things; and he was inclined to think that now was the time—when the panic arising from recent small-pox had scarcely subsided—for the medical profession, as a body, through the corporate institutions of the country, to put the case plainly and clearly before the Government, and show the necessity of passing an act taking vaccinations out of the hands of the Poor-law Board and the Poor-law Guardians. He proposed—

"That a committee be formed for the purpose of discussing the matter, and that the result of their deliberations be submitted at the next meeting of the South-Eastern Branch."

After some remarks from Mr. Trustram, Dr. Carpenter, and Dr. Sutherland,

Mr. Bottomley maintained that it was the duty of the medical profession to vaccinate without fee or reward. He never received a penny in his life.

Mr. Trustram (Tunbridge Wells) seconded Mr. Bottomley's proposal. He advocated the appointment of an impartial inspector of vaccination, whose duty should consist of giving certificates where he found vaccination had been successfully performed.

Dr. Carpenter (Croydon) was very glad to find that in some points his opinions were identical with those of Mr. Bottomley. He was glad Mr. Bottomley had introduced the question of vaccination to this meeting. The gentlemen present had no doubt seen the observations which had been recently made in the British Medical Journal, and which had made known to them that there had been a medical gentleman who had not acted in concord with his professional brethren. That question had been ably discussed by their Journal; and Mr. Bottomley's motion had been brought forward in such a manner that they could find no exception to it. He (Dr. Carpenter) only wished Mr. Bottomley had acted in the same manner elsewhere as he had done at that meeting. During the late epidemic in this country, small-pox became prevalent in Croydon, and in the course of twenty weeks twenty-five deaths occurred. Then the question arose, What was the cause of the spread of small-pox? The town was drained perfectly, the water was plentiful and beautiful; then why this epidemic? He answered this question at the Local Board of Health, and said that vaccination was not properly attended to. He said that the fee given to medical officers by the Board of Guardians was not sufficient to enable them to go and search out persons who had not been vaccinated. He said that the medical officer was bound by his contract to vaccinate every person who came to his house for that purpose, the fee being 1s. 6d.; but that he was not bound to go from house to house to find out cases, and that the fee was too small to induce him to do so. A member of the Local Board of Health thereupon moved a resolution that a communication go to the Board of Guardians calling their attention to the spread of small-pox, and expressing a hope that they would take some steps to carry out the Vaccination Act more effectually in the parish, and take into consideration the desirability of increasing the vaccination fees. When the communication from the Board of Health was discussed by the Board of Guardians, Mr. Bottomley attended the meeting, and there made the observations which had appeared in the Journal. There would never have been any quarrelling in this matter had Mr. Bottomley adhered to the views he had expressed at this meeting, and had he hung with the other medical men in Croydon, who were all unanimous as to the terms on which the contracts should be taken. He (Dr. Carpenter) was very pleased to find that Mr. Bottomley had now become

a convert to the opinions they had always held in Croydon; and there was no doubt if the medical men continued to hang together they could defy Boards of Guardians. He had great pleasure in supporting the proposition.

Mr. Heckstall Smith felt much obliged to Dr. Carpenter for the part he had taken in this matter; and, while he was willing to bear testimony to the zeal, intelligence, and activity of Mr. Bottomley to endeavour to give a status to the medical profession in some matters, he (Mr. Smith) could not go with him on that question. It gave him considerable pain to see in the Journal the observations made before the guardians at Croydon by Mr. Bottomley, who advised them to pinch the pocket at the expense of the public health, and to the disparagement of the profession. Mr. Smith, however, hoped all would go smoothly in Croydon, and that Mr. Bottomley would be true to himself, and give reasonable support to the profession, and not stand quietly by and hear a medical officer grossly insulted by guardians.

After some further discussion, the motion was put, and lost by a large majority.

At half-past four, the members adjourned, and visited the Castle and other objects of interest; and at half-past five, sat down to dinner at the Bull Inn. There they were joined by the Mayor of Rochester and the Rev. J. Conway, incumbent of the parish, and a very pleasant evening was spent.

READING BRANCH: ANNUAL MEETING.

The annual general meeting of the Reading Branch was held at the Council Chamber, Reading, on Wednesday, July 1st.

After the retrospective address of the Reading Pathological Society had been delivered by Mr. Marsh, the President, George Pound, Esq., of Odiham, took the chair, and in an able address reviewed the present position and prospects of the medical profesion.

Mr. Pound's address will be found at p. 32.

Officers. I. Harrinson, Esq., of Reading, was elected President; and N. Crisp, Esq., of Swallowfield, representative in the General Council. The Council and Honorary Secretary were reappointed.

Dinner. The members of the Reading Pathological Society and of the Branch afterwards dined together at the George Hotel, and spent a pleasant evening under the presidency of Mr. Pound.

Correspondence.

THE ELECTION OF COUNCILLORS AT THE ROYAL COLLEGE OF SURGEONS.

Sir,—A leading article in the last number of the British Medical Journal is devoted to denouncing, in very forcible language, the mode of conducting the elections into the Council of the Royal College of Surgeons. For the sake of the peace of mind of those Fellows (if there be any) who may be led by the strength of your rhetoric to fancy that there is really anything "contrary to common sense and fair play", demoralising in its action, and unrighteous in its consequences", in the system on which we vote, I am induced to pen these lines; assuring them that, if we descend to the plain regions of fact, we shall find that it is quite as simple, just, and efficacious as any that has hitherto been devised, and, moreover, precisely the same in principle as that upon which nine-tenths of the elections in this country, whether political, municipal, or social, are conducted.

There are, as you have pointed out, two methods by which the voting at such elections might be carried on: 1. Where, as at present, each elector *may* vote for as many candidates as there are vacancies; 2. Where each elector *must* vote for so many candidates, or not at all. Both systems can be shown, of course, to share in the imperfections incidental to all human institutions; but to suppose that the second is free from the objections which you have so vehemently and persistently urged against the first, is, I conceive, an utter fallacy. These objections amount to two. The first is, that by it "a majority of the votes of the Fellows present is not necessary to carry an election". This is confounding two different subjects. In any such elections there never is, nor has been, any question of absolute majority or minority among the whole number of electors, but simply one of the highest number of votes; otherwise elections would often be impossible, and the elected body would cease to exist, for want of the required but unattainable unanimity among the electors. The second method would do nothing to remedy this supposed evil. Take, for instance, this not improbable example. There are three vacancies to be filled up. Five candidates and two hundred voters come to the poll, giving in all six hundred votes. A. has 180 votes recorded for him; B. has 160; C. has 90; D. 86; and E. 84. According to all rules of common sense, A. B. and C. would be elected; but yet C., having only a *minority* of the whole number of electors voting for him, according to your principle, would not be eligible to serve. Your imaginary Fellow, voting for himself, must surely be rightfully elected, if, in "the favourable and quite possible circumstances" (!), no candidate is put forward who can obtain more than the one vote. He must be the *best* man, if there be no *better*. The vacancy has to be filled up; and the election would not be a whit more in accordance with common sense and fair play, if the seven hundred Fellows present are compelled to record a second vote for a candidate for whom they feel no interest. The case is like maintaining that a man who "walks the course" at an uncontested election cannot be righteously elected, because the whole constituency, not voting *for*, therefore voted *against* him.

Your second objection, that this method encourages "electioneering jockeying and trickery", is not in the least degree more applicable to one system than the other. A "plumper" for a favourite candidate would probably lead to a better result than the inevitable alternative of adding the names of the *least likely* candidates—a most dangerous electioneering game, but one which is sure to come largely into play when voting for as many candidates as there are vacancies is compulsory. I believe that, practically, the result would be precisely the same, whichever system is adopted. The same men would be elected, and there would be the same amount of electioneering tactics. For the eradication of the latter element, nothing but the honourable feeling of the constituency can be depended upon; and the machinery which already exists should, for the very reason of its existence, not be disturbed until it can be proved that a better might be substituted for it.

I am, etc., F.R.C.S.

July 1st, 1863.

THE TREATMENT OF BRONCHITIS.

Sir,—Having recently perused in the Journal a lecture on Capillary Bronchitis, in which the eloquent lecturer at page 554 seems to invite the comments of his professional brethren, as well as the concurrence of his hearers, I shall venture, with all the humility befitting a village apothecary of the old school, to assure him that, although I find no difficulty in concurring with him "that the fate of the poor Italian organ-grinder was sealed when or even before he entered the hospital," because the proverbial abstemiousness of his class, their habitual exposure by day to our (to ther

ungenial climate, half clothed, and their nightly shelter in loathsome dens, are pretty certain in time to reduce their power to resist the attacks of disease to its minimum, and thus to pave the way for speedy dissolution, as in the case related—yet I must protest most emphatically against his conclusion "that the treatment adopted in the case was theoretically correct". To say that a patient is suffering from acute bronchitis of three days duration is, I presume, equivalent to saying that the lining membrane of the lesser air-passages is to a greater or less extent in a condition of hyperæmia or congestion; that its sensibility is augmented; its secretion diminished or replaced by one preternaturally viscid; and, as a consequence of these morbid changes and possibly others, we find the patient suffering from a most distressing dyspnœa, an incessantly harassing dry cough, a quickened circulation, and all symptoms speaking as plainly as language can that the prompt relief of the patient is the imperative duty of the practitioner. Now let me ask, Were the medicines prescribed calculated to afford this relief? Was the ammonia, of which the ordinary effect is to increase the force and frequency of the pulse, likely to lessen the hyperæmia or the dyspnœa? Was the squill which dries the mucous membrane, or the senega, which both dries and irritates the mucous membrane, likely to alleviate the dry cough which incessantly tormented the patient? What benefit could reasonably be expected from chloric ether, although as a sedative it is found useful in spasmodic asthma, in the non-inflammatory irritable cough of children, and in hysteria when combined with a stimulant? Lastly, although nothing is better fitted than a turpentine liniment to relieve acute pains, commonly of brief duration, in the thorax and abdomen, who would not, where a lasting effect is desired, prefer the old-fashioned blister? And I may add, at the risk of being deemed hypercritical: Where is the patient suffering from acute bronchitis, who would not infinitely prefer pure air to an atmosphere loaded with the vapour of turpentine?

Every practitioner of the old school (and many, doubtless, of the new) is perfectly familiar with the steps usually taken to insure relief in acute bronchitis, when seen early; viz., venesection, or cupping between the shoulders or elsewhere, with the object lessening of hyperæmia and relieving dyspnœa; tartarised antimony in small doses, to quiet the circulation, and to promote easy expectoration; solutions of the neutral citrates, tartrates, or acetates of the alkalies, by way of febrifuge, in accordance with the teachings of experience, confirmed by the theory of Liebig, which is as plausible as any other, although ignored by the late Dr. Golding Bird in his lecture upon the *modus operandi* of acetate of potash in rheumatic fever; blisters, or counterirritation in some other mode; and lastly, after all inflammatory action has subsided and the expectoration is easy and too abundant, we may have recourse to the miscalled expectorants, squill and senega.

The experiment of Valentin quoted by Dr. Salter for that purpose, so far from proving that the abstraction of blood can be of little use in inflammations, has, when rightly appreciated, a precisely contrary tendency; for it shows that the abstraction of blood favours the rapid imbibition into the circulation of the weak solutions of the neutral vegetable salts generally prescribed, and which, as shown by Liebig, by combining with a part of the oxygen inspired, and being thereby converted into carbonates, both directly and indirectly render the blood less stimulating, and induce a condition more favourable to the patient. To conclude; is it not evident that after bloodletting we can, by medicine and an appropriate diet, certainly lessen the proportion which the fibrine bears to the serum of the blood, and by this attenuation lessen the intensity of inflammation when it exists, and render more rapid and easy the return to health. I am, etc., C. de Cinq Maisons.

Whittlesey, Cambridgeshire, June 19th, 1863.

NITRATE OF SILVER.

Letter from John Higginbottom, Esq., F.R.S.

Sir,—I think it very important to call the attention of surgeons to the superiority of the ordinary nitrate of silver over the new preparations which have been now some time in use. The new preparation, "Lunar Caustic Points, perfectly tough", is worthless as an application in surgical cases. It is not nearly so soluble as the old brittle stick of nitrate of silver, and has scarcely any power in checking and subduing inflammation, and useless in the cure of wounds. The same remarks apply to the cake and crystals of the nitrate of silver used for photographic purposes; which, although they may be more chemically pure, are much less efficacious for surgical purposes than the old preparation.

It is a remedy to which I called the attention of medical men thirty-seven years since, in an essay on the *Use of the Nitrate of Silver;* every succeeding year it has maintained its value in my estimation; but I fear that if the new preparations continue to be used, it will undeservedly fall into discredit.

The grounds upon which I have formed my opinions are these. I have used the new preparation for some time, and in cases where, from past experience, I looked forward with a certainty to successful results, I have been much disappointed, and the cause was to me then inexplicable.

To give a case. A medical friend had a severe puncture. I applied the nitrate of silver, with a conviction that he would have no further trouble with it. To my surprise, the application took little or no effect; surrounding inflammation followed; also of the absorbents. Further applications were made with the same nitrate of silver, but the inflammation continued its usual course, keeping my patient several days in bed; and afterwards it very slowly subsided.

Another patient had a severe contused wound on the middle finger of the left hand, from a fall. The nitrate of silver was well applied. I expected it would heal under an adherent eschar. That it did not do so, surprised and disappointed me. The wound remained some weeks in a painful and irritable state, and when at last it healed, it left an irritable induration with swelling. This I treated again and again with the nitrate of silver, without much benefit.

These and other cases I could relate (one especially, a formidable attack of erysipelas on the leg, which formerly I found yield to the application, entirely failed), led me to think there must be something wrong in the preparation of the nitrate of silver; and it occurred to me that the new preparation did not produce so much pain as the old did immediately on its application. I procured some of the old fashioned stick nitrate of silver. The first application on the case above mentioned did more in removing the irritable inflamed swelling in four days than all former applications.

From the experience I have had daily of the use of the nitrate of silver for so many years, I am convinced that no remedy of equal power has been discovered, if properly applied, in subduing external inflammation and healing wounds, although many remedies have been recommended in lieu of it.

In cases of extensive external inflammation, I would use a solution of four scruples of the old fashioned stick of nitrate of silver to four drachms of distilled water; in common cases of inflammation and wounds, the ordinary stick, as particularly directed in my last work, *Additional Observations on the Use of the Nitrate of Silver.* I am, etc.,

John Higginbottom, F.R.S.

Medical News.

Apothecaries' Hall. On July 2nd, the following Licentiates were admitted :—

Brend, Alfred, Middlesex Hospital
Harrap, George, Charing Cross Hospital

At the same Court, the following passed the first examination :—

Jeffery, Edward, King's College
Simpson, Spencer Henry, St. Bartholomew's Hospital

APPOINTMENTS.

Hughes, James S., M.D., appointed Professor of Surgery in the Royal College of Surgeons of Ireland, in the room of J. H. Power, M.D.

Hughes, Thomas H., M.D., elected House-Surgeon to the Chester General Infirmary.

Poor-Law Medical Service.

Curtin, Charles J., M.D., to the Kanturk Dispensary District of the Kanturk Union, co. Cork.

Smart, Francis W., M.D., to the Workhouse and the Ballymahon Dispensary District of the Ballymahon Union, co. Longford.

Vardy, Robert, Esq, to the Rothbury Eastern District of the Rothbury Union, Northumberland.

Waters, William, L.K.Q.C.P., to the Carbury Dispensary District of the Edenderry Union, King's County.

Indian Army.

Forbes, Deputy Inspector-General John, retired on full-pay, to have the honorary rank of Inspector-General of Hospitals.

Linlon, Deputy Inspector-General Cornelius C., retired on full-pay, to have the honorary rank of Inspector-General of Hospitals.

Morehead, Surgeon-Major Charles, retired on full-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

Royal Navy.

Bickford, Thomas L., Esq., Assistant-Surgeon, to the *Fisgard*.
Humphry, Robert, Esq, Assistant-Surgeon, to the *Meander*.
Walsh, J. C., Esq., Surgeon, to the *Pembroke*.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

Bott, T. B., M.D., to be Surgeon 8th Lancashire R.V.
Parsons, D. W., Esq., to be Surgeon 64th Lancashire R.V.
Ryan, W. B., M.D., to be Assistant-Surgeon South Middlesex R.V.
Winterbotham, W. L., M.B., to be Assistant-Surgeon 26th Somersetshire R.V.

BIRTHS.

Harries. On July 7th, at Shrewsbury, the wife of *John D. Harries, Esq., of a son.

Sansom. On July 2nd, at 8, Angell Terrace, Islington, the wife of *A. Ernest Sansom, Esq., of a son.

DEATHS.

Bell. On June 27th, in Edinburgh, Lucy Anne, widow of Charles W. Bell, M.D.

Borrett. On July 1st, at Castleton, Sherborne, aged 4 months, Joseph Turner, infant son of James Borrett, M.D.

Clark, John, Esq., Surgeon, at Weldon, Northamptonshire, aged 77, on July 1.

Hyde, Sidney, Esq., Surgeon, aged 23, on July 3.

MacIntyre. On July 1st, at Brighton, Mary W., widow of William MacIntyre, M.D., late of Harley Street.

Spencer, William, Esq., late Surgeon 5th Bengal Light Cavalry, at Bath, aged 68, on July 3.

Summers. On July 3rd, at Gillingham, Chatham, Anna, wife of John Summers, M.D., Surgeon-Major Royal Engineers.

Vaccination (Scotland) Bill. This bill was read a third time in the House of Commons on Monday last.

Vaccination (Scotland) Bill. Dr. Alexander Wood and Dr. Burt, of Edinburgh, last week had an interview with Sir George Grey and the Lord Advocate, on the subject of the Vaccination (Scotland) Bill.

Naval Medical Supplemental Fund. The amendments in the Naval Medical Supplemental Fund Society Winding-up Act, 1861, Amendment Bill were agreed to, and the bill was read a third time and passed, in the House of Lords, on Monday last.

Royal College of Surgeons. The annual election of officers of this institution took place on the 9th inst., on which occasion Mr. F. C. Skey, of St. Bartholomew's Hospital, was elected President, and Messrs. Hodgson and Wormald Vice-Presidents for the ensuing year. At this meeting of the Council, Messrs. Lane, Busk, and Hancock, the recently elected Councillors, were sworn-in and took their seats.

Enormous Tumours in a Cow. Mr. Reynolds, M.R.C.V.S. (Mansfield,) relates a case in the *Veterinarian* of the existence in a cow of three enormous tumours, weighing collectively upwards of twenty stone.

Southampton Medical Society. The annual *réunion* of this society took place on Thursday week; on which occasion the members, to the number of sixty-five, sat down to a cold collation in that part of the ruins of Netley Abbey known as the Abbot's Lodgings. Dr. Bullar, president of the society, occupied the chair. Previously to this, the members assembled at the Victoria Hospital, over which they were conducted by Inspector-General Dr. Anderson, Colonel Wilbraham, Dr. McLean, Professors Longmore, Parkes, Aitken, and other officers.

Death from the Stings of Bees. Two cases of death from the stings of bees have just occurred in France. At Pousthomi (Aveyron) a child three years of age, while alone in a garden, having approached too near a hive, was attacked by the bees and so severely stung as to expire shortly after. The concierge of Fort Belin at Salins (Jura), while occupied two days back in hiving a swarm of bees which had approached his residence, was also so much stung on the hands that he died within an hour after. Remedies were applied, but without avail.

The Hunter Memorial. The Committee of the American Medical Association on the Hunter memorial reported that the sum of 357 dollars had been raised, in one dollar subscriptions, towards the Hunter fund, a portion of which had been forwarded to London. The smallness of the contribution was imputed mainly to the fact that the monument would stand on British soil, and the indifference felt by England about the present national trial had checked enthusiasm. The report was contained in a letter from Dr. Bowditch, which was received and placed on file. It was also decided that the account be closed, and the balance forwarded to England. (*American Medical Times.*)

St. Bartholomew's Hospital. On the 2nd inst., at a meeting of the Common Council, the subject of the election of Mr. Cubitt, the late Lord Mayor, as President of St. Bartholomew's Hospital, was brought under consideration. At present, as for some time past, a fierce quarrel exists between the members of the corporation who are governors of the hospital on the one hand, and the donation governors on the other, as to the class from which the governing body at large shall elect their president, and the more interest attaches to the question from a belief that it affects all the royal hospitals of the city of London, richly endowed as they are, and not that of St. Bartholomew alone. (*Times.*)

Calomel for the Army. The Committee of the American Medical Association, appointed to make a report upon the recent order of the Surgeon-General, prohibiting the use of mercurials and tartarised antimony by the army surgical corps, made a majority report through Dr. Lawson, of Cincinnati, and an entirely antagonistic minority report by Dr. Woodworth, of Indiana. The former strongly favoured the use of these remedial agents in the army, and the latter as strongly discountenanced their use there. Each report was backed up by resolutions rigidly endorsing the language of the report. After an animated discussion, the motion was adjourned. (*American Medical Times.*)

Testimonial to Mr. Spencer Wells. On the 1st inst., a very handsome silver candelabrum, valued at £114, was presented to Mr. Spencer Wells at a meeting attended by a considerable number of the contributors to the testimonial. The following address, written by Dr. Conolly, was read :—"The friends who have the pleasure to present the accompanying testimonial to you are influenced not only by sincere personal regard, but by a desire to express their estimation of your long-continued services in the editorship of the *Medical Times and Gazette*. They are strongly impressed with a sense of the importance of the duties of an editor of a medical journal, and of the influence of the periodical press on the medical profession in general. The judicious and impartial selection of facts and observations, from whatever honourable quarter proceeding, the liberal appreciation of the literary efforts of medical writers, the direction of the public mind on questions interesting in regard to the public health or in relation to medical jurisprudence, and the promotion of the general interests of the medical profession, and of good and kind feelings among its members, are among the objects requiring the constant and vigilant attention of an editor, and their performance demands high qualifications of intellect, and a disposition to promote whatever is true and whatever is useful. His duty scarcely less requires a courageous determination to discountenance whatever is mean, and pretentious, and valueless. We are convinced that views of this character have animated you throughout your editorial labours; and it affords us much gratification thus to record the expression of our respect, and to express our continued good wishes for your professional success and your happiness." Mr. Spencer Wells, in reply, said that when he heard, soon after his retirement from the editorship of the *Medical Times and Gazette*, that some of his friends wished to present him with some testimonial of their regard, he was naturally very much gratified, but he expressed his strong desire that the testimonial should be in no respect a public one. He knew that the practice of presenting public testimonials to private persons had become absurdly common during the last few years. He thought that expressions of public gratitude should be reserved for great public benefactors; but he also felt that if gentlemen who had been associated with him as contributors to the journal which he had edited for more than seven years were kind enough to present him with some permanent record of their regard, he might accept their good-will offering, not only without impropriety, but with pride and great satisfaction. And when he found that one hundred and ten gentlemen, having among them men holding the highest rank in the profession, had contributed to this testimonial, without the publication of a single advertisement, but simply on receiving from one or two of his friends an intimation that there was an opportunity of joining in it if they wished to do so—he felt that such a testimonial from such men was indeed to be prized and handed down to his children as a most honourable heirloom. The value of the gift was greatly increased by the address which accompanied it; and the value of the address was very greatly increased by the fact that it was written by one so much loved and revered by his brethren as his kind friend Dr. Conolly. Mr. Wells also expressed the hope that this would not be the last testimonial to a medical editor. Few who had not tried had any idea of the amount of labour and anxiety involved in the literary management of a weekly journal; yet there was no labour so generally ill-rewarded, or so often followed by the reverse of reward. If some such tokens of approval were a little more frequent there would be more encouragement for men of ability and high character to undertake the serious responsibilities and anxious cares of journalism. The testimonial is a massive candelabrum of solid silver, and on the base is the following inscription, also from the pen of Dr. Conolly: —"Presented to Thomas Spencer Wells, F.R.C.S., by one hundred and ten contributors and subscribers to the *Medical Times and Gazette*, on his retirement from the editorship, 1862, as a testimony of their estimation of his services to medical science, and of his honourable character."

Royal College of Surgeons. The annual election of Fellows into the Council of this institution took place on the 2nd instant, and at no time since the charter was granted to the College, empowering the Fellows to elect from among their own body representatives for seats in the Council, has there been so much interest excited as was then exhibited. For some weeks past the medical journals have been suggesting to the constituents the propriety of infusing a little new blood into the Council, and of breaking through the usual routine plan of re-electing the retiring candidates; hence the appearance in such large numbers of provincial and metropolitan Fellows as were assembled in the noble library of the College to elect three councillors in the vacancies occasioned by the retirement in the prescribed order of Mr. Cæsar Henry Hawkins, Sergeant-Surgeon to Her Majesty, and Mr. Thomas Tatum, Surgeon to St. George's Hospital, and the resignation of Mr. William Coulson. To fill the chair of the last named gentleman, and in opposition to the reelection of the former, the following gentlemen offered themselves—viz., Messrs. S. A. Lane, Surgeon to St. Mary's Hospital; G. Busk, an ex-Professor of the College, and Surgeon to the Dreadnought Hospital Ship; T. B. Curling, Surgeon to the London Hospital; and H. Hancock, Surgeon to the Charing-Cross Hospital. The President, Mr. Luke, accompanied by the Vice-Presidents, Messrs. Skey and Hodgson, the Mace-bearer, and other officials of the College, entered the library about two o'clock, when the first named functionary shortly addressed the assembled Fellows, pointing out the object of the meeting, and calling upon the Secretary to read those portions of the charter and bye-laws relating to elections into the Council. This having been done, the President invited the Fellows to commence the voting, which was by ballot, and conducted in the following manner. Each elector was provided with a list of the candidates, from which he removed the names of those for whom he did not vote, taking care not to leave more than three; the paper thus corrected was deposited in a large box provided for that purpose, in which the President and Vice-Presidents had previously deposited their voting papers. At the conclusion of this part of the proceedings scrutineers were appointed to take down the votes, when the Chairman announced that the choice of the Fellows had fallen upon Messrs. Lane (who polled 199 votes), Busk (169 votes), and Hancock (153 votes.) In the evening the Fellows dined at the Albion Tavern, under the presidency of Mr. Turner, of Manchester, who was surrounded by some of the most distinguished provincial and metropolitan Fellows; among the former were Dr. Wiblin, of Southampton; Messrs. Southam, Wilson, and Hutchinson, of Manchester; Sankey and Ottaway, of Dover; Jackson, of Sheffield; Smith, of Leeds; Harrison, of Chester; Cardell, of Salisbury; Crabb, of Poole; Carden, of Worcester; and Garstang, of Clitheroe. Among the metropolitan Fellows were Sir Rutherford Alcock, Her Majesty's Minister at Japan; Sir John Fisher; Messrs. Toynbee, Hancock, Hird, Luke, President, and Hodgson, Vice-President of the Royal College of Surgeons, Adams, Moore, Paul, Shaw, etc. Mr. Arnott, a late President of the Royal College of Surgeons, has consented to take the chair next year. Before separating, a cordial vote of thanks was offered to Mr. Callender, of St. Bartholomew's Hospital, the honorary secretary, for his indefatigable exertions in promoting these interesting meetings of the Fellows of the Royal College of Surgeons of England.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Ethnological Society.

THURSDAY. Zoological Society.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JULY 4, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys .. 995 / Girls .. 942	1937	1187
Average of corresponding weeks 1853-62		1728	1142

Barometer:

Highest (Sat.) 30.117; lowest (Sun.) 29.784; mean, 29.973.

Thermometer:

Highest in sun—extremes (Wed.) 111 degs.; (Fri.) 96.6 degs.

In shade—highest (Fri.) 74.2 degs.; lowest (Wed.) 45.5 degs.

Mean—59.4 degrees; difference from mean of 43 yrs.—2 degs.

Range—during week, 28.7 degrees; mean daily, 22.3 degrees.

Mean humidity of air (*saturation*=100), 70.

Mean direction of wind, W.S.W.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THERAPEUTICAL INQUIRY. No. III. OIL OF MALE-FERN IN TAPEWORM.—Dr. Fleming has received schedules from:—Dr. C. R. Bree, Colchester; Dr. W. Anderson, Birmingham; W. J. Harris, Esq., Worthing; Dr. Charles Barham, Truro; William Sankey, Esq., Dover; Dr. Arthur Ransome, Manchester; John Cornbill, Esq., Birmingham; John R. Humphreys, Esq., Shrewsbury; A. G. Osborn, Esq., Northampton; J. Kent Spender, Esq., Bath.

Temple Row, Birmingham, July 2nd, 1863.

PHYSICIANS' FEES.—SIR: In reference to the correspondence between Dr. Vose of Liverpool and the executors of the late Mr. Grant, animadverted on in your last number, I feel called on to state:—

1. That I knew nothing whatever of this case and correspondence, till a printed copy of the latter reached me a few days ago by post.

2. That the introduction of my name into that correspondence has been not only without my authority but without my knowledge.

3. That the "tariff" to which I alluded in my private correspondence with Sir Thomas Gladstone, in 1852, had reference to visits *moderately* "distant" from town, and would not apply to such special services as those of Dr. Vose, in the case now in question. I am, etc., JAMES MILLER.

29, Charlotte Square, Edinburgh, July 6th, 1863.

[Professor Miller's statement is fully confirmed by other correspondence which we have received from Edinburgh. We are assured that the tariff of fees which Sir T. G[illegible]one stated in his correspondence with Dr. Vose to have been [illegible] him by Mr. Miller of Edinburgh, as the established medica[illegible] for journeys in Scotland, is not the tariff accepted by the p[illegible]s and surgeons of Edinburgh. Sir T. Gladstone made a[illegible]one blunder in reference to the fee of Dr. Latham; and, [illegible]ssed, he has also made a similar blunder in reference [illegible]le of fees. EDITOR.]

SIR,—The fee paid to Professor Miller by Sir T. Gladstone is not regarded here as the proper fee of a consultant of the highest standing for a country visit. It is undeniable that the fee he got for his visit to Fasque was ridiculously small, and can only be accounted for by the delicacy that he and almost every one similarly circumstanced must frequently have felt in positively stating the amount—and there can be no doubt that on the occasion referred to by Sir Thomas Gladstone (even on Sir Thomas's own showing), he must have been taken very sharply at his word. And, surely, the Professor's name must have been used on this occasion without his sanction having been previously obtained or the circumstances of the case fully explained. At all events, from ample knowledge and some personal experience, I am justified in saying that I know no one here who, with any pretensions to position, would not (except for benevolent reasons) regard £30 for the greater part of two days absence from Edinburgh as a very insulting *honorarium*.

There can be no doubt that, in the case of a distant country visit, there ought not to be any fixed fee. Every man should be allowed to name his own estimate; and if the patient's friends reckon it too high, they can decline his services. If they have not made the requisite previous inquiry, Dr. Watson's view is the correct one—they should pay freely and fully what is asked.

It is undeniable that most physicians in considerable practice would rather not leave home, and generally sacrifice much when they do; and it is too much to expect that when they do, they are to be paid in a ratio not much above their domestic receipts.

It is quite refreshing to see how actively and energetically you have taken up the cause of professional fraternity, and how entirely your brother journalists have joined with you on this occasion. Dr. Vose's fee may have been either too high or too low; as to that people may differ. But there can be no doubt or question among medical brethren that the various offers of the trustees were unbecoming him to accept; and we should be all grateful to him for rather surrendering all claim to remuneration than his right as an independent physician to insist on what he considered his due. I am, etc., F.R.C.P.E.

Edinburgh, July 6th, 1863.

COMMUNICATIONS have been received from:—Mr. BENJAMIN STARR; Dr. FLEMING; Dr. LATHAM; Dr. W. P. STIFF; Mr. S. W. FEARN; Dr. J. B. PITT; Dr. COPEMAN; Dr. DURRANT; Dr. HYDE SALTER; Mr. R. MARTIN; Mr. T. W. CROSSE; Dr. RANKING; Mr. W. EDDOWES; Dr. BREE; Dr. H. GOODE; Mr. W. ADAMS; Mr. J. Z. LAURENCE; F.R.C.S.; Mr. HIGGINBOTTOM; Mr. GEORGE POUND; Mr. MILLER; Mr. J. D. HARRIES; F.R.C.P.E.; COMMON SENSE; Mr. C. H. ROPER; Mr. J. W. BAKER; Mr. C. P. COLLYNS; and R. W.

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The Queen's Hospital, Birmingham.

—ELECTION OF SURGEON.—A SPECIAL GENERAL MEETING of the Governors of this Charity will be held in the Board Room at this Hospital, on TUESDAY, the 28th day of July next, at Twelve o'clock at Noon, for the purpose of ELECTING a SURGEON, Mr. SANDS COX'S period of office having now expired.

Candidates are required to forward their Testimonials, under cover, to the Secretary, at the Hospital, on or before Tuesday, the 21st July. DAVID MALINS, Jun., Secretary.

Board Room, June 19th, 1863.

The Queen's Hospital, Birmingham.

— ELECTION OF PHYSICIAN. — A SPECIAL GENERAL MEETING of the Governors of the Queen's Hospital will be held in the Board Room of the HOSPITAL, on Tuesday, the 28th day of July next, at Twelve o'Clock at noon, for the purpose of ELECTING a PHYSICIAN to fill the Vacancy caused by the resignation of Dr. Maule Sutton.

Candidates are required to forward their Qualifications and Testimonials, under cover, to the Secretary, at the Hospital, on or before Tuesday, the 21st of July.

DAVID MALINS, Jun., Secretary.

Board Room, June 19, 1863.

COPY OF BYE LAW.

No Gentleman shall be eligible to the office of Physician or Assistant-Physician who has not taken a Degree in Medicine at Oxford, Cambridge, or Dublin, or the Doctorate in Medicine at London or Edinburgh, or who is not Fellow of the Royal College of Physicians of England, or Fellow of King and Queen's College of Physicians, Ireland, or Fellow of the Royal College of Physicians, Edinburgh.

Bath Mineral Water Hospital.

—The Situation of RESIDENT APOTHECARY having become Vacant by the resignation of Mr. HENRY H. PARRY, the Committee will proceed to fill up the Vacancy on Thursday, the 6th of August.

Candidates must have Diplomas of the Apothecaries' Company and College of Surgeons, and are requested to send Testimonials of their professional abilities and moral character (under cover) to the Registrar of the Hospital, before Twelve o'Clock on Thursday, the 30th of July.

The Salary is £100 per Annum, with Board and Apartments in the Hospital. BENJAMIN STARR, Registrar.

July 6th, 1863.

Salop Infirmary.—To the Pupils

OF MEDICAL MEN.—WANTED a RESIDENT CLINICAL ASSISTANT.—The duties will be to Dress in the Wards, and assist generally, under the direction of the Medical Officers and House-Surgeon of the Institution.

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Applications to be addressed to the House-Surgeon, who will furnish any information that may be required.

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Salop Infirmary, July 7th, 1863.

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Turner, Thomas, Esq., Manchester	3	0	0
Vinen, E. Hart, M.D., Chepstow Villas	1	1	0
Wades, T. W. B., M.D., Blackmore, Essex	0	10	6
Westall, Edward, Esq., Croydon	1	1	0
Wilson, Erasmus, Esq., F.R.S., Henrietta Street	5	5	0

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JOHN B. WALKER, Hon. Sec. and Treasurer,
17, Clifton Gardens, Maida Hill, W.

Royal Medical Benevolent College, Epsom.

—The Council have the pleasure to announce that FOUNDER'S DAY will be celebrated at the College, Epsom, on Wednesday, the 22nd of July inst. Divine Service will commence at 1.15, and the Speeches, etc., at 2.30.

No one will be admitted without a ticket. Governors of the College, and Parents of Scholars, can obtain tickets by application to either the Rev. the Head Master, at the College; or to the Secretary, at the Office in Soho Square.

By order of the Council,

ROBERT FREEMAN, Secretary.

Office, 37, Soho Square, London, July 8th, 1863.

A Lecture

ON THE

ACUTE NECROSIS OF GROWING BONES.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN.

BY

THOMAS SMITH, F.R.C.S.,

ASSISTANT-SURGEON TO THE HOSPITAL.

I HAVE chosen for the subject of my lecture to-day a disease, with the ordinary progress and consequences of which you are all sufficiently familiar in the full-grown adult, but which in children and growing adults presents certain peculiarities, which I cannot but think worthy of your attention.

The acute necrosis of young children is the disease which, perhaps, beyond all others, has most impressed me as deserving of more notice than it has hitherto met with; and that on account of its frequency, the serious consequences it produces, and the want of a definite or detailed account of it in the surgical treatises of the day. The most complete—and, so far as I know, the only—history of this affection is to be found in Mr. Holmes's article on the Diseases of the Bones, in the third volume of his *System of Surgery*.

As most of you are aware, the increase of the body in height is mainly dependent upon the growth of the bones of the lower limb and of the bodies of the vertebræ. This growth of the femur and tibia in a longitudinal direction is due to the continual increase and synchronous ossification of the layer of cartilage separating the epiphyses from the diaphyses of these bones; while the spinal column adds to its length by the growth and ossification of the cartilage lying between the bony body of the vertebra and the interarticular fibro-cartilage, and subsequently by the formation of a secondary centre of ossification at the upper and lower rim of the body of each vertebra.

Of course, the increasing depth of the pelvis and the growth of the tarsal bones add somewhat to the general stature; but I repeat that the chief additions to the length of the human body are made at the epiphysial lines of the bones of the lower limb and at those of the bodies of the vertebræ.

The growth of the spinal column in length may be roughly but strikingly illustrated by comparing its increase with that of the spinal cord, and noticing the degree of obliquity of the roots of the lower lumbar nerves. The point at which each nerve leaves the spinal cord indicates the part of the cord which was originally opposite the foramen, out of which the nerve leaves the spinal canal; and the distance between the point of exit from the cord and from the canal shows how much the spinal column has outgrown the spinal cord in that region. (See Humphry, *On the Human Skeleton*.) At the third month of fœtal life the spinal cord reached as low as the last bone of the sacrum; in the adult, it extends only as low as the second lumbar vertebra. But this growth of the spinal column, great as it is, is far exceeded by that of the femur; which of all the long bones is the first to show an epiphysis or secondary centre of ossification. Indeed, at birth, the only epiphyses which are formed among the long bones of the body are those at the lower end of the femur and at the upper end of the tibia; and, in accordance with the general rule with regard to epiphyses, that those first formed are the last to disappear, this lower epiphysis of the femur is the last to ossify to its corresponding shaft—remaining separate until about the twentieth to the twenty-fifth year.

From tables constructed by Dr. Humphry, to be found in his work *On Osteology*, it appears that the relative lengths of the spinal column and the femur at birth may be stated as 7 for the spine to 4·3 for the femur; while, when growth is just complete, the spine stands at 18·5 to 15·8 for the femur. Thus, while from birth to manhood the spine has grown a little more than its own length and a half, the femur is three and a half times as long as it was at birth.

From the same source, we can gather that at birth the femur forms 22·94 per cent., or nearly a quarter of the whole length of the body; in adult life, it forms 27·51 per cent. of the same; while the spine at birth is 31·48 per cent., in adult age 34·15 per cent. of the whole body.

To further illustrate the great activity of growth in the epiphyses of the femur, let me remind you that the growth of the spinal column is carried on at twenty-four different ossific centres; that is, at the central bony nucleus in each vertebra, while the longitudinal increase of the femur takes place but at two points, the upper and lower epiphysial lines.

I have ventured to occupy your time with these details, as I believe their consideration may help to explain the frequency of necrosis and other allied affections in certain bones of children and growing adults. It is in these parts of the osseous system where are found separate centres of vitality and growth, that disease is most likely to occur; and the more active the growth at any one point, the more prone to disease will that point be. In the long bones, or those parts of them covered by periosteum; and where the compact structure predominates, or where they are exposed to changes of temperature and external violence—the disease of the bone will generally be sudden in its access and rapid in its progress, and will quickly produce those changes which we sum up under the term necrosis; while, if the bone be chiefly composed of cancellous tissue and surrounded by soft parts; if it be but little invested with periosteum; and be, from its position, protected from external violence and changes of temperature—the disease will be gradual in its onset, insidious in its progress, and will more slowly produce that gradual destruction of the osseous tissue termed caries.

To quote a few examples in illustration of my meaning, I would point to the bodies of the vertebræ, which, from their position and connection with surrounding parts, will, if my statement be true, be liable to caries, and but little exposed to necrosis. In the last two years, I have collected, from my out-patients' books, ninety cases of caries of the bodies of the vertebræ, and all well marked instances of the disease. I have never seen, and probably you have never seen, a case of necrosis of the same bones.

Again, it is very uncommon to meet with an instance of acute necrosis of the head of the femur—though I have known the occurrence of such an affection—and this is as one would expect from the position and connections of this part of the bone; while, during the last two years, fifty cases have come to this out-patients' room, of hip-joint disease, where there was evidence of a carious condition of the head of the bone. On the other hand, the shaft and lower end of the femur are commonly enough attacked by necrosis. Again, I would remind you of the extreme infrequency of necrosis of the bones of the tarsus and carpus; of their liability to caries; of the liability of the phalanges of both fingers and toes to necrosis; of their general exemption from caries.

This difference in the liability of bones to be attacked by one of the two diseases, necrosis or caries, seems to depend (I repeat)—

1. On the composition of the bone, whether the cancellous or compact structure predominate;

2. On the position of the bone, whether it be protected from external violence and changes of temperature, or not;

3. On the presence and extent of, or the absence of, a fibrous periosteal investment.

To both necrosis and caries, the bones of children and growing adults are particularly liable; and I believe this liability is due to the increased vascularity and sensibility of these parts during their period of growth and development; rendering them highly resentful of external injuries, and prone to serious disturbances in their circulation, when exposed to extremes or sudden variations in the external temperature.

If any one will take the trouble to examine the membrane covering one of the long bones of a child, in its soft, vascular, and almost succulent texture, and in the ease with which it is separable from the bone, he will scarcely recognise its identity with the dense, dry, and tightly clinging, fibrous periosteum of a full-grown adult, from which it differs in texture almost as much as does a mucous from a serous membrane. During the last years of growth, and the early period of manhood, when growth has ceased, the soft, vascular, and rapidly ossifying structure forming the deepest layer of the periosteum, disappears; the membrane itself becomes thinner, from ossification of its deeper layers; it is denser, and more tightly stretched over the subjacent bone, with which its vascular connections are now less intimate, the blood-vessels having diminished both in number and size.

It is to this vascularity of the deeper periosteal layer in young persons that I would direct your attention, since it is this that peculiarly predisposes them to subperiosteal effusions from slight external causes—a condition, as I hope to show you, always imperilling the vitality of the bone, and not unattended with danger to the individual.

[*To be continued.*]

A Capital Opening for a Physician. At 2 P.M. this morning, a noted physician of Carlisle reached Harrisburgh, Pennsylvania, in a buggy, having left that place two hours previously under the impression that the rebels were within one mile of him. He abandoned his house, furniture, and property of all description. (*Telegram.*)

Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VII.—On Pleurisy. (*Concluded.*)

Case II. *Case* III. *The Pain of Pleurisy. The Diagnostic Bearings of Pain in the Side. The Nature of Pleuritic Pain; its Non-dependence on Friction; its Non-coincidence with the Inflammation; is probably Reflex. The Diagnosis of Pulmonary from Costal Pleurisy. Important Part which the Inflammatory Results play. The Pathology of Catarrhal Pleurisy. Prognosis. The Persistence of Pleuritic Friction. What determines the divers Results of Pleurisy? Treatment.*

Case II. Sarah Russell, aged 19, presented herself among the out-patients at Charing Cross Hospital, May 2nd, complaining of severe stitch in her side, just under the right breast. It is much aggravated by attempting to take a deep breath; indeed, the pain is so great on trying to make a full inspiration that it is almost impossible to do so. She cannot lie on her right side. She dates the pain from a severe cold she caught on the night of the illuminations celebrating the Prince of Wales's marriage. This cold was attended with shivering, pains in the limbs, feverishness, and cough. A few days later the pain in the side was superadded, and has not left her since. She has now had it for three weeks.

On examining the chest, a strong pleuritic friction was heard at the seat of the pain, at the termination both of inspiration and expiration, especially the former. In every other respect the sounds of the chest were natural. There was no fever; the patient was pale and weak, with a depressed and rather anxious expression. I ordered perfect rest, the infriction of a sedative liniment, and internally opium, chloric ether, and quinine. I advised this patient to come into the hospital, but she refused.

A week afterwards she presented herself again, and reported that the right side was quite well, but that the pain had moved to the left side. Bearing in mind the physical evidence of the organic nature of the cause of the pain, I felt rather sceptical of this migration. On applying my stethoscope to the original seat of the sound and pain I found that all trace of rubbing was gone. But what was my surprise, on applying the stethoscope to the opposite side, to find an exactly similar friction-sound in an exactly corresponding situation! So that while the pleurisy, with its results, had been vanishing on one side it had been developing itself on the opposite. The two points, right and left, where the friction was heard, were exactly symmetrical; its disappearance on the right side was complete—not a trace was left; whilst on the left it was even louder than it had been on the right. The patient appeared to have caught no fresh cold; in her general condition she was better; and, had it not been for the pain, would have considered herself well, except that she was weak. She still refused to come into the hospital, and I prescribed the same treatment as I had done before. Since that time I have not seen her.

Case III. Thomas Wingall, aged 17, a tall, well-made youth, with very little aspect of illness about him, a but-

cher by trade, and in his occupation much exposed to the weather; temperate.

Three weeks ago he caught cold; had headache, and vomited, coughed, and spat. Five days after he was attacked with pain under his right scapula, passing along the axilla to under the right breast, and aggravated by taking a deep breath and coughing, but not by movements of the arm or body. He was obliged by the pain to lie on the opposite side, although the right side was that on which he was accustomed to lie. The pain was the most severe the first two days; since that it has gradually become less severe, especially in the day. It is worst in the morning after he wakes until after he is up; it then gets better throughout the day, and comes on again in the evening, particularly on going to bed. He went on in this way for a fortnight, and then came to me, May 15th, among the out-patients at the hospital.

On examining his chest, I immediately found loud rubbing-sound in the upper part of the right mammary region, the most intense above and to the inner side of the right nipple, but extending thence about two inches upwards and inwards over the inner extremities and cartilages of the second, third, and fourth ribs. Sound audible at the termination both of inspiration and expiration, especially inspiration; the intensity of the sound proportionate to the length and depth of the respiratory act. The fremitus at the termination of each inspiration (especially if deep) distinctly perceptible by the hand. He eats, drinks, and sleeps perfectly well, and has done so since the first day or two of the attack, and he has not laid by from his work for a single day. Pulse 80; respiration 18. The treatment consisted of local sedative, combined with iodine, and internally of iodide of potassium, quinine, and iron. As much rest as possible was enjoined.

May 20th. The pain is nearly gone; what little there remains now is chiefly felt beneath the scapula. Friction as loud as ever; its maximum intensity at the junction of the bone and cartilage of the third rib.

You will observe that in all three cases the one circumstance that brought the patient to the hospital was pain in the side; and pain of a peculiar character—severe, circumscribed, stabbing, and greatly aggravated by inspiration. In Franklin's case, as we have seen, this pain was of the most violent kind, resembling the plunges of neuralgia more than anything else. Now such a pain as this almost always accompanies pleurisy; it is rare to find pleurisy without it; and hence when such a pain is present pleurisy is the thing one always thinks of and looks out for. But pain in the side may arise from fifty causes besides pleurisy; and since some of these are very trifling, while pleurisy is often a grave affection, the diagnosis of lateral pain frequently becomes a very momentous as well as interesting question. How then, in any given case, can we ascertain if pain in the side is due to pleurisy or not? I will endeavour to show you as clearly as I possibly can. But I must admit that the diagnosis is sometimes difficult.

If physical signs show the anatomical results of pleurisy to be present, then pleurisy clearly exists or has existed, and the pain in the side is probably due to it.

But supposing there are no physical signs of pleurisy, is the pain on that account non-pleuritic? Certainly not. I believe it perfectly possible for pleurisy to be present and yet not reveal itself by any physical signs whatever; either because the inflammation is not intense enough to give rise to anatomical changes sufficiently marked to reveal themselves by physical signs, or because the stage of the inflammation is too early and the time has not yet arrived for the development of those changes. In such a case as this how are we to determine whether the pain points to pleurisy or not?

If there are other signs of lung mischief such as is often associated with pleurisy—as, for example, pneumonia, or tubercle, or cavity—then the pain is probably pleuritic.

If pressure *between* the ribs produces the pain, while pressure *on* the ribs does *not*, if inspiration is the great aggravator of the pain, if there is cough, if there is fever and much constitutional disturbance, and if the pain is circumscribed and a little without or below the nipple, then it is probably pleuritic, although there may be an entire absence of all physical signs of lung-disease.

If the pain is very severe and the pulse is unaffected, the pain is *certainly* (I think I may say) not pleuritic.

If moderate pressure *over* a rib, as well as *between* the ribs, produces the pain, the pain is not pleuritic.

If the movement of certain muscles which could not affect the pleura produces the pain, especially if there are other evidences of rheumatism, the pain is not pleuritic. Only yesterday we had two cases in which the diagnosis turned upon this point; contraction of the *latissimus dorsi*, that could not possibly have been appreciated by the pleura, gave rise to the pain in both cases. The verdict was rheumatism.

With regard to the influence that the evidence of rheumatism has upon the diagnosis, it must be admitted that it cuts both ways. For while rheumatism is one of the commonest causes of lateral pain simulating pleurisy, it is also, in its acute and febrile form, a very common cause of pleurisy itself; so that while the evidence of its presence might suggest the non-pleuritic nature of the pain, on the other hand it would afford an explanation of, and in some cases almost constitute a presumptive proof of, its true pleuritic character.

Doubtless, the case the most difficult of solution is the alternative between pleurisy and rheumatism of the intercostals. I have more than once been puzzled with it myself, and I have seen other and able men puzzled with it. There is in both cases the same superficial breathing, the same "stab" on attempting to take a full inspiration, the same lateral *decubitus* on the unaffected side, the same tenderness in the intercostal spaces. The rules of diagnosis that I have just mentioned to you will generally solve the mystery, but the most careful scrutiny may leave the question undecided.

The nature of this pain is no doubt the same as that of all other inflammatory hyperæsthesias, and, like them, the principal thing that aggravates it is mechanical disturbance; hence the intolerance of pressure and of stretching, hence the superficial breathing and the *decubitus* on the sound side. I do not believe that the friction of the roughened surfaces has anything to do with the pain, for two reasons: first, because you may have, as shown in the case of Wingall, pleuritic rubbing continuing after the pain has ceased, and when nothing is felt by the patient beyond a sense of the friction; and secondly, because the pain may be severe where the existence of effusion in considerable quantity prevents the contact of the two pleural surfaces. It has been said

that as soon as effusion takes place the pain ceases. This is not true. In the case of Franklin the pain was of the most severe kind that I think I have ever witnessed in any case of pleurisy, while the pleural cavity was full of fluid—so full as to preclude all possibility of friction.

Does the seat of the pain coincide with the seat of the inflammation? As far as always occurring on the same side goes, I think it does. But I doubt if it does further. Certainly the seat of pain does not coincide with the seat of the greatest friction-sound. Thus, in the case of the lad Wingall, the maximum friction was about the cartilage of the third rib, where there was no pain; while the chief pain was at the inferior angle of the scapula, where there was no rubbing. Moreover, there is a suspicious constancy about the seat of pleuritic pain, which cannot be explained by a similar constancy in the seat of the inflammation. We know from *post mortem* evidence that all parts of the pleura are liable to inflammation, while the seat of pleuritic pain is not liable to equal variety. For the seat of pleurisy there is no rule; for the seat of pleuritic pain there is a tolerably well marked rule:—beneath the nipple, at the inferior angle of the scapula, on the acromion, and beneath the false ribs, are its characteristic situations. Moreover, some of these situations are beyond the limits of the pleura, as on the acromion, and in the interval between the last rib and the crest of the ilium, where the chief pain in Franklin's case was felt. Moreover, the seat of pain may be covered with the finger when *post mortem* appearances show that the implication of the pleura has been almost universal. From all these considerations, I am inclined to think that pleuritic pain, as far as its distribution is concerned, is chiefly reflex; and that the constancy of its situation represents some law of reflex distribution, analogous to that which makes bronchial pain sternal, and colic pain umbilical, whatever may be the exact seat of the source of irritation.

I have often asked myself the question, in cases of pleurisy, whether both costal and pulmonary pleuræ were affected, or only one, and which; and if there were any means of diagnosing this point. Is it possible to answer this question? I think, to a certain extent, it is. I think one surface may be affected without the other; and certainly both may be affected at once. I think, if there is pleuritic effusion, and pressure between the ribs at the seat of pain increases the pain, that the costal pleura is affected. I think, on the other hand, that if, under such circumstances, there is no pain on pressure, the costal pleura is not affected. I think that if pneumonia coexists with the signs of pleurisy the implication of the pulmonary pleura is certain. I think that in all cases of pleuritic rubbing, both surfaces are certainly affected; perhaps one primarily, but *both* ultimately. In cases of pleuro-pneumonia in which there is friction-sound, the pulmonary pleura is probably affected first; and when that has been roughened, a similar state on the opposite surface of the costal pleura is set up by the chafing produced by the already roughened lung-surface. In pleuritic rubbing produced by traumatic injury of the thoracic parietes, the same events probably take place in a reversed order.

Observe the important part which the nature of the anatomical result of the inflammation plays in these cases. In the cases of Russell and Wingall, when the febrile stage of the cold passed off nothing remained but the inconvenience and annoyance of the stitch in the side. But Franklin's catarrhal attack left him not only with the pain, but with one lung instead of two, with the incubus of a pleura-full of fluid upon his mediastinum and heart, and with all the circulatory and respiratory derangement and distress that must result from such a state of things. We see from this how, when hydrothorax is developed, it comes to constitute the substantive disease; —the pathology is lost, the morbid anatomy is everything.

What is the nature of the pleurisy in these cases? Some, no doubt, would say they are idiopathic. But I think, without adopting Serjeant Shee's definition of the word *idiopathic*,* I may show you that it would not be fair so to call them. It is quite clear that in all the cases the pleurisy was due to cold. Is this fact inconsistent with the general proposition with which I commenced my lecture—*that serous inflammations preeminently point to states of blood-poisoning?* I think not. I think, on the contrary, that everything both in the etiology and clinical history of catarrh shows it to be a veritable toxhæmia —a state of blood-contamination by a special *materies morbi;* and therefore pleurisy from catarrh is but an example of a serous inflammation from a blood-poisoning. I do not see how it is possible to give any other reading to the phenomena of catarrh: —rigors, lassitude, headache, subjective pains in back and limbs, accelerated and enfeebled heart's action, loss of appetite, thirst—all the symptoms, in fact, of fevers of blood-origin; secondly, certain local inflammations of glandular or quasi-glandular parts; and thirdly, all this supervening on the suppression of the function of an eliminating surface which, taken in the aggregate, constitutes one of the largest glands of the body. And pleurisy is not the only serous inflammation that catarrh will produce; I am quite satisfied that I have seen, on three or four occasions, catarrhal peri- and endo-carditis. And, if you will not accuse me of reasoning in a circle, I will say that, if I wanted a clinching and convincing proof of catarrhal fever being a true blood-poison state, I should find it in its tendency to give rise to serous inflammations.

The *Prognosis* in all these cases is entirely favourable. About the cases of the girl and lad, in which there was no effusion, there has been from first to last peculiarly little besides the local condition. That local condition has never been of a serious character. In the case of the girl, the pleura of the left side has merely to resume the state that the right pleura has already resumed, and which a few days has sufficed for it to resume, for her to be well. In the boy, as far as one can judge, the smoothing of the membrane will be a slower process. The man's case, as we have seen, is rapidly improving day by day—each day the physical signs mark a subsidence in the effusion. It is now only a week and a day since I first listened to the chest and found, in the right half of it, apparently *serum, et præterea nihil;* and now there is but a small quantity in the most dependent part of the pleural cavity, and the lung has all but reoccupied its old situation. A few steps

* In the trial of Palmer for the murder of Cook, Serjeant Shee, in reply to a question from the bench as to what was the meaning of the constantly recurring word "idiopathic", said that it was a word employed by doctors to signify "that which was not understood".

more in the same direction, and every drop of serum will be gone.

As far as physical signs go, I will venture to predict that the two last that will be lost will be the percussion-dulness and the diminished vocal fremitus; the percussion-dulness last of all. It is wonderful how these two signs hang about after pleuritic effusion. Long after natural respiratory murmur has been reestablished, long after every trace of ægophony has disappeared, we shall probably find traces of these two signs. I venture to predict this on the strength of what I have observed in other cases. What is the cause of this lingering percussion-dulness and imperfectly re-established vocal fremitus I find it very difficult to guess. It is certainly not dependent on lung-compression or unabsorbed effusion. The only thing that I can imagine is, that the film of gelatinous fibrine-clot, to which I have already referred, so often found lining the cavity of the chest and covering the surface of lung in pleuritic hydrothorax, may, by intervening between the lung and the chest-wall, act as a *damper*, and in the one case stop the conduction of the percussion-stroke from without, and in the other the conduction of the bronchial voice-vibrations from within.

How soon the girl and the young man will lose their friction-sound it is impossible to say; nor does it matter. Pleuritic rubbing is one of the most variable and uncertain of physical signs as regards its duration, and one of the least important as regards its prognostic indications. You may just catch it for a day, or it may persist for weeks—yes, for months; and if it does so persist, a man is not a whit the worse for it, if he has recovered his health in every other respect. A man in whom all the functions of life are perfectly performed is not the less a sound man because you hear in his side a sound you do not hear in another's. I remember a patient in King's College Hospital, some years ago, who was kept in the hospital several weeks after he was in other respects well, in consequence of strong pleuritic sound and fremitus in his left pectoralis region. The man was a strong sturdy fellow, and made himself so generally useful that he became a sort of supernumerary servant of the hospital. We used to amuse ourselves, I remember, by making him strip, and feel with the palms of our hands on the pectoralis this friction-thrill each time he breathed. At last the physicians were ashamed of keeping him in any longer; and he left the hospital with not only the sound, but the fremitus, as strong as ever. In Wingall's case, the friction will very likely last equally long. In the girl's case, however, I should expect that the rubbing would soon disappear, merely because it has so quickly disappeared on the opposite side.

There is one curious question that these cases suggest:—What is the determining cause that gives such different anatomical results in different cases of one and the same disease? Why in one of these cases should there have been effusion without roughening, and in the two others roughening without effusion? Shall we find the explanation of this difference in the condition of the blood? Shall we find it in any diathetic peculiarity? That it is not to be found in the nature of the exciting cause seems pretty evident, because in these three cases the exciting cause was one and the same.

I must not dismiss you without saying just one word about *Treatment*.

You will have observed that in all the cases my treatment was very simple. I aimed at three or four definite and intelligible objects with a view of placing the parts under the conditions most favourable for inducing and maintaining the natural reparative processes. These conditions in my opinion are:

To give functional and physical rest;

To allay pain by direct sedation;

To keep up vital power.

To give functional and physical rest, because the part is crippled, and to work a crippled part is to *keep* it crippled; it is to keep it at a constant disadvantage; whereas it ought to be placed at an advantage, for something is to take place in it which is not taking place in the sound part, namely a reparative process over and above its ordinary nutrition and function.

To allay pain, because pain and healthy nutritional action are incompatible—as long as the one subsists the other will be suspended; and this, no doubt, from the baneful and disturbing influence which pain exercises on the nervous superintendance of the circulation of the part.

To keep up vital power, because the higher the standard at which this is kept, the more energetic will be the processes leading back to a condition of health, whether of deposition, or absorption, or whatever they may be.

In the cases of Russell and Wingall, in which there was no effusion, but merely the pain and friction, I endeavoured to secure these conditions by forbidding exertion, by the infriction of sedatives, and by the administration of quinine, etc. And even with the man Franklin I had but little more to do than this. I neither bled him, nor leeched him, nor blistered him, nor purged him, nor antimonialised him, nor mercurialised, nor "ised" him in any other way, except did my best to *sthenise* him. His pain was much greater than that in the other cases, so I gave him in addition frequent doses of sedative internally. As far as we can judge from results the counter-irritation of the turpentine fomentations was of the greatest service to him.

By some persons a blister is always applied in cases of pleuritic effusion, and with a view, I believe, of removing the fluid by withdrawing it into the blisters which are raised; but if we look at the quantity contained in the chest, and the quantity which the blister "draws," this action is seen to be clearly impossible. The only other way in which it can act is as a counter-irritant, and I think in this way it is inferior either to mustard or turpentine, and has the disadvantage of not being able to be repeated.

With a view of promoting absorption some physicians have advocated bleeding in cases of pleuritic effusion. There can be no doubt that the abstraction of blood increases the rapidity of absorption, and, therefore, that this practice stands on rational theoretical grounds; but there are strong practical objections to it; it certainly in its general results tends in exactly the opposite direction to that which the rest of our therapeutics is directed to; and in the opinion of some, and among them the late Dr. Todd, has a direct tendency to increase the effusion, by impoverishing the blood and rendering it more watery and prone to passive transudation. I have heard Dr. Todd say myself that he thought, if in any

given case of pleurisy you wanted to produce effusion, nothing would be so likely to do so as to bleed your patient. At any rate, if we could, by reducing the contents of the blood-vessels, generate an endosmotic current into them, and so favour absorption without impoverishing the blood, it would be vastly better. I am not sure that this might not be done by giving occasional smart doses of hydragogue cathartics; in any future case of hydrothorax, I should feel very much disposed to try it; carefully keeping up my patient at the same time in every way, by tonic, stimulant, and food, to antagonise the lowering effect of the catharsis.

The only part of my treatment about which I have any doubt is about the value of the iodine. In any case in which one wants to promote absorption, one gives iodine, as a matter of course, externally, internally, and both; and one cannot doubt that locally its effects in this way are sometimes very striking. But if you were to ask me if, in any given case of hydrothorax, I had any tangible and irrefragable proof that the fluid had disappeared the sooner for its administration, I should say I had not.

Transactions of Branches.

EAST ANGLIAN BRANCH.

PRESIDENT'S ADDRESS.

By Edward Copeman, M.D., Physician to the Norfolk and Norwich Hospital.

[*Delivered at Yarmouth, June 26, 1863.*]

Gentlemen,—In entering upon the office you have done me the honour to confer upon me (that of President of the Eastern Branch of the British Medical Association), I will not detain you with needless remarks about my own unfitness; but leaving the well beaten track of personal apology, I will enter at once upon what I conceive to be my duty in the position in which you have placed me. Let me, however, in the first place, offer you my sincere thanks for the confidence which has led you to entrust me with the conduct of the affairs of this Branch for the ensuing year, and still more for the friendly feeling which I am fully aware has influenced you in giving me your valuable support and countenance on the present occasion.

Gentlemen, if we desire to see our noble profession holding the position it so well deserves, occupying a high rank in the social as well as in the moral and scientific world, and enjoying the good opinion and respect of society in general, we must *encourage* friendship and even affection amongst ourselves; *discourage* all animosity and ungenerous opposition; uphold as a body all worthy efforts to increase the respectability and usefulness of our calling, and never on any pretence whatever enter into a combination to oppress the less fortunate, or wound the feelings of the more humble; or, worst of all, increase the burden of a professional brother who may be labouring under some grievous imputation without, perhaps, any just or real grounds. At first sight, we might think such a remark superfluous, and aimed against an imaginary evil; but is it really so? Have we not seen in several instances how readily some of our body have lent their aid in the prosecution of a professional brother, when there has not been a tittle of reliable evidence against him, and where a prosecution could not have been entered upon with the slightest chance of success had it not been for the help afforded by the opinions of medical men? It is surely but a poor compensation to the injured feelings of a sensitive man to be told, when such a trial is over, that he has the sympathy of the profession, and that his expenses will be paid by subscription! Gentlemen, he has a right to the sympathy of the profession *beforehand*, and no medical man ought to allow himself to be placed in a witness-box under such circumstances, without the strongest conviction in his own mind, based upon facts, that the suspected party is really guilty of the charges brought against him. And even then, if he feel it his duty to give evidence in a court, that evidence should not be founded upon, or guided by, opinion, but solely upon *facts* and the conclusions to which those facts direct him.

No society, I believe, has ever encouraged friendship and sociability among its members more than that which we are met here today to commemorate; and I cannot help thinking that it is yet fated to be the instrument of very much benefit to our profession. The British Medical Association, formerly the Provincial Association, is coeval with my own professional life, being founded in 1832, the year when I completed my professional education by passing the College of Surgeons. In 1835, a medical society was formed to embrace the Eastern Counties, of which the late Mr. Cross was the founder and honorary secretary; and the inaugural meeting was held at Bury. But in the following year, this was dissolved as a separate society; and, soon after the fourth anniversary meeting of the Provincial Association at Manchester in 1836, its members joined the Parent Society as the Eastern Branch, setting an example of forming Branches which has since been followed in numerous instances, and even by the metropolis itself. I was a very early member of this Eastern Branch, and find, on referring to the Journal, that at a meeting held at Bury, in September 1840, a paper of mine was read "On the impropriety of Blood-letting in certain Apoplectic and Paralytic Seizures." I do not pretend to have been the first to place before the profession the impropriety of indiscriminate bleeding in such cases; but at all events, it was at that time a comparatively new doctrine in this country, and I have lived long enough to see it entertained and adopted almost universally by the profession.

The period which dates from the commencement of this Association has been one of great progress in the medical world. The stethoscope had not been long in use, and was understood only by the few in the early days of this society; but now it is indispensable to the practitioner, and almost answers the purpose of second sight. The chemical examination of the urine was at that time but little practised; and much of the early success of Dr. Jephson of Leamington was due, I believe, to the point he made of examining his patients' urine, by which he produced a strong impression on their minds that he was adopting a novel and probably beneficial mode of distinguishing the nature of their diseases. What has it come to now? Why, it has become a most important means of diagnosis; it has led to most interesting discoveries as to the nature of various diseases; and, no doubt, has also contributed to the improvement of medical treatment.

The history of this Association also embraces much of the history of the microscope. When I began practice, it was scarcely ever employed by medical men, but now every student possesses a microscope; and many practitioners have found it an important aid in diagnosis, to say nothing of the interest it has added to the study of the minute anatomy of tissues. Then, as to literature, what a vast amount of valuable information has been placed before us within the same period of time! The first part of Copland's *Dictionary* was published in 1833, and the learned author has lived to complete that gigantic work of his own hands, and still lives to practise the profession he has so much honoured by his industry and talent. A Sydenham Society has lived and died,

leaving behind it an excellent collection of ancient and foreign literature; and there is now a junior Society bearing the same honoured name, a New Sydenham Society, which is actively engaged in supplying us, at but a slight expense, with a variety of useful and interesting medical works. Journalism has also made great strides; but sometimes "the more haste the less speed"; and I take leave here to remark that in our journals of the present day there is too much of speculative, and too little of practical, reasoning; too much theory and too little practice; too much written by young aspirants for fame, and too little by those who, from their years and experience, might render essential service in promoting the practical improvement of our art.

What may we not say of that most wonderful discovery of late years, the use of anæsthetics for the relief of pain? Has not the use of chloroform materially altered the practice of surgeons in many important points? Could joints have been resected, bent limbs straightened, prolonged and difficult operations performed with the same immunity from danger to the patient, and with equal steadiness and comfort to the surgeon, without the assistance of chloroform? When we consider that all these and many other difficulties can, by its use, be overcome without the infliction of pain, how can we sufficiently estimate the possession of such an invaluable aid to the practice of our art?

We are now so familiar with the beneficial effects of chloroform that we are apt to lose sight of the immense value of the discovery, and the great debt we owe to the discoverer for such a blessing. But unhappily, no great good is, generally speaking, unaccompanied with a certain amount of evil, and chloroform has in too many instances proved fatal; but this has arisen from the abuse rather than from the use of this powerful agent; and I venture to assert, though not without fear and trembling lest some casualty should yet arise, that if the precautions adopted at our hospital were generally followed, the same immunity from loss of life would prevail elsewhere as in that excellent institution, where up to the present time no death has occurred as a direct result of the use of chloroform, although for years scarcely any operation has been performed without it. The cause of this exemption I believe to be, the true appreciation of the signs of danger and their speedy removal. The chief danger I take to be from suffocation, anæsthesia of the tongue and other muscles in the guttural region, by which the glottis may be mechanically closed, and death caused by asphyxia. The mode employed at the Norfolk and Norwich Hospital consists in administering the chloroform on a piece of linen folded into a conical form, held at first at a short distance from the mouth, and then laid over the mouth and nose. If stertor, the first sign of danger, arise, the cone is raised a little to admit air; and should any threatening appearances of impeded respiration shew themselves, the tongue is at once drawn forward with a pair of forceps to open the glottis, at the same time that artificial respiration is practised by alternate pressure on the chest. Such, in brief, are the means which have hitherto succeeded in protecting us from any fatal casualty from chloroform.

Time would fail me were I to attempt to notice half the improvements that have taken place in medical and surgical appliances since the birth of this Association; many of them are so familiar to us that we can scarcely believe they are of so recent an origin; but when we really consider how much has been done in a comparatively short period, what may we not hope to witness, even in the lifetime of some of us, in the way of advancement in medical science, and of additional aids to the relief of suffering humanity? I cannot, however, omit a cursory notice of another art of recent date, almost of the other day; I allude to photography, an art which has contributed so largely to the happiness of families, bringing before them with such truth and distinctness the lineaments of those dear to, but distant from them, or preserving to their visual sense the correct features and expression of those who have for ever departed from them. This beautiful discovery has been brought to bear upon professional subjects with success; and our excellent house-surgeon Mr. Williams could show you numerous likenesses of tumours before and after operation, taken at a cost of only sixpence each, which are so true to nature as to be of essential use in illustrating cases, and completing the history of operations.

I am unwilling to trespass further upon your time, or deprive you any longer of the gratification we shall experience from the papers promised by some of our friends present. Allow me but time for a few concluding remarks, and I shall then have much pleasure in proceeding to the more important business of our meeting. Whilst contemplating the vast strides that have been made of late years in the attainment of medical knowledge, as regards minute anatomy, pathology, and diagnosis, I have been strongly impressed with the idea that we have not made the same progress in the treatment of disease. Chemistry has amply supplied us with an elegant assortment of therapeutical means, but I doubt whether a corresponding improvement in treatment has been the result. Indeed, I would venture to say that, in many instances, views of the treatment of disease have become unsettled; and that, in consequence of new theories, much doubt has been thrown upon previously recognised and successful modes of treatment. The fact is, that really practical men appear seldom to have the time, or they have not the inclination, to publish the results of their experience; and, unless they do, we may be driven about by every wind of doctrine; and be led almost to doubt the evidence of our own senses by the crude statements of the inexperienced. If it were possible for practical men to meet oftener and communicate to each other their several experiences and practical observations, the most valuable information of all would be distributed amongst us; and such a society as the present offers the finest opportunity for such a work. It has already fully established the social principle as a powerful means of disseminating knowledge. I earnestly recommend you all to cherish this social principle; for it not only promotes knowledge, but, in the words of the founder of our Association, "it is the principle which promotes peace; it is the principle of true honour; it is the principle of the Christian religion."

MIDLAND BRANCH.

PRESIDENT'S ADDRESS.

By Henry Goode, M.B., Derby.

[Delivered at Derby, July 2nd, 1863.]

In occupying the position in which you have done me the honour to place me, I must beg, in thanking you, at the same time to express my desire, that I may be found worthy of that honour by upholding the dignity and credit of this Association, to which we belong, during the term of office.

My own concern for the welfare of the society I have shown by having performed now for eleven years the duties of secretary; and to this in part, I believe, is due my present position, and in part also it is due to the circumstance that, though now in practice as a surgeon, I have been known to most as a physician; and we in this place have sought for a president by turns from the two classes of practitioners.

The principles on which this Association is founded are such as to ensure a beneficial action among its members, by promoting that harmony and gentlemanly feeling which ought to prevail among the members of a liberal profession; and if it now numbers many, we may

hope to see it number yet more to partake in its social meetings; while, at the same time, we must look to this Association for the carrying forward such measures of improvement as may affect us as a body politic. We are now settling down to the working of those measures of medical reform obtained in great part by the machinery for cooperation of our society; and have to share in the general disappointment of the medical profession on discovering the futility for the prevention of illegal practice of the penal clauses of the Act obtained with so much trouble. This is the only portion of the Act calculated to produce any immediate apparent effect; and it has failed unless we again put the shoulder to the wheel for an united effort for a revision of the Act. Important improvements in some of the clauses have been brought before the Medical Council; and it will be our duty to fortify the hands of the promoters by the expression of an opinion upon them. Doubtless, some opposition may be expected in the attempt to tighten the cords of restriction, since the genius of this country is to be jealous of the liberty of the subject and intolerant of constraint. It rests with us to show that these measures are not for the benefit of a class; but for the good of the public at large.

The improvement in the mental culture of the medical body begun by the Act of 1815 may fairly be expected to progress under the present enactments, and this, at any rate, is a subject of congratulation; and with this improvement we may reasonably anticipate that the distinction between the two classes of physicians and surgeons, already disappearing, will be yet more completely swept away. Apparently alive to this fact, the College of Physicians of London has entered into an honourable rivalry with the College of Surgeons and the Apothecaries' Company by creating a license suitable to the times, and by instituting examinations in surgery in addition to pure medicine. Future years will develope the changes arising from this step; for, doubtless, it will much modify the present relations of things in the medical world.

The older universities of Oxford and Cambridge, though they have been stirred up to inaugurate changes of importance, have as yet made but small progress towards taking up the position they ought to occupy in holding the keys of scientific knowledge. How grudgingly they yielded to pressure from without in the establishment of the tripos for subjects of natural science, is evidenced by the withholding their emoluments from such as achieve distinction in these branches of learning; and until this is changed, we must still expect these ancient seats of learning to lag behind their younger sister university in London, whose institutions are founded on more modern requirements.

Of the universities in the sister kingdoms we must now entertain the same respect that we do for those of our own, since we find the minor schools conforming equally to the required standards; and of the greater we can wish no better than that they may yet retain their European reputation. The study of medicine, with the adjunct sciences, has always furnished the chief investigators after truth, since its dealing is with the real and present more than the distant and doubtful; and hence it leads to boldness and precision of thought, and loosens the trammels of prejudice. We cannot, therefore, but regret that the older English universities should be reluctant to allow a fair share to these pursuits in the distribution of their rewards.

Our business lies more with the social than the political relations of society; we deal with individuals rather than communities; and hence each is apt to regard his own interests from a narrow point of view; and from a want of union, we are incapable of claiming from the public those rights and that moral influence which ought to attach to our body. It is only on the occasion of meetings like this, that the differences of doctors can be said to be laid aside to allow us to take a review of our political aspects.

I will now pass on to one or two topics of public interest which have agitated the medical world during the past year, giving rise to questions not yet solved; viz., gratuitous medical services, and the proper method of rendering scientific evidence in courts of law.

That a helping hand should be lent to a fellow creature in distress is the maxim on which is based the whole of our art, and to this we are bound by our rules of life. But though this is the case, obviously and prominently, with the medical profession, the same also holds with all the other trades and professions which minister to the wants of civilised life, though in a less manifest degree; and there seems no reason why a fair return for services rendered should be less justly due in one case than in the other; but yet the policy of our profession has been to give largely its services to the public, partly from motives of benevolence, but partly also from expectations of an ultimate return; and here a zeal too indiscriminate is apt to run beyond the bounds of strict necessity, and needs a watchful eye to retrict to the truly needy the assistance rendered. This is an evil incidental to all public charities; but perhaps of less weight in a small provincial, than in a large metropolitan hospital. In the metropolis the principle has been recognised, that some requital should be made to certain of the medical staff of the public charities in return for their services. A further extension of this principle rests with the profession themselves, if they should deem it desirable to claim it by an expression of public opinion.

With this question is also involved the subject of Poor-law remuneration, which is kept at its minimum, in great degree, by the underbidding through professional rivalry. Our own estimation of the value of medical services affects also the public estimation of them in various circumstances of a private and public nature.

The topic of medical evidence, or rather, we should say, of scientific evidence, is one deserving of careful reflection, to rescue science from the undignified and unsatisfactory position she is wont to assume from the present mode of arraying scientific witnesses on each side of a disputed legal question, whereby each witness is constrained to answer only certain limited and one-sided questions, and an apparent discord is produced on subjects, which, taken in the whole, admit of but one solution. It is difficult for the coolest and best trained mind to enter the witness-box without the feeling of a partizan, and more especially so on being specially brought forward to back some view of a case propounded by the man of law. This is too frequently done; witnesses appear to contradict one another, and the truths of science are made to appear but fallacies. It has been suggested that the institution of a court of experts for certain cases would remove this difficulty and give more certain results; and where this method is feasible, we should have every confidence in expecting purer truths to emanate from a dispassionate scientific inquiry, than from an exhibition of the adroitness of opposing counsel, the result of the present system. It is only by the reiteration of opinion that such subjects can receive improvement; and for that reason I have now brought them before your notice. There are also other topics of medical polity; but I now pass them by to make some allusion to the progressive growth of practical medicine.

With the general growth of all branches of learning, it were impossible that medicine should remain stationary; and we find accordingly that various procedures have been improved in medicine and surgery. The laws of consanguineous unions have been a subject of discussion. The treatment of lowering diseases has been further carried out, and more especially we may point to

Bennett's observations on the employment of stimulants in pneumonia. The female generative organs have become the subject of bolder surgical operations than formerly, and with success in this country, so as to induce the French surgeons to imitate ours in operations for ovariotomy and vesico-vaginal fistula. Improvements have been carried out in the operative surgery of the eye, as in iridectomy, and Mr. Bowman's operation for fistula lacrymalis; nor must we forget to notice several ingenious contrivances for the better inspection of some of the outlets of the body. Many labourers, as usual, have devoted their attention to syphilis, and in connection with vaccination some observations on this disease have been of much importance. In pharmacy, a few new drugs have been introduced to notice; in part plants from the continent of America, and in part organic products obtained from coal and other sources by labourers in organic chemistry. Each year presents to our attention novelties of this nature; still one cannot fail to be struck how, with very few exceptions, we in the main still fall back upon the drugs which were the main reliance also of the physicians of ancient Greece and Rome, such as opium, aloes, colocynth, and so forth. But though we point to an experience of many centuries in the employment of these drugs, of their mode of action we have still much to elucidate. This matter is now engaging the attention of our Association, and we may hope it will be carried on. In such an inquiry, the search for specifics must yield to that for general principles; for it must be admitted that the more we search, the fewer specifics do we find.

These are subjects of general interest. There are local topics on which I wish to say a few brief words; and, first, in regard to medical pathology as it is cultivated in this county. We who live apart from the schools of medicine, and the emulation kept alive by them, are apt to allow our opportunities to go to waste, and to direct our industry into other channels than pursuits of this nature; hence the public, from habit, become averse to allow the necessary examinations to be made in cases of doubtful disease. That this prejudice prevails to a considerable extent in this district, is a fact which most of our medical neighbours can verify, as an obstacle to the completion of that experience which should be for the public good in the advancement of medical skill. It is for medical men to show that such researches should not be held by the enlightened mind to interfere with a sacred regard for the dead, nor with those holy instincts which we should wish to prevail.

Of topical diseases I might speak, but the limits of this address forbid me to enter upon a subject so extensive; and though I should have liked to take some notice of goitre, the local Derbyshire disease, I feel I must now give place to those who have kindly promised us papers; and more especially so since some of the topics I have alluded to seem to me to require the expression of your opinions.

In closing these few observations, I must congratulate the members on the healthy condition of the Association, and the better character of the JOURNAL since it has been conducted by its present editor. New names have been added to the list of members, and some have gone since the last annual meeting; among them we find the name of one—the most illustrious in our profession—the late president of the Royal Society, Sir Benjamin Brodie, who has departed full of years and honours; and nearer home one esteemed and useful associate is missing, the patriarch of the profession in this place, Mr. Jones, who was always willing to work for the public good, and always with intentions for the best.

I must now beg your kind indulgence for the imperfect nature of these remarks; but, such as they are, I offer them for the expression of your opinions.

YORKSHIRE BRANCH.

LARGE PROSTATIC CALCULUS EXTRACTED DURING LIFE.

By SAMUEL HEY, Esq., Leeds.

[*Communicated June 18th*, 1863.]

THE weight of the calculus was eleven ounces, two drachms, and two scruples. Its surface was smooth and polished, and beautifully marked, like a "fortification agate". It consisted chiefly of lithic acid, with a small mulberry nucleus.

The patient, aged 40, a cloth-weaver at Gomersal, was admitted into the Leeds General Infirmary on April 13th, 1863. He had suffered from symptoms of stone in the bladder for twenty years; but, although the catheter had been frequently introduced, the calculus had not been discovered, probably because the instrument used was too short. His complaint was supposed to be enlargement of the prostate, as the stone formed a large protuberance in the rectum. On introducing a *large* silver catheter, it was at once struck. His health was so shattered, and his sufferings were so great, that an operation was evidently his only chance. This was performed on April 19th. On opening the membranous part of the urethra, the stone was felt by the finger. Great difficulty was experienced in the extraction, partly from its size, but chiefly from the hardness and polish of the surface, which caused the forceps to slip. Ultimately it was broken by the "lion" forceps into three pieces, and was then removed without difficulty. The patient died exhausted on the 24th—viz., on the fifth day after the operation.

Some doubt was expressed whether so large a stone could be contained within the prostate, altogether exterior to the bladder; but the *post mortem* examination proved that this was the case. The cavity of the bladder was small, and its coats were greatly thickened; and it communicated with the pouch containing the stone by a narrow passage. This pouch was formed by the inserting membrane of the prostate, the substance of that gland having been attenuated, or absorbed by constant pressure. This membrane was found to be in a sloughy state; its vitality being probably so low as not to admit of any reparative action.

CALCULUS REMOVED FROM THE URETHRA OF A FEMALE BY VAGINAL SECTION.

By J. WARD, Esq., Penistone; and H. JACKSON, Esq., Sheffield,

[*Communicated June 18th*, 1863.]

MR. H. JACKSON exhibited a calculus weighing five drachms and two scruples, which had been removed from the urethra of a female by vaginal section; and by the kindness of Mr. Ward of Penistone, in whose practice it occurred, gave the following particulars.

The patient was the mother of ten or twelve children. In her last confinement but one, some difficulty was experienced in the passage of the child; but she recovered well, and nothing more was thought about it. In about eighteen months she was again confined, and suffered from convulsions. Mr. Ward's assistant, who attended her, detected the existence of a hard body immediately in advance of the fœtal head, which considerably retarded delivery. The labour, however, terminated; and, on seeing the patient the following day, Mr. Ward wished to explore the bladder; but this was objected to.

Some months elapsed, and he was then consulted; the patient being in a very distressing state. The urine was charged with phosphates to a great extent. There was great difficulty of micturition, and the urine passed in driblets, excoriating the external parts; and she was suffering from great constitutional irritation.

Three days afterwards, Mr. Overend saw her in consultation; and an incision was made through the vagina,

and the calculus removed. A catheter was introduced into the bladder, but caused so much distress that, with great reluctance, it was removed.

No sutures were used. Pledgets of dry lint were frequently introduced into the vagina; and the wound thoroughly healed, so that in about three weeks the normal power of the bladder was completely restored.

Reviews and Notices.

PARTURITION WITHOUT PAIN OR LOSS OF CONSCIOUSNESS. By JAMES TOWNLEY, Member of the Royal College of Physicians of Edinburgh, etc. Third Edition. Pp. 63. London: 1863.

IF Dr. TOWNLEY had, before writing his book, spent a few hours in studying the observations of obstetric authorities who have written on the use of anæsthetics in labour, he would surely not have hastened to announce that, until he appeared on the scene, the pains of parturient women were assuaged only by the use of chloroform to such an extent as to "produce loss of consciousness also," and to be "not unattended with danger." He is apparently unaware that, for instance, Dr. Churchill, of Dublin, at least as far back as 1860, wrote:—

"It is quite possible to afford immense relief, to 'render the pains quite bearable', as a patient of mine observed, by a dose which does not procure sleep or impair the mental condition of the patient, and which all our experience would show is absolutely free from danger." (*Theory and Practice of Midwifery*. Fourth Edition: 1860.)

However, having the idea—a very proper one—that chloroform ought to be given in labour so as to merely relieve the pains without interfering with the patient's consciousness, Dr. Townley has, "after considerable reflection on the subject," devised a plan by which the desired end can be attained. This plan consists in the use of a new inhaler, and of an aromatised compound of chloroform and alcohol, to be inhaled by the lying-in woman.

After some flourish about the inhaler and aromatised chloroform, Dr. Townley describes the mode of administration. The patient, holding the inhaler in the right hand,

"Is directed to take a full inspiration, and then to apply the inhaler to her mouth and nose. She is then to breathe rapidly for six, eight, or more inspirations. .....The inhaler should then be removed, and immediately one or two full deep chest-inspirations taken. This will be found sufficient to relieve all pain, and there will be no loss of consciousness."

Could not Dr. Townley have obtained this result by a simple modification in the manner of giving chloroform? But in that case, perhaps, the discovery would have been hardly worth a book; while the inhaler and the anodyne mixture give it importance and dignity.

The author's notions of the physiological action of chloroform, administered by his process, are not of the clearest. He says that, in his plan, the "rapidly repeated but interrupted impressions made on the nervous system produce the anodyne without the anæsthetic effect—before, indeed, the mass of the blood has become affected." Will he kindly explain, at some convenient opportunity, for the benefit of the profession, how the chloroform which is inhaled from his "anodyne mixture" reaches and acts on the seat of pain, without entering the circulation?

From science we turn to ethics; and, while we cannot compliment Dr. Townley on the clearness of his scientific ideas, his notions of professional propriety are even more obscure. We allude to his publication of a series of laudatory letters from patients whom he has attended; which letters occupy forty-one out of the sixty-three pages of the book. It is due to him to say, that he does not give the names of the writers; but still the tone of the letters—however right it may be that a patient should express gratitude to his or her doctor, and however pleasing such expression of gratitude may be to the feelings of the practitioner—is such, that their publication can have no other object than that of showing, in the words of one of the writers, how impossible it is

"To speak sufficiently in praise of your marvellous process, or to offer you thanks at all in proportion to the great blessing you have been the means of bestowing on suffering women."

Or of illustrating the almost more than grateful feelings with which Dr. Townley's patients regard him, when one speaks of him as having been "directed by a gracious God to a means of mitigating such severe suffering"; and another writes:

"The earnest desire of both myself and husband is, that by God's blessing your valuable life may long be spared, and that you may enjoy the happiness and privilege of being, to a constantly increasing number of ladies, the means of proving that what has hitherto been considered an impossibility can be done; namely, the birth of a child without any pain or any loss of consciousness to the mother through the whole of her labour."

Verily, Dr. Townley is fortunate in having fallen among a class of patients with highly refined and noble feelings. Did any other obstetrician—even Simpson himself—ever receive such a mass of outpourings of gratitude as are contained in the sixteen letters which Dr. Townley has published? Happy patients and happy accoucheur! But was it important to medical science, or to medical ethics, that these kindly expressions of patient to doctor should be published to the view of the world?

FRENCH PUBLIC VOTES FOR SCIENTIFIC PURPOSES. The following are a few of the annual votes of the French government for the support of science, etc.:—£35,000 as a help towards superior instruction, which includes the faculties of theology, law, medicine, science, and letters, superior schools of pharmacy, laboratories, etc., in different parts of the country. The Institute of France, with its five academies, the Académie Française, Académie des Inscriptions et Belles Lettres, Académie des Sciences, Académie des Beaux-Arts, Académie des Sciences Morales et Politiques, costs £25,000. The College of France, with its twenty eight chairs, costs £10,000. The Museum of Natural History, with sixteen professors, travelling naturalists, and the cost of gardens, menageries, etc., £22,000; the Imperial Academy of Medicine, £1,700. There are also about £1,600 as donations to learned societies; £600 as subscription to the *Journal des Savants*; £5,600 as subscriptions to scientific and literary works; £8,000 as annuities, or temporary help, to learned men and men of letters; £3,200 towards voyages and scentific missions, and £5,000 for the publication of documents of national history.

British Medical Journal.

SATURDAY, JULY 18TH, 1863.

THE COURT OF EXAMINERS OF THE COLLEGE OF SURGEONS.

THE necessity which prevails for an infusion of younger and more scientific blood into the Court of Examiners of the Royal College of Surgeons is manifest enough to every one (outside the Court of Examiners) who will give a moment's thought to the subject. A correspondent this week calls attention to the fact that, for the prizes offered by the Royal College, there is a deficiency of competitors, and sometimes no competitors at all. How is this? it may well be asked. Our correspondent ascribes the fact to the circumstance that the working minds in the profession have no faith in the capacity and sufficient knowledge and powers of judging of the judges. They do not feel that original and modern scientific investigations will have fair consideration at the hands of those who, as they imagine, have grown too old to change their ideas or modes of surgical action. We note the fact, at all events, that valuable as the prizes offered by the College are, and honourable as their attainment should be in the eyes of the profession, the numerous energetic and working surgeons of the country do not turn their attention to them. For some reason or other, they are passed over as things not to be attempted.

In confirmation of a remark made in a late number of the JOURNAL on this subject, we may further observe that a gentleman, who has long been a teacher of anatomy in this metropolis, assures us that he has constantly felt the necessity of instructing his pupils down to the level of the examinations of the College. He quite confirms the views suggested by us; viz., that the examinations are often of a character so far behind the knowledge of the day, and of so particular a character, as to render a resort to the grinder a reasonable action on the part of the candidate. At all events, it is a well known fact that no one knows so well as grinders the proper answers which candidates should be prepared to give to certain questions proposed by certain Examiners.

With regard to the constitution of the Court of Examiners we may make one or two remarks; for it really is a thing most surprising to note the ignorance displayed both by the profession at large and also by the press generally on all subjects connected with this remarkable College. The general darkness which reigned over the College and its constitution was complete until this JOURNAL undertook to enlighten the profession about its doings.

We must, therefore, here observe, that the Court of Examiners is composed of ten Fellows of the College, who, according to the charter, may be elected out of the Council, and out of the general body of Fellows. Each Examiner is elected for five years; at the end of which period he is eligible (*i. e.*, by the laws) for re-election, and, we may add, has hitherto invariably been re-elected. Of the present Court of Examiners, there is only one Examiner who is not subject to this quinquennial process of re-election; and that gentleman is Mr. Lawrence. Mr. Lawrence is the only one left of the original men who were in office as Examiners at the time of the passing of the charter of 1843. He, therefore, according to the terms of the charter, remains an Examiner for life. But every other Examiner now in office goes out at the end of his five years; and, we need hardly say, will, unless the present routine system is broken through, be no doubt re-elected.

And here should step forwards, and show itself in action, the spirit of reform with which, as it is anticipated, the Council is now impregnated. This spirit should declare in Council that the system of re-election of ancients is contrary to the charter, and contrary to the demands and intention of the Fellows and Members of the College; and that the declared opinion of the profession is, that new and capable men, from the body of the Fellows at large, if they are not to be found in the Court or in the Council, must be elected—men in whom the profession can have confidence as Examiners. This is the duty which now devolves upon Messrs. Lane and Hancock and Busk. It was for this work that they were elected to the Council of the Royal College. *Hic labor, hoc opus est*—this must be their motto, if they do the duty expected at their hands. But the profession itself must still back them. So quietly and snugly is the work of the College done, that of this matter of election of Examiners the College knows nothing, as a rule, until the thing is done by the Council. The apathy of the Fellows and Members in this important matter has hitherto, indeed, been surprising. It must be the business of the profession publicly to discuss the election of each Examiner, just as it has discussed the subject of the election of Councillors. True, it is the business of the Council to elect the Examiner; but it is equally the business and the duty of the Fellows of the College at large to demand of the Council why it is that they never have done what the charter enjoins them to do; viz., elect Fellows outside the Council and outside the Court of Examiners, as well as from within the Council and within the Court of Examiners; and also why it is that the retiring Examiner is invariably re-elected, whether he be or be not fitted for the business.

MR. CÆSAR HAWKINS AND THE COURT OF EXAMINERS.

Mr. Cæsar Hawkins does not hold the office of Examiner of the Royal College of Surgeons for life, as we are told he does by the *Lancet*, and as is generally believed in the profession. The very fact of his lately offering himself for re-election as a Councillor shows that such could not be the case. Had he been on the Court of Examiners when the new Charter was obtained, he would, like Mr. Lawrence, have been an Examiner for life. But he was not. He was elected under the new Charter.

Mr. Cæsar Hawkins, therefore, if he continue an Examiner after his present quinquennial period of office is accomplished, must be re-elected into office. But here comes a most knotty matter for the decision of the Council. The Council have hitherto determined that no man should be an Examiner who was not also a Councillor. To this rule, as we have shown, they have most rigidly and wrongly adhered; and, if we mistake not, it has had no more fervent supporter than Mr. Cæsar Hawkins himself. And now, with a stroke of that kind of dramatic justice in which the old Greek play indulges, Nemesis puts Mr. Cæsar Hawkins into the very position which he and the Council have so long declared is an untenable one. No man who is not a Councillor shall be an Examiner; this has been their dictum rigidly put in practice. But now mark the recoil of this logic, as applicable to one of themselves!

Mr. Cæsar Hawkins is not a Councillor, therefore Mr. Cæsar Hawkins shall not be an Examiner. This is really the case of Prometheus chained to the rock. How will Mr. Cæsar Hawkins meet the difficult position in which his own long-nourished principles in Council have placed him? Will he, no longer a member of Council, stick to the office of Examiner up to the termination of his five years Examiner's life, the office which his own principles have made so false a one for him? And what will the Council, his late colleagues, do? Will they, when his term of office expires, have the courage to belie the principles to which they have hitherto so stoutly adhered, and so put themselves in the (for them) false position of re-electing a non-Councillor to the Examinership—of electing, in fact, an Examiner from outside of the Council? Certainly, if Mr. Cæsar Hawkins be consistent, his clear course would be instantly to resign the Examinership. And certainly, if the Council should, at some future day, re-elect him Examiner, then they will, for the first time, to the great gain of the profession, and sorely against their grain, have laid down and acknowledged in practice the principle of the Charter, which says that Examiners may be elected from the general body of Fellows—the principle for which we have been so long fighting.

Sir Benjamin Brodie, it must be remembered, resigned his Examinership, because he thought it his duty to obey the intention of the Charter; viz., to let younger men into the Court; but by doing so (though he remained a life member of the Council) he was considered by the Council to have rendered himself unfit for the office of President of the College. No man (they said) shall be President who is not of the Court of Examiners—although the Charter says he may. How then, we may now fairly ask of those who have upheld this system, can it be right, according to your theory and practice, for a man who is not a Councillor to be an Examiner? How can Mr. Cæsar Hawkins, consistently with the theory and practice which he has so long upheld, remain an Examiner now that he has ceased to be a Councillor?

Altogether, this is one of those interesting little episodes, which naturally crop up, sooner or later, like fungi, from the scene of a false position. We recommend its conclusion to the attention of our readers.

In the meantime, we have now before us the novel and interesting fact demonstrated for the first time in the history of the College, and in the person of Mr. Cæsar Hawkins; viz., that a Fellow can be an Examiner without being a Councillor. Nay, more, we have to note that it is positively only by this forced acknowledgment of the very terms of the new Charter, which have been heretofore so strenuously ignored by the Council, that Mr. Cæsar Hawkins can hold his Examinership. The Councillors, to save themselves from the consequences of their own long and falsely assumed position, are now obliged to take advantage of the long evaded charter to save themselves! Was ever retributive justice more painfully complete?

LONDON AND PARIS HOSPITALS.

M. Blondel, head inspector, and M. Ser, engineer of the Administration of Public Health, have issued a Report on the hospitals of London, in which a comparison is made between them and the Paris hospitals.

As regards the origin of these charities, the Report says that in France, as well as in England, they were the productions of individual charity; but the characters of the two are now different. The English hospitals are supported solely by their own revenues, or by annual subscriptions; and, being managed entirely according to the will of the subscribers, are private institutions. But in France the hospitals have become mixed establishments, being in part supported by grants from government; consequently they are public institutions. The *number* of the hospitals in London is not regulated in any

way according to the wants of the population, as it is in France. London hospitals are founded somewhat in accordance with the caprice, etc., of individuals; and thus, though more numerous than in Paris, are less effective in providing for the medical wants of the poor.

As regards their *nature*, many hospitals in London, desirous of encouraging subscriptions, only receive those patients who are recommended by subscribers. Some hospitals, again, reject certain classes of diseases, etc. The French establishments, on the other hand, are open to all sufferers, and are asylums to all the wretched who ask for aid; so that we may say the French hospital system is the most liberal of the two.

Like all English buildings—houses, palaces, or hotels—London hospitals appear inferior to the French in amplitude of proportion, in regularity of lines, and in elegance of style. The internal arrangements of English hospitals are much more simple than those of Parisian hospitals; but, on the whole, those hospitals which are of modern construction seem to the Reporters preferable to the best London hospitals. The *situation* of London hospitals is the result of hazard; they are not located with any reference to hygiene, or to the wants of the population. On the contrary, the Paris hospitals are disposed according to the actual necessities of the people. French hospitals are more frequently isolated than English hospitals; they have also more space within them in the shape of courts and gardens, etc. English hospitals are badly off in this respect. Promenades for the convalescent are almost wholly wanting in London hospitals. Those English hospitals which have reached what is held to be their proper development contain as large agglomerations of patients as the Parisian hospitals. The shape of the wards is more varied in London than in Paris. The English have not yet determined what is the best shape. In Paris, the wards receive light and air from both sides of the wards, and can be ventilated from one end to the other by doors or windows. The size of the wards differs in both countries. In England, they contain, on an average, from twelve to twenty beds. In Paris, the wards either contain fewer, or, on the other hand, a great many more beds. In England, each patient has about forty-four cubic *mètres* of space; and in France about forty-three. The furniture in the wards of English hospitals is as simple, it may be said as insufficient, as it is complicated and comfortable in Parisian hospitals. The English prefer natural ventilation by opening windows, etc.; the French, on the contrary, by mechanical contrivances endeavour to prevent the necessity of opening windows. General cleanliness is, for various reasons, more easily maintained in London than in Parisian hospitals. The diet of French hospitals is more varied, and therefore more rational, than in English hospitals. In England, the nurses are all female; they are more numerous also, and better paid. The general mortality is about the same in London as in Parisian hospitals. The cost of construction is as great in London as in Paris, and the annual expenses greater. Each bed in London costs, on an average, about 1,155 *francs*, and each patient 137 *francs;* in France, the figures are 776 *francs* and 51 *francs*.

The Report adds: It is desirable that French hospitals should always be, like the English, free from over-crowding; that the wards should be free from odours, as they are in English hospitals—provided it be shown that the means adopted in England for ventilation are not more hurtful than the evil which is sought to be avoided; that the closets, etc., attached to the wards, should be made as cleanly; that the nurses should be as numerous as in London hospitals; and that the "services" should be made to approach as near as possible to "Britannic simplicity". But (winds up the Report) let us do ourselves justice. We are superior to our neighbours, and surpass them in the road on to perfection. The comparison of the general mortality is in our favour; and as to the special mortality attending operations, it may be said that the comparison has been made only in a vague fashion.

This summary of a rather egotistical production will, we fancy, scarcely be accepted as containing a true parallel of hospitals English and French. It is well, however, that we should know what our neighbours think of us in this way.

A PHYSICIAN WANTED.

The Derby Hospital has been for a long time past in vain advertising for the services of a physician. No medical man in that capacity will listen to the voice of the charmer. Derby, we are told, once kept three physicians in good practice. Now it cannot keep even two. The governors, therefore, have been compelled to alter the laws of their hospital, to enable them to elect a general practitioner to do the physician's work at the hospital. It is a pity that some one did not suggest to the governors that it would be well for them to hire and pay a physician to do the work, if they think the services of a physician are really required.

We often have to listen to a good deal of bunkum on the rights of the sick poor to the very best medical advice—at least, we hear this sort of thing from the lips of governors who can find medical men foolish enough to work gratuitously. For those who really believe in what they preach, here at Derby is a great opportunity to back their sentiments by subscribing and paying for the article. For ourselves, we must say that this is an argument of which we never could understand the justice. Why is the

pauper entitled to the first medical advice, as it is called, or supposed to be, any more than the curate, or the schoolmaster, or any of the many persons above the pauper in rank, who are obliged to be satisfied with their ordinary medical attendant when sick? The pauper sick have a right only to the pauper's doctor. And if doctors choose to give their advice gratis at hospitals, they do so neither for charity, nor out of a love of duty; but simply because it answers their purpose to do so indirectly.

But at Derby the indirect advantage usually derived from the gratuitous services is not forthcoming. Neither is the doctor. Then, we say, let the philanthropic governors who preach so much about the rights of the poor to this sort of first-rate advice now show their philanthropy by paying a physician to do the work.

The truth is, we believe, that very great significance attaches to this Derby Hospital incident. It shows that the social position of the profession is undergoing a change. It is an indication of the passage of medical practice into the one faculty system. It certainly must be confessed that this is the point towards which all modern medical legislation tends. The educational system of different examining boards is every day becoming more assimilated; and we think also that the feeling is gradually finding its way into the minds of the profession, that it would be very desirable that the amount of education required of all candidates by medical examiners should be alike.

Then, again, we cannot but see in the condition of the profession at Derby an illustration of the fact of the immense improvement which has of late years taken place in the education of what is called the general practitioner.

There is, in truth, very little, if any, difference in the amount of lectures, etc., required of the physician and of the general practitioner. The world begins to learn, what the profession has long known, that, in reality, a medical man begins to learn his business practically after he has passed his examinations, and has become a doctor, or surgeon, or general practitioner. And then, according as he distinguishes himself in practice, or as he gains the public confidence, does he obtain his status in society as a medical man. Our friend, Dr. Ogle, who has manfully fought the battle of physicians on this occasion, takes, we fear, a by-gone view of things. If the public have come to think that their own ordinary practitioner is as well educated and as full of knowledge, for their purposes, as any physician or surgeon, we may reasonably conclude that they will not care to pay their guineas to the consulting men. We wish Dr. Ogle would ask the governors of his hospital on what grounds of fair play they expect him and his colleagues to do the work of the hospital gratis? If there be any real honesty in the argument, that the sick poor have a right to all this first-rate (as supposed) advice, then, if the first-rate advice cannot be had gratis, the governors are bound in conscience to buy and pay for it.

THE WEEK.

What may be done by members of the profession, when they are in earnest and *united*, has been well shown at Bedford. It is impossible that any medical man who has any respect for himself can resist the united expression of opinion of the medical brethren around him. This is not the first proof we have had of the fact that the profession at Bedford is in a healthy condition. The leading men of that town are resolved that, as far as they are concerned, the practice of medicine shall be carried on legitimately and honourably. They will have no dallyings with the trickeries and fopperies and quackeries which hang about the skirts of the profession. They leave those things to their brethren in the metropolis. These gentlemen deserve well of the profession at large for the honourable stand which they make and have made for the upholding of honourable practice and legitimate medicine. At a meeting held at Bedford on the 6th instant, a Medico-Ethical Society was established—a court of appeal to preside over the medical morals and practice of the practitioners in and around Bedford. One gentleman on the occasion, Mr. Coombs, whose name is already familiar to our readers, pledged himself on the occasion no more to practise homœopathy. He refused, however, to give up the title of M.D. obtained at a homœopathic university; and his medical brethren, consequently, still refused to meet him in consultation. Moreover, a gentleman who had hitherto used the title of M.D. on the strength of being a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, on being appealed to, very creditably gave up the title. A resolution was also passed to the effect that medical men should refuse to meet in consultation those who meet homœopaths in consultation. We sincerely congratulate our medical brethren at Bedford on the honourable position assumed by them. We need, we are sure, hardly hint to the Medico-Ethical Society that all its resolutions should be marked by extreme calmness and consideration. Nothing so much damages the force of such societies as any hastily conceived resolutions which are not founded in abstract justice.

The *American Medical Times* says of Washington City, the national capital,

"That it is undoubtedly in the most insanitary condition of any city in the United States. The principal sources of uncleanliness are thus given by Dr. Henry G. Clark:—'1. The accumulation of large numbers of men and animals in confined locations. 2. The accumula-

tions of filth, such as vegetable and animal offal, consequent on the above. 3. The entire neglect of cleansing operations in the yards, lanes, and streets of the city, especially the very deficient drainage. 4. The nuisance of a shallow, and neglected, and filthy canal in the heart of the city, a receptacle of the sewers, and a place of deposit for dead horses, etc. 5. The marshy and stagnant water in many vacant lots, some of them—as in North Capitol Street—near large hospitals, the want of drainage of which has rendered many parts of the city, as that near the President's House, malarious spots, producing intermittent and remittent fevers, jaundice, etc. 6. The accumulation of the sick in large numbers is a very powerful means, unless proper sanitary measures are taken, of intensifying all the ordinary and extraordinary causes of disease.' "

Dr. Marion Sims, we read, lately performed an operation in M. Nélaton's *clinique* at the Hôpital de la Clinique, in a case of vesico-vaginal fistula. His operation produced occlusion of the vagina, which was objectionable, " as it would prevent fecundation, and cause the menstrual fluid to be evacuated by the bladder. But this inconvenience was much less", it was argued, " than that of the fistula."

M. Bouillaud related to the Academy of Medicine, on the 9th inst., a case of anomalous state of the heart in a man thirty-nine years old. The interventricular septum was absent; the pulmonary artery was contracted, and had no valves. The auriculo-ventricular valves were normal; the aorta had but two valves. The aorta passed up before and to the left of the pulmonary artery. The subject died of brain-disease. The signs observed were irregularity of heart's action, and those of hypertrophy of heart. A loud *bruit de souffle* was heard, and a vibratile *frémissement* felt. Cyanosis did not exist.

M. Rayer, in presenting Dr. Davaine's *Treatise on Entozoa* to the Academy of Medicine, pointed out the novel facts contained in it. Amongst others, it was pointed out that M. Davaine has shown the presence of the *ova* of entozoa in the fæces when no worms were visible in them—a fact of possible service in diagnosis.

OUR ARMY IN INDIA: ITS SANITARY STATE.

The Royal Commission appointed in 1859 to investigate the sanitary state of the army in India has presented its report. The report is a comprehensive repertory of facts and opinions upon every part of its great subject. It contains in the language of the Commission, " The rate of sickness and mortality and invaliding among our troops," both European and native, in every part of India and its dependencies; the prevailing classes and causes of disease; the sanitary condition of existing stations, and the improvements required in them; the rules to be observed for the selection of healthy positions, and especially of sanitaria in the hills; the principles of construction for barracks, tents, and hospitals; the best means of enforcing sanitary regulations and of organising the medical service efficiently; and the practicability of establishing a complete system of military statistics. We have hitherto held India at a cost of European life which it is shocking to think of, since it has been mainly due to the neglect of the commonest precautions, if the report be true.

We had more than 90,000 soldiers in India in the year 1860, and more than 80,000 in the year 1861. The great majority of these are picked men in the prime of life, and the mortality of men of the same age in the healthy parts of England and Wales is at the rate of 8 in 1,000. In great towns and cities subjected to unfavourable conditions of health the rate varies from 9 to 12 in 1,000, There is no apparent reason why the mortality of our army at home in time of peace should exceed from 8 to 10 in 1,000. Until recently, however, it was no less than 17 in 1,000, though it is " now declining in proportion as the causes of disease are abolished or mitigated, and has already sunk to about 10." But this exaggerated death-rate of 17 per 1,000 must not only be doubled, but quadrupled, before it can be compared with the Indian standard. In one year, indeed,—1852,—it was as low as 41, but the general range has been from 58 to 80, 90, or 100. It was actually as high as 134 in 1804, during the first Mahratta war; averaged 85 from 1800 to 1829, and has stood at 69 for the whole of the present century. It is now a little below this, but the Commissioners consider that there has been little variation since our first occupation of the country. The inference is obvious, though it is so appalling as to be hardly credible. " Besides deaths by natural causes," which would be represented by 9 in 1,000, " 60 *head per* 1,000 *of our troops perish in India annually.* It is at that expense that we have held dominion there for a century; a company out of every regiment has been sacrificed there every twenty months. These companies fade away in the prime of life, leave few children, and have to be replaced at great cost by successive shiploads of recruits."

And next comes the grand question,—What is the reason of this frightful loss of life, and how far is it preventable? To this the Commissioners answer, that it is not solely or mainly the climate which decimates our army. " Endemic diseases," and particularly fevers, diarrhœa, dysentery, cholera, and disorders of the liver, occasion by far the larger proportion of the mortality. Malaria, and the joint agency of heat, moisture, and rapid changes of temperature predispose the constitution to these diseases, but it is the open neglect of sanitary laws which gives them their deadly virulence. The stations have generally been selected without reference to health, and often occupy low, damp, and undrained situations. The towns and bazars in their immediate vicinity teem with every nuisance that can breed pestilence under a tropical sun. An utter want of drainage, an impure water supply, defects in building and ventilation, imperfect means of ablution and cooking, and a bad system of barrack and hospital arrangements, combine to aggravate the effects of atmospheric conditions. Intemperance, sedentary habits, *ennui*, and self-indulgence fill up the list of the circumstances to which the Commissioners primarily attribute the excessive sickliness of our troops, and by comparison with these they consider the influence of climate " altogether secondary." The proof of this lies not only in the express testimony of medical authorities on these points, but in the returns of mortality among officers and civilians, as well as among private soldiers, at those few stations where the evils pointed out have been partially corrected. Here the death-rate is no more than 20 in 1,000, and if the same improvement could be brought about, as it well might, all over India, 1,460, instead of 5,037, recruits would suffice to fill up the death vacancies in the proposed establishment of 73,000 men. The greater number of the suggestions made by the Commissioners are directed to the removal of these sources of disease. They recommend—" That the strategical points of the country be fixed, with special reference to reducing, as far as pos-

sible, the number of unhealthy stations to be occupied; that a sufficient number of hill-stations, or of stations on elevated ground, be provided; and that a third part of the force be located on these stations in rotations. And in order to introduce sanitary improvements by degrees into barracks, hospitals, towns occupied by troops, and seats of government, they urge the "appointment of Commissions of Public Health, one for each presidency, so constituted as to represent the various elements, civil, military, engineering, sanitary, and medical." To these boards they would delegate the general supervision of public health in India, arming them with the power of controlling every plan of building or other work that may affect the sanitary condition of the population.

PHYSIOLOGY OF MORMONISM.

Dr. Charles C. Furley, assistant-surgeon, United States Army, writes in the *San Francisco Medical Press* as follows:—

On a recent visit to Salt Lake I had good opportunities for observing and inquiring into the effects of polygamy, as practically exemplified in the case of that people. It is, chiefly as a physiologist that I consider the subject, and in this view, I must say, the consequences of the Mormon system are in every aspect of the case hurtful and degrading. A marked physiological inferiority strikes the stranger, from the first, as being one of the characteristics of this people. A certain feebleness and emaciation of person is common amongst every class, age, and sex; while the countenances of almost all are stamped with a mingled air of imbecility and brutal ferocity. This, in fact, is their true character; they being obsequious and yielding to their superiors—to strangers sullen and spiteful, while among themselves they are cold and unamiable. In the faces of nearly all, one detects the evidences of conscious degradation, or the bold and defiant look of habitual and hardened sensuality—the women, with but few exceptions, shrinking from the gaze of the stranger, as if fully alive to the false and degraded position they are forced to occupy. Some seem overwhelmed with shame; others wear a forlorn and haggard appearance, while a few put on a cheerful air, affecting to be satisfied with their sad condition.

Without entering into minutiæ, I may instance the following as a few of the bodily peculiarities that strike the medical man in mingling with the inhabitants of Salt Lake City. Besides the attenuation mentioned, there is a general lack of colour—the cheeks of all being sallow and cadaverous, indicating an absence of good health. The eye is dull and lustreless—the mouth almost invariably coarse and vulgar. I have nowhere seen anything more pitiful than the faces of the women here, or more disgusting than the entire appearance of the men. The children are puny and of a scorbutic tendency. The external evidences are numerous that they are doomed to an early death—the tendency to phthisis pulmonalis being eminent and noticeable.

The evidences of natural degeneracy are more palpable in the youthful than in the adult population. A more feeble and ill-looking race of children I have not met with, even among the vice and squalor of our larger cities. So far as food, climate, and other external causes are concerned, the children, as well as the adults here, are favourably circumstanced; their sanitary conditions are generally good; wherefore, we must look to the evils engendered by their religious and social system for the agents of this physical inferiority.

They are as gross and vulgar in all their tastes, thoughts, and styles of expression as in their bodily appearance. More than half their language is made up of slang phrases, nor do they relish the efforts of their preachers, unless well interlarded with this style of speech. As a consequence, these men indulge freely in the most trivial, and, sometimes, in the most vulgar and blasphemous expressions, to the great delight and mental titillation of their hearers.

Under the polygamic system, the feeble virility of the male and the precocity of the female become notorious. The natural equilibrium of the sexes being disturbed, mischief of this kind must ensue; as a consequence, more than two-thirds of the births are females, while the offspring, though numerous, are not long lived, the mortality in infantile life being very much greater than in monogamous society; and were it not for the European immigration, the increase of inhabitants would be actually less than in Gentile communities. The fecundity of the women is remarkable, as might be expected, considering that the husband cohabits with the wife only at such periods as are most favourable to impregnation.

THE LATE JOHN JONES, ESQ., OF DERBY.

It is with feelings of unfeigned regret that we record the death of John Jones, Esq., surgeon, who expired at Derby on the 23rd ult. After a long professional career he has passed from us, lamented by the public and by a large circle of friends, more especially those of his own calling.

Mr. Jones is perhaps best known to the profession at large by his warm advocacy of self-supporting dispensaries. Encouraged by his friend Mr. Smith of Southam, and aided by some of his fellow townsmen, he established in the year 1830, the Derby Self Supporting Dispensary, and as its senior medical officer was connected with it until the day of his death. That the institution has been appreciated by those for whose benefit it was established, there need only be said that the average number of free members is considerably over 4,000, and its prosperity and usefulness must be mainly attributed to the unwearied interest manifested therein by its zealous founder.

He was also the earliest promoter of a museum illustrative of the natural history and productive wealth of this county, and has well deserved the thanks of his fellow townsmen. We only hope that successors may be found equally active and equally patient in the prosecution of this important work.

As an accoucheur the subject of this notice was most successful, possessing a large amount of valuable experience which made his assistance eagerly sought by many of his professional brethren. Imbued with a keen zest for medical science he was ever active in its pursuit, attending whenever he was able the meetings of the British Medical Association, of which he had been a member almost from its commencement.

In his character as a medical man Mr. Jones has left behind him an example well worthy of imitation. His candid and honourable conduct towards his professional brethren had won their highest confidence and esteem. With the strictest integrity he combined manners the most courteous and conciliatory. Free from all ostentation, a quiet but earnest Christian course marked his daily life, and whether socially or professionally his one high aim and singleness of purpose were apparent to all who knew him.

His medical attentions to the poor were beyond all praise. None ever applied to him in vain, and no considerations of personal fatigue or of unrequited service deterred him from promptly responding to their calls. In him they have lost an unknown friend, and the grief everywhere expressed for his loss is an undying tribute to his great worth. (*Derby Reporter*, July 3rd, 1863.)

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

President—GEORGE BURROWS, M.D., F.R.C.P., F.R.S, London.

President-elect—JOHN ADDINGTON SYMONDS, M.D., F.R.C.P., F.R.S.Ed., Clifton.

All the meetings will take place at the Victoria Rooms, Clifton.

WEDNESDAY, *August 5th.*

1 P.M. Meeting of Committee of Council.

2.30 P.M. Meeting of the General Council.

4 P.M. First General Meeting of Members. The retiring President (Dr. Burrows) will make a few remarks. The new President (Dr. Symonds) will deliver an Address. The Report of Council will be presented, and other business transacted.

9 P.M. Through the kindness of the Committee, a *Conversazione* will be held at the Literary and Philosophical Institution, Bristol.

THURSDAY, *August 6th.*

11 A.M. Meeting of the Members of the New Council.

12 NOON. Second General Meeting of Members. The Address in Medicine will be read by WILLIAM BUDD, M.D. Papers and Cases will be read.

3.30 P.M. The Address in Surgery will be read by AUGUSTIN PRICHARD, Esq.

The Report of the Medical Benevolent Fund will be presented.

Papers and Cases will be read.

9 P.M. By the kind invitation of the President (Dr. Symonds) a *Soirée* will be held at his residence, Clifton Hill House, Clifton.

FRIDAY, *August 7th.*

12 NOON. Third General Meeting of Members. The Address in Chemistry in its Relations to Medicine will be given by WILLIAM B. HERAPATH, M.D., F.R.S. Papers and Cases will be read.

3.30 P.M. The Address in Midwifery will be read by J. G. SWAYNE, M.D. Papers and Cases will be read.

6.45 P.M. Dinner at the Victoria Rooms. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice, as soon as possible, to Dr. MARSHALL, 8, The Mall, Clifton.

Members are requested to enter, on arrival, their names and addresses in the Reception Room at the Victoria Rooms, where cards will be supplied which will secure admission to all the proceedings.

Refreshments will be provided in the Victoria Rooms during the Meetings.

Members who wish for previous information may communicate with Dr. MARSHALL, 8, The Mall, Clifton.

Papers have been promised by T. S. Fletcher, Esq. (Bromsgrove); Graily Hewitt, M.D. (London); Lionel Beale, M.B., F.R.S. (London); G. F. Burder, M.D. (Bristol); W. O. Markham, M.D. (London); B. W. Richardson, M.D. (London); A. P. Stewart, M.D. (London); R. W. Coe, Esq. (Bristol); W. M. Clarke, Esq. (Bristol); G. D. Gibb, M.D. (London); Thomas Nunneley, Esq. (Leeds).

Papers and Cases will be read in the order of the dates at which notice of them has been received by the General Secretary.

Alteration of Laws. Notice of the following new Laws has been given by W. O. MARKHAM, M.D.

At each Annual Meeting of the Association, the Secretary shall lay before the first meeting of the Council a List of the Members of the Association, together with a separate List of all Members whose Subscriptions are in arrear, and the amount of Subscriptions due from each Member.

This List shall be at once referred to a Committee, consisting of four or more Members of the Council (three of whom shall form a quorum), together with the President and the Secretary. The Committee shall thereupon proceed to settle the List of Members for the ensuing year, retaining or erasing, as they may think fit, the names of any Members who are in arrear: provided always, that no person shall remain a Member of the Association who is more than two years in arrear. The List of Members thus corrected shall be presented to a subsequent Meeting of the Council, and shall, with their approval, be published immediately after the Annual Meeting.

The Secretary shall in each year, during the first week of June, supply the Editor of the JOURNAL with the names of all those Members of the Association whose Subscriptions have not been paid up to the 31st day of May in each year.

Notice of the following alteration has also been given by Dr. Markham.

In Law 15, for the words "twelve months", to substitute the words "five months".

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, June 30th, 1863.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on Friday, the 24th of July, at 1.30 P.M.

Business:—To prepare Report of Council, and to receive Report of Finance Committee, etc.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, July 13th, 1863.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
SOUTH-WESTERN. [Annual.]	Board Room of the Devon and Exeter Hospital.	Wednesday, July 22nd, 3 P.M.

GRATUITOUS MEDICAL SERVICES.

THE following suggestions as to the steps that might be taken by the Association to discountenance and suppress public gratuitous medical services have been forwarded to the Committee of Council by Dr. Gibbon:—

"1. To give publicity to all hospitals and dispensaries that recognise the principle of payment for medical service. This has done good service in the case of insurance companies.

"2. To append to every medical vacancy announced in the JOURNAL the amount of salary or *honorarium*, if any, that is attached to the post, just as the value is given with every clerical vacancy.

"3. To bring from time to time the expediency as well as the justice of paying for medical, no less than for legal and clerical services, under the consideration of the governors and committees of all institutions.

"4. To urge individual members, neither directly nor indirectly, to countenance or encourage the acceptance of gratuitous service, by giving testimonials, canvassing, etc., for such appointments.

"SEPTIMUS GIBBON, M.D."

The subjoined letter on the same subject has also been received by the General Secretary from Charles F. J. Lord, Esq.:—

"1, College Terrace, Hampstead, N.W.

"Dear Sir,—Your Committee are right in considering that I take a deep interest in the attempt to break down the vile system of gratuitous medical advice; but I am not sanguine of doing much good, till an uniform co-operation is obtained from the profession. The few are the brave and unselfish; the many will seek the honour (?) of public appointments through speculations of incidental or ulterior advantages.

"I have found this in my long battle for the Poor-law medical staff, for which Mr. Griffin has subsequently worked so long and so hard. Medical men in these appointments perseveringly put the suicidal knife to their own throats, while the officers are kept to their task-work without redress, owing to the unworthy competition of their hungry professional brethren. With feelings arising from this experience, I do not expect any good from the fourth proposition of Dr. Gibbon; though, on the whole, I would very cordially support his four propositions.

"So soon as the measure may have acquired 'strength by going,' it would be important to have a public meeting. The matter is not mature enough for this at present; it may be so after the Bristol anniversary. Would the 'magnates' there assist by a vigorous support?

"Time has 'altered men and things'. Among the revolutions he has brought about should be reckoned the abolition of 'gratuitous medical service.' This service has become iniquitous, and should have 'died, sir, long ago.' Justice, benevolence, sound policy, and professional respect, now unite to demand this death, if only in the spirit of the motto or phrase, 'Let every tub stand on its own bottom.'

"I am, dear sir, yours very faithfully,

"Charles F. J. Lord.

"Dr. Williams."

SOUTH-WESTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of the South-Western Branch will take place on Wednesday, July 22nd, at the Board-room of the Devon and Exeter Hospital, at 3 P.M. President-elect, Samuel Budd, M.D.

Dinner at Pratt's Hotel, Exeter, at 5 P.M.

C. H. Roper, *Hon. Sec.*

WEST SOMERSET BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held on Wednesday, July 1st, 1863, at the Squirrel Hotel, Wellington.

A vote of thanks to the retiring President, Henry Alford, Esq., was passed unanimously; and the President-elect, C. P. Collyns, Esq., of Dulverton, then took the Chair.

The minutes of the last annual meeting having been read and confirmed, the following Report of Council was presented.

Report of Council. "Your Council are pleased to announce that the Branch continues in a prosperous condition. During the past year, one new member has joined, and one has withdrawn owing to removal of residence. Two members have not paid their subscriptions for three years, and have removed from the neighbourhood. The society will have to determine what course to adopt with respect to them. If their names are omitted, the Branch will number thirty-one members.

"Since the last annual meeting, your Council have not been called upon to consider any public matters of interest or requiring comment.

"Acting on the suggestions made last year, a *conversazione* meeting was held on the 7th January, at which the following communications were read:—

"1. Excision as a Local Mode of Treatment in Cancer of the Mamma. By Henry Alford, Esq.

"2. Case of Aneurismal Tumour of the Femoral Artery. By William Liddon, Esq.

"3. Case of Gun-shot Wound of the Arm, with Division of the Median Nerve and Brachial Artery, where Recovery ensued. By H. W. Randolph, Esq.

"There were also some interesting pathological preparations exhibited; and short histories of the cases in which they occurred given.

"Your Council believing that such a reunion of our members is not less useful than agreeable, are encouraged to recommend that a meeting of the same character should be held in the ensuing winter.

"The Treasurer's Report shows that the finances are in a satisfactory condition, and that a balance remains to the credit of the society. The usual payment of one shilling and sixpence by each member for Branch expenses is recommended to be continued.

"Your Council, in conclusion, beg to call the attention of members to the claims of the Benevolent Fund—subscriptions in aid of which are earnestly sought by the promoters of that most excellent and useful Fund."

Removal of Members. It was resolved that the names of Dr. Sewell and Dr. Sawkins be omitted from the list of members of the Branch.

Conversazione Meeting. It was resolved—

"That a *conversazione* meeting be held during the ensuing winter at Taunton."

The Treasurer's Report was received and approved. It was resolved—

"That the annual Branch subscription of one shilling and sixpence be continued."

Next Annual Meeting: President-elect. It was resolved—

"That Hamilton J. Kinglake, M.D., of Taunton, be President-elect; and that the next annual meeting of the Branch be held at Taunton."

Council. It was resolved—

"That the Council for the ensuing year do consist of the following members:—W. E. Gillett, Esq.; R. A. Smith, Esq.; W. Liddon, Esq.; H. J. Alford, Esq.; G. Kidgell, Esq.; and W. Reynolds, Esq."

Secretary. A vote of thanks to Dr. Kelly for his services during the past year was passed; and he was re-elected Honorary Secretary to the Branch for the ensuing year.

President's Address. The President then delivered an address. After some introductory remarks, he observed that it was the duty of the profession to prevent disease as well as endeavour to cure it; and he instanced an occurrence of last autumn, when the town of Tiverton was visited by low fever. As soon as servants became attacked, they were removed to the homes of their respective parents, thus conveying the disease into what was before a healthy locality. Three cases of typhus were brought into three different parishes in his neighbourhood; the disease spread in each, and valuable lives were sacrificed in consequence. To obviate this, he suggested that every union house in the kingdom should have a fever ward attached, to which the class of patients he had alluded to should be sent, instead of to their homes. He thought the British Medical Association should urge this on the authorities of the country; and he considered it would not be a very great interference with the liberty of the subject if a compulsory clause were introduced into any Act that might be required for the purpose to compel this class of persons to be conveyed to the ward, where proper medical and other attendance was provided for them, instead of propa-

gating disease in other localities by being removed to their respective homes.

He then called attention to the working of the present Poor-law system; and here, too, he thought the Parent Association should interfere, and apply to the Government to have some medical element associated with the Poor-Law Board. He instanced the treatment his son, lately one of the medical officers of the Dulverton union, had recently experienced. This gentleman had for six years filled the office of Surgeon to the Union House, at the pitiful salary of £20 a-year. He was also the non-resident medical officer to No. 2 District. On three several occasions, he had to perform amputation on inmates of the Union House, and required to engage the assistance of a neighbouring surgeon, to whom, on two of the three occasions, a fee of two guineas was paid by the guardians; but the third time they demurred; and, after a correspondence on the subject between their medical officer (Mr. Collyns), the Board of Guardians, and the Poor-Law Board, ending in the fee being refused, Mr. Collyns felt himself compelled to resign his appointment to the Union House. The Board of Guardians thereupon advertised, offering the increased salary of £30 a year for the House, and promised that the District No. 2 should be given to the person elected, as soon as Mr. Collyns' year of office, then having five months to run, had expired. After much delay and disappointment from successive elections and resignations, Mr. Attwater, a surgeon with only one qualification, was at length installed in office. Now this office not only comprised the union house and the No. 2 district of the Dulverton Union, which contains an area of above 20,000 acres, but Mr. Attwater held and still holds appointments in the Southmolton Union embracing an area of nearly 30,000 acres; thus making a total area of above 50,000 acres, over which enormous district he has medical charge of the sick poor. All this time there were duly qualified medical men at Dulverton who offered for, and were ready to take, the appointment to the house; and the No. 2 district Mr. Collyns did not wish to abandon, and offered himself for re-election. The Poor-law Board were made fully aware of all these circumstances; nevertheless, they have chosen to confirm the appointment of Mr. Attwater. The President dilated on this special grievance, and intimated that a pamphlet with all the correspondence had been published, and might be had by any member on application to him. He expressed the belief that the presence of a medical element at the Poor-law Board would have influenced a different decision and issue in this case. Unless some mode of redress were adopted, he thought it would end some day in a great majority of the body of union medical officers combining to give in their resignations simultaneously.

The address concluded with some observations on the past and present treatment of pneumonia. The President thought the old practice of bloodletting the safest; and he believed a great mortality arose from the want of bleeding in the early stage of the disease, and perhaps also from pleurisy being often complicated with, and sometimes mistaken for, pneumonia. He considered that, if the pulse be full, not yielding to the pressure of the finger, bloodletting, and that not sparingly, but from a large orifice, was the best remedy; if the pulse be small, frequent, and yielding, topical bleeding by leeches or cupping should then be resorted to for relieving the congested organ. He had seen many a patient in this disease, who had lost fifteen or twenty ounces of blood from the arm, recover afterwards under a stimulating plan of treatment, who he believed would have been lost, had the depletion not first been adopted. He allowed that bloodletting was formerly carried too far, and instanced some amusing examples of the practice as he had witnessed it in his early days. He urged on all practitioners, when called early in the attack to a patient suffering from severe pain in the chest accompanied with fever, and the pulse not yielding to the pressure of the finger, first to bleed, and then afterwards resort to stimulants; and this he believed to be the best practice. He wished to remark, in reference to these observations, that they were noted on paper before he read the recent articles on the subject of blood-letting in the pages of the JOURNAL.

The Poor-law System. After some discussion on the points raised in the President's address, the best thanks of the meeting were accorded to him, and the following resolution was passed.

"That this meeting do request the Council of the Association to bring before the annual meeting in August next the desirableness of urgently memorialising the government to introduce into the Poor-law Board some medical element, to assist them in deciding all matters connected with the medical department of that Board."

Dinner. A party of eleven afterwards dined together, under the presidency of C. P. Collyns, Esq., at the Squirrel Hotel; many interesting medical discussions being intermixed with the usual loyal and other toasts of the evening.

MIDLAND BRANCH: ANNUAL MEETING.

THE Annual Meeting of the Midland Branch was held in the Board-room of the Infirmary, Derby, on Thursday, July 2nd, at 2 P.M.; HENRY GOODE, M.B., President, in the Chair. There were also present fifteen members and several visitors.

Mr. SYMPSON, the retiring President, first took the Chair, and in a brief speech introduced his successor, Dr. GOODE, who delivered an address, which is published at page 57.

Mr. SYMPSON proposed and Mr. BAKER seconded a vote of thanks to Dr. Goode, which was carried by acclamation.

Report of Council. Mr. SYMPSON read the following Report of Council.

"Your Council, in presenting to the members of the Midland Branch of the British Medical Association the report for the past year, rejoice in being able to congratulate them on the satisfactory manner in which the meetings have passed off, and on both the number and the value of the communications which have been read; whereof the following is a list:—

"1. Case of Traumatic Aneurism of the Gluteal Artery successfully treated by Ligature. By E. F. Broadbent, Esq.

"2. Two Cases of Melasma, or Bronzed Skin of Addison's Disease. By E. Morris, M.D.

"3. Case of Tænia treated by the Areca-Nut. By E. Morris, M.D.

"4. On the Prevention of Incontinence of Urine after Female Lithotomy. By Thomas Paget, Esq.

"5. Some Cases of Intermittent Fever following Injury to the Spleen. By S. Lowe, Esq.

"6. Some Interesting Cases of Strangulated Hernia, with Various Complications. By C. Brook, Esq.

"7. A Case of Sporadic Cholera, with Rupture of some of the Fibres of the Gastrocnemius Muscle from Violence of Spasm. By G. Mitchinson, L.K. & Q.C.P.I.

"8. On the Advantage of Retaining the Staff in the Bladder during the Operation of Lithotomy. By E. Morris, M.D.

"9. The Difficulties of Signing Certificates of Lunacy under the Existing State of the Law: with Cases. By F. D. Walsh, Esq.

"10. Case in which Biliary Calculi escaped through a Sinus in the Abdominal Wall. By T. Sympson, Esq.

"11. Dislocations of the Knee-joint. By C. Brook, Esq.

"12. Puerperal Convulsions. By S. Lowe, Esq.

"13. Case of Inflammation of the Left Femoral Vein, followed by the Formation of an Abscess round the Shoulder-joint: Symptoms of Pyæmia: Recovery. By G. Mitchinson, L.K.&Q.C.P.I.

"14. Case of Disease of the Tarsal Bones: Amputation of the Foot after Pirogoff's Method: Recovery. By T. Sympson, Esq.

"A feeling of disappointment having found expression at some of the meetings, that such opportunities as were afforded by them of friendly intercourse and scientific discussion should be lost to the Lincoln members for so long a period as three years, during the holding of these meetings at other towns within the circle of the Branch, it was unanimously resolved that a Local Medical Society be formed, the establishment of which, it is hoped, will not fail indirectly to strengthen and promote the prosperity of the Branch, by keeping alive a spirit of unity, good feeling, and scientific rivalry among its members, similar to that fostered and encouraged by the British Medical Association, and by awakening those who have not yet become members to the benefits conferred by that Association, will induce them to join it when the Branch again assembles at Lincoln.

"The New Society was happily and successfully inaugurated at Bassingham, on the 25th of June, and the members were most hospitably entertained by Mr. Osborne Johnson."

Dr. Webb moved, and Dr. Ogle seconded the adoption of the report. Dr. Webb suggested that the meetings in the several counties should be held in different parts of the county, and not always in the county towns.

Mr. White supported this recommendation, and observed that it had already been acted upon during one of the periods of meeting in Lincolnshire, when the Branch met at Spalding.

Officers. A vote of thanks was proposed to the retiring President, the members of the Council, and the Secretaries for the past year; and the members of Council were re-appointed for the several counties. Mr. Dolman was appointed Secretary for Derbyshire; Mr. White was re-appointed for Nottingham; Dr. Sloane for Leicester; and Dr. Mitchinson for Lincoln.

President-elect. Mr. White proposed, and Dr. Webb seconded—

"That Dr. Ransom of Nottingham be requested to act as President for the ensuing year."

New Members. Mr. Marriott of Leicester, and Dr. Candy of Alstonfield, members of the General Association, were elected members of the Branch; and Mr. Frederick Stevenson of Nottingham, Dr. Charles Taylor of Nottingham, and Mr. William Maltby of Basford, near Nottingham, were elected new members.

Medical Act. The Secretary was called on to read a few of the clauses of the Medical Act, in which changes have been brought before the Medical Council, but no resolutions were agreed to.

Papers, etc. The following communications were made:—

1. Excision of the Upper Jaw. By S. W. Fearn, Esq. Mr. Fearn illustrated his paper by showing the subject of the operation and the fibrous tumour removed. As on a former similar occasion in another patient, the deformity was but small compared to the formidable nature of the operation.

2. Mr. Fearn also showed a large tumour, of more than eight pounds weight, recently removed from the back of a female. Also, a good case of Chopart's operation for removal of the foot, and a case in which most of the os calcis had been removed for disease, a useful foot being still left.

3. Case of Amputation at the Hip-Joint. By C. H. Marriott, Esq. This paper led to a discussion on the exposure of cartilages of joints; and Mr. Gisborne and Mr. Fearn remarked on the small chance of injurious results from the cartilages of the lesser or greater joints being left exposed after operations.

4. Hæmatoma of the External Ear in Lunatics. By W. P. Stiff, M.D.

In the remarks which followed, Dr. Goode stated that he thought ecchymoses occurred more frequently in some classes of lunatics than in other cases of disease.

5. Notes of Excision of the Carpal Bones in a Gunshot Wound. By W. Newman, M.D.

Mr. Fearn stated that he had successfully removed the carpal bones for disease in two cases, opening the joint in each case by a longitudinal incision at the side of the wrist along the head of the ulna.

Mr. Dolman remarked that the removal of joints in the wrist would be more likely to be attended with success than similar operations in the foot.

A vote of thanks to the Chairman terminated the proceedings; after which, the members and their friends met at dinner at the King's Head, at 5 o'clock, and passed a convivial evening.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

The eleventh annual meeting of this Branch was held at the Crystal Palace, Sydenham, on Tuesday, July 7th, at half-past 3 P.M. The Chair was taken by the retiring President, R. Dunn, Esq., who afterwards resigned it to his successor, Francis Sibson, M.D., F.R.S. There were also present thirty-four members and five visitors.

New Members. The following gentlemen, members of the Association, were elected members of the Branch; J. R. Gibson, Esq., Russell Square; W. S. Kirkes, M.D., Lower Seymour Street; and R. R. Matthewson, Esq., Belvedere, Kent.

Report of Council. Dr. Henry, one of the Honorary Secretaries, read the following report.

"The Council of the Metropolitan Counties Branch have much pleasure in reporting that there has been a considerable increase in the number of members during the past year. At the last annual meeting, the number on the list was 132; since that date, there have been 10 resignations, and 53 names have been added, making the total number at present 175.

"During the year, the attention of your Council has been directed to the subjects of gratuitous medical services, and of medical evidence in courts of law.

"The evils arising from the present system of gratuitous medical services having been brought under the notice of a meeting of the members of the Branch held on Dec. 2nd and 9th, 1862, the subject was referred to the Council, in order that they might consider what steps, if any, might be taken for the suppression of the evil. After a careful examination of the subject at three meetings, your Council presented a report to a general meeting of the Branch held on March 25th, the proceedings of which have been reported in the Journal. Your Council hope that the permanent Committee appointed at the last mentioned meeting will use their best energies in carrying out the objects which have been entrusted to them; and that they will receive every possible support from the other members of the Branch. Your Council would remind the members that the system of gratuitous medical services is deeply rooted; and that its eradication or modification will require lengthened and energetic action—which, however, if carried on, will in all probability be successful. Your Council cannot quit this subject without acknowledging the valuable suggestions and advice in regard to it which they have received from Dr. Gibbon, an active member of the Branch.

"The subject of medical evidence in courts of law has for some time past been, and is still, exciting so much attention among the members of the Association and the

profession, that your Council have felt it a duty to take so important a matter into serious consideration, and to submit to the present meeting a series of amended resolutions, which, if thought proper, may be adopted by it as an expression of the views of the Branch as to the rules which should guide the conduct of medical men when called on to give evidence in courts of law. A copy of these resolutions has been forwarded to each member of the Branch, with the circular calling the annual meeting.

"Your Council would suggest to their successors in office that, as the Branch has received so great an accession of strength during the last year, and seems likely, if judiciously fostered, to go on increasing, they should take into consideration the propriety of instituting meetings of the Branch at which papers may be read or lectures delivered on subjects connected with medicine or the collateral sciences. It might be found possible, and be advantageous to the Branch, to bring before these meetings several matters of scientific interest to medical men, but which are not likely to be discussed in the ordinary medical societies of the metropolis."

On the motion of Dr. SEMPLE, seconded by Mr. BOTTOMLEY, the report was, after some remarks on gratuitous medical services by Dr. Gibbon, Dr. G. Johnson, Dr. Stewart, and other members, received and adopted.

Treasurer's Report. Dr. HENRY read the Treasurer's report.

Receipts.

Balance in hand at last meeting . .	9	18	9
Subscriptions received . . .	16	17	6
	£26	16	3

Expenditure.

Donations to Medical Benevolent College	4	4	0
Donation to Medical Benevolent Fund .	2	2	0
Richards for printing . . .	7	9	6
Secretaries' expenses . . .	8	2	9
Balance in hand	4	18	0
	£26	16	3

In addition to the balance in hand, there were also assets estimated at £8.

Election of Officers and Council. The following members were elected the Officers and Council for 1863-4:—*President*—Francis Sibson, M.D., F.R.S. *President-elect*—Charles F. J. Lord, Esq., Hampstead. *Vice-Presidents*—B. W. Richardson, M.A., M.D.; Robert Dunn, Esq. *Treasurer*—Edwin Lankester, M.D., F.R.S. *Secretaries*—A. P. Stewart, M.D.; Alexander Henry, M.D. *Ordinary Members of Council*—For the Metropolitan District: John Birkett, Esq.; W. Camps, M.D.; Septimus Gibbon, M.D.; Henry Lee, Esq.; William O. Markham, M.D; S. W. J. Merriman, M.D.; John Millar, Esq.; E. H. Sieveking, M.D. For the Extra-Metropolitan District: William Martin, Esq. (Hammersmith); J. H. Paul, M.D. (Camberwell); Joseph Seaton, M.D. (Sunbury); Harrington Tuke, M.D. (Chiswick).

The President's Valedictory Address. Before leaving the chair, Mr. DUNN, the retiring president, briefly addressed the meeting. He thanked the members for the indulgence at all times and on every occasion extended to him during the time that he had been in office. Last year, he not only felt all the novelty of a new position; but also, with the prospect before him, of the great annual gathering in the metropolis of the British Medical Association, he felt certain misgivings as to his capabilities of discharging the duties of president in a manner that might be creditable to himself and satisfactory to the Branch. But the appointment of a committee of management for the occasion of the meeting of the Association, so efficient, energetic, and zealous, at once banished from his mind all anxiety as to that meeting; and as for the rest, he had endeavoured to do his best, and he must say that his tenure of office had been one of unmixed pleasure to himself, and he had the satisfaction of knowing that the members of the Branch had increased. Glancing back for a moment upon the past, and at the success of last year's great meeting—for it was a great success, when the Royal Colleges of Physicians and Surgeons vied with each other, with true nobility on their part, in doing honour to our Association—he would say, that best thanks were due to the Committee of Management for their admirable arrangements. Seldom, if indeed ever, had there been delivered three more able and eloquent addresses on any such occasion; and the Committee gave proof of their wisdom in selecting representative men to deliver them. He need not remind the members with what rapt attention they listened to the stirring eloquence of Dr. Walshe, as he expatiated on the importance of deductive reasoning to practical medicine; to the marvels and progress of physiological science, announced by the clear and far-seeing Dr. Sharpey; or to the lessons of practical wisdom upon practical surgery as they fell, effectively and tellingly, from the lips of Mr. Paget. He finally congratulated the Branch on having elected, as the occupant of the presidential chair, so able and distinguished a man as Dr. Sibson, under whose presidentship the Metropolitan Counties Branch was sure to flourish and to prosper.

Dr. SIBSON then delivered an address.

Representatives in the General Council. The following members were unanimously elected as representatives of this Branch in the General Council for 1863-4:—Geo. Burrows, M.D., F.R.S.; A. Henry, M.D.; Jonathan Hutchinson, Esq.; W. O. Markham, M.D.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; E. Smith, M.D., F.R.S.; and G. Webster, M.D.; with A. P. Stewart, M.D., *Secretary*.

Vote of Thanks to the Retiring President. Dr. HENRY moved, Dr. WEBSTER seconded, and it was unanimously resolved—

"That the thanks of the Branch are due, and are hereby given, to the retiring President, Robert Dunn, Esq., for the able and courteous manner in which he has performed his duties during his year of office."

Medical Evidence in Courts of Law. Dr. MARKHAM moved the adoption of the resolutions on medical evidence, which appeared in the JOURNAL at p. 631 of last volume.

Dr. HENRY seconded the motion.

Dr. EDWARD SMITH proposed, and Dr. ROUTH seconded, as an amendment to the first resolution—

"That, in giving evidence in courts of law, the medical witness should carefully distinguish between facts and opinions, and should as far as possible limit his evidence to the statement of facts. When, however, he is obliged to express opinions upon medical facts, he should state them explicitly as his opinions only."

The amendment was lost by a large majority; and the resolutions, after a discussion, in which Dr. Markham, Dr. Stewart, Dr. Seaton, Dr. Routh, Dr. E. Smith, Dr. Douglas, and Dr. Thudichum took part, were carried in the following form:—

"1. Whereas medical men of equal knowledge and honesty differ widely in their views of the nature and proper treatment of many diseases; and whereas the opinions of medical men, and especially of those of high standing, given in courts of law on medical matters, are not unfrequently (if uncontradicted) accepted both by judge and jury as of equal value with positive facts, and may consequently lead to the perversion of justice and the gross injury of innocent persons:

"This meeting is of opinion that no medical man is justified in expressing, in a court of law, a positive opinion on any medical subject concerning which he

is aware that medical men of equal knowledge and honesty with himself hold different views, without endeavouring to inform the court that his opinion is a personal one, and not universally accepted by the profession.

"2. Whereas it is seldom possible for a medical man to form, from the statements of patients themselves or of their non-professional friends (which are notoriously untrustworthy and defective), or from the present condition of the patients, an accurate judgment as to the propriety of the treatment previously adopted:

"This meeting is of opinion that no member of the profession is justified in expressing, in a court of law, an opinion as to the treatment adopted by another professional man, when his knowledge of the treatment employed in a given case is derived solely from the non-professional statements of the patient or his friends.

"3. Whilst expressing these sentiments, this meeting recognises in the fullest manner the solemn duty incumbent on every medical man, in common with all other classes of the community, to further the ends of justice by unhesitatingly deposing to all facts within his knowledge, without regard to the effect of such evidence on the interests or character of a professional brother."

Gratuitous Medical Serviees. Dr. GIBBON moved, Mr. LORD seconded, and it was resolved—

"That this Branch recommend to the General Council the desirability of carrying out the steps for the discouragement of public gratuitous medical services, which have been unanimously approved by this Branch."

Dinner. At half-past five, the members and their friends, including the Rev. Dr. Cookesley (vicar of Hammersmith), Colonel Ouvry, F. Ouvry, Esq., Dr. Waters (Chester), Dr. Armstrong (Gravesend), etc., to the number of thirty-five, dined together.

Correspondence.

EXAMINERS AND PRIZES OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—Whilst you are considering the reforms necessary in the governing body of the College of Surgeons, allow me to direct attention to one department of that College in which the existing system works most imperfectly. I allude to the annual prizes offered by the College, and the mode in which they are awarded. Scarcely a year passes in which it does not become apparent that no competitor offers himself for some of those prizes, and very frequently, indeed, the prize is given to the only candidate; yet, as shown by the proceedings of our Pathological Society, there are not wanting plenty of men who will work, provided only they can bring the results of their labours before a competent tribunal.

The terms upon which the College prizes are offered, demand "original investigation." But what security have those who, in the prime of life, bestow their best days to these investigations, that the examiners who for years have maintained a "dignified silence" upon those subjects should be in a position to appreciate their work?

The examination for the prizes is in some respects analogous to that for the diploma of members of the College. If an essay be presented containing matter differing in any great degree from that which was taught forty years ago, the examiners have no time to pause to investigate its merits, and the shortest way to deal with it is to consider it "theoretical."

Some who have tried for these prizes, and many who have not, do not consider the tribunal as at present constituted a fair test of the value of really original investigations, and they prefer appealing concerning such subjects to a society or to the public. But the case would probably be different if men were appointed as examiners whom the profession know to have recently been themselves engaged in original pursuits. Every one might then submit his work to the College, with a full confidence that his labours would be duly appreciated.

I am, etc., VINDEX.

July 6th, 1863.

AN ELECTION OF COUNCILLORS.

SIR,—You last week wrote:—"We most sincerely congratulate the profession on the results of the late election." The Fellows "have shown a determination to exercise their power in the performance of their duty," and much more to that effect on one side. On the other, the present system "favours jobbery," encourages "skilful electioneers," gives a man "the advantages of electioneering trickery." "That the mode of election, therefore, is more favourable to the jobber than the high-minded man, needs no further demonstration." With all this latter article, I most cordially agree; but in the present instance it destroys the force of the former. To congratulate the profession that skilful jobbery, skilful electioneering, electioneering trickery, have led to a result however desirable, is hardly consistent with sound ethics.

In the present election, canvassing was most recklessly carried on for two of the successful candidates. I was canvassed by London physicians and country practitioners for one of them. Plumping was resorted to. Everything was done which ought not to be done; and the improper system carried its point—and the profession is to be congratulated. Elections as now carried on will do more to demoralise the profession in ten years than the old system would in fifty. Under such a system, no man except a pachyderm will come forward; a gentleman never; because no gentleman will compete with the pachyderm in his own way. It will be much as it is in a metropolitan borough; or in an election of a president of the once United States. I am, etc.,

A FELLOW.

[Our highly respected correspondent's indignation has manifestly produced in him a temporary confusion of ideas. Calm consideration will assuredly tell him that it is neither unchristian nor unprofessional to rejoice at the good that comes out of evil. He should rather have commended our consistency in rejecting the means, though on this occasion we gladly accept the conclusion. At all events, we are delighted to find that so able a man is on our side in the matter of condemnation of the present system of election. We hope he will assist us in the attempt of obtaining some more fair and rational system of election. We may, however, remind him that on this occasion no Councillor was elected by a *minority* of forty votes. EDITOR.]

NITRATE OF SILVER IN PREVENTING THE PITTING OF SMALL-POX, ETC.

LETTER FROM JOHN HIGGINBOTTOM, ESQ., F.R.S.

SIR,—Having observed, many years ago, that the nitrate of silver had been used on the continent by MM. Velpeau, Bretonneau, and Serres, for the purpose of preventing pits and scars consequent on small-pox, I was induced to apply it as they directed, by puncturing the centre of each vesicle with a needle and then applying the solid stick of the nitrate of silver. I found it effectual in preventing any further progress of the pox.

The next patient on whom I used the nitrate of silver was a strong healthy young man about twenty years of age, with confluent small-pox. I punctured a few of the vesicles on the face; but these being very numerous, I satisfied myself with applying the concentrated solu-

tion over the whole surface of the face where they were most confluent, without making any punctures. The solution answered as well as where the punctures had been made in arresting the progress of the eruption.

The next case of confluent small-pox was one where no punctures were made. Mr. P., a young man, 19 years of age, and of delicate constitution. From the confluent state of the pox, I should have expected deep pits and scars on his face. I applied the concentrated solution on the whole of the face and ears in the same manner as recommended in erysipelas. The vesicles of the pox were immediately arrested in their progress, and in four days presented small hardened eschars free from inflammation, whilst the pustules on the body were gradually proceeding to suppuration. In about nine days, the eschar had come away from the face without leaving pits.

In this case, the nitrate of silver not only prevented the pits, but the inflammation and irritation and offensive suppuration, which are so distressing to the patient. If thought necessary, the nitrate of silver might be applied all over the scalp, as in erysipelas, to prevent cerebral inflammation.

It might be applied on and within the cavity of the ear to prevent otitis; and on the conjunctiva to prevent ophthalmia.

I have used as a gargle to the throat in small-pox, with great benefit, a solution of a scruple of nitrate of silver in three ounces of distilled water.

For the remedy to be successful in preventing pitting, it should be applied on the fourth or fifth day of the eruption; the concentrated solution being used, composed of the old stick nitrate of silver, four scruples to four drachms of distilled water. I am, etc.,

JOHN HIGGINBOTTOM.

Nottingham, July, 1863.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your giving insertion to the annexed correspondence, which, I regret to say, gives no hope of any amelioration of the condition of the Poor-law medical officers this session.

I am, etc., RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, July 11th, 1863.

"12, Royal Terrace, Weymouth, July 8th, 1863.

"SIR,—On the 22nd June, I had the honour to forward to you, as the Chairman of the Select Committee on Poor Relief, certain documents which I desired might be laid before the Select Committee. May I ask the favour of your informing me if they have been received, and also if they have been considered; if not, when they are likely to be brought under the notice of the Select Committee? These documents I hold to be very important, as they not only contain a refutation of all the material points in Mr. Cane's evidence, but also prove that the present regulations for the medical relief of the poor require material changes before they can be made to approach anything like perfection; and therefore I trust they (the documents) will receive attention.

"I have the honour to be, sir, your obedient servant,

RICHARD GRIFFIN.

"The Right Hon. C. P. Villiers, Chairman, Select Committee Poor Relief."

"Poor-law Board, Whitehall, July 10th, 1863.

"SIR,—I am desired by Mr. Villiers to inform you that the Select Committee on Poor Relief have taken no evidence in the present session; and also to return to you the documents which you forwarded to him on the 22nd ult., as the Committee will not sit again during the session. "I am, sir, your obedient servant,

"Richard Griffin, Esq." "HUGH OWEN.

Medical News.

APPOINTMENTS.

ALDERSON, Frederic H., Esq., appointed House-Surgeon to the West of London Hospital.

DAVIES, William, Esq., appointed Assistant Medical Officer to the Salop and Montgomery Lunatic Asylums.

MCDIARMID, Albert, M.D., appointed Assistant-Surgeon to the Chatham Convict Prison.

RITCHIE, Charles, M.D., appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh.

RIVINGTON, Walter, Esq, elected Assistant-Surgeon to the London Hospital.

STURGES, Octavius, B.A., M.B., appointed Medical Registrar to St. George's Hospital.

TRENCH, William S., M.D., elected Medical Officer of Health for the Borough of Liverpool.

WILLIS, Francis, M.B., elected Assistant-Physician to the Westminster Hospital.

POOR-LAW MEDICAL SERVICE.

BLACKWELL, Thomas W., Esq., to the Balla Dispensary District of the Castlebar Union.

CÆSAR, R. T., to District No. 2 of the Alderbury Union, Wiltshire.

CREWE, John, Esq., to the Weldon District of the Oundle Union, Northamptonshire.

DODGSON, H., M.D., to District No. 2 of the Cockermouth Union,

MOORE, Lionel W., Esq., to the Debenham District of the Bosmere and Claydon Union, Suffolk.

SLOANE, Matthew H., M.D., to the Ovenden District of the Halifax Union.

STEWART, James S., M.D., to the parish of Tyrie, Aberdeenshire.

TOFTS, Henry, M.D., to the Woking District of the Guildford Union.

WILTSHIRE, Jas., Esq., to District No 1 of the New Forest Union.

WYLLIE, A., M.D., to the Borough District of the Walsall Union.

ARMY.

BELL, Surg. A., 76th Foot, to be Surg. 36th Foot, *vice* J. Jopp, M.D.

JOPP, Surgeon-Major J., M.D., 36th Foot, to be Surgeon 76th Foot, *vice* A. Bell.

MEIKLEHAM, Surgeon G. C., M.D., 70th Foot, having completed twenty years full-pay service, to be Surgeon-Major.

SCHROEDER, Staff-Assistant-Surgeon H. S. E. to be staff-Surgeon, *vice* A. Morphew.

MILITIA.

MARSHALL, J. S., Esq., to be Assistant-Surgeon 1st Lanarkshire Royal Militia.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BARKER, S., M.D., to be Second Assistant-Surgeon 1st Sussex A.V.

HUSBAND, W. D., Esq., to be Surgeon 1st Administrative Battalion West Riding R.V.

PATERSON, W., M.D., to be Assistant-Surgeon 1st Buteshire A.V.

VINCENT, P., Esq., to be Surgeon 1st Administrative Battalion Cornwall R.V.

To be Honorary Assistant-Surgeons:—

DEVILLE, T., M.D., 37th Staffordshire R.V.

LAMBDEN, H., Esq., 15th Lincolnshire R.V.

RUFFE, R. E., Esq., 39th West Riding R.V.

SEABROOK, T. E. F., M.D., 12th Kent A.V.

MARRIAGE.

NICHOLSON, Adam, M.D., to Anna Mary, youngest daughter of the late Barnewall JACKSON, Esq., of St. Vincent, at the Cathedral, St. John's, Antigua, on June 11.

DEATHS.

CATTON, Richard T. G., Esq., Assistant-Surgeon 3rd Dragoon Guards, at Ahmednugger, India, aged 28, on May 23.

COAR. On July 9th, at Oxford, Julia Elizabeth, youngest daughter of the late Thomas T. Coar, Esq., Surgeon.

DAVIES. On July 12th, Agnes Eleanor, youngest daughter of *Wm. Davies, Esq., York Town, Surrey.

EDWARDS. On July 8, at Worthing, aged 21, Louisa, only daughter of Charles F. Edwards, Esq., late chief Medical Officer in the Convict Establishment, Bermuda.

MILSON. On July 11th, aged 69, Rachel, widow of Richard O. Milson, Esq., Surgeon, of Heaton, Yorkshire.

O'FLAHERTY. On July 12th, at 2, Baker Street, Portman Square, aged 34, Margaret Ann, wife of Thomas A. O'Flaherty, M.D.

PARDEY, Charles, M.D., at Southampton, on July 10.

SPEAR, William, M.D., at Totton, Southampton, aged 45, on June 12.

TAYLOR. On July 10th, aged 2, Edith, daughter of Alfred A. Taylor, Esq., Surgeon, Queen Street, Cheapside.

WARE, Samuel, Esq., Surgeon, at Chard, aged 64, on July 9.

Naval Lunatics. The insane patients at Haslar have been transferred to the Naval Lunatic Asylum at Yarmouth.

A Medical Knight. Dr. Gray, a medical man who has taken a prominent part in the politics of the day in Ireland, has been knighted by the Lord Lieutenant.

Bequests. Lady Poltimore has left £500 to the Devon and Exeter Hospital. Mr. W. G. Gibson has by will left £5,000 for the construction of an hospital at Saffron Walden.

The Hospital of La Charité is to undergo a complete transformation. The works have been commenced under the direction of M. Labrouste, the architect of the Administration of Public Assistance, and are to cost 2,000,000 *francs*.

Accidental Death Insurance Company. The annual report of this company shows very satisfactory progress in its business. The premiums received from all sources during the year 1862 amount to upwards of £65,776, against £47,878 in 1861. The claims during the year were £34,579: 4: 7, giving a total since the commencement of the society of £215,579.

Sanitary Condition of the Indian Army. In the House of Commons, in reply to Mr. Coningham, Sir C. Wood said that already certain improvements had been introduced into the arrangements for preserving the health of our Indian army, and that still more effective measures remained to be taken in pursuance of the recommendations of the sanitary commissions.

Presentation to R. H. Bowness, M.D. At the anniversary of the "Rainbow" Lodge of the Independent Order of Oddfellows, celebrated at Poulton-le-Fylde, on the 8th inst., a valuable testimonial in the shape of a handsome gold watch was presented to R. H. Bowness, M.D., in recognition of his unceasing interest in the welfare of the members of the society during a period of eighteen years. In presenting it the speaker said, that he trusted the doctor would not value the testimonial for its intrinsic worth, but as a memento of their respect for him, and an acknowledgment of the zealous and faithful performance of his professional duties.

Medical Registration Association. The following contributions have been received since our last announcement, towards the liquidation of outstanding debts amounting to £200, and for which the creditors are seeking to make the treasurer, John Lavies, Esq., liable: it should be stated that he is already fifty pounds out of pocket. Dr. G. Budd, £2:2; Dr. J. Watson, £2:2; Dr. J. Duncan, £1:1; Dr. Smiles, £1:1; Dr. G. Tebay, £1; M. Ware, Esq., £1:1; E. Pearse, Esq., £1:1; F. Price, Esq., Deptford, £1:1; J. White, Esq., £1:1; W. U. Whitney, Esq., £1:1; E. A. Newton, Esq., 10s. 6d.; Dr. Riding, 10s.; Dr. A. B. Duncan, 10s. 6d.; H. W. Statham, Esq., 10s.; P. Marshall, Esq., 10s.; T. C. Jackson, Esq., 10s; Dr. H. C. Andrews, 10s.; George Booth, Esq., £1:1; H. Hancock, Esq., £2:2; H. Harris, Esq., £2:2; Dr. Routh, £2:2; W. A. Harrison, Esq., £1:1; Dr. Semple, 10s. 6d.; Dr. A. Clark, 10s. 6d.; Dr. Richards, 10s. 6d.; Dr. Morgan, £1; C. Ridley, Esq., £1:1; Dr. Frazer, 10s.; T. Hazel, Esq., 10s. 6d. Subscriptions should be sent direct to John Lavies, Esq., 5, Great George Street, Westminster, in aid of the Fund.

A Transatlantic Museum. Washington letters state that there are at present at the Army and Medical Museum in Washington about 1,000 surgical specimens, 150 medical specimens, and 300 specimens of missiles used in warfare. A portion of the bone, both sides of the fracture, when amputations are performed by army surgeons, have to be sent to the Surgeon-General for inspection, and the specimen is placed in the museum, with the surgeon's name attached to it, as a record of either the good or bad operation performed. This museum, it is said, already combines more surgical and medical specimens than any museum of the kind in Europe. The specimens are illustrative of gunshot wounds, shell and sabre wounds, injuries and affections. Accompanying such specimens is a description stating where the wound was received, how treated, the result, and by whom treated. Mr. Corcoran's spacious building near New York Avenue has been secured, and is being fitted up for the new medical museum. (*American Paper.*)

King's College. The distribution of prizes and rewards to the students in medicine, general literature, and the applied sciences took place at King's College on June 26th; the Bishop of Lichfield in the chair. The following were the successful candidates in the medical department:—*Scholarships*: Edward Harley, senior, scholar; Charles Berrell, 2nd year scholar; Robert S. Smith, Charles Kelly, and Edward C. Evans, junior scholars; Edward Harley, William L. Canton (since deceased), Charles Kelly, Samuel H. Smith, Robert S. Smith, Frederick Marshall and Charles H. B. B. Allen (equal), Warneford scholars. *Prizes and Certificates of Honour*:—*Winter Session*, 1862-63. *Warneford Prizes*: Edward Liveing Fenn, 1; Charles Berrell, 2. *Leathes Prizes*: William T. T. Dyer, 1; Alfred J. Matthew, 2. *Divinity Prizes*: John S. Ferris, 3rd year; Richard W. Haines, 2nd year; Charles Kelly, 1st year; *Gill Prize*: John Oakley. *Todd Clinical Prize*: Henry L. Kempthorne. *Anatomy*: Thomas Clay Shaw, B.A., and Miles Astman Wood (equal), prizes; Charles W. Philpot, Thomas Howells, and Edward L. Fenn, 2nd year, Walter O. Withers, Samuel H. Smith, and Geoffrey Hett, 1st year, certificates of honour. *Physiology*: Walter T. P. Wolston, prize; Thomas C. Shaw, B.A., and Paris Bradshawe, 2nd year; W. O. Withers and George A. Brown, 1st year, certificates of honour. *Chemistry*: C. W. Philpot, 2nd year, prize; T. C Shaw, B.A., certificate of honour; G. A. Brown, 1st year, prize; and Frederick Marshall, 1st year, certificate of honour. *Medicine*: Henry L. Kempthorne, prize; Herbert Nankivell, Joseph Groves, B.A., and Revett C. Powles, certificates of honour. *Surgery*: H. Nankivell, prize; R. C. Powles and John S. Ferris, certificates of honour. *Clinical Medicine*: Joseph Groves, B.A., prize. *Clinical Surgery*: H. Nankivell, prize; J. S. Ferris and James Jones, certificates of honour. *Summer Session*, 1862. *Practical Chemistry*: Charles Berrell, prize; John B. Welch, and Richard W. Haines, certificates of honour. *Forensic Medicine*: J. S. Ferris, prize; Edward Harley, and H. Worms, certificates of honour. *Botany*: William T. T. Dyer, prize; Frederick Noyes, C. W. Philpot and Thomas Bond, certificates of honour. *Midwifery*: Robert Meadows, prize; E. Harley, and Gwynne H. Harries, certificates of honour. *Materia Medica*: T. C. Shaw, B.A., prize; R. W. Haines and J. B. Welch, certificates of honour. *Comparative Anatomy*: R. C. Powles, prize; W. T. Buckle, certificate of honour. *Clinical Medicine*: William C. Smith, prize; Edward Harley, certificate of honour. *Clinical Surgery*: John S. Wesley, prize; Edward Bellamy, certificate of honour. The following are the names of those elected associates of King's College. John Bubb, Edward Harley, John Henry Hartley, Robert Lewer, Charles Samuel Matthews, William J. Smith, and William N. Thursfield.

Middlesex Hospital Medical School. The distribution of prizes took place on June 29th, 1863; Sir Stuart Alexander Donaldson in the chair. The following prizes and certificates of honour were awarded to First Year's Students:—*Summer Session*, 1862. *Prizes*, Mr. Henry Cribb, Bishops Stortford; Mr. Edward Norton, Birmingham (equal.) *Certificates of Honour. Materia Medica.* Mr. H. Cribb; Mr. E. Norton; Mr. Robert King, Moulton, Lincolnshire. *Botany.* Mr. H.

Cribb; Mr. E. Norton; Mr. R. King. *Practical Chemistry.* Mr. H. Cribb; Mr. E. Norton. *Winter Session*, 1862-63. *First Prize*, Mr. Vincent Edmund Noel, Devonport; *Second Prize*, Mr. Charles Wills, Narborough, Leicestershire. *Certificates of Honour. Anatomy.* Mr. V. E. Noel; Mr. C. Wills; Mr. W. Griffith Jones, Llanelly, Carmarthenshire; Mr. John Swindale, Appledore, Devon; Mr. Alfred Jones, Undy Vicarage, near Chepstow. *Physiology.* Mr. V. E. Noel; Mr. J. Swindale; Mr. C. Wills; Mr. W. G. Jones; Mr. Thomas W. Gascoyne Palmer, Cheltenham. *Chemistry.* Mr. V. E. Noel; Mr. C. Wills; Mr. J. Swindale. The following prizes and certificates of honour were awarded to Second Year's Students:—*Summer Session*, 1862. *First Prize*, Mr. John Ablewhite Smith, Louth; *Second Prize*, Mr. Alfred Brend, Bideford. *Certificates of Honour. Midwifery.* Mr. J. A. Smith; Mr. A. Brend. *Medical Jurisprudence.* Mr. J. A. Smith; Mr. A. Brend. *Winter Session*, 1862-63. *First Prize*, Mr. George Clements, Brixham; *Second Prize* (which for the fulness of his clinical reports has been made equal to the first prize), Mr. Henry William Freeman, Bideford. *Certificates of Honour. Medicine.* Mr. R. King; Mr. H. W. Freeman; Mr. G. Clements. *Surgery.* Mr. G. Clements; Mr. H. W. Freeman; Mr. R. King. *Anatomy.* Mr. G. Clements; Mr. H. W. Freeman; Mr. R. King; Mr. Edward J. Armstrong, Dowlais; Mr. Charles E. H. Rogers, Westmeon, Hants; Mr. Horace Basan, London. *Physiology.* Mr. G. Clements; Mr. H. W. Freeman; Mr. R. King; Mr. C. E. H. Rogers. *Pathology.* Mr. G. Clements; Mr. R. King; Mr. H. W. Freeman. *Prize offered by the Medical Society for the best Paper of the Session.* (In consequence of the excellence of two of the papers, a prize has been awarded to the author of each) Mr. George Pyle, Amesbury; Mr. James Smith Turner, London. The following prizes were awarded to Third Year's Students:—*Clayton Prize for Comparative Anatomy.* Mr. S. Seabury Edwardes, Hampstead. *Governors' Prize for the best Report in Clinical Medicine and Clinical Surgery.* Mr. J. A. Smith. *Honorary Certificates of General Good Conduct and Diligence.* Mr. Frederick H. Alderson; Mr. A. Brend; Mr. William G. Curgenven; Mr. George H. Clifton; Mr. John Drust; Mr. Charles Hinds; Mr. Thomas Lucas; Mr. Charles J. Pyle; Mr. George Pyle; Mr. J. A. Smith; Mr. William D. Stone; Mr. Frederick J. Tucker; Mr. James S. Turner; Mr. William J. Wey; Mr. Charles H. Weld; Mr. Albert Weaving.

Meeting of Medical Men of Bedford and its Neighbourhood. A meeting of the medical men of Bedford and its vicinity was held at the George Hotel, Bedford, on Monday, July 6th, at two o'clock; R. Couchman, Esq., Mayor of the borough, in the chair. The meeting was called on account of the alleged fact that Dr. Burrows and Dr. Wharton had met in consultation with Mr. Coombs. It was stated that Mr. Coombs had never given a satisfactory disavowal of the practice of homœopathy, and that Dr. Wharton still continued to meet him in consultation. Mr. Coombs had privately stated that he does not practise homœopathy, and had intimated his willingness to give any pledge required of him for the future. The meeting resolved to request of Mr. Coombs "a distinct pledge in writing to the chairman that in future he will not practise homœopathy; and that he will discontinue using the M.D. from a homœopathic college." A resolution was also passed:—"That it is the opinion of this meeting that members of the profession should refuse to meet in consultation anyone who meets in consultation with homœopathic practitioners." In consequence of some statements made by Mr. Thurnall and Dr. Barker, the meeting passed a resolution, "That the practice of medical men, or their wives, calling upon new comers in the town or neighbourhood, with the view of either directly or indirectly securing them as patients, is derogatory to the profession; and that the present meeting earnestly recommends that in future the strictest regard to professional etiquette should, on all occasions, be observed by members of the profession." Mr. Carter having alluded to the fact that one practitioner was present who, as a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, used the title of M.D.; and that such license does not give a right to the use of such title, Mr. Hacon at once pledged himself not to use the title of M.D. for the future. Dr. Barker said that sufficient had come under the notice of the meeting to show the necessity of a society which should take cognisance of professional irregularities—in fact, of a court medical. He proposed that a Bedford Medico-Ethical Society should be established, to consist of a president, a secretary, and three members of committee, the president and secretary to be chosen annually, and one member of committee to retire annually in rotation. If any member of the profession in the town or county had any reason to complain of the conduct of any other member, he should communicate with the secretary, who should call a meeting of the committee. If the committee deemed the alleged charge of sufficient importance, a meeting of the entire profession to be called for the purpose of settling the matter in dispute. A resolution forming the society was passed; Mr. Couchman was elected president, Mr. Carter secretary, and Dr. Wharton, Mr. Thurnall, and Mr. C. Robinson, the first members of the committee. Dr. Prior's name was afterwards substituted for that of Dr. Wharton. At this stage of the proceedings, Mr. Coombs entered the room. The chairman explained to Mr. Coombs the object of the meeting; and disclaiming on the part of himself and of every member present any personal feeling, or any other motive than the purest desire to uphold the honour of the profession, read to him the first resolution that had been passed. Mr. Coombs expressed his willingness to give the required pledge in writing, as far as the practice of homœopathy is concerned; but refused to discontinue the use of the M.D. degree. It was then resolved:—"That this meeting will not recognise Mr. Coombs's repudiation of homœopathy, unless he at the same time repudiate the degree of M.D. obtained from a homœopathic university." Mr. Coombs was urged by the chairman and by several members of the meeting to give up the use of the homœopathic M.D.; but he still maintained that he had made all necessary concessions. The following resolution was then unanimously, although reluctantly, passed:—"That this meeting congratulates Mr. Coombs on his repudiation of homœopathy as a practice; but regrets that, in consequence of his not agreeing to resign his title of M.D. obtained from a homœopathic college, they cannot consent to meet him in consultation."

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Saturday. Royal Botanical Society.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—July 11, 1863.

[From the Registrar-General's Report.]

	Births.	Deaths.
During week..... { Boys.. 989 / Girls.. 994 }	1983	1287
Average of corresponding weeks 1853-62	1777	1170

Barometer:
Highest (Fri.) 30.198; lowest (Tu.) 29.890; mean, 30.093.

Thermometer:
Highest in sun—extremes (Fri.) 124 degs.; (Sun.) 99 degs.
In shade—highest (Fri.) 83.5 degs.; lowest (Fri.) 51.1 degs.
Mean—65 degrees; difference from mean of 43 yrs. +3.4 degs.
Range—during week, 32.4 degrees; mean daily, 26.8 degrees.

Mean humidity of air (*saturation*=100), 70.

Mean direction of wind, N.E.—Rain in inches, 0.00.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—Mr. Maunder, we have been requested to state, is not a candidate for the vacant office at the Lock Hospital.

MR. W. R. ROGERS.—The paper of Mr. Martyn on "Housemaid's Knee" may be found in the JOURNAL of November 23rd, 1861.

SYNTAX IN ST. GEORGE'S HOSPITAL.—We have been asked the meaning of the following choice specimen of *reasonable* English. It is, we are told, a Law which has just been passed by the Governors of St. George's Hospital.

"1*a*. No surgeon shall hold office beyond a period of twenty years from the date of his last election (but this law shall not affect any surgeon elected before the fifth day of July, One thousand eight hundred and sixty-one), when he shall become a consulting-surgeon."

According to the words of the Law, it is manifest that the present surgeons of St. George's Hospital became consulting-surgeons at the date of their election as surgeons! No medical man, we are satisfied, is responsible for such a composition.

COMMUNICATIONS have been received from:—Dr. H. HYDE SALTER; Mr. C. F. MAUNDER; Dr. W. R. ROGERS; Dr. HENRY GOODE; Dr. H. BARKER; Dr. T. J. WALKER; Dr. KIDD; Mr. W. CADGE; Dr. MAYO; Mr. T. O'CONNOR; Dr. VOSE; Mr. RICHARD GRIFFIN; Mr. HIGGINBOTTOM; Mr. H. LEE; Dr. GIMSON; Mr. W. EDDOWES; Dr. EDWARD COPEMAN; Mr. G. REED; Mr. R. B. CARTER; and Mr. BREMRIDGE.

BOOKS RECEIVED.

1. Lectures on Surgical Pathology delivered at the Royal College of Surgeons of England. By James Paget, F.R.S. Revised and Edited by William Turner, M.B. London: 1863.
2. Braithwaite's Retrospect of Medicine. London: July 1863.
3. Half-Yearly Abstract of the Medical Sciences. London: July 1863.
4. Quarterly Journal of Microscopical Science.
5. On Peculiar Appearances exhibited by Blood-Corpuscles under the Influence of Solutions of Magenta and Tannin. By W. Roberts, M.D.
6. Small-Pox and its Prevention. By W. Newman, M.D. 1863.

ADVERTISEMENTS.

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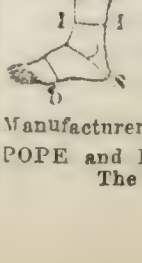
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Remarks
ON
EXTREMES IN PRACTICE.

BY
THOMAS MAYO, M.D. F.R.S.

One of the most active and thoughtful Fellows of our College, Dr. Lionel Beale, has published in the number of this Journal for July 4th two interesting cases, well calculated to elicit from me a few more remarks on the subject of "Extremes in Practice". This expression, which I used in my last contribution, certainly was then used as implying a something in excess and overdone. But it must be remembered that, unless this view be cautiously adopted in any given case, the imputation which it thus conveys, may be extremely uncandid. The so-called extremes of practice of one age may be the normal and moderate practice of another; and the physician, who is blamed for extreme practice in the first, may be justly held up to praise in the second age for philosophical boldness.

The extreme in practice questionable in these two cases *may* be considered twofold—an excessive avoidance of depletory measures; and an excessive amount of stimulation by brandy, etc. The question, whether the first of these excesses be imputable here, is suggested by the author. In my opinion, this question is applicable only to the second; that is to say, to the use made of alcoholic stimulants. That a commissionaire, who had been much exposed to wet and cold, his urine with a trace of albumen, his heart's action feeble after a loss of only five ounces of blood, labouring under symptoms of pulmonary infarction in a very high degree, should not require further sanguineous depletion, and should require by the seventh day after admission to the hospital, which may have been a more advanced day of the disease, a very plentiful supply of stimulants,—all these suppositions may be conceded, certainly without the concession implying deficient abstraction of blood. But the amount of brandy given (twelve ounces in twenty-four hours), and the prosperous termination of the case under this kind and amount of treatment, is certainly an extreme in practice, which we ought to regard with a very cool judgment. Large statistics are wanted on this subject, and I have no doubt may be found. The different amount of susceptibility of irritation from stimulants in different persons is very remarkable. Whether the annals of King's College can confirm the value and harmlessness of intense alcoholic stimulation or not, in one respect the public is greatly indebted to that school; namely, the making good its claims to be considered a far *safer* remedy than had ever been before laid down and proved. This point is certainly made good; but it does not settle the whole question, whether the amount of stimulation was expedient. In the above case, which is much too briefly given, "some might consider", Dr. Beale observes, "that this man ought to have been bled freely, in consequence of the low delirium, the motions and urine being passed under him, the great oppression of breathing, which was 70 in the minute, with congestion of the superficial vessels and profuse sweating." I do not think we have so far oscillated back into the depletory excesses of former days as to consider the abstraction of blood requisite under these circumstances.

With respect to the second case of Dr. Beale, in which also he discovers some pneumonia, there is no evidence in his account of its treatment of inadequate depletion. The small loss of blood, only four ounces, to which it was subjected, seems as much as it would require on any theory of the present day; but certainly there is greater evidence of "excessive stimulation", to use Dr. Beale's words. Under this treatment (24 oz. of brandy in twenty-four hours), according to him—1. The pneumonia does not extend. 2. The embarrassment of respiration is not increased; nor is the breathing increased in frequency. 3. The inflammatory products are absorbed, and free excretion goes on, etc. I refer my reader to Dr. Beale's description of this case. But was it pneumonia? The case began with rheumatic pains; then came rubbing sound and cardiac dulness; then "dulness and bronchial breathing from the spine of the scapula downwards to the base of the left lung"; "breathing in front of both lungs good; pulse 132, feeble, but regular; respiration 43, very short; no delirium." Whether these and the other symptoms given by Dr. Beale justified his treatment—besides large nutrition, twenty-four ounces of brandy every twenty-four hours for seven days—is a question certainly not settled by the facts adduced by Dr. Beale. Still the treatment was borne, and the progress of the case under it was successful.

Some of my cotemporaries may remember a most interesting case of an eminent physician, not absolutely irrelevant to the subject which I am considering. It commenced with very intense pain in the thorax. This was relieved by a large dose of hydrochlorate of morphia and five grains of calomel. Then came dulness of a portion of the thorax, lasting many days, and attended by occasional spasms of intense dyspnœa, threatening suffocation; and, during the latter part of the case, copious sputa of *jus de pruneau* expectoration. The case was, in fact, pulmonary apoplexy. The patient's strength was well maintained by some stimulants and by nutrition. The treatment was hydrargyrum cum cretâ continued to salivation; and I can well remember the immediate abatement of the formidable spasms and general improvement as soon as the gums became affected. There was want of power in this case. Would excessive stimulation by brandy have diminished danger and hastened recovery? The annals of King's College would probably contribute to settle this all-important question in a large group of cases, allowance being made for the varying conditions of air in different hospitals and localities. Certainly we are indebted to Dr. Lionel Beale and others for raising the important question here involved, and, at all events, for proving an apparent amount of safety and value in this practice, hitherto, I believe, unsuspected by experienced practitioners. One thing appears to *me* very probable, that, in many acute cases, bolder stimulation than has hitherto been thought safe may be applicable; and that in many cases it would be advantageous to precede such treatment by *some* abstraction of blood, which in the same cases might otherwise be mischievous.

A Lecture

ON THE

ACUTE NECROSIS OF GROWING BONES.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN.

BY

THOMAS SMITH, F.R.C.S.,

ASSISTANT-SURGEON TO THE HOSPITAL.

[*Continued from page* 52.]

Passing by the carious affections of bones for the present, I wish to speak of the acute necrosis of the long bones of children. This disease, from its frequent connection with general pyæmia and various local manifestations of general blood-poisoning, has attracted the attention of several physicians and morbid anatomists; and has of late been ably investigated in its pathological bearings by Mr. Stone, Dr. Bristowe, Dr. Wilks, and Dr. Kirkes; yet, since it has until quite recently met with so little recognition in the standard surgical works of the day, I shall venture to tell you all I know of the disease.

Through the kindness of friends, from published accounts, and from my own experience, I have collected twenty-three cases of this disease; and, as no description of mine can so clearly convey to your minds a notion of its character as an account of a case, I will relate to you some instances of the disease.

Case i. Elizabeth Wootton, aged 3 years and 6 months, on March 8th, 1862, was noticed by her mother to walk lame. On examining the right leg, she screamed with pain; for ten days she continued getting worse; the thigh in the meantime became greatly swollen. On March 18th, the child came to my out-patient room. She was suffering under severe constitutional disturbance; the thigh was much swollen, tense, whitish in colour, and shining; the lower end of the femur was greatly enlarged and exquisitely sensitive to pressure. A poultice was applied and support was given; and three days afterwards she was admitted into the Children's Hospital, under my care. At this time, the thigh had still further increased in size, and the child was very ill, requiring stimulants and support. There was no sense of fluctuation over any part of the femur. On March 29th, an incision was made over the front of the middle of the thigh down to the bone, which was quite bare, but not rough. No pus escaped; but bloody serum in considerable quantity. No relief followed the incision; the limb remained as much swollen as before.

After a few days, a little bloody pus was discharged from the wound. The child took freely of wine, brandy, beef-tea, and eggs; but gradually sank, and died April 17th, a month after the time when she first came under observation.

Post Mortem Appearances, ten hours after death. There was found to be complete necrosis of the whole shaft of the right femur, excluding the epiphyses. The bone was entirely denuded of its periosteum, except the upper inch of the back of the femur, at the commencement of the linea aspera, over the part of bone bounded by the divergence of that line above. Between the periosteum and the bone, there was a collection of dark grumous blood—no pus. The upper epiphysis was loosely connected with the shaft of the bone, but was quite healthy, as also was the hip-joint. The lower epiphysis was separated from the shaft, but was itself natural in appearance, as also was the knee-joint. The surface of the bone generally appeared white, and was hard; but just the lower end of the shaft where it joined the epiphysis, was softened and shrunken in its transverse measurement. The upper lobe of the right lung was completely solidified. The left upper lobe was solidified at its anterior part; its surface was finely nodulated, as if exudation had taken place in separate and distant lobules.

The heart was healthy; the liver fatty; the brain was not examined. The other organs were healthy. The bone has been preserved; and its present appearance confirms my description of it.

For the following cases, I am indebted to Mr. Marsh, the resident house-surgeon of the Children's Hospital.

Case ii. M. E., aged 11, a sickly child, was admitted May 30, 1862, into St. Bartholomew's, under Mr. Skey. A week before admission, the left leg over the tibia became swollen and painful. She had been treated for rheumatism before admission. When admitted, she was suffering from severe constitutional disturbance; the left leg and knee were swollen, very painful, and covered by a mottled redness. An incision was made over the tibia; about an ounce of ill-formed matter was let out; and the bone was found bare as far as the probe would reach. Wine and stimulants were administered. The subsequent course of the case was that large collections of matter formed, and were let out in the lower part of the thigh and from around the knee. The knee-joint remained much distended by fluid, though no suppuration occurred in it. Two months after her admission, as she had fallen into a state of great exhaustion from the discharge, the limb was removed by Mr. Savory, just above the middle of the thigh; after this she made a good recovery. On examination of the limb, the tibia was found bared of its periosteum, and necrosed in the whole length of its shaft.

Case iii. A boy, aged 13, struck his left knee violently against a piece of wood. This was followed by severe pain, and by general febrile symptoms, with pain in the limb and joints generally. He was admitted into St. Bartholomew's Hospital eight days after the accident, in a typhoid condition, with symptoms of pericarditis, the left knee-joint being much swollen, and other joints being tender on pressure. Next day he died.

Post Mortem Examination. The periosteum of the left femur was completely separated from the lower three-fourths of the bone, except at the linea aspera; beneath it was a large quantity of brown gruel-like fluid, which was also largely infiltrated among the soft parts of the thigh. The bone itself on section looked natural. The right elbow and left hip-joints contained a turbid oily fluid; the other joints were healthy. The superficial and deep veins of the thigh were plugged by coagula, which in places had begun to soften. Secondary deposits were found in the lungs; and the pericardium showed traces of recent acute inflammation.

Case iv. A boy, aged 16, was kicked on the shin, August 27th, 1862. Three days afterwards, he was admitted under Mr. Skey into St. Bartholomew's, with symptoms of general febrile disturbance. The injured leg was swollen, hot, red, and acutely sensitive to pressure from just below the knee to just above the ankle. There was no enlargement of either the knee or ankle joints. An incision was made over the tibia, and about half an ounce of ill-formed bloody and offensive pus was let out. The periosteum was found largely separated from the bone. Symptoms of pericarditis came on, and the boy died the next day—seven days after the injury.

Post Mortem Appearances. Indications of recent acute pericarditis were found. There were numerous secondary deposits in the muscular substance of the heart, in

the lungs, and in the kidneys. The periosteum was separated from the tibia on almost the whole of its anterior aspect, and to a considerable extent from the sides and back of the bone. Bloody serum was infiltrated among the tissues of the limb, and surrounded the shaft of the bone; which latter was inflamed and roughened on its anterior aspect.

Case v. A boy, aged 8, knocked his shin against a coal-scuttle. Two days afterwards, he had rigors and pain in the leg, and general febrile disturbance. The third day he complained of a pricking pain in the left side of his chest. He was admitted into St. Bartholomew's Hospital, September 18th, 1862, under Mr. Skey, with symptoms of acute pleurisy. The upper half of the left leg was swollen, red, and tender. An opening was made, and two drachms of sanious pus was let out; the bone was found bare beneath. He was ordered stimulants. After a while the discharge from the wound became very profuse, and he sank exhausted, six weeks after his first seizure.

Post Mortem Appearances. A large collection of pus was found in the pericardium; another, smaller, between the spleen and diaphragm; a third, beneath the recto-vesical pouch of the peritoneum. The tibia, which I have before me, was found separated almost entirely from its periosteum, except at its articular ends; a fissure may be seen running obliquely down the bone, as if it had been fractured. Here and there the periosteum is separated from the bone by recent deposits of vascular and semi-ossified lymph, which adhere closely to both it and the bone. There is a circumscribed spot of ulceration just below the upper epiphysis of the tibia. The deposits of new bone upon this tibia indicate, as I believe, points where the periosteum was originally separated from the bone, but where the bone has not lost its vitality, they illustrate the rapidity with which new bone may be formed from the lymph effused by the vascular periosteum of a child.

Case vi. A schoolboy, aged 9, fell on his left shoulder, or struck it, on February 26th. He made no particular complaint, but used it in the ordinary way, until March 1st. He then complained of pain about the shoulder, and felt unwell; took no food, and was dispirited. He was at once sent to bed; and Mr. C. Robinson saw him, and ordered four leeches to the injured part. There was no sign of fracture, but there was tenderness over the whole length of the clavicle and below it downwards towards the chest—it was firm and œdematous. A puncture was made half an inch below the clavicle; blood only escaped, and no relief followed. On March 3rd, Mr. Paget (to whom I am indebted for this account), saw him, and found considerable swelling over and about the whole length of the left clavicle; the swelling was ill-defined at its borders, and extended up into the neck, towards the nipple; but was not perceptible in the axilla; it was firm, doughy, and œdematous. The surface of the skin had a widely diffused pinkish tinge; poultices had been freely applied; the only part that was tender to pressure was along and over the line of the clavicle. There was much constitutional disturbance; the accompanying fever was not of a low type; great restlessness and wandering at night. He had had no shivering at any time. Leeches were ordered, followed by fomentations and poultices. On March 4th, the patient was better, though the swelling had gradually extended upwards towards the neck and chin. Next day, an incision over the clavicle, let out a teacupful of turbid pus, and gave the patient much relief; but the same evening his pulse rose; he became irritable and light-headed; his breathing more hurried; teeth, lips, tongue, and skin dry. The swelling over the clavicle was much diminished and began to discharge pus freely. Wine, opium, and support were freely administered, but he gradually sank, and died on March 9th, nine days after the commencement of his illness. Before death, the whole of the swelling had subsided, the discharge being copious to the last. No *post mortem* examination was allowed.

The foregoing case—for the particulars of which I am indebted to Mr. Paget—I believe to have been an instance of acute necrosis of the clavicle, with death from pyæmia; similar to the case to which I shall next allude.

Case vii. Mr. Jonathan Hutchinson presented this specimen, which I have before me, to the museum at St. Bartholomew's; it is numbered in the catalogue (258 series 1.) It is a clavicle with the neighbouring soft parts. The bone is dead, bare, rough, and is completely separated from its periosteum and its outer epiphyses. It was surrounded by bloody pus. It was removed from a boy, aged 5, who, after a fall on the shoulder, suffered from swelling, pain, and great tenderness over the clavicle. He died eleven days after the injury, and was found to have suffered from pericarditis and pleurisy.

The following cases I have extracted from the *Guy's Hospital Reports* for 1861; they are to be found in an article on Pyæmia by Dr. Wilks.

Case viii. James H., aged 15, fell and struck his right thigh; this was followed by swelling, and four days afterwards, he entered Guy's Hospital. Two days after admission, he was seized with rigors and pain in the side, swelling and pain in the joints. He died on the twenty-fourth day of his illness.

Post Mortem Examination. The soft parts of the thigh were infiltrated with pus; the femur was bare; the knee-joint containing pus; there was abundant evidence of general pyæmia.

In this case, the disease seems to have concentrated itself about the lower end of the femur and its lower epiphysis; not, as is more usual, confining itself to the shaft of the bone. The following cases afford instances of the same.

Case ix. Thomas M., aged 16, was admitted with a swelling around the thigh, which was supposed to arise from injury, and from which the lad died in seventeen days.

Post Mortem Examination. There was an abscess in the thigh surrounding the lower parts of the bare femur, and involving the knee-joint; and abundant evidence of general pyæmia.

Case x. Henry B., aged 16, struck his right knee against an anvil. A week afterwards, it began to pain him, and he felt ill. The knee began to enlarge; an abscess opened near it, and he died with symptoms of general pyæmia, five weeks and three days after the injury.

Post Mortem Examination. An abscess was found in the right knee-joint; the bones were bare; and there were evidences of pyæmic deposits in the lungs, heart, kidneys, and elsewhere.

The following five cases are taken from a paper by Dr. Bristowe in the *Transactions of the Pathological Society* for 1862. Dr. Bristowe states that, "in most of them the bones were extensively affected, often the whole shaft of one of the long bones being necrosed. In consequence of the rapid course of the disease, little beyond complete detachment of the periosteum, with suppuration around and sometimes within the shaft, had occurred. In one instance, however, in which the duration of the disease had been unusually long, a small quantity of new bone had been already deposited; in no case were the joint-ends materially affected."

Case xi. A woman, aged 29, suffering great privation, was attacked with pains in the thigh, followed by œdematous, doughy, and pallid swelling. She was attacked

with rigors and delirium, pulmonary complications occurred, and in seventeen days she died.

Post Mortem Examination. The lower two-thirds of the femur were found almost completely denuded of the periosteum, and surrounded with thick pus. At one point, a good sized patch of soft granular new bone was found adhering to the shaft; the epiphyses and neighbouring joints were healthy; the medullary canal of the bone was full of puriform fluid. There were evidences in the body elsewhere of general pyæmia.

This case is worth noticing, since it is singular in respect of the age of the patient attacked; indeed, it is the only instance I have met with of a patient suffering from this disease after the complete ossification of the long bones.

Case xii. A boy, aged 15, was admitted into St. Thomas's Hospital, his left knee being swollen, red, and tender, supposed to be due to cold caught after exposure to the heat of a furnace. The swelling extended downwards towards the leg. A large quantity of pus was let out from over the tibia, the upper part of the shaft of the bone being completely denuded of its periosteum. Symptoms of pyæmia set in, from which, however, he seemed to recover; finally, the whole shaft of the tibia became necrosed, and the knee-joint involved; and the boy died from phthisis, five months after his admission. No *post mortem* examination was allowed.

Case xiii. A boy, aged 5½, after exposure to cold, had swelling and pain on deep pressure over the upper part of the right thigh, followed by abscess over the parotid region and left wrist. The femur was cut down upon, and pus let out from beneath its periosteum. He suffered from severe constitutional irritation, and died ten days after the commencement of his illness.

Post Mortem Examination. Amost the whole of the shaft of the left femur was found bare and bathed in pus; the cancellous texture of the bone contained purulent fluid; the pterygoid process of the sphenoid bone was necrosed, and formed the centre of an abscess. There were evidences of general pyæmia.

Case xiv. M. G., a girl, aged 11, sprained her right shoulder, which became painful and swollen, and very tender. The swelling was in the region of the deltoid muscle. The child being very ill, a knife was pressed down to the bone, and a large quantity of pus was let out from beneath the periosteum. A considerable portion of the shaft of the bone below the anatomical neck was found bare. From this time her condition improved, and eight months after her admission, a large sequestrum was removed from the outer side of the shaft of the humerus, just below the neck. She was discharged cured, nine months after her admission; a result which, I think, we may in a measure attribute to the early recognition of her ailment, and the prompt treatment adopted.

Case xv. A boy, aged 12, from no apparent cause, was attacked with pain in the right thigh, knee, and hip; there was no swelling nor redness. He was treated for rheumatism. The pain increased in his thigh; but on the day before his death, he got up and dressed himself. Next day, he visited St Thomas's Hospital, and died in the out-patient's room, after eight days illness.

Post Mortem Examination. The upper third of the right femur was found bare and bathed in sanious pus, collected between the periosteum and the bone. The diseased portion of bone was irregularly limited below; above, it was bounded by the capsule of the hip-joint. The cancellous structure of the bone presented here and there distinct accumulations of pus. Secondary abscesses and deposits were found in various parts of the body, giving indications of pyæmia.

I would point to this case as one typical of the disease under consideration; the early symptoms resembling rheumatism, the disease with which acute necrosis is most often confounded; and I would caution you of the difficulty of recognising suppuration in an early stage around the shaft of the femur, particularly about the upper part of the bone; since there the covering of soft parts is so dense that it is long before swelling, redness, or fluctuation, make their appearance.

Of the resemblance of this disease in its early stage to acute rheumatism, the following case affords another example. It is taken from an account of some cases of Acute Necrosis followed by Pyæmia, by Mr. W. H. Stone (*Medical Times and Gazette*, 1859, p. 55).

Case xvi. A healthy well formed girl, a domestic servant, aged 15, five days before her admission into St. Thomas's Hospital, began to suffer from severe pain in the left forearm, especially on its posterior aspect; it quickly began to swell. Next day, she was seized with rigors, vomiting, pain in the chest, and cough—with delirium at night. On admission, her general aspect was that of a case of rheumatism, with cardiac complication. The forearm was doughy, swollen, slightly red, in patches, tender on pressure; the joints were unaffected. She died on the day of her admission, on the sixth day of her illness.

Post Mortem Examination. The lower third of the left radius, with the exception of its epiphysis, was separated from its periosteum and surrounded with thick pus. The wrist-joint and epiphysis of the radius were healthy. There were indications of pyæmia in the lungs, pleura, pericardium, kidneys, and elsewhere.

Case xvii. The following case is from the same source as the above. A boy, aged 15, injured his left leg in a fall down stairs; an abscess formed over the tibia at the seat of injury, and from this there was a profuse discharge. He was admitted a month after this injury into St. Thomas's Hospital, with symptoms of typhoid fever. The leg was swollen and tender, and a probe, passed into the opening over the bone, could be passed upwards and downwards for its whole length. Diarrhœa came on, and he died, forty-three days after the injury.

Post Mortem Examination. The whole shaft of the tibia was found bare and dead, and surrounded by pus. The joints at each end of the bone were healthy, and the epiphyses were unaffected. Secondary abscesses and other indications of pyæmia were found in the body.

These cases will serve to illustrate the prominent symptoms of this affection; such symptoms being, first, a local swelling, pain and tenderness, followed by constitutional fever and subperiosteal effusion, ending in abscess beneath the periosteum, or in the neighbouring joints, general pyæmia, with death from secondary affection of internal organs. The early symptoms, especially if pyæmia be rapidly developed, often much resemble those of acute rheumatism; and this on account of the swelling of the part first affected, the frequency with which joints remote from the seat of disease are attacked by pyæmic inflammation, and the pericarditis which so often complicates the disease. Thus it has happened that many of the cases I relate were mistaken for, and treated as, acute rheumatism with cardiac complication.

The tendency to pyæmic poisoning of the blood is the most characteristic difference between the necrosis of the young and fully grown adults. As I have before stated, I believe the predisposing cause of this affection to be the extreme vascularity of certain parts of the long bones, which, from their very position, are more exposed to external injuries and influences than other parts, and are, from their vas-

cularity, extremely prone to resent such injury by copious subperiosteal effusions.

All but one of the twenty-three cases before me occurred before the age of twenty; that is, while growth and ossification of the bone were still in progress. This will, I believe, account for more than half (or twelve) of the cases having commenced in the lower epiphysial end of the femur—the most rapidly growing epiphysis in the whole body, the first to appear in infant life, the last to disappear in adult age. It will, I believe, explain why seven of the cases happened in the tibia, which, next to the femur, is the most rapidly growing long bone in the body, and why of these cases the majority commenced in the upper epiphysis of that bone, an epiphysis which appears but a few days later than that of the lower end of the femur, and in which growth ceases somewhat sooner.

The local origin of this malady is frequently a blow of some sort. In twelve, or more than half of these cases, this was the assigned cause; six were not traceable to any cause; three occurred after exposure to cold; one was attributed to privation; one to a strain.

[*To be concluded.*]

Curious Case of Poison: Effects of the Upas-Tree Poison. The *Abeille Médicale* states that a short time ago a scientific gentleman at Berlin received a small quantity of the condensed juice of the upas, and resolved to try the effects of it upon himself. One afternoon he accordingly took three grains of this drug, which he found very bitter and rather saltish. Immediately afterwards he felt extremely gay, and a bad headache which he had at the time disappeared; but after a while he experienced a sensation of oppression in the stomach. Nevertheless, he had the imprudence to go out; on turning a corner he became aware of a considerable stiffness along the spine; this was about half an hour after having taken the poison. An hour later, while taking a cup of coffee, he felt a violent shock throughout his body, and stiffness at the extremities; at the same time his head was thrown backwards, he lost all power of speech, but his mental faculties remained unimpaired. There was a slight remission of these symptoms for a few minutes, and then a fresh attack came on, and this continued until the patient at length succeeded in expressing a wish to be taken to the hospital of La Charité. As he was being helped downstairs to get into a carriage a new attack impeded his progress, but during the drive he had none, although the slightest shake seemed sufficient to bring it on. These attacks were attended with but little pain; deglutition was very difficult, and the patient felt very weak. After every attack the muscular system relapsed into inertness. At the hospital emetics were immediately administered to expel the poison if any remained; the vomiting was attended with sudden starts, spasms in the glottis, and difficulty of breathing; the latter symptom, however, soon subsided. The pulse was at 72. Thirty drops of laudanum were administered at the rate of ten for every quarter of an hour, and then thirty more, in three parts, at intervals of half an hour. The patient fell asleep, but was often awakened by the contraction of the muscles of the back and neck. Laudanum was again administered, and sleep returned. On the following morning the patient felt very weak, but only complained of stiffness in the left muscles of the neck; the pulse was at 66. Wine and light food were now given instead of medicine, and on the sixth day the patient left the hospital perfectly recovered. (*Galignani's Messenger.*)

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

OBSERVATIONS ON CEREBRAL HÆMORRHAGE, FROM AN ANALYSIS OF FORTY FATAL CASES.*

By Thomas Jones, Assistant Resident Medical Officer at the Hospital.

Fully impressed with the importance of investigating any disease by the "numerical method," I am desirous of recording some general inferences arrived at on certain points in relation to cerebral hæmorrhage. These inferences have been induced from pell-mell accumulation of individual facts obtained from the records of forty fatal cases that have occurred at St. George's Hospital. In any inquiry of this kind, it is of the utmost importance to steer clear of all sources of fallacy which are so prone to creep into our individual facts, rendering our data a conglomeration of truth and error. For these reasons, I have carefully excluded in my analysis all the cases of merely congestive or simple apoplexy of Abercrombie, and also those which had not died, however marked the symptoms may have been. I have thus included only those which presented after death visible evidence of hæmorrhage within the cranium; and all these taken indiscriminately and heaped together quite independently of any preconceived idea of the disease. After all this careful scrutiny, I find I have notes of forty cases.

I shall examine these cases with the view of determining, if possible—

1. The prevailing symptoms which indicate an approaching attack of cerebral hæmorrhage;
2. The symptoms which exist after the lesion in the brain, leading to effusion of blood, has taken place.

I.—Premonitory Symptoms.

The importance of studying these premonitory symptoms cannot be too strongly insisted upon; for by timely and judicious treatment, an attack might be effectually warded off, and not to return for a considerable length of time.

The following table shows the relative frequency of these different symptoms, excluding those cases (Sec. 6) of which the history is deficient or altogether wanting. The calculation per centage is made in proportion to 30.

Symptoms.		No. of cases.		Per cent.
1. Mental:	Impaired intellect	1		
	Drowsiness	1	2	6·66
2. Sensational:	Cephalalgia.	4		
	Vertigo	2		
	Nausea	2		
	Altered sensations in the limbs	2	10	33·33
3. Motorial:	Diminished power in limbs.	1		
	Do. over sphincter	1	2	6·66
4. Symptoms positively stated to be absent			11	36·66
5. "Found insensible"			5	16·66
6. History wanting		10		
			30	99·97

* From papers read before the St. George's Hospital Medical Society during the sessions 1861-62 and 1862-63; and before the Western Medical Socity, 1862-63.

From the above it appears—excluding the doubtful cases—that symptoms are more frequently present than positively absent. They were present in about 46 per cent. and absent in 36 per cent.

The most common symptoms are those of abnormal sensations; of these, cephalalgia seemed to have been the most frequent form, it having been observed in 13 per cent. The seat of the pain in the head is no indication in all cases of the site of the hæmorrhage which may subsequently take place in the brain. One of the cases was a woman who suffered from most severe pain in the temporal regions, but the hæmorrhage which afterwards followed existed in the cerebellum. Vertigo, nausea, and altered sensations in the extremities, occurred with equal frequency as the total in the mental and motorial groups; viz., about 7 per cent. The altered sensations in one case were described as "strange feelings," which were general, and the paralysis which subsequently supervened was general; in another, those altered sensations, described as "numbness," were confined to the extremities of one side, which afterwards became the seat of the paralysis. Thus, it appears that sensibility may be perverted or diminished, and these symptoms occur in those parts which afterwards become paralysed; hence, by these symptoms, one would be able to prognosticate the probable site of the hæmorrhage in the brain if it should take place.

These premonitory symptoms varied in duration from a few minutes to three months. I have no doubt that in many instances they are so transient as to escape observation altogether.

Now, to estimate the diagnostic value of any of the foregoing symptoms as precursors of hæmorrhage into the brain, we should take into consideration certain other symptoms which may be present or absent in each case. Suppose, for example, the headache were persistent for some length of time in persons presenting evidence of general defective nutrition, with degeneration of the arteries and kidneys, and hypertrophy of the heart, especially if these be accompanied with one or more of the other precursory symptoms enumerated, we have strong reason to infer that our patient suffers from that condition of the vessels and tissues of the brain, which, if not arrested, will inevitably terminate in rupture of the vessels, and consequently effusion of blood.

II.—Symptoms during the Attack.

a. Alterations of Motility. 1. *Paralysis* may be general or partial. The following analysis shows the relative frequency with which each variety occurred. As the information in one case was somewhat doubtful, I have excluded it, and have made the calculation per centage in proportion to 39.

		No. of cases.	Per cent.
Paralysis.	(*a.*) General	9	23·07
	(*b.*) Partial.....	21	53·84
Positively stated to be absent.....		9	23·07
		39	99·98

From the above, it would appear that paralysis occurred in about 77 per cent.; so that this symptom is more frequently present than absent. It also appears that partial paralysis is much more common than general; the former having existed in more than two-thirds of the cases in which loss of power was observed, and in more than one-half the total number of cases. Absence of paralysis was observed in one-fourth of the cases—a point of some importance to be borne in mind when we shall attempt at explaining the manner in which cerebral symptoms may be produced.

Of the 9 cases in which the paralysis was general, it was confined to both upper extremities in 2, and in one case the lower limbs alone were the parts mentioned as being paralysed. In the remaining numbers all the limbs were completely paralysed. As a decided instance of paraplegia is so seldomly met with as the effects of cerebral hæmorrhage, perhaps a short account of the case may not be void of interest.

Case I. William E., aged 49, a plasterer, had been pretty well, and at work all day. In the evening, he went to a public-house, and drank, as was stated, only two glasses of ale. Walking home, he staggered, and could not have got along had not his friends supported him. He complained at the same time that he could not see. He was at once conveyed into the hospital.

On admission, he was perfectly coherent and sensible, but appeared to have no power in his legs, which were also devoid of sensibility; and he had incontinence of urine. Shortly after admission, he vomited fluid smelling strongly of beer. Ten leeches were at once placed on the temples, which bled freely. Purgatives were given without any result. A blister was applied to the nape of the neck, which rose well. In two hours after he was admitted, he became comatose, and remained in this state until the following morning—twelve hours after he was first seized—when he died.

A *post mortem* examination was performed thirty hours after death. The body was in good condition; the lower parts were livid. There was much fluid blood in the scalp. The surface of the brain was dry; the convolutions were much flattened. There was a considerable quantity of bloody fluid in the lateral ventricles. The septum was broken down, and there was a considerable clot of blood in the descending horn of the right lateral ventricle. There was a small clot in the anterior part of the left optic thalamus; and another, also of small size, in the corpus striatum. The principal clot, however, was situated in the centre of the pons Varolii, which was extensively broken down. The clot extended forward in the right crus cerebri, and behind had broken into the fourth ventricle, which was full of semi-clotted blood. All these clots were quite recent. The arteries at the base of the brain were extensively atheromatous. No other part of the body was examined.

This case is open to objections; for the obvious reason, that the spinal canal and its contents were not examined after death. The existence of the loss of sight, however, indicated that he suffered from lesion in the brain on his admission. This fact, together with the absence of the ordinary symptoms of sudden lesion of the spinal canal or cord, seem to point that the paraplegia in this case depended upon the hæmorrhage in the pons. The hæmorrhage which was found here and in the crus cerebri would also account for the loss of sight, by the pressure it must have exerted upon the optic tracts. Previously to meeting with this case, I felt convinced that paralysis of both upper or lower extremities is not an unlikely phenomenon to take place from hæmorrhage into the pons, providing it were sufficiently localised.

I remember a case in which both arms, with one side of the face alone, were paralysed; but the hæmorrhage was confined to the pons. Probably, the hæmorrhage into the ventricles took place in this case at the time the patient became comatosed.

The following were the prevailing sites of the hæmorrhage in these cases of general paralysis:

1. One side of the brain, with fluid blood passing into the opposite lateral ventricle.
2. Both lateral ventricles.
3. The central ganglia at the base of the brain.
4. Both hemispheres of the brain.

The number of cases are too few to draw any inferences as to the parts which are most frequently the seat of hæmorrhage in cases of general paralysis. It is important to note that in none of the cases was the lesion confined to one cerebral hemisphere. In one case, however, it was found on one side and the corresponding side of the pons Varolii.

[*To be continued.*]

Original Communications.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page 29.*]

Paralysis from Myelitis.

The lesions of sensation and motion which accompany inflammation of the spinal cord vary with the seat, intensity, and period of the disease. If only one side of the cord be affected, the paralysis which results is confined to the corresponding side of the body. When the anterior columns chiefly are the seat of inflammation, the paralysis which follows is that of muscular motion; but of sensation, if the lesion exist in the posterior columns; and, if a careful analysis be made of the several cases in which the grey substance of the cord has been implicated, it will be found that the function of reflex action has been deranged.

During the early stage of inflammation, when the capillaries of the cord are abnormally loaded with red blood, there is a corresponding exaltation of tactile sense and muscular contraction. It is true, death rarely occurs at this first stage of inflammation; but if we may be guided by the analogy of corresponding conditions, superinduced towards the termination of disease of other portions of the nervous centre, the above inference is justified; and a case in point is recorded by M. Ollivier. (*Traité de la Moelle Epinière*, vol. ii, pp. 636-640. Observation 81. Deuxième edition.)

But as the corpuscles of the blood begin to be arrested in the injected vessels, a correlative diminution of the vital properties of the cord ensues; and it is made manifest by the decreasing sensibility or motility of the parts which receive their nerves from the affected part. It is conceivable that the vascular dilatation, when thus carried to an extreme degree, produces injurious pressure on the complex organ, and thereby diminishes its functional activity.

The next stage is that of serous or purulent exudation, in which the consistence and cohesion of the nerve-fibres are destroyed, and a solution of their continuity takes place. The arrest and accumulation of the blood-corpuscles in the distended capillaries impair the quality of the blood, and cause it to behave in the same way as when separated from the living body. It coagulates, in fact; and the liquor sanguinis, together with red and white globules, transude through the delicate tissue of which the capillary walls are formed, and which is known to be favourable to the interchange between their fluid contents and the tissues through which they pass. In this way, as Mr. Lister has satisfactorily shown (*Proceedings of the Royal Society*, June 1857), "these tissues in some degree approximate to the condition of dead matter, and cease to discharge the offices peculiar to them as components of the healthy animal frame."

This disorganisation entails a condition of complete paralysis, more or less extensive, according to the seat and extent of the inflammation. Every part of the body which receives its nerves from the spinal cord below the upper level of the structural lesion is paralysed; consequently, when destructive myelitis extends throughout the cord to the fifth pair of cervical nerves, the upper extremities are palsied, and all those parts which receive their nerve-power from a lower level of the cord are palsied too. If it reach still higher, respiration will be disturbed in consequence of the phrenic nerves becoming involved, whilst the circulation of the blood and the action of the irides may be affected through the medium of the sympathetic nerves.

But if the paralysing influence do not extend through the entire thickness of the cord, then may the lower extremities preserve their sensation and motion, although the arms hang powerless, owing to the disease having dissected out, as it were, the groups of ganglionic cells which determine the action of certain sets of muscles, whilst the conductors of the will for the movements of the legs pass by unscathed.

An illustrative case, occurring in the practice of M. Broussais, is recorded by Ollivier. The patient was a medical student aged 21, who had, as a result of acute myelitis, complete paralysis of the upper limbs, while the legs, as well as the bladder and rectum, retained their healthy power. He died on the eighth day after the attack. There was some increased vascularity of parts of the encephalon, considerable congestion of the sinuses of the cord with fluid blood, and much sanguineous effusion between the dura mater and the vertebral arches opposite the brachial enlargement of the cord, as well as a considerable quantity of red serum between the pia mater and arachnoid at the lower part. Four minute cartilaginous laminæ were found about the centre of the dorso-lumbar enlargement; and the opposite surfaces of the arachnoid were adherent at several points over the brachial enlargement, which part of the cord, especially the grey substance, was remarkably soft for about two inches. The remaining part of the cord below was somewhat softened.

This case is interesting on more accounts than one, for it illustrates most of the phenomena of myelitis in the cervical region of the cord. The next observation which Ollivier describes (No. 78) is demonstrative of the fact that, when destructive myelitis involves the entire thickness of the cord in the cervical region, there is, as might be expected, complete paralysis of the four extremities.

When the disease occurs in the dorsal region between the two enlargements of the cord, the respiratory muscles which are under the influence of the dorsal spinal nerves, obeying the laws of irritability, are frequently agitated by violent spasms, and the breathing is accomplished by short and painful efforts. If the disease extend to either enlargement, the arms or legs may participate in the spasmodic movements. But, as the work of disorganisation goes on, anæsthesia of the surface and paralysis of the muscles above alluded to follow in the train of symptoms—abdominal respiration, disturbed circulation, embarrassed digestion, difficult defecation, inefficient micturition, and all the consequences of these respective functional disturbances, ensue.

A nervous and imaginative man, with lateral curvature of the spine, is alluded to by Ollivier (vol. ii, pp. 658-667). After an irregular course of life, he experienced at the age of 34 considerable pain and numbness over the curved part between the shoulders; and complete muscular paralysis, with hyperæsthesia of the arms, rapidly ensued. Respiration and expectoration were difficult. He had likewise painful digestion, obstinate constipation, and considerable weakness in the expulsive power of the rectum; but he could void his urine, and retained the muscular power of the lower extremities until he died, at the age of 44.

In this case, the spinal cord did not suffer from compression; but from below the fourth cervical vertebra to the fourth dorsal—about seven inches in extent—the cord was found to be little more than a diffluent mass of greyish red fluid, which fluctuated about with the movements of the body. A few nerve-fibres remained in the situation of the anterior columns; but in the diseased part the anterior roots of the spinal nerves were reduced to their neurilemma only, all the white substance or nervous matter being absent; the posterior roots preserved their integrity.

The solution of continuity of the anterior columns was not complete; hence the case forcibly illustrates the independent function of each individual longitudinal nerve-fibre; and, in considering the change of structure above alluded to, it should be remembered that no part of the animal body changes so rapidly after death as the nervous tissue; so that the decomposed state in which the diseased portion of the cord was found might have resulted from a *post mortem* transformation; and that it was so appeared from the injected condition of the capillary vessels, which were left floating in the fluid mass—a degree of vascularity inconsistent with absolute destruction of both structure and function.

Dr. Nairne has recorded a more acute case in a boy aged 17, who had also an affection of the heart resulting from rheumatism, and in whom chorea existed. He was admitted into St. George's Hospital on the 27th of June, 1849. On the 3rd of July, he died; the convulsive movements having ceased only some hours before his death.

On examining the body twelve hours after death, the spinal veins were found to be greatly congested; and a portion of the spinal marrow—an inch at least in length—opposite the third and fourth dorsal vertebræ, was white and reduced to a semifluid state. In the central part of this softened portion there was fluid; and the remainder was so thoroughly disorganised, that it was thought unnecessary to put any of it under a microscope. (*Medico-Chirurgical Transactions*, vol. xxxiv, p. 37.)

In these cases, where the lesion of the spinal cord is of such a nature as to intercept the transmission of the influence of the will from the brain, convulsive movements are apt to occur in the legs, and to continue for a long time even after the arms have become completely paralysed. These phenomena are doubtless owing to the excitement of disease reflected from the spinal marrow to the motor nerves of the lower extremities. And the same involuntary movements may be produced artificially by tickling the soles of the feet, whose nervous connexion with the brain is cut off by the destruction of a portion of the cord. The influence of the stimulus is transmitted to the spine by the incident nerves, and is reflected back by the motor nerves, thereby producing spasmodic contractions of the limb. Some interesting cases of this description are recorded by Dr. Budd in the twenty-second volume of the *Medico-Chirurgical Transactions*.

But when the disease is confined to the lumbar enlargement of the spinal marrow, the convulsive movements occur at an early period of the disease, and cease *pari passu* with the disorganisation of the cord. And for a time also the electro-muscular contractility is retained;* but eventually this latter property is almost always lost. In the same manner, if there be in the first stage spasmodic contraction of the sphincters of the rectum and bladder, the urine generally becomes alkaline from retention; and priapism not unfrequently results as a reflex action from a distended bladder; but this state soon gives place to a negative condition which is often ushered in by reflex spasms of the legs during defecation and micturition.

The characteristic symptoms of paralysis, as induced by destructive myelitis, are:

1. Pain over that portion of the back which corresponds to the seat of inflammation.

2. Lesions of sensation giving rise to feelings of formication, creeping, pricking, tingling, heat, or cold, to numbness or complete anæsthesia.

3. A gradual and progressive diminution of muscular power, distinguishing it from the paralysis which the French have denominated "ataxie locomotrice progressive".

4. An equable degree of paralysis in all the muscles which are implicated; for as in health the nerve-force is distributed to whole groups of muscles in an equal degree, so likewise is it annulled when the nervous centre is disorganised.

5. Convulsive and reflex movements of the paralysed muscles.

6. Spasm or paralysis of the rectum and bladder.

7. Alkaline urine. And finally,

8. The loss of electro-muscular contractility.

Be the cause of acute myelitis what it may, whether accidental violence, inordinate muscular exertion, the abuse of venereal pleasure, cold, tubercle, or any other cause, when paralysis has once supervened, there is great reason to fear that the inflamed portion of the cord has passed into a state of disorganisation, and that the disease is incurable. The prognosis, however, will in some degree depend on the precise seat of the disease. If it be in the cervical region, for reasons already stated, the *immediate* danger is greater than when in the dorsal; in this latter, again, the prognosis is more unfavourable than when the lower portion of the spinal marrow is affected; and when the patient retains the command over the motions of the rectum and bladder, and the acid character of the urine remains unchanged, the case is still more hopeful.

But in the dorsal portion of the spinal column there is an exceptional state of things, in consequence of the calibre of the canal, which is narrower and more closely adapted to the volume of its contents than any other part. In the cervical vertebræ, where the extent of motion between vertebra and vertebra is greater, the canal is of a triangular form, and large in proportion to the size of the cord. In the lumbar vertebræ, it is also triangular and capacious; and the dura mater is loosely connected with the bony canal. A considerable space, moreover, is left between the opposed surfaces of the arachnoid, so as to allow of a sufficient play of one surface on the other; and thus, at the greatest extent of natural curve, no pressure can take place. Not so, however, with the dorsal vertebræ, the mechanism and articulation of which conspire to limit motion; and there the cord is closely enveloped in its membranes, which more completely fill the canal. This construction of the spine was first described by Mr. Earle (On the Mechanism of the Spine, *Philosophical Transactions*, 1822, part ii, pp. 276-283), to explain a circumstance which had been noticed in diseases affecting the vertebra; namely, "that the symptoms of irritation and inflammation of the spinal marrow are much more early manifested, and are generally more serious in their consequences, when the dorsal vertebræ are affected, than when either the cervical or lumbar are the seat of disease. In the former case, the slightest congestion or effusion is often productive of serious symptoms, from the canal being smaller and more completely filled with the marrow and its membranes; whilst, in the latter description of cases, from the greater capacity of the canal and looseness of the membranes, considerable effusion may exist, without at first producing any marked symptoms, more particularly in the lumbar region"; where, from other circumstances already explained, pressure is less dangerous to life.

In all cases of paralysis dependent on myelitis, both diagnosis and prognosis are greatly assisted by a knowledge of every antecedent and concomitant circumstance connected with the particular instance. In the acute form, every characteristic sign is well marked, and the disease runs a rapid course. M. Ollivier gives, as an average, from three to four days;* but, in some chronic

* To determine the amount of muscular excitability, M. Duchenne of Boulogne places the moistened conductors of his volta-Faradiac apparatus on each side of the belly of a muscle, and thus ascertains the amount of electro-muscular or Hallerian irritability which the muscle possesses. (*De l'Eléctrisation Localisée, etc.*, p. 66.)

* An interesting case of paraplegia from acute myelitis, which was

cases, the pain in the back is sometimes scarcely noticed, notwithstanding that the structural change in the cord may pass through every stage of disorganisation. An example is quoted by Dr. Abercrombie from Professor Bréra.

Such cases, in which a progressive weakness is the only symptom antecedent to complete paralysis, are usually called non-inflammatory; and the morbid result is for the most part a white softening of the spinal cord; but *ramollissement* is very seldom observed where pain has not previously existed; and, in the great majority of cases, I am disposed to think that it depends on an inflammatory origin. Lallemand of Montpellier, whose investigations were in a great degree confined to young and vigorous persons, regarded every case of softening as the result of hyperæmia, extravasation, and endogenous formation of pus; whilst Rostan, whose observations were confined almost exclusively to the aged, maintained that the structural lesion in question might occur without a trace of congestion, infiltration, or morbid secretion; but that it results from a diseased state of the arteries, and, consequently, from an imperfect nutrition of the part to which those arteries are distributed.

It is probable that both views contain the elements of truth, and that softening may depend on inflammation, exudation, and alteration of the connective tissue of the cord; and that it may be produced also by a diseased condition of the arteries and of the coats of the capillaries, whereby the mutual interchange between the blood and the tissues is interrupted.

Fortunately the question is of no great practical importance; for, as a general rule of treatment, it may be stated that as long as the affected muscles are convulsed, rigid, and irritable, the use of antiphlogistics and counterirritants is indicated; but when the means which are calculated to subdue the stage of excitation have failed to arrest the further progress of disease, and paralysis supervenes, stimulants are the only remedies which have the power of restoring to functional activity those nerve-cells and conducting fibres which are not irretrievably destroyed.

And of all stimulants with which we are at present acquainted, electricity and strychnine are unquestionably the most potent and the best.

M. Barbier, of Amiens, first suggested the *secale cornutum* as a remedy possessing the same power as that of strychnine, but in a more manageable form; and M. Payen, of Aix, reasoning on the special action which the secale appears to have on the nervous system,—producing, as it does, feelings of tingling and involuntary spasmodic movements of the legs—tried its effects in paraplegia, and in many cases with the most encouraging result. From repeated and careful observations, he concluded that where neither great pressure, *beyond that which simple congestion produces*, nor disorganisation of the spinal cord exists, its remedial power is very great. In one case of paraplegia complicated with paralysis of the rectum and bladder, the healthy function of these latter organs was completely restored. At the Bicêtre, M. Guersant has had much experience of its action, and has established the fact of its efficacy as a means of resuscitating muscular contractility of the rectum and bladder, and of assisting the latter organ to expel the remains of calculus left after lithotrity. (*Journal de Chimie Médicale*, June 1839.) The interesting question, however, which suggests itself, from our knowledge of the property of ergot of rye in arresting uterine hæmorrhage is, whether its special agency may not be on the sympathetic system, and consequently on the vaso-motor nerves? The gangrene which it produces points to that particular action, and a distinguished physiologist affirms that he has seen the diminution in the calibre of blood-vessels of the pia mater of the spinal cord take place in dogs after they had taken large doses of ergot of rye; and that the reflex power of the spinal cord becomes very much diminished under its influence. (*Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities.* By C. E. Brown-Séquard, M.D. P. 78.) And yet the prolonged use of the ergot produces convulsive affections of the face and hands, and in some cases absolute opisthotonos: results entirely at variance with the growing opinion of the effects produced by a diminished supply of blood to the spinal marrow. But we are not called upon to discard a remedy because we cannot entirely explain its mode of operation; neither should we disregard the experience of men like Guersant, Trousseau, and Brown-Séquard, from whom we have every encouragement to depend on the ergot of rye in chronic myelitis, especially when the pelvic viscera are implicated in the paralysing influence. I have given the æthereal tincture in doses of from ten to twenty drops twice or three times a day, and certainly with advantage; but I have not experienced the relief to reflex convulsions from it which I have been led to expect, and have therefore trusted to prussic acid, digitalis, and belladonna for that purpose.

After the local pain in the back has been subdued by the regular and repeated application of two or three leeches to the painful part, followed by a large warm poultice over the whole length of the spine, and a belladonna plaister of equal length to follow it; or an occasional blister on each side of the spine, together with mild warm purgatives if necessary, I have found no remedy so effectual as strychnia in the dose of one-twentieth of a grain, repeated more or less frequently (twice or three times a day), according to the evidence of its action.

Electricity, after the activity of inflammation has been subdued, is a therapeutic agent of great value; and my own experience has convinced me that the continuous current of galvanic electricity is just as efficacious as the induction or intermittent current.

Whether galvanism or electro-magnetism be employed, no high degree of tension is required for the restoration of muscular power; on the contrary, I suspect that the favourable course of many a case has been retarded by the employment of strong currents, and that Pflüger's experiments may be contemplated with advantage.

But when disorganisation of the spinal cord has become an accomplished fact, the disease is incurable. The exigencies of the patient, however, are not the less pressing on the careful attention of the physician, and in nothing more so than in the protection which is called for against bed-sores, which will sometimes occur in spite of the greatest care.

Spinal congestion and inflammation may result in apoplexy, or the formation of a blood-clot in the cord itself, or on its surface; but paralysis is not an invariable attendant on such extravasation unless it be in the substance of the cord. Such cases are extremely rare, but when they have occurred, the clot has generally been found in the cervical region; and, according to Rokitansky, in the grey substance of the cord. Dr. Abercrombie has given a summary of nine cases, in five of which the extravasation existed on the surface, and convulsions, without paralysis, were the principal symptoms. In four others, the cord being more or less implicated, paralysis ensued.

Paralysis may likewise supervene from induration of the spinal marrow, which is not an unfrequent result of chronic myelitis. The preternatural consistence is generally confined to the columns of the cord, and the cervical region is by far the most frequent seat of the affection. This structural change is probably due to a peculiar condition of the blood, or of the extravasated fluid from the blood, which becomes converted into an abnormal fibroid tissue, the deposition of which, in the interstices

caused by the action of cold on the body, and which lasted six days, is reported by Dr. Burrows in the *Medical Times and Gazette*, vol. xxii, p. 331. M. Ollivier records a case of chronic myelitis, the duration of which was fifteen years. (Tome ii, Observation 92, p. 685.)

of the longitudinal nerve-fibres, involves the absorption of the nervous matter, and the resulting induration is called sclerosis. A very remarkable example of paralysis from this cause is recorded by M. Portal. (*Cours d'Anatomie Médicale*, tome 4, pp. 116-17.)

The above, together with two or three other cases of induration of the spinal marrow, are contained in M. Ollivier's work; and in all there is a great analogy of symptoms; but the most remarkable feature in all is the long duration of the disease, notwithstanding the important portion of the nervous centre affected. In neither case was there any muscular contraction, which is so commonly observed in myelitis ending in softening.

A remarkable case of induration and local softening of the spinal cord is also recorded by M. Laboulbène, which has been quoted as suggestive of the exact channel in the cord through which impressions of sensation are transmitted. (*Mémoires de la Société de Biologie*, 1855. Pp. 233-45.)

The iodide of potassium is a remedy which suggests itself to the mind in cases where there is good evidence to believe in the existence of chronic myelitis with induration of the cord. For upwards of ten years I had under my observation a gentleman who, at the age of about 65, began to show symptoms of what I suspected to be induration of the spinal cord. At an early period of the disease he had paroxysms of distressing formication, each of which was the prelude to loss of muscular power. A course of the iodide of potassium always relieved the itching and tingling surface, but on no occasion did it arrest the progress of the general paralysis.

The absence of pain and of spasmodic muscular contraction of muscles in this affection, enjoins much caution in determining the precise moment when the spinal cord is likely to be favourably affected by the energetic excitement which strychnine has the property of communicating to it; therefore its internal administration may be preceded by its external use, together with other stimulants in the form of embrocations over the spine, in this, as in all other varieties of myelitis, when the stage of excitation has been subdued. The same external applications may be employed for the purpose of stimulating paralysed muscles to action through the influence of the sensitive branches of the spinal nerves; and in so doing, the interesting observation of Schroeder Van der Kolk, that "the spinal nerves give their motor branches to the muscles as instruments of motion, and their sensitive branches to the parts moved," should be borne in mind, in deciding on the part to which the embrocation is to be applied.

[*To be continued.*]

CASES OF PUERPERAL CONVULSIONS TREATED WITH AND WITHOUT BLEEDING.

By R. Prosser, Esq., Surgeon, Bromsgrove.

Case i. A. J., first confinement, June 6th, 1860, 4 p.m. She had been in labour four hours. The pains gradually increased, and in an hour became very strong; and she had a violent convulsive fit. She was bled immediately to about twenty-five ounces; in about ten minutes after she was bled, the convulsion ceased; but she remained insensible for a few minutes longer. Whenever the pains came on strong, the fits recurred with equal violence. The fits and pains continued at irregular intervals, and the labour progressed very slowly for some time. After the head had descended upon the perinæum, it seemed to stand; and whenever the pains came on strongly, the fits came on with greater violence. The forceps was applied, and delivery very easily effected. The placenta came away. The uterus contracted, and no hæmorrhage occurred. There were no fits after delivery. The patient made a good recovery.

Case ii. F. W., third confinement, August 6th, 1860. When the pains put on an expulsive character, she was taken in a violent convulsive fit, which passed into a comatose state. She was immediately bled to about twenty ounces. The fits continued; and the case progressed very slowly. The forceps was applied while she was in a comatose state; and the case terminated without any further difficulty or complication. No fits occurred after delivery; and she made a good recovery.

Case iii. E. W., about eighteen months previous to my attending her, was taken in fits about nine days previously to her delivery. The fits continued about two days. She was bled twice, and had twenty leeches applied to her head. She had no fits during labour. She made a tedious recovery.

On June 4th, 1861, she was in a violent convulsive fit; the breathing stertorous, and face turgid. She sank into a state of quiet unconsciousness, and remained so for about ten minutes. The fits recurred at irregular intervals for the next twelve hours with more or less violence. The kidneys were inactive. A saline diuretic was given; and perfect rest and quietness maintained. The fits gradually became less violent and less frequent, until they ceased. No more fits occurred; and she was naturally delivered eight days afterwards, and made a speedy recovery.

On March 20th last, nine days after confinement, she had a most violent convulsive fit which lasted some hours, or rather a succession of fits. She bit her tongue; her breathing was stertorous, and face turgid. The bowels had not acted for three days; and the kidneys very little. She had large doses of solution of sulphate of magnesia repeated about every three or four hours, until the bowels acted freely. After the bowels had acted, she was without a fit for six hours when a fit came on; and she was no sooner free from one than she was seized with another. The kidneys continuing inactive she had a saline diuretic, and was kept perfectly quiet, and free from all disturbance and restraint. She sank into a deeply comatose state, and continued so for eight hours. When she awoke, she expressed herself much better; but complained of feeling exhausted. No more fits occurred; and in a week she was convalescent.

Case iv. P. D., about two years previously to my attending her, was taken in labour. She had fits; was bled and delivered; and made a good recovery.

On January 8th, 1862, labour had made considerable progress. The pains became very strong; and she was seized with a violent fit. The limbs were rigid; the breathing stertorous; and the face livid. The fit lasted about ten minutes, but recurred again and again, when the pains came on strongly. The forceps was applied without any difficulty. The placenta immediately followed the birth. The uterus contracted, and no hæmorrhage occurred. There were no fits after delivery; and the patient made a good recovery.

Case v. E. P., first confinement, March 18th, 1861. She had a "good time"; but next day she had a convulsive fit. As I was not at home, a friend saw her and bled her. No fit occurred until the following day, when she was taken much the same. She had a castor-oil aperient; and made a good recovery.

Case vi. G. O., in February last, had a natural labour; but a few minutes after the birth, she had a convulsive fit which only lasted about five minutes. Neither bleeding nor any other treatment was adopted. She was kept perfectly free from all disturbance; did not have another fit; and made a good recovery.

Remarks. The first two cases show that bleeding was tried with no benefit; for the fits continued, and only ceased upon delivery. Cases iii and iv were subjected at two different confinements to the two different systems of treatment, and recovered equally well. Case v was

bled immediately, when a slight fit occurred—and yet a similar fit occurred next day. Case VI was similar to case V, but got well without any treatment at all.

Transactions of Branches.

NORTH WALES BRANCH.

PRESIDENT'S ADDRESS.

By Llewelyn Lodge, M.R.C.S.Eng., St. Asaph.

[*Delivered at Rhyl, July 7th, 1863.*]

Gentlemen,—By no special merits of my own, certainly not by any preconceived desire, but through your kind and too favourable consideration of my humble services, I have been elected to preside over the North Wales Branch of the British Medical Association for the current year. The remembrance that so many talented and eloquent members of our profession have successively and so well filled this position, might induce me to hesitate ere I accepted the post. When I reflect with how much welfare and success the operations of all classes of society depends upon obedience, I cheerfully comply with your wishes, and will endeavour to discharge the duties pertaining to the presidentship with all the zeal and industry I can bring to my aid. Gentlemen, for the honour you have conferred upon me I beg to convey to you, with the earnest expression of sincere feeling, my warmest acknowledgments and best thanks.

Our annual gatherings present many features of interest to the widely scattered members constituting the Branch. We enjoy, often long before the time, a pleasurable feeling at the prospect of an intellectual treat, arising from the experience and matured opinions of older members of our profession; and when we are fortunate enough to snatch a day in realisation of these wishes, we return home rich in each other's friendship and social regard, and with our minds also enriched with some new discoveries in medicine and the collateral sciences. To those of our brethren who may not have been able, from pressure of professional engagements, to attend our reunions, the British Medical Journal opens its well-stored pages of information, giving an account of all passing events, and noting particular occurrences at these Branch meetings.

The influence of the British Medical Association is felt not alone in the profession, but also out of it. Principally through its means we have had the Medical Act; and we hope that this measure will ere long be improved by the correction of some anomalies in it which earlier and hasty legislation, from fear of provoking opposition or other cause, failed to achieve.

The general and professional education of the rising generation of medical men will, it is fair to expect, place them, in point of rank and status, not below the members of other learned professions. I can conceive that they will, at no distant period, be placed on an equality with the upper legal profession, as represented by judges and barristers. I am speaking of the general body of medical men—the bulk of the profession: for there are already very many brilliant examples of men who are peculiarly gifted, and who may be said to be fitted to adorn some of the highest stations in the realm. You will readily understand that I allude to men like the late Sir B. Brodie, to our own worthy associate Sir Charles Hastings, to Christison, Syme, Simpson, and many others whose names will at once recur to your minds. Then, by being true to ourselves and honouring and regarding each other as brethren indeed, we might enter the courts of justice, and compel gentlemen of the long robe to show us greater respect and courtesy than we can at present boast of receiving from them. We would also, by our moral and general character, remove the bad impression upon our motives and actions now unjustly attached to us in the public estimation. You have all long since heard and read of the proceedings which had been taken against some highly respectable medical men in England and elsewhere. I refer to the cases of Mr. Adams of London, Dr. Waters of Chester, and others. You need not be told by me how unjustly and undeservedly they were dragged into courts of law. I rejoice that they defeated their enemies so triumphantly; but I deplore the position of those medical men who stood up against them, and delivered their opinions with the view of influencing the minds of the jury against at least one of the gentlemen (Dr. Waters). Sad it is to witness scenes like these; but the united voice of the profession will soon, I hope, put a stop to such unseemly practices.

I fear I have detained you unnecessarily long. If I have erred in this respect, let me assure you that I am deeply mindful of, and obliged for, the kind and patient hearing you have so good-naturedly accorded me.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

PRESIDENT'S ADDRESS.

By William Paley, M.D., Peterborough.

[*Delivered at Peterborough, July 9th, 1863.*]

Gentlemen,—I assure you I feel most deeply sensible of the high honour you have done me in permitting me to preside over such a large united meeting of our Branches. The compliment is doubly gratifying as coming from members of my own profession. However much we may wish to obtain the good opinion of the public, as essential to our success in life; still we must admit that they are by no means the best and fairest judges either of our skill or reputation. All of us at times have been blamed where we really deserved credit; or, as once happened to myself, after a long, anxious, and at length successful treatment of an important case, have been deprived of our justly and well-earned meed of praise by some charlatan being called in at the eleventh hour, and falsely and shamelessly assuming the whole credit of the case. Harder still, if the slightest error or mistake in judgment is made, or is supposed to have been made, a medical man is now at once threatened with an action. If he succeed, he is half ruined by the costs; and if he lose, his reputation is gone for ever.

Under these and similar trials, we all naturally turn to our own profession for sympathy and assistance. They alone, who know the very delicate and responsible situations in which we are daily placed—more especially in consultation practice—can fairly judge us. They are, and ought to be, to every man his inner world, his home circle, within which praise or blame is deeply felt. To obtain the goodwill and esteem of the members of our own profession should ever be considered our highest and most legitimate reward. I have always thought that one of the great uses of our Association is that it forms, as it were, a high court of appeal, before which all important questions of medical conduct, either towards our patients or each other, may be fairly tried. They have the power, through their Journal, of making the voice of the profession loudly and distinctly heard when any one of us acts in an unfair or unfriendly manner towards a brother practitioner; or when any one, however high in the profession, dares to tamper with any of the popular quackeries of the day. When I reflect what a high tone of professional conduct and courtesy towards each other has been insisted upon by our Association, I feel deeply the high compliment you have paid me in placing me in this chair.

Gentlemen, at so large a meeting as the present, attended by so many experienced men in large practice, I

have ventured to think it would not be unsuitable if I made a few remarks—and I will promise that they shall be very few—on a question of the deepest importance to us all; viz., the position which we occupy as a profession in public estimation at the present time.

If it be true, as I fear it is, that the public faith in the efficacy of medicine and medical treatment is much and unduly shaken, surely it is proper and manly to look the danger fully in the face, to endeavour to ascertain its cause, and to seek to provide a remedy. Well then, I think, much must fairly be attributed to the spirit of the age in which we live. It is a restless, changing, inquiring, almost sceptical age, with no reverence for authorities; no one fully believes anything; or, as Sir Edward Bulwer Lytton observes, "We want conviction." Coupled with the distrust of old-established truths, there is a morbid anxiety to stretch inquiries into new, untrodden, and dangerous paths; far away from the safe regions of our actual experience, into that unknown and mysterious spirit-world which an all-wise Providence has hidden from our eyes.

In inquiries like these there is such ample scope for the grossest imposture on the one hand, and the most childish credulity on the other; nay, minds of a high order, from the very sharpness of their faculties, most easily cut their fingers with these edged tools. Hence it is no longer a matter for wonder to find men of the highest talent and station believing in crystal globes, *clairvoyant* young ladies, spirit-rapping, table-turning, and the fearful effect of the millionth part of a grain of charcoal. It is by no means in our profession alone that this spirit manifests itself; not even the great and momentous truths of our religion are left unchallenged. It is now gravely asserted that, according to the revelations of modern science, it is quite impossible that many of the events recorded in the Bible could ever have taken place; and this, not by unlearned laymen, but by men, alas! holding the highest position in the church, men of deep learning and profound thought.

Another reason why the public at large are so easily imposed upon in medical matters, is that they are profoundly ignorant of the whole science, especially of its principles, and the nature of the evidence on which they rest. Medicine, not being an exact science, rests upon experience for its foundation. In investigating disease, we are obliged to draw our conclusions from a most careful balance of probabilities.

To establish any fact so firmly that it shall be generally received as true, and become a principle of medicine, requires a most extended series of observations, all accurately recorded and most carefully guarded against error. Now, the public know nothing of all this; nor of the enormous amount of time, labour, and talent, required to carry out these investigations. They hastily conclude, when a few cases get well after a particular plan of treatment, that it was in consequence of that treatment that they recovered; whereas the cure may have been effected entirely without reference to, and even actually in spite of it, by nature alone.

Thirdly, I cannot help fearing that we ourselves are not altogether free from blame in this matter. Public opinion ebbs and flows like the waves of the sea; the higher it rises, the further it recedes. If too much importance was formerly given to the mere administration of medicine, to the neglect of the general management of the patient, such as good nursing, attention to out-door exercise, diet, change of air, stimulants, etc., disappointment and consequent undue distrust of medical treatment was sure to follow. I do most sincerely believe that nothing has done more to lower us in public estimation than the old, and now happily nearly exploded, custom of making the payment of the practitioner depend solely upon the quantity of medicine which his patient took. It was a fiction, and all fictions are bad; for it is the time, skill, and experience of a medical man that are really valuable; the drugs themselves are comparatively cheap. It lowers his proper dignity, converting a high and noble profession into a mere trade. It places the interest of a medical man and that of his patient in opposition; the one sending as much, and the other taking as little as he can—a position most painful to an honourable mind. It necessarily leads to the administration of medicine in frequent doses, and in a bulky and consequently unpleasant form; sometimes, as in the last stages of fever, actually taking the place of food and stimulants when these are most urgently required. I am aware that there are great difficulties in some neighbourhoods in carrying out fully the simple and sensible plan of charging so much for medicine, journeys, and attendance; but none, I am satisfied, which a little union among ourselves would not easily enable us to overcome, especially now the law gives us power to recover reasonable charges for attendance in a court of justice. I have a strong feeling myself that this is a matter of the deepest importance, and that we shall never occupy our due and proper position in public estimation until it is generally carried out; and it is for this reason that I have ventured to bring the subject—though rather a delicate one—before the meeting, in the hope that some more influential member of our Association may take it up, and may make it a recommendation to all its members to adopt it.

Lastly, and most important of all, the public will never respect us till we learn to respect ourselves. There must be no uncharitable fault-finding with each other; no stating one side of the case and withholding the other; no tampering with any of the foolish quackeries of the day, meeting their professors on equal terms in consultation, travelling with and being called in by them. I am sure that the rule laid down by the profession is right: to absolutely refuse to have anything to do with any of these systems or their professors. Depend upon it, the general cut of a whole profession is no little punishment. Any other course must necessarily lead the public to think that, in our opinion, one kind of treatment is as good as another. Twice lately have we been favoured with the presence of distinguished homœopathic practitioners in this city. To the honour of my medical brethren in this place be it said, not one of them took the slightest notice either of them or their system. By this wise course it was soon found that the air of our fens did not agree with their constitution, and they were both obliged to seek for change of air and scene.

One word as to our prospects for the future, and I have done. Our noble profession has already stood the attack of too many storms to make us fear a moment for its safety, provided we are true to ourselves. The only thing that makes homœopathy formidable is, that the arrow comes out of our own quiver; and that, under its specious garb, efficient doses of medicine may be and are daily given by regularly educated men. It is clear that an all-wise Providence, "in giving medicine to heal our sickness", intended it to be used, like all his other benefits, wisely, temperately, but efficiently. The power of medicine over our frame is mighty indeed: its administration requires the utmost prudence and caution. I confess honestly that the result of increased experience in the cure of disease is to make me adopt a less active treatment than I used to do when a younger man; and I think that this feeling is gradually gaining ground among us.

In conclusion, let our motto be, "Great is truth and it shall prevail"; and let us all endeavour, both in our investigation into disease and in our intercourse with our patients, to follow after truth with a patient, earnest, humble, careful spirit, and I feel sure that our noble profession will ever prove a source of honour to ourselves and an unbounded benefit to mankind.

British Medical Journal.

SATURDAY, JULY 25TH, 1863.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS OF IRELAND.

SOME remarks which we lately made respecting the power lately claimed by this College, of granting the degree of Doctor of Medicine, have called forth several communications on the subject. We stated that we considered the Licentiates of that College were, under the circumstances, *justified* in assuming the title of Doctor of Medicine; but we carefully avoided giving any opinion as to their legal right to the title. We said that we thought they were justified in assuming the title by the fact, that the College itself publicly declares it possesses the right of granting medical degrees; that the College publishes lists of its Doctors of Medicine; and that it defies all the world to interfere with its right. Of course, this declaration and affirmation do not give or make the smallest legal right to the thing; but certainly, coming from such high authority, they naturally lead members of the profession to seek the license of the College, under a full conviction that the College does actually possess the right in law which it claims to possess. What private individual would for a moment question the openly made claim of a great public corporation, or suppose that it would solemnly pretend to a right which it did not possess? We, therefore, have ventured to think that gentlemen who obtain the license of that College, under the distinct understanding that they also thereby obtain their doctorate, are so far justified in assuming the title thus solemnly granted them.

We again refer to the subject, because it is one deeply affecting the interests of the profession. The legal decision of the matter is one which is manifestly beyond our competence. As now placed, the College defies all attempts to dispossess it of the right it claims; and it is only by law, if at all, that such a right can ever be effectively disputed. It is, however, our duty to lay the facts of the case, as far as they appear, before the profession, so that any member of the profession, who may be turning his attention to the licentiateship of the Dublin College, should see what is, *primâ facie*, the actual value of the claim of granting the degree of Doctor of Medicine, as well as of a license to practise, which is assumed by the College.

It seems strange, indeed, at the first view of the matter, that on so important a subject, deeply affecting the interests of the College, any doubts whatever should exist. But that they do exist is certain. Indeed, Licentiates of that College have themselves, at different times, indirectly admitted the doubts by stating, in letters to the weekly journals, that they hoped a legal decision in a Court of Law would for ever settle the matter.

We are, indeed, bound to say that, in our mind, an impartial consideration of the facts of the case leaves the claim referred to of the College in an unsatisfactory position. Justice to all parties concerned requires that, in a matter of this kind, there should be no possible room for a second opinion.

That unblessed *year of grace* upset the minds and constitutions of several of our collegiate corporations; and it appears to have disturbed the routine life of the Dublin College, *inter alia*. We know nothing of the history of the matter—how the discovery of its power of granting medical degrees by the College was made. What we find is this, that in 1861 a declaration, founded on a legal opinion, is issued by the College, declaring that it has the power to grant medical degrees. And in conformity with this new claim was put forth a new form of admission and a new license. "By virtue of the authority vested in me as President, I hereby admit you a Licentiate and Doctor of Medicine of the King and Queen's College of Physicians in Ireland." And in the new license are inserted the words, "And do certify that he has obtained, and is hereby entitled to, the degree, title, and qualification of Doctor of Medicine."

When we look for the grounds upon which this important and serious claim is founded, we do not find them any where publicly stated; we mean in the course of the discussions on the subject which have been publicly reported. We find the College and its defenders assuming an attitude of defiance, but not declaring (as it may be said it is not called upon to do) the actual grounds, we mean, pointing out the terms of the charter, upon which the claim is founded. This claim, it must be remembered, is of quite a modern date. It came up, at least in this public way, after the famous year of grace. Previously, the King and Queen's College merely issued licenses to practise. The President admitted the candidate in these words: "By virtue of the authority vested in me as President, I hereby admit you a Licentiate of the King and Queen's College of Physicians in Ireland"; and the license itself contained simply a power of practising medicine, *licentiam medicinæ exercendæ*.

The College obtained from its counsel a legal opinion favourable to its Doctorate, and the College acted thereon, although that opinion was contradicted point-blank by other counsel.

But surely this is an unsatisfactory position for the College itself to be placed in. Colleges of Physicians ought to be, like the wives of Cæsars, beyond all suspicion; and surely a position of defiance, however boldly assumed and vigorously sustained, is no

proof of the possession of a legal right. We believe that our readers will agree with us that the profession ought to be fully informed of the grounds upon which the College assumes this newly exercised right. It has often been asked, but, as far as we are aware, no reply has ever been given to the question: "If you possess the right, why don't you publish the words of the charter upon which you found your right?"

We have thought it our duty in the interests of the profession to place before them the exact position of the case, and we believe that it is represented as follows.

In the first place, we find that the question has long been, and still is, an unsettled one—we mean, one which has been battled about in the pages of the medical journals, and still is battled about. Correspondence in our JOURNAL during the last two years plainly enough proves this. Licentiates also of the College themselves ask for relief from the doubts which overhang it. Thus, in the *Dublin Medical Press* of April 30th, 1862, we find a L.K.Q.C.P.I. asking that a clause should be inserted into a Bill then before Parliament,

"So as definitely to settle the right of those holding the license or diploma to the title of Doctor of Medicine, as set forth in that license, so as to appear as such in the *Medical Register*, without which the mention of it in the diploma is a complete farce."

Another correspondent, who also writes in favour of his College, in the same JOURNAL says:

"No one denies that a Licentiate of the College is entled to 'Doctor'; but the disputed question is, Is he not an M.D.? It cannot be doubted but the doctor alluded to is Doctor in Medicine; but to have the matter finally and satisfactorily settled for ever, there can be no better opportunity than the present. I therefore heartily join in suggesting that something should *at once be done* for the object proposed, and that a petition to Parliament be signed with as little delay as the circumstances will admit of."

In the minds of Licentiates themselves, then, there clearly exists, or existed, a doubt; and the *Dublin Medical Press* in 1862, commenting on the subject, also admits a doubt.

"The Dublin College claims the privilege of conferring the title of Doctor on its Licentiates; and the only question regarding it is, whether it legally enjoys the right. We leave the question for argument by correspondents, because we have no power to decide it, and because no competent tribunal has been called on to express an opinion regarding it. The charter of the Dublin College of Physicians is a very peculiar one, but is not to be discredited on that account; royal charters are often found to confer peculiar privileges."

These doubts, it must be remembered, all come from Dublin itself.

But, more than this, even the College itself lays its case before men of the law; which fact must be fairly considered as a passive admission that the right is not altogether clearly and undeniably stamped on the very face of the charter. Its men of law, it is true, gave an opinion favourable to its claim; the Attorney-General for Ireland laying down as follows:

"The two charters of the College, and the several Acts of Parliament bearing thereon, having been submitted to the Attorney-General, his opinion was requested on the following query: 'Whether the Licentiates, as such, of the King and Queen's College, are entitled to the degree and title of Doctors in Medicine, and to use the abbreviation or initial letters M.D. after their names?' Answer: 'I think the Licentiates and Fellows, as such, of the King and Queen's College of Physicians, are entitled to the degree and title of Doctors in Medicine, and to use the letters M.D. after their names. Signed, R. Deasy. Nov. 21st, 1860.'"

And it is on the strength of this opinion that the College in January 1861 adopt a new form of diploma, to the effect that the Licentiate "is hereby entitled to the degree, title, and qualification of Doctor of Medicine and Licentiate of the said College."

The next move taken by the College was to have the title acknowledged by the *Medical Register;* and the Registrar was, therefore, summoned to show cause in the Court of Queen's Bench why he refused to give to one Mr. Samuel Brown the title of Doctor of Medicine in the *Medical Register.* This summons, of course, brought into the field counsel on the other side. And accordingly, on January 31, 1861, we find an opposite opinion given to the Medical Council by Sir Hugh Cairns and Mr. Arthur Hobhouse:—

"Supposing the College to have no larger powers than are disclosed in the case laid before the Attorney-General of Ireland, we are clearly of opinion that it has no power to confer the degree of Doctor of Medicine; and without the degree there can be no right to title, to whatever extent it may have been conceded by courtesy," etc.

The College, therefore, as it appears, assumed and practised a right, on the opinion of its own legal advisers—the possession of which right was, *per contra*, distinctly denied by the opinion of the legal advisers of the Medical Council.

Next came an action against the Medical Registrar. He was called upon to give to Mr. Barker (on the strength of his being a Licentiate of the King and Queen's College of Physicians) the title of Doctor of Medicine in the *Register.* The judges, however, decided that such title could not be inserted in the *Register* in accordance with the terms of the Medical Act.

The College, therefore, took nothing by that move; but, as is asserted, it lost nothing in respect of its claim. We have nothing, said the judges, to do with this claim of yours; all we have to do is to decide that, according to the Medical Act, you cannot register as Doctors of Medicine. Whatever claim you possess in the M.D.-way is just as good after our decision is given as it was before. This, therefore, was a safe action for the College. If it won, it would have gained an undeniable right to its giving the title of Doctor of Medicine; and if it lost, its claim, it was said, remained untouched—at

least, in a legal sense. The Lord Chief Justice of Ireland, in giving judgment, said:

"It was not necessary for the Court to pronounce any judgment as to the power of the College to grant degrees; they had not given a degree of doctor of medicine in this instance, and, therefore, it was not necessary to introduce into this case any decision on that matter; whatever impression they might have upon the subject, the case did not turn upon that, and, therefore, the question was not to be considered as concluded by anything that passed in the present case.....A marked distinction was taken between medical men holding a degree from an university, and the licentiate of a medical corporation. Mr. James Barker had a diploma from the College of Physicians; but that was not any of the qualifications mentioned in the schedule entitling him to be registered as a doctor of medicine. A license and a degree from an university are mentioned; and this gentleman having only a diploma, or license to practise medicine generally, and not a degree from an university, was not entitled to be entered on the register as a doctor of medicine, not having brought himself within the qualification mentioned in the schedule. The circumstance that he was popularly treated and regarded as a doctor is not enough. What he desired, was to be regarded as a licentiate of the College of Physicians, and as a medical doctor, and there was no such privilege given by the schedule to a mere licentiate. He contended that there was a diploma which entitled him to what he sought; but suppose there was, and suppose that the College of Physicians had a right to grant a degree of doctor of medicine, they had not granted it."

Now, since this failure of the College to get a registral recognition of its new claim, it has (as a claimant) in that way taken no further step. It has given out that it is ready to meet all comers in a court of law, and there leaves the matter. Flying skirmishes have, however, naturally been going on between unrecognised correspondents; but no regular settling blow has yet been struck. The College say: Come on and hit our men, if you dare; we are ready to fight you at law. The other side says: If you have the right, why don't you show your Charter, and tell us, in the language of the Charter, how the right runs. We are not going, as private individuals, to play Don Quixote, and fight you that way for the benefit of the profession at large. We think you should prove your claim, and not throw the *onus probandi* on others.

One gentleman, in defence of the Dublin College, says: Does not the diploma say we are Doctors of Medicine? and does not the President admit us as Doctors of Medicine; but to this it is, of course, readily answered: Yes; that is all true enough; but this tells dead against your case; for if you really have had the right for two hundred years, how comes it that you only took up this form of license and of admission in 1861? How is it that the licence granted and the terms of admission used up to that year were such as to lead to a contrary belief?

Another correspondent says:—"I cannot believe that the present eminent President, Dr. Corrigan, or any future President, will confer the title of Doctor without having the authority for so doing." Another one says, If it be in your Charter, why do not you produce your Charter's powers. Such is the kind of small artillery which has been discharged; but we need hardly add, without finally settling the question.

We have given this historical, and we hope perfectly correct, sketch of the position of this question affecting the Dublin College; because it is only fair that the profession should have a means of judging how far the promises and gifts of the College are in accordance with its actual powers.

We must, without at the moment offering any opinion further upon the subject, candidly confess that we feel constrained, from a fair consideration of the facts before us, to conclude that the Dublin College would do well, for its own sake and in justice to its Licentiates, to obtain some positive legal decision on the subject, such as will for ever silence all the doubts and difficulties which have been and are suggested in reference to the right which it claims. We are sure that the profession at large will agree with us in the sentiment already expressed that no possible doubts ought to overshadow the claims which such a College as this puts forth.

THE WEEK.

THE laws and constitution of the Royal College of Surgeons are things, as Lord Dundreary would say, which no man can understand. The ignorance of the profession in general, and of the Fellows and Members of the College in particular, respecting them, is really something surprising. Every one, until we took the royal corporation in hand, seemed to have given the place up as beyond all hope, and therefore never tried to dissipate his ignorance in reference to it. Even the medical instructors—the press—who have followed us in our invasion of the assumed privacy of this great public body, are unable to get at or express the real facts of the case, or to comprehend them. Thus, for example, we find the *Lancet* again repeating the mistake which we have more than once pointed out; viz., that Mr. Cæsar Hawkins is an Examiner for life. Mr. Cæsar Hawkins neither is nor could be an Examiner for life. He is, like all others who have been made Examiners since the charter, elected to office by the Council. The history of the matter is this: To make the charter of 1843 acceptable to the powers which then *were* at Lincoln's Inn Fields when the charter came into force, all men in office at the time, whether in the Council or in the Court of Examiners, were, by a special clause, confirmed in office for life. Of the Examiners then in office, Mr. Lawrence is the only survivor. The very fact of Mr. Cæsar Hawkins presenting himself for re-election, the other day, to

the Council, shows that he was not even on the Council at the time of the establishment of the charter of 1843, and therefore, *à fortiori*, could not have been on the Court of Examiners. As we have already said, Mr. Hawkins is an Examiner by election, and holds office at the pleasure of the Council. In the meantime, he is the very first example of a Fellow not on the Council holding office as an Examiner. In his person the new order of things enjoined by the charter has been for the first time exemplified in practice. He now, by retaining the examinership whilst not a Councillor, takes the benefit of that clause in the charter whose existence he and his former colleagues in office at the College have heretofore persistently ignored!

On Tuesday last, the Liverpool testimonial was presented to Dr. Waters of Chester by Dr. Stookes, the secretary of the fund raised for the purpose. The testimonial consisted of a handsome silver claret-jug, on which was written an appropriate inscription, and a purse of £90. We need hardly say, that the gift to Dr. Waters was one ten times greater than the mere money value of it. It was a distinct recognition, on the part of his professional brethren, that he had been cruelly maligned; that his character and honour were untouched by the shameful accusation laid to his charge. It is, indeed, gratifying to be able to announce such genuine sympathy for an injured professional brother on the part of those medical men who are his immediate friends and neighbours. We venture to prophesy that the courage—the courage which an honest conscience could alone have shown in so great a trial—will not be without its reward. The darkest night is often followed by the brightest day; and if we are not much mistaken, the sympathy which has been excited towards Dr. Waters will produce a still brighter day than has ever yet shone on his professional prospects.

The following flattering testimonial to the value of the services rendered by Mr. Clendon to the Westminster Hospital and its school as dental surgeon and lecturer, has been addressed to him by the medical officers and lecturers at that hospital, on the occasion of his retirement from the hospital and school. Mr. Clendon has during sixteen years faithfully, and with his well-known energy and earnestness, laboured as an instructor of medical students in the practice of dentistry. He has especially endeavoured to teach his pupils to regard the dental art as the business of the physiologist and of the surgeon, and not as a mere mechanical art. And we refer to this fact, because we know that Mr. Clendon has invariably insisted that there ought to be no distinction between the fundamental instruction of the student who devotes himself to dental and of the student who devotes himself to general surgery. He never would admit that the teaching proper for the one was different from the teaching fitted for the other.

"Westminster Hospital, July 14, 1863.

"Dear Mr. Clendon,—We, the undersigned, medical officers of the Westminster Hospital, desire to express to you our sincere regret at your retirement from the office of surgeon-dentist. We equally regret that the laws of the hospital do not permit the governors to elect you consulting dentist; to which, after so many years service, your abilities eminently entitle you. We are not unmindful of the loss which both patients and students will sustain by your resignation; for you have always succeeded in gaining the confidence of the one and the esteem and respect of the other; for your dexterity as an operator has only been equalled by your success in imparting much of it to the students who attended your teaching. In wishing you health and happiness for the future, we sincerely trust that though our official connexion may have ceased, the friendship which has sprung from a service of so many years may be prolonged into many yet to come. With renewed assurances of our good wishes,

"We are very faithfully yours,

(Signed)

"Barnard Holt, W. R. Basham,
Chas. Brooke, Geo. T. Fincham,
C. Holthouse, C. B. Radcliffe,
W. A. Hillman, Francis Ed. Anstie,
Henry Power, Fred. Bird."
Chris. Heath,

The approaching meeting of the British Medical Association at Bristol promises to be a great success. Our brethren there are making every effort to render the congress fruitful to science and agreeable to the members of it. Everything conspires to make this annual gathering a grand one. The situation of Bristol in the midst of a beautiful country, its immense importance as one of our great centres of commerce and population, and, above all, the celebrity and number of medical men who reside in and around it, cannot fail to make this assembling together a most important one.

The Anti-Tobacco Society will weep over the customs imports returns for the first five months of the present year. The increase in tobacco is truly enormous. The quantity imported in the first five months of 1862 was 6,355,215 lbs. of unmanufactured and 514,499 lbs. of manufactured tobacco. The quantity in 1863 was 10,507,400 lbs. of unmanufactured and 815,070 lbs. of manufactured tobacco, making altogether an increase of 4,852,761 lbs. for the first five months of the present year.

Whether or not the criminal lunatic murderer shall be hanged, depends in the main upon the particular views of the judge who presides at his trial. A man, for example, who was lately, at the Central Criminal Court, acquitted of the murder of his wife and child on the ground of insanity, under the presidency of Chief Justice Pollock, would, as far as we can judge,

have been assuredly sent to execution by Serjeant Shee or Mr. Justice Wightman. The surgeon of Newgate, Mr. Gibson, said he was in a sound state of mind; but the Chief Justice was not satisfied with this. He wanted to know what was the state of the man's mind when he committed the murder.

All who are interested in the prosperity of our Association will be glad to learn that a Branch has been formed in Calcutta. In May last, a preliminary meeting of about thirty British and native practitioners was held; Dr. Norman Chevers, principal of the Calcutta Medical College, being in the chair. Dr. Chuckerbutty, to whom is due great credit for inaugurating the movement, gave an excellent address on the advantages of such an organisation as is presented by the British Medical Association, and proposed the formation of a "Bengal Medical Association"; which proposal was unanimously adopted. It is suggested that, to meet the circumstances of the profession in the country, the Bengal Medical Association shall consist in part of members who, being willing and able to pay, in addition to the local subscription, their guineas to the British Medical Association, will be entitled to receive the Journal; and in part of members paying a local subscription only, and enjoying merely the local privileges of attending the meetings, etc. At the same meeting, a provisional committee was appointed, with Dr. Chuckerbutty as chairman; and it was determined to hold a general meeting for the adoption of rules and election of officers on June 17th. Fifty-two members had already joined the Association when the information which we have received was despatched. That the medical practitioners in Calcutta—both English and native—should so appreciate the benefits of the British Medical Association, as not only to form a similar institution among themselves, but to desire to affiliate their body to ours, is equally honourable to them and to the parent society.

A committee appointed by the Royal College of Physicians at the wish of the Government, to consider the value of the evidence in favour of the contagiousness or otherwise of leprosy, have reported, that they have received sixty replies to the questions addressed by them (through the Colonial and Foreign Offices) to different colonies, as well as from places in Turkey, from Sierra Leone, Tunis, Cairo, Ceylon, Hong Kong, etc.; and also that they have received replies from medical men in England. In these replies there are forty-five decided opinions given that leprosy is not contagious; in nine, the disease is pronounced contagious, but no good evidence of the fact is adduced; in the other twelve, no opinion is expressed. The committee, therefore, consider that the weight of evidence is greatly in favour of the non-contagiousness of leprosy; and that the replies given contain no evidence which justifies any measures being resorted to for the compulsory segregation of lepers. The effect of this recommendation will, of course, be to set at liberty any unfortunate individuals who may be kept in confinement under the idea of the contagiousness of leprosy, in any part of her Majesty's dominions. The result of the appointment of the Committee is an additional proof of the utility of such a body as the College of Physicians, to which the Government can refer questions demanding the application of medical science and observation for their solution.

The College of Physicians of London have approved of the proposition submitted to them by the University of Oxford; viz., that the area of election of candidates for the Sherard professorship be enlarged; and have, therefore, given their assent to the following statute passed by the University:—"*Eligatur professor ex iis omnibus qui ad incipiendum in artibus admissi fuerint.*"

Mr. Savery of St. Leonard's, who has so long been engaged in collecting meteorological facts relating to Hastings and St. Leonards, in a pamphlet, details facts which he considers prove the three following conclusions:—"1. That Hastings is warmer in winter than most other places; 2. That Hastings is cooler in summer than most other places; 3. That Hastings has a less daily range than most other places."

M. Sappey has lately made some interesting remarks concerning the mechanism of the act of vomiting in man. His remarks were founded on the observations made by Dr. Patry in the case of a boy eleven years old, who was injured by a bull, so that his stomach, spleen, and a part of the intestines, were exposed. The intestines were exposed for some time to the action of the sun and the air, so as in fact to have become dried up. From observations thus obtained, it would appear that the phenomena of vomiting proceed in the following order: contraction of the diaphragm; vermicular contraction of the stomach, commencing at the pylorus and passing up to the cardia; the moving backwards of the contents of the stomach towards the œsophagus; energetic contraction of the œsophagus; retraction of the stomach at each effort; dilatation of the cardia under the influence of the longitudinal fibres of the œsophagus; and, lastly, the filling of the œsophagus with the liquids of the stomach, and vomiting. M. Sappey gives the following theory of vomiting: 1. The act of vomiting is divided into two stages. In the first, the food passes from the stomach into the œsophagus; and in the second, it is ejected from the mouth. These two stages succeed each other rapidly, but are perfectly distinct. 2. Four organs are con-

cerned in the act—the œsophagus, the stomach, the diaphragm, and the abdominal muscles. These organs contract simultaneously. The contractions of the stomach are slow, gradual, and scarcely perceptible in some cases, though really present. The contractions of the other muscles concerned are highly spasmodic. 3. The part which each of these organs plays in vomiting depends upon its mode of action, and not upon its energy, as generally supposed. The contractions of the œsophagus act gently, driving the food progressively towards the mouth. M. Sappey shows that the disposition of the longitudinal fibres of the œsophagus dilate the cardiac orifice of the stomach. The food rises up into the œsophagus, whither it is driven by the contractions of the stomach; the food accumulates there until it reaches up the pharynx; and then follows the vomiting. M. Cloquet, referring to the case, remarked that, about thirty years ago, he operated on an old woman for an enormous strangulated hernia. The patient was found in the evening lying before the fire, with the bandages all removed. The intestines had escaped from the wound, and were lying on the carpet, and were completely dried by the fire. M. Cloquet reduced them; and the patient recovered rapidly and completely.

M. Huguier relates an unsuccessful case of ovariotomy to the Academy. The woman was removed from the hospital, and operated on at the house at Bellevue, which has been prepared by the Administration of Hospitals for the reception of cases of this kind. A number of cysts were found in the omentum, and complicated the operation, which lasted nearly an hour. The patient, a young Englishwoman, aged 20, died forty-five hours after the operation. Of six operations of ovariotomy performed by M. Kœberle of Strasburg, five have been successful.

M. Pajot, in a paper read by him to the Academy respecting pelvic malformations, concludes as follows:—1. If the infant is at full term and alive, and presents by the trunk, if the pelvic contraction is less than from 6 to 7 *centimètres*, and if external manœuvres to effect version have failed, the Cæsarean operation may be entertained. 2. If the fœtus is not at full term, and version is found impossible, the amputation of the arm will favour the evolution of the fœtus. Moreover, the section of the neck or of the trunk may be readily effected by a new proceeding (explained by him); and then the extraction of the fœtus will not be impossible if the fœtus is not much more than seven months old. 3. If the fœtus is dead, whatever may be the difficulties and dangers presented by the operations required to deliver the woman *per vias naturales*, the Cæsarean operation is quite inadmissible.

Dr. Fournié has related to the Academy of Medicine a case of transmission of syphilis through the means of a catheter used for the catheterisation of the Eustachian tube. M. Ricord also saw the case, and gives the same view of it. He added the following startling remarks. "This is the fifth syphilitic patient whom I have seen come out of the hands of Dr. —— (the Eustachian-tube doctor); one of the five was a married woman. All of them had been catheterised a short time before the disease appeared, which it did in the nasal fossa or the back of the throat. Being convinced that Dr. —— introduced poisoned and dirty catheters into the nasal fossæ of his patients, I got a mutual friend to give him a hint; but he does not seem to have taken it." Dr. Fournié details the case at length, so as to bring the cause of the syphilis pretty clearly home to the nasal catheter.

Le Siècle tells us that the Court of Assize at Cagliari has condemned Dr. Angine to three months prison and 500 *francs* fine for having promulgated, in a surgical thesis, certain erroneous propositions relative to the wounds and death of Christ.

La dame Delinotte, attacked with apoplexy, dies in the hands of a magnetiser, who was said to have hastened or caused her death by his manœuvres. *Le Droit*, the journal which details the case, wisely enough remarks hereon:—"She died, says the legal doctor, through the treatment of the magnetiser; she died, replied the magnetiser, through the attentions of the two diplomatised doctors. *Ma foi!* it would have been better to have said that the patient, having reached her seventieth year, had arrived at the term of her existence." M. Gire, however, of the Magnetic and Electro-Magnetic Academy of Paris, is accused of practising medicine, not being a legal doctor. With the most charming of smiles, he informs the judge: "When I was called to this lady she was dying; I subjected her to my process, and in three-quarters of an hour she gave considerable signs of vitality, and on the following day she was walking about." The President: "And in ten days was dead?" M. Gire: "She had been persuaded to eat asparagus in oil, and I could not answer for that." President: "But you can answer for practising medicine, and for putting the letters D.M. after your name." M. Gire: "It is quite a mistake, M. le President, I sign myself P.D.M., which signifies Professor de Magnetisme." Notwithstanding, M. Gire was fined 500 *francs*.

The use of the air-bladder of fishes still puzzles the *savant*. M. Moreau has just informed his Academy that, according to his experiments, it must be considered as an oxygen reservoir, filled for the sustenance of the life of the fish. Perch, when put in a situation in which they were unable to renew the oxygen of the air-bladder, were asphyxiated. The quantity of oxygen in the air-bladder diminished proportionably with the duration of the experiment; and when it arrived at zero, the fish died.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

President—GEORGE BURROWS, M.D., F.R.C.P., F.R.S, London.

President-elect—JOHN ADDINGTON SYMONDS, M.D., F.R.C.P., F.R.S.Ed., Clifton.

All the meetings will take place at the Victoria Rooms, Clifton.

WEDNESDAY, *August 5th.*

1 P.M. Meeting of Committee of Council.

2.30 P.M. Meeting of the General Council.

4 P.M. First General Meeting of Members. The retiring President (Dr. Burrows) will make a few remarks. The new President (Dr. Symonds) will deliver an Address. The Report of Council will be presented, and other business transacted.

9 P.M. Through the kindness of the Committee, a *Conversazione* will be held at the Literary and Philosophical Institution, Bristol.

THURSDAY, *August 6th.*

11 A.M. Meeting of the Members of the New Council.

12 NOON. Second General Meeting of Members. The Address in Medicine will be read by WILLIAM BUDD, M.D. Papers and Cases will be read.

3.30 P.M. The Address in Surgery will be read by AUGUSTIN PRICHARD, Esq.

The Report of the Medical Benevolent Fund will be presented.

Papers and Cases will be read.

9 P.M. By the kind invitation of the President (Dr. Symonds) a *Soirée* will be held at his residence, Clifton Hill House, Clifton.

FRIDAY, *August 7th.*

12 NOON. Third General Meeting of Members. The Address in Chemistry in its Relations to Medicine will be given by WILLIAM B. HERAPATH, M.D., F.R.S. Papers and Cases will be read.

3.30 P.M. The Address in Midwifery will be read by J. G. SWAYNE, M.D. Papers and Cases will be read.

6.45 P.M. Dinner at the Victoria Rooms. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice, as soon as possible, to Dr. MARSHALL, 8, The Mall, Clifton.

Members are requested to enter, on arrival, their names and addresses in the Reception Room at the Victoria Rooms, where cards will be supplied which will secure admission to all the proceedings.

Refreshments will be provided in the Victoria Rooms during the Meetings.

Members who wish for previous information may communicate with Dr. MARSHALL, 8, The Mall, Clifton.

The "Queen's" (situated close to the Victoria Rooms); the "Bath" (Clifton); and the "White Lion" (Bristol); are among the best hotels.

A clerk will be in constant attendance at the Victoria Rooms during the days of the meeting, and will give information regarding lodging-houses, which are numerous, and where beds may be had from two shillings a night upwards.

Papers have been promised by T. S. Fletcher, Esq. (Bromsgrove); Grailly Hewitt, M.D. (London); Lionel Beale, M.B., F.R.S. (London); G. F. Burder, M.D. (Bristol); W. O. Markham, M.D. (London); B. W. Richardson, M.D. (London); A. P. Stewart, M.D. (London); R. W. Coe, Esq. (Bristol); W. M. Clarke, Esq. (Bristol); G. D. Gibb, M.D. (London); Thomas Nunneley, Esq. (Leeds); C. B. Radcliffe, M.D. (London); T. K. Chambers, M.D. (London).

Papers and Cases will be read in the order of the dates at which notice of them has been received by the General Secretary.

PHILIP H. WILLIAMS, M.D., *Gen. Sec.*

Worcester, June 30th, 1863.

NEW MEMBERS OF THE ASSOCIATION.

THE following gentlemen have joined the Association since the publication of the list on March 7th.

BERKSHIRE.

Ellison, James, M.D., Windsor

BUCKINGHAMSHIRE.

Atkinson, Benjamin, Esq., Great Marlow
Terry, Charles, Esq., Newport Pagnell

CAMBRIDGESHIRE.

Hough, James, Esq., Cambridge
Latham, P. W., M.B., Cambridge

CHESHIRE.

Larmuth, John H., Esq., Sale Moor
Medd, William H., Esq., Stockport
Moreton, James E., Esq., Tarvin, Chester

DEVONSHIRE.

Lyle, Thomas, Esq., Devon County Asylum, Exminster

GLOUCESTERSHIRE.

Cubitt, George R., Esq., Stroud
Goodeve, Henry H., M.D., Bristol
Hawkins, Clement J., Esq., Cheltenham
Steele, Charles, Esq., Clifton

HAMPSHIRE.

Longmore, Thomas, Esq., C.B., Professor in the Army Medical School, Netley

HUNTINGDONSHIRE.

Wright, Thomas G., Esq., Stilton

KENT.

Alexander, Joseph, M.D., Edenbridge
Allfrey, C. H., M.D., Chiselhurst
Armstrong, John C., Esq., Gravesend
Bateman, William, Esq., Folkestone
Bell, James Vincent, M.D., Rochester
Burton, Joseph S., Esq., Blackheath
Churton, Thomas, Esq., Erith
Duncan, Peter M., M.B., Lee
Fitzgerald, C. Egerton, Esq., Folkestone
Kinnear, C. R., M.D., Melville Hospital, Chatham
Martin, — jun., M.D., Rochester
Sanders, W., M.D., Gravesend

LANCASHIRE.

Bott, Thomas B., M.D., Bury
De Vitré, Edward D., M.D., Lancaster
Fitzpatrick, C. D., L.R.C.P.Ed., Liverpool
Hodgson, Samuel, Esq., Liverpool
Howitt, Thomas, Esq., Lancaster
Irvine, J. W., Esq., Liverpool
Johnson, Christopher, jun., Esq., Lancaster
Mould, G. W., Esq., Lunatic Asylum, Cheadle, Manchester
Twyford, E. P., M.D., St. Helen's

LEICESTERSHIRE.

Marriott, Charles H., Esq., Leicester

MIDDLESEX.

Blackstone, Joseph, jun., Esq., Gloucester Road, Regent's Park
Callender, George W., Esq., Queen Anne Street
Cooper, George, Esq., Brentford
Hill, M. Berkeley, M.B., Weymouth Street
Holding, C., Esq., New Broad Street
Radcliffe, Charles Bland, M.D., Henrietta Street
Semple, Robert H., M.D., Torrington Square
Teevan, William F., Esq., Portman Square

NORFOLK.

Smith, John C., Esq., Great Yarmouth
Woodhouse, William, Esq., Norwich

NORTHAMPTONSHIRE.

Pearce, J. W., Esq., Peterborough

NOTTINGHAMSHIRE.
Maltby, William, Esq., Basford
Taylor, Charles, M.D., Mansfield Road, Nottingham

RUTLAND.
Keal, J., Esq., Oakham
Keal, W., Esq., Oakham

SHROPSHIRE.
Griffiths, Griffith H., M.D., Church Stretton
Morgan, Thomas, Esq., Madeley

SUSSEX.
Caudle, A. W., Esq., Henfield

WARWICKSHIRE.
Anderson, W., M.D., General Hospital, Birmingham
Roberts, J. R., Esq., Children's Hospital, Birmingham
Rudd, T., M.D., Scots Greys, Birmingham
Sharman, Malim, Esq., Birmingham
Wilkinson, A. G., Esq., Birmingham
Woody, J. F., Esq, Tamworth

WORCESTERSHIRE.
Brunton, J. R., Esq., Redditch
Cooksey, William, Esq., Worcester

YORKSHIRE.
Anningson, J., Esq., Hull
Arden, Arthur O., Esq., Hull
Drew, Samuel, M.D., Chapeltown
Griffiths, F. T., Esq., Sheffield

WALES.
Jones, Richard, Esq., Flint
Thomas, Richard, Esq., Menai Bridge
Wolstenholme, J. H., Esq., Holywell

INDIA.
Beatson, W. B., M.D., Calcutta

NORTH WALES BRANCH: ANNUAL MEETING.

The fourteenth annual meeting of the North Wales Branch was held on Tuesday, July 7th, at 1 o'clock P.M., at the Royal Hotel, Rhyl, under the presidency of Dr. Llewelyn Lodge, of St. Asaph. There were twenty-one members present. Letters were received from several gentlemen, regretting their inability to attend, from urgent professional engagements.

Dr. G. T. Jones (Denbigh), the retiring President, addressed the meeting, and thanked the members of the Branch for the kindness and courtesy extended to him during the past year. He then vacated the Chair to the President-elect.

President's Address. Dr. Lodge then delivered an address, which is published at page 87.

T. T. Griffith, Esq. (Wrexham), moved—

"That the cordial thanks of this meeting be given to the President for his address; and that he will be good enough to allow it to be published in the British Medical Journal."

T. F. Edwards, Esq. (Denbigh), having seconded the motion, it was passed with applause.

Report of Council. Mr. Kent Jones (Beaumaris), Honorary Secretary, read the following Report.

"In congratulating the members of the North Wales Branch of the British Medical Association upon the fourteenth anniversary of their Society, the Council, in their report, have to review some of the most prominent events which have transpired since the last annual meeting.

"The intermediate general meeting of this Branch, in accordance with a resolution adopted at the last annual meeting, was duly held on the 27th of January, and was attended by nine members. Although the attendance was small, there were four cases or communications brought forward, which elicited interesting discussion. They were the following:—

"1. On Diphtheria, followed by Ascites and Recovery. By T. E. Jones, Esq., of Llanasa.

"2. Case of Retention of Urine. By Ll. Lodge, L.R.C.P.Edin., of St. Asaph.

"3. Case of Occlusion of Vagina and Anus. By J. C. Davies, M.D., of Holywell.

"4. Case of Hermaphrodism. By J. Williams, Esq., of Holywell.

"It might be desirable to ascertain the feeling of this Branch as to whether the intermediate meeting shall continue to be held in the winter or later in the spring. Your Council think it would be advantageous to the Branch to continue the practice of holding the annual meeting a little before the great annual meeting of the Parent Association as is done by almost all the other Branches. This arrangement tends in a great degree to regulate and direct the sentiments and decisions of the British Medical Association upon all important subjects brought to their notice at the usual periods for deliberation.

"If, in their last report, your Council thought it necessary to comment with firmness upon the conduct of the General Medical Council under the Medical Reform Act, with respect to what they considered a dereliction of duty in dealing with the shortcomings of the Royal College of Surgeons of England, they would, on the present occasion, take leave to say that that public body, as the ruling authority in the profession, shows now a desire to do its allotted work fairly. They have, for instance, sketched out an amended Medical Bill, which promises greater protection to the legitimate medical practitioner, and will visit with more certain punishment the illegal practices of unqualified persons. They have also given us assurance that the new national *Pharmacopœia*, so long anxiously looked for, will soon be in our hands.

"Your Council have witnessed with much pain the conduct of medical men, some of them of high standing, rushing into courts of justice to ruin by their particular dogmas and opinions the character of their brethren as high and learned as themselves, who have been unfortunate in having been assailed by their ungrateful and wicked patients. This disgraceful proceeding appears to be on the increase; and it will be right to take action upon the matter at this meeting. The case of Dr. Waters, of Chester, is particularly worthy of notice; and your Council invite your cooperation in offering him a vote of sympathy upon the late trial, on which occasion he nobly vindicated his character from the base and most cruel aspersions sought to be cast upon it.

"Your Council have much pleasure in bearing testimony to the admirable manner in which the British Medical Journal is conducted by its spirited and talented editor, Dr. Markham; and to the bold and fearless exposure by him of all empiricism, whether called homœopathy, or known by other names. He justly merits the cordial thanks of the Association for having brought the Journal to its present high moral tone, and for the scientific character of its contributions.

"The Treasurer reports that the funds of this Branch at the end of last year—viz., the 31st of December, 1862—exhibited a balance of £5:3:2. The half-crown subscriptions and arrears since received amount to £1:12:6, which will bring the total balance in hand to £6:15:8, to meet the expenses of the current year."

Dr. Williams (Wrexham) moved—

"That the Report of Council now read be received, adopted, and entered in the minutes."

Mr. Davies (Llanfairtalhairn) seconded the resolution, which was carried unanimously.

New Members. The following gentlemen were elected members of the Association and of the Branch:—Richard Thomas, Esq., Menai Bridge; Richard Jones, Esq., Flint; and J. H. Wolstenholme, Esq., Holywell. Dr. George Harvey Williams, late of Oswestry, and already for many years a member of the British Medical Association, was elected a member of the Branch.

Vote of Thanks to the Council of the Branch. It was moved by Dr. Williams (Mold), seconded by Mr. Jones (Carnarvon) and carried with acclamation—

"That the best thanks of this meeting be tendered to the Council of this Branch for the past year for their unremitting attention and valuable services."

President-elect for 1864. It was proposed by Dr. GEORGE T. JONES (Denbigh), seconded by Mr. EYTON JONES (Wrexham), and unanimously carried—

"That Dr. Williams, of Mold, be the President-elect for 1864."

Place for holding the next Annual Meeting. After some discussion as to the relative merits of several places, it was agreed that Mold be appointed the place for holding the next annual meeting.

Intermediate Meeting. Dr. Davies (Holywell) having in a most hospitable manner invited the members of the Branch, it was unanimously resolved that the next intermediate meeting be held in his house in the spring of next year.

Council of the Branch. It was moved by Dr. DAVIES (Holywell), seconded by Mr. THEED (Rhyl), and carried—

"That the following gentlemen constitute the members of the Council of this Branch for the current year, in accordance with the seventh bye-law; viz.—Thomas Morris, Esq. (Marford); Robert Jones, Esq. (Carnarvon); E. Williams, M.D. (Wrexham); E. T. Hughes, M.D. (Mold); A. E. Turnour, M.D. (Denbigh); T. Francis Edwards, Esq. (Denbigh)."

Representatives in the General Council. Upon the proposition of Dr. ROBERTS (St. Asaph), seconded by Dr. J. R. HUGHES (Denbigh), W. Williams, M.D. (Mold) and A. E. Turnour, M.D. (Denbigh), were unanimously elected to represent the Branch in the General Council of the British Medical Association.

Secretary and Treasurer. It was moved by Dr. G. T. JONES (Denbigh), and unanimously agreed to—

"That D. Kent Jones, Esq., of Beaumaris, be re-elected Secretary and Treasurer for next year."

Vote of Sympathy with Dr. Waters of Chester. Dr. WILLIAMS (Wrexham) moved, and Mr. JONES (Carnarvon) seconded the following resolution—

"That the expression of our warmest sympathy be conveyed to Dr. Waters of Chester, together with our feelings of regret, that he should have had to undergo so painfully anxious and expensive an ordeal as the late trial, 'Bromwich *versus* Waters'. And while we hold it to be the duty of every honourable man to further the ends of justice by faithfully speaking to *facts*, we deprecate in the strongest terms the dogmatic assertions in courts of law of mere *opinions*, founded only upon the statements made by interested and non-professional witnesses to the total disregard of the professional opinions, practice, and character of a brother practitioner."

After several members expressed their feelings upon the above resolution, it was put to the meeting, and was unanimously carried.

Upon the proposition of Mr. Jones (Carnarvon), Mr. Griffith of Wrexham was requested to act as Treasurer, to receive the subscriptions of the members of this Branch, in aid of the "Waters Testimonial Fund".

Papers, Cases, etc. The following communications were made:—

1. Extirpation of the Uterus. (The excised mass was shown.) By T. F. Edwards, Esq., Denbigh.
2. Nævus. By T. T. Griffith, Esq., Wrexham.
3. Dislocation of the Hip-joint reduced by Manipulation, in an Idiot aged 45. By E. T. Hughes, M.D. Mold.
4. Protracted Chronic Gastritis, with considerable Thickening of the Walls of the Stomach in the neighbourbood of the Pylorus. By O. Roberts, M.D., St. Asaph.
5. Nævus of the Arm. By T. Eyton Jones, Esq., Wrexham.
6. Communication between the Uterus and Bladder, with ultimate Recovery. By Robert Jones, Esq., Carnarvon.
7. Obstruction of the Bowels, where Gangrene of the Bowel took place, and six inches were expelled. By T. Francis Edwards, Esq., Denbigh.

Dinner. All the members, with Dr. Robert Lodge of Liverpool, and the Rev. Thomas Williams, rector of St. George, as guests, dined together at half-past three, and spent a very pleasant evening.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES: COMBINED ANNUAL MEETING.

THE combined annual meeting of the South Midland and Cambridge and Huntingdon Branches was held at the Infirmary, Peterborough, on Thursday, July 9th; WILLIAM PALEY, M.D., President, in the chair. Forty-six members and visitors were also present.

Most of the gentlemen who attended were entertained at a sumptuous luncheon at Dr. Paley's house. Previously to the general meeting of the Branches in combination, a separate meeting of each Branch was held for the transaction of business.

SOUTH MIDLAND BRANCH.

The number of members of this Branch is now ninety-two.

President-elect. On the motion of E. DANIELL, Esq. (Newport Pagnell), seconded by J. G. LEETE, Esq. (Thrapstone), it was resolved that Henry Veasey, Esq., of Woburn, be the president-elect; and that the annual meeting for 1864 be held at Woburn in July.

The Committee of Management were proposed, seconded, and carried unanimously, to consist of G. Ashdown, Esq.; T. H. Barker, M.D.; E. Daniell, Esq.; J. M. C. Faircloth, M.D.; D. J. T. Francis, M.D.; J. G. Leete, Esq.; P. McLosky, M.D.; H. Terry, jun., Esq.; and R. W. Watkins, Esq.

Representatives in the General Council. The following gentlemen were elected representatives in the General Council of the Association:—Robert Ceely, Esq. (Aylesbury); Thomas Clark, Esq. (Wellingborough); Frederick Cox, Esq. (Welford); and John Francis, Esq. (Market Harborough).

Honorary Secretaries and Treasurer. Dr. Bryan of Northampton and Mr. Goldsmith of Bedford were re-elected Secretaries, and Dr. Bryan Treasurer, for the next year.

New Members. On the motion of Dr. PALEY, seconded by Mr. DANIELL, the following gentlemen were admitted as members:—E. H. Bolland, M.D. (Daventry); R. Death, Esq. (Buckingham); E. Dudley, Esq. (Yardley Hastings); J. Keal, Esq. (Oakham); W. Keal, Esq. (Oakham); D. Nixon, Esq. (Stony Stratford); C. Terry, Esq. (Newport Pagnell); and T. A. Warren, Esq. (Princes Risborough).

Autumnal Meeting. It was decided that the autumnal meeting be held at Northampton in October next.

CAMBRIDGE AND HUNTINGDON BRANCH.

At a meeting of this Branch, under the presidency of Mr. WELSH, the following resolutions were passed—

1. Proposed by Mr. MURIEL, seconded by Mr. HODSON—

"That it be left with the Council of the Branch to determine the time and place of the next annual meeting; also, to elect the President."

2. Proposed by Mr. GIRLING, and seconded by Dr. PINCHARD—

"That the retiring President (Dr. Paget); J. Hammond, Esq.; J. Carter, Esq.; G. F. Helm, Esq.; and the Secretary, form the Council of the Branch till the next annual meeting."

3. Proposed by Mr. HODSON, and seconded by Mr. HELM—

"That Dr. Paget and M. Foster, Esq., in addition to the Secretary, be the representatives of the Branch in

the General Council of the Association till the next annual meeting."

COMBINED MEETING OF THE BRANCHES.

The members of both Branches then adjourned from Dr. Paley's house to the Infirmary.

President's Address. On taking the chair, Dr. PALEY read an interesting address, which is published at p. 87.

Papers. The following papers were read:—

1. On Strumous Ulceration of the Face (*alias* Lupus) and its Treatment. By G. M. Humphry, M.D., F.R.S., Cambridge.

This paper was illustrated by several striking drawings; and considerable discussion took place thereon by Dr. Paley, Dr. Waller, Mr. Muriel, and others. The paper will be published in the JOURNAL.

2. On the Diet of Childbed. By Graily Hewitt, M.D., London.

This was a very interesting paper, giving the opinions of eminent accoucheurs and physicians, and advising a judicious departure from the accustomed routine of low diet indiscriminately, *post partum*, to a more generous one. Dr. Hewitt advised that there should be as little change as possible from the former habits of the patients; but that we should treat them in the manner to which they have been accustomed (if equal to it). Their temperament, and their feelings as to what they would like, should be consulted. If a patient desired food, he would give it according to inclination, more or less. Some interesting discussion took place by several gentlemen.

3. Clinical Notes of Ophthalmic Surgery. By H. Veasey, Esq., Woburn.

4. After this paper, the meeting separated; and several adjourned to another room to witness some excellent demonstrations of the laryngoscope by Dr. T. J. Walker, on himself and others. Dr. Walker gave these demonstrations very clearly and beautifully by means of a glass globe on a stem filled with water and a moderator lamp, throwing thereby a very clear and distinct light into the throat, and showing the epiglottis, rima glottidis, and vocal cords, very distinctly.

The Dinner. About thirty-eight gentlemen met at the Angel Hotel, and partook of a dinner, after which the usual toasts, loyal and otherwise, were given, and thus a most satisfactory meeting was concluded.

GOVERNMENT ENCOURAGEMENT OF SCIENCE. The total amount spent for purposes of education, science, and art in this country, is about £1,500,000.

SUBSTANCES WHICH SHOULD NEITHER BE HEATED NOR MELTED IN PLATINUM CRUCIBLES. According to Dr. Hager, the following operations cannot be performed: 1. The fusion of alkaline sulphurets, as well as the reduction by charcoal of sulphates of the alkalies and alkaline earths. 2. All operations which produce the disengagement of chlorine, bromine, iodine and fluorine; consequently platinum cannot be used for aquaregia. 3. All operations which involve the separation of silicic acid, which at a red heat acts on platinum and renders it brittle. 4. The fusion or heating of nitrates, especially those of the alkalies and alkaline earths, 5. The heating to redness of the caustic alkalies and alkaline earths. 6. The fusion of metals, especially those very fusible, as lead, bismuth, tin, and cadmium, and particularly when a red heat is used to reduce metallic oxides. 7. Heating to whiteness metallic oxides, which give up oxygen at a high temperature, as for example the oxides of lead, bismuth, nickel, copper, etc. 8. The heating of phosphoric acid and the acid phosphates with carbon or other deoxidising agents, because of the tendency to eliminate phosphorus which acts on the platinum. (*Jour. de Pharm.* and *Chemical News.*)

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, MARCH 2ND, 1863.

A. BRYSON, M.D., in the Chair.

ON THE SUCCESSIVE EPIDEMICS OF YELLOW FEVER IN BERMUDA DURING THE PRESENT CENTURY. BY W. R. E. SMART, M.D., R.N., DEPUTY INSPECTOR OF FLEETS AND HOSPITALS.

THIS elaborate paper contained a large amount of most valuable information, derived from the records of the Naval Hospital and other official documents on the spot, illustrative of the history of the consecutive visitations of the pestilence in these islands. The neglect of sanitary and hygienic precautions was shown to have contributed much to the diffusion and to the fatality of the fever among the garrison, naval depôt, ships of war as well as convict hulks, and among the general population. A fourth part of the troops perished in the epidemic of 1853; while in that of 1856, they were but slightly affected, owing in a great measure to the timely removal of the men from their barracks, and camping them out on healthy ground. Much of the mortality in some of our ships of war, of recent years, has been traced to overcrowding of the men on board and to unwise delay in not promptly landing the crew.

The paper excited a very lively interest at the meeting.

MONDAY, APRIL 6TH.

B. G. BABINGTON, M.D., F.R.S., in the Chair.

ON THE EPIDEMIC DISEASES OF TASMANIA. BY S. HALL, M.D., OF HOBART TOWN.

Van Diemen's Land, or Tasmania, as it is now generally called, enjoys a highly salubrious climate, as evidenced by the extremely low death-rate among her rural population, this being under twelve per thousand. The town districts, of course, exhibit less favourable returns, in consequence, as the writer shewed, of the neglected condition of the lower districts, the accumulation of decomposing refuse, and the defective supply of pure water. Some of the public schools appear to stand much in need of amendment. The most frequent epidemic diseases hitherto have been some of the exanthemata, especially measles and scarlatina, together with hooping-cough. Typhoid fever, if not genuine typhus also, has occasionally carried off a good many victims. Malignant cholera has not yet been seen in the Australian continent or in any of the adjacent islands. The sickly state of several emigrant ships was dwelt upon.

Dr. HALL's paper was illustrated with numerous statistical and meteorological tables, reflecting the highest credit on his professional zeal and intelligence.

MONDAY, MAY 4TH.

B. G. BABINGTON, M.D., F.R.S., in the Chair.

ON THE INFLUENCE OF PANDEMIC CAUSES IN THE PRODUCTION OF FEVER. BY R. LAWSON, DEPUTY INSPECTOR-GENERAL OF ARMY HOSPITALS.

While engaged in examining the Army Statistical Returns of the sickness and mortality since their first publication, with reference more especially to the prevalence during certain seasons of malignant fever in Jamaica and other West India islands, the author's attention was drawn to the seeming connection, in point of either simultaneousness or sequence, between the manifestations of the disease in different countries or regions of the globe. By a careful analysis of the data bearing on the subject in the returns from the various military

stations in America, the West Indies, Mediterranean, Cape of Good Hope, etc., he was led to suspect that, from time to time, there are great febrific waves or currents passing over large portions of the earth's surface, and indicated by the more than usual prevalence and severity of fevers and kindred diseases along determinate lines, and within certain periods of time.

The subject well deserves the attention of epidemiologists. There may be far greater uniformity and regularity in the outbreak of zymotic diseases than is generally imagined.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 23RD, 1863.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

OBSERVATIONS ON STERILITY IN MAN; WITH CASES. BY T. B. CURLING, ESQ., F.R.S.

THE object of this communication was to show that a want of aptitude to impregnate may coexist with the capacity for sexual intercourse; or, in other words, that man is subject to *sterility* independently of *virility*.

The author stated that sterility in man may arise from the following causes:—

1. Malposition of the testicles.
2. Obstructions in the excretory ducts of the testicles.
3. Impediments to the escape of the seminal fluid.

1. *Sterility from Malposition of the Testicles.* The opinion of John Hunter, "that when one or both testicles remain through life in the belly they are exceedingly imperfect, and probably incapable of performing their natural functions," was corroborated in a remarkable manner by the facts adduced in this paper. After describing the condition of detained testicles, the author stated that the question to be considered was whether a testicle that has not passed into the scrotum can secrete a fertilising fluid. He assumed as quite established, that to possess this property the semen must contain zoosperms.

Having referred to the observations of Professor Goubaux on horses, and to those of Follin and Godard on man, the author remarked that the proofs adduced by these observers were not sufficiently cogent and numerous to establish the law that cryptorchics are infertile; and it could not be expected that assent should be given to results so remarkable and unexpected without evidence of the most convincing character. Opposite opinions continued to be entertained, and had recently been avowed by Dr. Alfred Taylor.

The author gave the particulars of two cases of double detained testicle in married men (cryptorchics) without children; and also two cases of single detained testicle, the second testicle, in one case, being completely atrophied, and in the other having been removed by operation. In all four cases the copulative powers were satisfactory; but the ejaculated semen was destitute of spermatozoa. He gave a table, which included these four cases and five others; three described by Godard, one by Puech, and one by the President of the Society, making nine in all, in which the fluid ejaculated by men with retained testicles was submitted to examination, and found to be destitute of spermatozoa. In confirmation of the results obtained in these cases, he deduced some observations made upon the lower animals by Messrs. Gobaux, Follin, and Godard; and he furnished a table of eight cases in which the fluid found after death in the substance of a retained testicle—in the epididymis or vas deferens, or in the vesicula seminalis on the side corresponding to the misplaced gland—had been examined and found destitute of spermatozoa. They had not been discovered after death in the spermatic ways of a detained testicle in any one instance that he knew of.

The facts which had been brought forward as opposed to the conclusion that cryptorchics are sterile, were chiefly instances in which they were reputed to have procreated children. Three cases were cited: one recorded by Mr. Poland, another by Mr. Cock, and a third by Mr. Durham. The author felt no little hesitation in calling in question the claims to paternity in these cases; but remarked that as yet no case had been found in which a retained testicle had been fully proved to be capable of secreting a fertilising fluid. The observations collected in the paper seemed sufficient to show that, as a rule, they do not; and though he saw no valid reason why there should not be exceptions, still the evidence was wanting to establish the exception in either of the instances of reputed paternity which had been mentioned.

2. *Sterility from Obstructions in the Excretory ducts of the Testicles.* After giving a brief account of Gosselin's researches, in which he showed that after attacks of gonorrhœal epididymitis the channel for the semen is temporarily and sometimes even permanently obstructed, causing, when the epididymitis is double, sterility, the author related three cases occurring in his own practice, of permanent obstruction in the epididymis of both testicles in married men whose wives were barren. In all three the patients had vigorous powers; but there was a total absence of spermatozoa in the ejaculated fluid. The author insisted on the importance of careful and prolonged treatment in cases of epididymitis, to obtain the removal of inflammatory effusions.

The author remarked that the passage of the semen from the testicle might be prevented by congenital absence of the vas deferens, which, if double, would occasion sterility. A case of the kind, in which the testicles were sound, had been observed by John Hunter.

The excretory duct of the testicle is liable also to be interrupted by tubercular deposits in the epididymis. It is well ascertained that this part is much more frequently the seat of tubercle than the body of the gland, and is often extensively diseased, whilst the substance of the testicle remains sound. The author gave a case in point, in which the semen was destitute of spermatozoa.

3. *Sterility from Impediments to the Escape of the Seminal Fluid.* A close stricture in the urethra so completely interrupts the passage of the seminal fluid, that in the ejaculation it regurgitates into the bladder, where it mixes with the urine. In erection of the penis, the urethra becomes narrowed, so that a stricture which offers but a slight obstacle to the flow of urine may under congestion be sufficient to impede the emission of semen. The author had grounds for concluding that sterility from chronic stricture in the urethra exists to a greater extent than is commonly supposed. As the condition was one which is in most cases remediable, it was only necessary to call particular attention to it as not an uncommon source of infertility.

The author alluded also to a case in which he had reason to conclude that sterility was consequent upon inflammation and abscesses near the prostate gland, occasioning obliteration of the ejaculatory canals.

Two important and delicate questions arose out of these inquiries. 1. Whether a man who has the inclination and power to copulate, but who is nevertheless sterile, is justified in contracting marriage. 2. Whether this condition is a sufficient ground for a divorce.

That a man who is unable to fulfil the command, "to be fruitful and multiply" is right in disappointing the hopes and periling the happiness and perhaps health of a woman, could not, the author thought, be maintained by any casuist; and in some of the cases related in the paper he had felt it his duty to give advice in accordance with this opinion.

It could not be doubted that, in women ready for con-

ception, frequent sexual excitement without impregnation was very likely to prove injurious to health; and the author showed from the writings of Dr. West that diseases of the ovaries and uterus originate from this cause.

The second question was one upon which a surgeon was scarcely called upon to pronounce an opinion. But the author remarked that, as sterility in women is not considered an adequate cause for divorce, so the man ought not to pay such a penalty for unsuspected unfruitfulness.

CASE OF STRANGULATION OF THE STOMACH IN AN UMBILICAL RUPTURE, AND OF DEATH DURING ITS REDUCTION UNDER CHLOROFORM. BY CHARLES H. MOORE, F.R.C.S.

A corpulent woman, aged 60, was admitted into the Middlesex Hospital, under the care of Mr. MOORE, with a strangulated umbilical hernia fourteen inches in diameter. She had been operated on for strangulation ten years before, by Mr. Wormald. She was greatly exhausted, having been vomiting six days and constipated three days, and having taken calomel and been leeched and blistered. She had vomited two gallons of fluid in the previous forty-eight hours. The pulse was 120.

A drachm of chloroform and four successive portions of forty minims each were inhaled during eleven minutes. The taxis was employed, and was twice interrupted —once by her coughing, once by vomiting. It was continued four or five minutes after the inhalation of chloroform was discontinued, and until about one-third of the hernia had been reduced. She was then so feeble that all but restorative measures were stopped; in four minutes more she was dead. Pulse and respiration continued uniformly, and failed proportionally until both ceased.

The cardiac and pyloric ends of the stomach were in the abdomen; the intermediate portion was fixed and constricted in the hernial ring. The cardiac portion was flaccid and empty; but was of enormous capacity. Many parts of its mucous membrane were gangrenous and black, and some were lacerated. These lacerations bore a definite relation to the œsophageal opening. The peritoneal coat near the spleen was also ruptured, and the back of the cardiac pouch was in one spot completely perforated. About a gallon and a half of black liquid, similar to that which had been vomited, lay in the peritoneum. The membrane was not inflamed, but the aperture through the stomach was partly black and pulpy, partly inflamed, partly infiltrated with the contents of the stomach, and a little ecchymosed.

The writer commented—1. On the unique character of the case—a complete strangulation of the stomach itself. None of the black fluid had passed into the small intestines, which contained air and a little yellow bile. 2. On the dilatation of the cardiac portion, to the inordinate distension of which he attributed the gangrene. 3. On the rupture of the stomach. The lacerations might have been traced to the taxis, had there been any mark of violence in the portions of the stomach within reach during that operation; but these seemed proved, by their radiated disposition with regard to the œsophagus and by the pathological changes in the principal rupture, to be due to vomiting. The perforation of the stomach might have been almost entirely produced by the vomiting, but might have been completed by the taxis. 4. On the cause of death. The importance of the case in respect to the toxical effects of chloroform and to the supposed sudden fatality of ruptures of the stomach was considered, and reasons were offered for assigning the result to neither separately, but to both, in common with the previous and great exaustion of the patient. Finally, it was suggested that the stomach-pump might have relieved such a case with less danger than was involved in the use of chloroform and the taxis, though actual recovery was in the highest degree unlikely.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 3RD, 1863.

R. GREENHALGH, M.D., in the Chair.

SIX gentlemen were elected Fellows.

SIMULTANEOUS UTERINE AND EXTRA-UTERINE GESTATION PROCEEDING TO THE FULL TERM. BY L. R. COOKE, ESQ.

E. R., aged 39, who had had three previous natural deliveries, was taken in labour on December 8th, 1862. She had suffered no very unusual amount of inconvenience during her pregnancy beyond dragging pains, and an unusual sense of weight in the abdomen. On external examination, the abdominal swelling was found to have its greatest prominence considerably to the left side, and about on a level with the umbilicus; the whole tumour was also more circumscribed, well defined, and spherical in form than usual. The limbs of a fœtus were distinctly traceable through the abdominal walls, and a placental souffle was audible over a large portion of the tumour. A vaginal examination showed the canal much elongated, its rugæ obliterated, and the os uteri drawn up beyond reach of the fingers. Suspecting therefore an abnormal gestation, Mr. COOKE requested Mr. Spencer Wells to see the patient with him, and he attended with Dr. Kuman, of Vienna. It was thought there were two sets of fœtal heart-sounds, while the extensive surface over which the placental bruit was heard gave a suspicion of two placentæ. Whether the fœtuses were both intrauterine, or an ovarian tumour was present also, was uncertain. At this time the pains were so slight and at such long intervals, that the patient was left, the bladder having been emptied, and a grain of opium administered, instructions being given to send for Mr. Cooke on the occurrence of expulsive pains or of any change in the patient.

She passed a good night, and the uterine pains were gradually reestablished during the next day. At six o'clock P.M. Mr. Cooke was sent for, and found her in strong labour. On making an immediate examination, the sacral concavity was now found occupied by a firm, resisting, rounded tumour, presenting no trace of fluctuation, and immovable under a very considerable degree of force employed between the pains. Its presence reduced the outer posterior dimension of the inlet to less than two fingers breadth, through which no os uteri was discoverable; but resting on, and anterior to the symphysis pubis, a small portion of the convex cranial surface of a fœtus was to be felt.

Dr. Greenhalgh and Mr. Meates, of Chester Square, saw the patient. The diagnosis was still a matter of doubt, because the tumour was not traceable abdominally, the uterus being in front more or less; and examined *per vaginam*, it might equally have been taken for a solid tumour or a pedunculated fibrous outgrowth from the uterus.

The obvious indication was to deliver the woman as speedily as possible, as the severity and frequency of the pain threatened rapid exhaustion of her strength, if not rupture of the uterus. Perforation of the head of the fœtus was considered inadmissible, from the almost impossibility of getting at it and fixing it; and because also, even supposing it accomplished, evisceration and dismemberment under the same difficulties would have been equally necessary.

It was decided therefore to put the patient under chloroform, so as to suspend the action of the abdominal muscles, in order to endeavour to displace the tumour and turn the child; and failing that, to perform Cæsarean section. The former being done, the tumour was pushed out of the vagina with some difficulty, and delivery completed by version. The placenta being removed, and the uterus not contracting satisfactorily, the

woman moreover being much exhausted, it was thought advisable to avoid any manipulation of the abdomen with a view to discover the nature of the remaining tumour. She never entirely rallied from the shock and exhaustion from the operation, and died within forty-eight hours.

The autopsy was made four hours after death, Dr. Greenhalgh, Dr. Kuman, Mr. Spencer Wells, Mr. Meates, Mr. Colborne, and Mr. L. R. Cooke being present. On opening the abdomen and reflecting the walls, the first thing revealed was the body of a full-grown female fœtus contained in its proper membranes, which were unruptured, and distended with liquor amnii. The anterior or external surface of the chorion was perfectly smooth, and in immediate relation with the abdominal peritoneum. Beneath the tumour the uterus was seen, partially contracted and unruptured. There was a large quantity of greenish-brown grumous fluid in the peritoneal cavity. On opening the fœtal membranes and removing the fœtus, it was found that the placenta was situated in, and firmly attached to, a shallow capsule, formed of the expanded and enlarged fimbriæ of the right Fallopian tube, which on its convex or peritoneal aspect was firmly tied down by numerous and very tough bands of old adhesion. A stylet could be passed along the tube to its expanded extremity, when it became arrested by the placenta.

The author remarked, that the lessons derivable from this case appear to be mainly that, in cases of doubtful tumours complicating parturition, it may be well to discover, as far as may be; 1. Whether there is any evidence of an extrauterine fœtation, as soon as possible after uterine delivery.

2. Whether, in case of such a discovery, the probability is or is not that the adhesions of the tumour may be so firm and numerous as to render gastrotomy inadmissible.

3. Whether, supposing the existence of such adhesions to be admitted, it is advisable or justifiable to remove the fœtus alone, with the certainty of a portion of the liquor amnii escaping into the peritoneal cavity, and with the possibility of the placenta becoming encysted and being thrown off at a future period.

Dr. Greenhalgh remarked that the case narrated by Mr. Cooke was most interesting in a diagnostic and practical point of view, and he believed was without parallel in the annals of obstetric medicine. He drew attention to the remarkable absence of abnormal symptoms during pregnancy, to the extreme anteversion of the womb, and to the influence of the labour pains in forcing the extra-uterine fœtus from its position in the abdomen into the pelvis, and so occasioning an obstacle to the passage of the intrauterine fœtus.

Dr. Graily Hewitt said that the case possessed very great interest, and was most unusual. The observation made by Mr. Wells as to the presence of two distinct sets of fœtal heart sounds antecedently to the commencement of the labour was conclusive as to the fact that both the intrauterine and the extrauterine fœtus were of simultaneous origin—were, in fact, twins; otherwise it would have been just possible that the extrauterine fœtus might have been the product of some previous impregnation.

Dr. Rogers could not agree with Dr. G. Hewitt in the supposition that the fœtus found in the abdomen might be the product of an anterior conception to the one removed from the uterus. The facts stated by Dr. Greenhalgh, Mr. Cooke, and specially by Mr. Spencer Wells, proved, he thought, that the two were conceived at the same time, and were twins.

Mr. Spencer Wells said that Mr. Cooke had suspected the existence of an extrauterine fœtus before he (Mr. Wells) had been called in; and it was the evidence of the presence of two living children, afforded by the sounds of two fœtal hearts—one heard under the right false ribs, and the other in the left iliac region—which had put them all off the track indicated by Mr. Cooke, as it certainly did not occur to them to suspect the presence of two children, both alive and at the full term, one within and the other without the uterus. He (Mr. Wells) had been called in on previous occasions of suspected extrauterine pregnancy, where it had been feared that gastrotomy might be necessary; but in every case the child had proved to be within the uterus; although, from the extreme thinness of the abdominal walls and uterus, in some cases the child seemed to be covered by scarcely anything more than skin. The only thing apparent in this case, uncommon in cases of twin-pregnancy, was the very loud sound of the placental murmur; and this might become a valuable indication in future cases. In this case it was supposed to depend upon the large size of the placenta. He (Mr. Wells) examined *per vaginam*, and thought he made out a breech presentation; but, as he had not practised midwifery for many years, he was not very confident about it, and advised Mr. Cooke, if he met with any difficulty after labour had fairly set in, to consult some experienced accoucheur.

Dr. Rogers asked Dr. Greenhalgh what course he would have pursued had he known that the tumour he felt likewise contained a living fœtus.

Dr. Greenhalgh replied, that had a living fœtus been detected after the delivery of the first, and the patient's condition been such as to justify an operation, he should have performed gastrotomy, which would almost certainly have saved the child and given the mother as good a chance of recovery.

Dr. Cleveland wished to know whether the *post mortem* examination had revealed such a condition within the abdomen that, if gastrotomy had been performed soon after the birth of the first child, there would have been a reasonable probability of a successful result.

Dr. J. Braxton Hicks wished to know whether there was any trace of the old chorion villi upon the unattached portion of the ovum, as it was almost impossible to explain its free state, except that it must have been wholly included in the infundibular end of the tube up to the time of the formation of the placenta, and that by its growth it projected beyond it at a later period. He agreed with Dr. Greenhalgh as to the rule of excision of the child in such a case—namely, if the child were dead it would be best to leave it untouched, in order that adhesions might form—a point he had brought forward in the *Guy's Hospital Reports* upon two cases of extrauterine fœtation he had operated upon. If the child were living, then it would be an important question whether it should not be removed by abdominal section, in the manner suggested in the above paper, stitching the edges of the opening of the cyst to those of the outer wound before removing the child, leaving the placenta to come away of itself.

Mr. Cooke said the surface appeared to be entirely free from traces of chorion processes.

Mr. Spencer Wells said the question raised by Mr. Cleveland as to the practice which ought to be followed in any similar case was one of great importance. Supposing it were known that a child at the full period of pregnancy was extrauterine, what ought the surgeon to do? He (Mr. Wells) questioned the morality of the principle suggested by the President and Dr. Hicks, that the rule of practice should depend upon the child being alive or not. If it were true that, when the child is dead, women, as a rule, live for many years, and do not suffer very much, it could hardly be right to subject a patient to a very dangerous operation on the slender chance of the child surviving. It seemed to him (Mr. Wells) that the life of the child was only one, and not a very important, element in the calculation. Experience was wanting to determine the ordinary duration of the life of the subjects of extrauterine pregnancy when left alone and when subjected to surgical operations, and each case must be judged by its own peculiarities. In

the case now before the Society, the question of operation had been seriously discussed over the dead body of the patient; and looking to the extensive attachments of the placenta and membranes, it was quite certain that the child alone and the unattached portion of membranes could have been removed. When the great liability of puerperal women to a low form of diffuse peritonitis was considered, it could hardly be expected that in this case the patient could have survived the slow process of separation of the placenta after the removal of the child, and it was very doubtful whether her life would have been lengthened or shortened by gastrotomy.

Dr. HICKS said that the value of the child's life varied much in the estimation of various practitioners. An important element in carefully weighing the relative risks of leaving or removing a live child was, that should any fluid escape into the peritoneal cavity, it would be much less irritating than if the child were dead.

Dr. GRAILY HEWITT believed that to one at least of the questions raised by Mr. Spencer Wells a tolerably positive answer might be given. Was it justifiable to open the abdomen in order to extract a live extra-uterine fœtus? This question, as was evident from the observations which had fallen from others in the course of the discussion, would not meet with the same reply from all. To the other question—Was it justifiable to open the abdomen to extract a dead fœtus in a case such as that supposed, viz., just after the death had occurred?—he believed a decidedly negative answer should be given. There were abundance of facts on record showing that the dead extra-uterine fœtus may remain for years in the abdomen, giving rise to comparatively little uneasiness; in some cases during the whole of the rest of the patient's life, the woman in many cases during this time giving birth to a numerous progeny. And when steps were taken by nature to get rid of the foreign body, the evacuation was usually effected without much danger to the patient. It was therefore much the safer plan to allow the case to proceed without interference, and certainly at this juncture—viz., just after the death of the fœtus.

Correspondence.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

SIR,—The question asked by "A Physician", in the JOURNAL of the 4th, implies a considerable doubt on his mind of the truth of the assertion of his College, "that he is entitled to call himself M.D." I do not hesitate to say that he is not *legally* entitled to call or sign himself M.D.; and that he has surrendered his apothecary's license for a supposed medical status which the King and Queen's College of Physicians in Ireland cannot legally confer—*i. e.*, the degree of M.D. It is most lamentable to see the Council of this corporation holding out the inducement of M.D. to its Licentiates, when at the same time there is the decision of the Court of Queen's Bench, Ireland, *unrevoked*, against them. In answer to "A Physician's" inquiry addressed to the President of the King and Queen's College of Physicians, he receives an answer, "bearing the College seal, that he is entitled to call himself M.D., and that the College will protect him and try the question against all comers who may feel disposed to dispute the point." Why, sir, what can the profession think of a College which quietly sits down under the decision above referred to, and talks of *protecting* its Licentiates against all comers who may dispute this point? Why, then, does the College not protect them?

The Medical Registrar disputes the point; for he refuses to register the Licentiates of the College as M.D.'s.

The editor of the *Medical Directories* disputes the point; for "A Physician" will find himself there recorded as "G.M.Phys."

Sir Hugh Cairns and Mr. Hobhouse gave it as their opinion, that unless this College possessed more powers than were submitted to the Attorney-General for Ireland, its Licentiates were not entitled to the M.D.

I have gone carefully over the various Acts of Parliament relating to this corporation, and also the charter; and neither give to this College the power of conferring on its Licentiates the degree of M.D. Indeed, its Fellows are obliged to obtain from some University (unless reduced to six) *a degree* before their *own* College can elect them into the fellowship. Would this be the case if the King and Queen's College could *of itself* confer the degree? Clearly not.

It is not to be supposed that any individual would be so Quixotic as to enter into law with this body corporate. This College has had an adverse decision on this very point by the highest legal authority in Ireland; and the *onus probandi* now rests with it. It owes this to its Licentiates; it owes it to its own dignity to prove legally what it asserts publicly; and by *mandamus* to compel the Registrar to insert upon the *Medical Register* its now excluded, and therefore valueless, title of M.D.

Some time ago, Dr. Foster and a Licentiate of this College wrote an angry letter upon some remarks I made with reference to its pretended degree. I candidly gave them my reasons, and challenged them to produce any clause from the charter conferring such powers. Their silence can only be construed into their inability to do so. Finding my statements were correct, they considered it most judicious to keep quiet.

I think "A Physician" may, without offence, ask for a sight of the charter of his College, and thereby satisfy himself of the truth of what I have here stated.

I am, etc., Δ.

SIR,—If the Irish College of Physicians can confer the degree of M.D., how is it that none of its Licentiates are registered as such? It is clearly the duty of the College officials to prove their right. They might as well affirm they possess the power to make Licentiates "Earls"; it could not be more ridiculed than "pretending" to confer University degrees.

I am, etc., COMMON SENSE.

MR. BOTTOMLEY AND VACCINATION.

LETTER FROM G. BOTTOMLEY, ESQ.

SIR,—It is my intention to correct the numerous misstatements made in the JOURNAL respecting my views upon vaccination.

It is stated in the JOURNAL of June 13th, that I was invited to attend a meeting of the Board of Guardians by their Chairman. This I positively deny.

I also deny that I said, "Doctors should work cheaply or for nothing." I am as strongly opposed as any man can be to gratuitous medical and surgical services.

It appears by the JOURNAL that Mr. Jeynes, the union medical officer and public vaccinator to the Croydon Union, said "he did not find fault with the fee paid by the guardians; the fault did not lie there." Then, I ask, where did it lie?

Boards of Guardians, no doubt, have many sins to answer; for which, I am ready to affirm, they may be compared to a felon who has committed many crimes, and a murder takes place in his neighbourhood. He may be accused; but if any one knew him to be innocent, it is but just that his innocence should be proved; but the one who comes forward to prove his innocence cannot be considered to be abetting the felon. So it is with Boards of Guardians.

Much may be said upon Poor-law medical relief—too much for me upon the present occasion; but it is well known that I formed one of the Poor-law Medical Relief Committee that held its meetings in Hanover Square, and for many years I sacrificed both money and time in its cause; and I did not give it up till I found it to be useless to proceed further, when the President of the Poor-law Board told me that there would be no advance in the salaries of the union medical officers so long as those appointments were eagerly sought for by legally qualified medical men. When a vacancy occurred in a union for a medical officer, there were plenty of applicants; therefore, they presumed, the pay was sufficient, and more particularly as the majority of the union medical officers neither assisted personally or by subscription. It is entirely in the hands of the profession. Once let the medical appointments to unions become vacant, then the government will do an act of justice to the profession and of humanity to the poor, but not till then.

And now for vaccination. I consider it a disgrace both to the government and the profession that we should in the present day be disputing about the fee for vaccination with Boards of Guardians, who never should have had the power given them of electing the misnamed public vaccinator. What, I would ask, is meant by public vaccinator? Is it one who is empowered by Act of Parliament to go into every house and request to vaccinate those who have not been vaccinated? That, I presume, is meant by the term public vaccinator. What say the profession and the public to so gross an act of injustice? It cannot be otherwise than an infringement upon the liberty of the subject, and an act of injustice to the mass of the profession. The public vaccinator pockets his 1*s.* 6*d.* or 2*s.* 6*d.* fee, and deprives the private practitioner of his regular fee of 10*s.* 6*d.* or £1 : 1, as the case may be. It is too monstrous to be permitted longer. Let the union medical officer vaccinate the children of the poor, and receive his 2*s.* 6*d.* fee for the certificate. It is not my wish, nor was it ever my intention, to deprive the union medical officer of sixpence. There should be no public vaccinator. Every medical practitioner should receive a fee for the certificate of successful vaccination, which fee should come through the Registrar-General's office. The subject is a national one; consequently, the state should pay the fees out of the public purse; they should not come out of the poor-rate.

In the Association Journal of January 20th, 1854, will be found a letter from myself, the date of which is Dec. 26th, 1853, to the following effect.

"*To the Editor of the Association Journal.*

"Croydon, December 26th, 1853.

"Sir,—Vaccination is a national question; consequently, from the legislature ought to spring a consistent law for the purpose of carrying it out. The legislature having hitherto failed in its endeavours, it now becomes the duty of the medical profession to point out the defects of the Compulsory Vaccination Act, and offer a remedy. I should propose that the Registrar-General be placed at the head of the organisation for carrying out vaccination; and all matters connected with the subject should pass through his office. The plan I should submit to him would be, that the union medical officer should vaccinate the children of the poor, receiving the fee for the certificate; and that other medical practitioners should give the required certificates to their own patients in every case of successful vaccination, receiving the parliamentary fee for the certificate from the public purse; leaving the usual fee for vaccination to be paid by his patient. The fee paid by the state ought to be very clearly defined to be for the certificate, which should be paid by the Deputy-Registrar. The Poor-law Board and Boards of Guardians ought to have nothing whatever to do with it, so that the certificates to the Registrar-General would give the number of cases vaccinated. Quarrelling with Boards of Guardians whether the fee should be 1*s.* 6*d.* or 2*s.* 6*d.* appears to me to be a complete waste of time. I petitioned both Houses of Parliament upon the subject when the former Bill was introduced. The Duke of Richmond presented my petition to the House of Lords, and his Grace quite agreed with me in its prayer, and kindly came up from Goodwood for the sole purpose of presenting it; and Mr. Alcock, one of the members for East Surrey, presented my petition to the House of Commons. I should propose that a deputation wait upon Lord Lyttelton, the introducer of the recent Act, to point out to him its defects and the certainty of its failure; then to wait upon the Registrar-General, and ultimately upon the Home Secretary. If at the same time the profession were to support the measure by petitioning both houses, good would result. It is painful to witness members of the medical profession quibbling and quarrelling with Boards of Guardians, who literally have it not in their power to render any assistance. The Act is put into their hands to carry out, and they have no alternative. Quarrelling with Boards of Guardians is degrading to the medical profession." (Signed) Geo. Bottomley.

If something like the above had met with support from the medical profession, the vexed question of vaccination would long ere this have been settled; and the trash about the spread of small-pox arising from the parsimony of Boards of Guardians would not have been countenanced.

Let the medical profession, promptly aided by the corporate institutions of the country, supported by the Medical Council, submit a plan to the government to frame an Act that would embrace all the requirements for the due performance of vaccination (as in Sweden and other places, where small-pox is now never heard of). It will then be the duty of the government to insist by an Act of Parliament the carrying out of a system that would render vaccination as beneficially protective as in other countries. I am, etc.,

George Bottomley.

Croydon, July 15th, 1863.

P.S. Union medical officers are bound by their contract under the Poor Law to vaccinate the children of the poor without any additional fee—which portion of the Act has not been repealed, unless Lord Lyttelton's Act overrides it.

ON THE APPLICATION OF COLD IRRIGATION AFTER CATARACT-EXTRACTIONS.

Letter from J. Z. Laurence, Esq.

Sir,—It may be taken as a well-ascertained fact that nine-tenths of the cases of extraction of hard cataracts that go wrong do so, not from any faults in the operation itself, but from the subsequent iritis and suppuration of the cornea, which so frequently mar the most skilfully executed operations.

Many attempts have of late been made to obviate these destructive inflammations. Schuft removes a portion of the iris, and then at once extracts the cataract by a small spoon. Mooren performs iridectomy, and in about a fortnight extracts the cataract by the old flap-operation; whilst Jacobson narcotises the patient by chloroform, extracts by the flap-operation, and then performs iridectomy.

I have myself tried all these plans. I agree with others in condemning Schuft's operation as a general procedure. Mooren's, on the contrary, I have found eminently successful; whilst of Jacobson's my present experience is too limited to enable me to speak authoritatively. But it is of an addendum to the *after treatment* of all these and other ophthalmic operations that I wish

to direct attention. Of one fact, my six years experience at the Surrey Ophthalmic Hospital has convinced me—that the only chance of saving an eye from destructive inflammation after an extraction is the instantaneous application of cold, the very moment the patient begins to feel the slightest sensation of *heat* in the eyeball. After severe pain has once set in, I have hardly ever succeeded in saving the eye. Leeches, ice, opium—nothing appears to produce any marked impression on this, almost peculiar, form of traumatic iritis and corneitis.

But I have lately employed an antiphlogistic agent, which certainly, if applied from the very onset, appears to me to exercise a very powerful influence—that is the system of cold irrigation. A wooden bracket is attached to the head of the bed; on this stands a vessel filled with water, which is kept constantly cold by immersed pieces of ice. From the edge of the vessel a few threads of lamp-cotton descend to within about half an inch of the patient's eyelid, over which is spread a piece of wet linen, which receives the drops from the cotton. This plan is superior to the alternate application of cold wet rags in several respects.

1. The temperature is thus kept *constant* in its degree.

2. The patient's head and eye are thus kept *perfectly quiet.*

3. The cold is *continuous.* The surgeon has not to fear any negligence in the application of the cold water, either on the part of the patient or of his attendant.

The irrigation system has not, as far as I am aware, yet been applied to inflammations of the eye, although its merits have been long recognised in general surgery; of its immense advantages over any hitherto employed means in such cases, I can speak from actual experience; and, therefore, I have felt no hesitation in recommending it to all those who have anything to do with the surgery of the eye.

I am, etc.,

J. Zachariah Laurence.

June 18th, 1863.

Cholera in India. When the last accounts left Theyat-Myoo, two officers of the battalion, Captain Hazen and Surgeon Sparrow, and between thirty and forty men, had fallen victims to the disease, and cases were still frequently coming into the regimental hospital.

Irish District Lunatic Asylums. In the House of Commons, on July 17th, Mr. Blake called attention to the defects in the moral treatment of insanity in the great majority of Irish district lunatic asylums; and asked the Chief Secretary for Ireland whether the executive government of Ireland intended taking any, and what steps, to render those institutions less irksome to the patients and more conductive to their recovery. Sir R. Peel said that within the last few years a very considerable improvement had been effected in the management of the Irish district lunatic asylums, and the patients in those establishments were at present furnished with amusements and occupations which would necessarily form an important element in promoting their recovery. There were in Ireland sixteen of those asylums besides the central establishment in Dundrum. Those institutions were, he believed, admirably conducted, and there was attached to each of them a resident medical superintendent. Means were also being taken for the introduction into them of Turkish baths, which were found to offer great advantages in the curative treatment of the insane. In addition to the sixteen district asylums he had mentioned, three were being constructed at Ennis, Castlebar, and Letterkenny; and ground had been purchased, and plans had been prepared for the erection of three more for the counties of Down, Monaghan, and Wexford. Amidst those improvements, he should neglect no efforts by which he could further promote the successful management of those establishments.

Medical News.

Royal College of Physicians. At a general meeting of the Fellows, held on Monday, July 20th, 1863, the following members of the College were admitted into the Fellowship:—

Budd, Richard, M.D.Edin., Barnstaple
Chance, Frank, M.B.Cantab., 51, Wimpole Street
Davis, John Hall, M.D.Lond., 11, Harley Street
Edwards, George Nelson, M.D.Cantab., 1, Finsbury Square
Harris, Francis, M.D.Cantab., 24, Cavendish Square
Hood, William Charles, M.D.St. And., Croydon
Meyer, John, M.D.Heidelberg, Broadmoor, Wokingham
Sanderson, John B., M.D.Edin., 9, Gloucester Place, Hyde Park
Stone, William Henry, M.B.Oxon., 13, Vigo Street, Regent Street

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Brown, John, Oldbury, Birmingham
Forman, Elijah Baxter, Derby
Griffith, Gorrequêr, 17, Stanley Terrace, Notting Hill
Hauser, Philip, M.D.Berne, Gibralter
Kempthorne, Henry Law, King's College Hospital
Long, Frederick, East Dereham, Norfolk
Medwin, Aaron George, Blackheath Road
Milsome, John Ruddle, M.D.St. And., St. Bartholomew's Hosp.
Taylor, Shephard Thomas, Dilham, Norfolk
Terry, Septimus, 21, Cambridge Street, Pimlico
Thursfield, William, M.D.Aberdeen, Bridgenorth
Thurston, Edward Whitfeld, Ashford, Kent
Trevan, Matthew, Port Isaac, Cornwall
Wahlsuch, Adolphe, M.D.Kieff, Cheetham, Manchester
Walthardt, Gustav Rudolph, Queensland

At this meeting, the following gentlemen were reported by the Examiners to have passed the first part of the Professional Examination for the License of the College:—

Brewer, Alexander Hampton, St. Bartholomew's Hospital
Brewer, Henry Melvill, St. Bartholomew's Hospital
Brockman, Edward Forster, St. George's Hospital
Broughton, Henry Todd, Guy's Hospital
Cavafy, John, St. George's Hospital
Clements, George, Middlesex Hospital
Compton, Thomas Annetriding, St. Bartholomew's Hospital
Duke, Olliver Thomas, Guy's Hospital
Eastes, George, Guy's Hospital
Eck, Vincent Frederick, St. Bartholomew's Hospital
Elkington, George, jun., Sydenham College, Birmingham
Evans, John Tasker, St. Bartholomew's Hospital
Fenn, Edward Liveing, King's College
Glynn, Thomas Robinson, St. Bartholomew's Hospital
Harvey, Walter Anstice, St. Bartholomew's Hospital
Jackson, George, University College
Lush, Wm. George Vawdry, St. Bartholomew's Hospital
Martin, Paulin, St. Bartholomew's Hospital
Mayou, Marmaduke John, Guy's Hospital
Paddon, George, Guy's Hospital
Savage, George Henry, Guy's Hospital
Smith, Charles, Guy's Hospital
Tayler, Francis Thomas, Guy's Hospital
Tayler, George Christopher, St. Bartholomew's Hospital
Taylor, Arthur, Guy's Hospital
Turner, Ebenezer Fulham, Guy's Hospital
Wood, Miles Astman, King's College
Wright, Charles James, Guy's Hospital

Apothecaries' Hall. On July 16th, the following Licentiates were admitted:—

Boutflower, Henry Crewe, Manchester
Etheridge, Charles, Stoke Ferry, Norfolk
Jackson, Thomas, Whitehaven
Spurway, Charles, Tiverton, Devon
Turner, Arthur Newman, Bermondsey Square
Wearne, Vivian, Helstone, Cornwall

At the same Court, the following passed the first examination:—

Allen, Bryan Holme, University College
Brewer, Alexander Hampton, St. Bartholomew's Hospital
Brewer, Henry Melvill, St. Bartholomew's Hospital
Clements, George, Middlesex Hospital
Coxeter, James John, University College
Dalley, Charles Thomas, St. Bartholomew's Hospital
Freeman, Henry William, Middlesex Hospital
Mason, Philip Brookes, University College

Morris, Joseph, Anderson's University, Glasgow
Shorland, Edward Peter, Guy's Hospital

Passed as an assistant :—
Burroughs, Thomas John, Union Street, Southwark

APPOINTMENTS.

Allen, Thomas, M.D., appointed Medical Superintendent of the Lunatic Asylum, Kingston, Jamaica.
Bramley, William S., M.D., appointed Assistant Resident Medical Officer to the Leeds Public Dispensary.
*Bright, John M., M.D., appointed Assistant-Surgeon to the Hospital for Women.
Cape, Lawson, M.D., elected Consulting-Physician to the General Lying-in Hospital, in the room of Sir C. Locock, Bart.
*Clarke, John, M.D., elected Physician-Accoucheur to the General Lying-in Hospital.
Cox, W. Sands, Esq., appointed Consulting-Surgeon to the Queen's Hospital, Birmingham.
*Dunn, R. William, Esq., appointed Vaccinator to King's College Hospital.
Fox, W. Tilbury, M.D., elected Physician-Accoucheur to the Farringdon General Dispensary.
*Hayward, H. Howard, Esq., elected Dental Surgeon to the Hospital for Consumption and Diseases of the Chest.
Jepson, Octavius, M.D., appointed Resident Medical Superintendent of St. Luke's Hospital for Lunatics.
*Radcliffe, Charles B., M.D., appointed Physician to the Hospital for Epilepsy, in the place of C. E. Brown-Séquard, M.D., F.R.S., resigned.
Shea, Henry G., M.D., appointed House-Surgeon to St. Bartholomew's Hospital, Chatham.
Shillitoe, Buxton, Esq., appointed Surgeon for Out-Patients to the Lock Hospital.

Army.

Barnwell, Staff-Assistant-Surgeon T., to be Assistant-Surgeon Rifle Brigade, *vice* G. Baly.
Everet, Staff-Assistant-Surgeon W., to be Assistant-Surgeon 39th Foot, *vice* R. Lindsay, M.B.
Irvine, Staff-Assistant-Surgeon G. N., M.D., to be Assistant-Surgeon 79th Foot, *vice* A. K. Drysdale.

To be Staff-Assistant-Surgeons :—
Baly, Assistant-Surgeon C., Rifle Brigade.
Drysdale, Assistant-Surgeon A. K., 79th Foot.
Landale, Assistant-Surgeon J., M.D., Supernumerary, 92nd Foot.
Lindsay, Assistant-Surgeon R., M.B., 39th Foot.
Skinner, Assistant-Surgeon D. S., Supernumerary, 92nd Foot.

Royal Navy.

Atkinson, R., Esq., Assistant-Surgeon, to Haulbowline Hospital.
Bridgford, Richard F., Esq., Assistant-Surgeon, to the *Cambridge*.
Coningham, Charles L., Esq., Assistant-Surgeon, to the *Wye*.
Cranded, Cecil, Esq., Surgeon, to the *Leander*.
Grove, Samuel, Esq., Assistant-Surgeon, to the *Dauntless*.
Ridings, William G., Esq., Assistant-Surgeon, to the *Formidable*, for Marines at Deal.
Yule, T. M. A., Esq., Assistant-Surgeon, to the *Cumberland*.

Militia.

Couch, T. Q., Esq., to be Assistant-Surg. Cornwall Rangers Militia.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—
Bell, A. M., Esq., to be Assistant-Surgeon 1st Midlothian A.V.
Booth, S., M.D., to be Surgeon 56th Lancashire R.V.
Bradbury, B., Esq., to be Surgeon 34th West Riding R.V.
Field, A. G., Esq., to be Surgeon 1st Sussex R.V.
Spence, R., M.D., to be Assistant-Surgeon 1st Linlithgowshire R.V.

To be Honorary Assistant-Surgeons :—
Ballenden, W., Esq., 4th Orkney A.V.
Thorpe, G. B., Esq., 1st Derbyshire Mounted R.V.

DEATHS.

Bird. On July 14, at 1, Norfolk Square, aged 8 months, Edgar Albert, son of Peter H. Bird, M.D.
Carter, Harry W., M.D., at Kensington Hall, Ashford, aged 75, on July 16.
Hill. On July 16, at Ramsgate, aged 5 months, Helen E., infant daughter of Samuel Hill, M.D., Mecklenburgh Square.
*Iles, Albert, M.D., of Fairford, at Cirencester, on July 12.
Sparrow, George W. P., M.D., Surgeon 3rd Battalion 60th Rifles, at Theyat-Myo, Burmah, aged 41, on May 1.
Walker. On July 15th, at Darlington, aged 57, Elizabeth, widow of the late Thos. D. Walker, Esq., Surgeon, of Harworth-on-Tees.
Wedderburn, James, Esq., Surgeon, at 39, Craven Street, Strand, aged 48, on July 17.

Drunkenness in the Metropolis. Two deaths in the past week are referred to intemperance, besides six to delirium tremens. (*Registrar-General's Report.*)

Solar Electricity. M. Samo-Solaro publishes a note detailing some experiments which have led him to believe that solar rays exert some electrical action.

Maternity Hospital at Constantinople. On June 1st, a meeting was held at Constantinople, at which it was resolved that a maternity hospital should be established, and should bear the name of Miss Nightingale. The proceeding was mainly carried out under the influence of the two well known benevolent persons, Sir Moses Montefiore, and his friend, Dr. Hodgkin.

Small-pox in London. The Registrar-General's Return last week show fifty-one cases of death from small-pox, twelve of which are stated to have occurred after vaccination. The mortality of the disease gives not much indication of decline; it is satisfactory to know, however, that it does not increase. Ten of the fifty-one deaths occurred in the Small-pox Hospital.

Food for American Powder. The total number of emigrants in 1860 was 128,469; in 1861 the number fell to 91,770; in 1862 rose to 121,214; and in the first six months of the present year the emigrants numbered 121,765, considerably more than the number for the whole of last year. The total emigration since 1815 has been 5,380,836 persons, of whom 3,238,579 went to the United States alone.

Condemned Meat. At the last meeting of the Commissioners of Sewers, Dr. Letheby reported that during the last fortnight, the officers had condemned 19,922 lbs. of meat as unfit for human food. It consisted of 61 sheep, 11 calves, 9 pigs, 75 quarters of beef, and 875 joints of meat, besides 203 head of game and poultry. 4,862 lbs. of the meat were diseased, 14,563 were putrid, and the rest was from animals that had died from natural causes.

Medical Officers in the Army. Mr. Blake asked on Monday last, on what grounds medical officers of the army were, by a late warrant, precluded from acting as Presidents of Boards of Inquiry, Boards of Survey, and Committees. The Marquis of Hartington said that the warrant in question was the result of an inquiry by a Commission, of which Sir B. Hawes was the president and Dr. Gibson a member; and the circumstances under which this decision were come to were such that the medical officers could not, he thought, feel it as a stigma.

Great Cold in July. On July 19th, in the morning, the *minimum* register stood at 86·8°; Birmingham, and in the valley of the Thames, not far from Reading, on the 11th inst., the registering thermometer marked during the day 83° in the shade, and at night descended to 50°. On the 17th, the temperature fell to 36°, or 4° above freezing. On Saturday, the 18th, the thermometer actually registered 30°, or 2° below freezing; and at five o'clock in the morning the grass was quite white and crisp.

Diseased Sheep and Cattle. On Monday last, Mr. Hume, in the absence of Mr. R. Long, asked the Secretary of State for the Home Department whether his attention had been called to certain statements respecting the importation of diseased sheep and cattle, made by Professor Gamgee, in his inaugural address to the members of the New Veterinary College, Edinburgh, in November 1862; viz., that "pleuro-pneumonia and epizootic aphtha never appeared in Ireland till foreign cattle were imported there"; that "the maladies peculiar to British soil, though often very fatal, never arose above one or one and a half per cent. loss, and usually much less; five, six, and ten per cent. are a common yearly average now; and that last year we did not lose in England alone less than three times the amount of cattle we imported; and, if we calculate the loss over the three kingdoms, it will be found that for every animal we purchased from foreign dealers we did not lose less than six

or seven of our own." Whether the above statements are well founded, and, if so, what steps the government propose to take to prevent such evils for the future; and whether the reports of Professor Gamgee, made to the government on his return from the continent last autumn, would be laid upon the table of the House this session. Sir G. Grey said he had not seen the inaugural address alluded to, and therefore could not say whether the statements alleged to have been made in it were well founded. He understood that the report of Mr. Gamgee would be presented in a few days.

The Medical College at Epsom. On the 22nd inst., the Founder's Day was celebrated at Epsom College by the half-yearly distribution of prizes. A large number of the relatives and friends of the pupils assembled at the college about one o'clock, soon after which service was held in the chapel, prayers being read by the head master, the Rev. Dr. Thornton, and at half-past two o'clock the visitors and boys adjourned to the school-room to witness the distribution of the prizes. The Right Hon. Lord Chelmsford, to whom this interesting duty was entrusted, occupied the chair, being supported on his right by Mr. Propert, and on the left by the Rev. Dr. Thornton. The prizes were distributed by Lord Chelmsford, who delivered an appropriate address to the successful candidates.

Association of Medical Officers of Asylums for the Insane. The fourteenth annual meeting of this Association was held on Thursday, July 9th, by permission of the President and Fellows, at the College of Physicians. Dr. Kirkman resigned the chair to the President for the year, Dr. Skae of Edinburgh, who delivered an able address. There was a numerous attendance of members; among these were Dr. Conolly, Dr. Munro, Dr. Thurnam, Dr. Wood, Dr. Sherlock, Dr. Duncan, Dr. Fox, Dr. Herz of Vienna, Dr. Wollaston, Dr. Edgar Sheppard, Dr. C. Browne, etc. The resignation of Mr. Ley as treasurer was received with regret. The following officers were elected for the ensuing year:—*President-elect*, Dr. Henry Monro; *Treasurer*, Dr. Paul; *Editors of the Journal*, Dr. Lockhart Robertson and Dr. Maudsley; *Secretary for Scotland*, Dr. Rorie; *for Ireland*, Dr. Stewart; *General Secretary*, Dr. Tuke. Twenty-two new members were elected; and the following proposed as honorary members:—William Lawrence, Esq., F.R.S., Surgeon to Bethlehem Hospital; Dr. Delasiauve, Editor of the *Journal de Médecine Mentale*, Physician to the Bicêtre, President of the Société Médico-Psychologique of Paris; Dr. Girard de Cailleux, Inspector-General of Asylums in the Prefecture of the Department of the Seine; Dr. Moreau de Tours, Chief Physician of the Salpêtrière; Dr. Damerow, Physician of the Halle Asylum, Prussia, Chief Editor of the *Allgemeine Zeitschrift für Psychiatrie*. A carefully written paper on Private Asylums was read by Dr. Eastwood. Several other papers were on the list; but a long and animated discussion upon the questions involved in the removal of Bethlehem Hospital occupied the meeting. The members, upon the motion of Dr. Lockhart Robertson, seconded by Dr. Conolly, finally unanimously agreed to the following resolution:—"That the members of this Association have viewed with especial interest the question of the removal of Bethlehem Hospital to a site more adapted to the present state of psychological and sanitary science, and affording enlarged means of relief to the insane of the middle and educated classes in impoverished circumstances; and that they desire to express their concurrence in the representations already made to the governors of that important institution by the Commissioners in Lunacy. The members on the same day held their annual dinner at the Freemasons' Tavern; Dr. Skae, President, in the Chair. Among other guests were Dr. Bucknill and Dr. Hood, honorary members of the Association, Dr. Webster, Dr. Russell Reynolds, and Mr. Skae.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—July 18, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys .. 930 / Girls.. 880 }	1810	1364
Average of corresponding weeks 1853-62	1803	1223

Barometer:

Highest (Mon.) 30.288; lowest (Sat.) 29.665; mean, 30.029.

Thermometer:

Highest in sun—extremes (Sun.) 124.5 degs.; (Th. & Sat.) 94 degs.

In shade—highest (Wed.) 86 degs.; lowest (Fri.) 42.5 degs.

Mean—61 degrees; difference from mean of 43 yrs.—0.7 deg.

Range—during week, 43.5 degrees; mean daily, 26.8 degrees.

Mean humidity of air (*saturation*=100), 68.

Mean direction of wind, N.E.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The remarks on the New Army Medical Warrant shall appear in our next number.

Q.—We see no reason why a licentiate of a College of Physicians should not be consulting physician to a Sick Friendly Society, or why a licentiate of the Glasgow Faculty of Physicians and Surgeons should not hold such office. As to the last-named body, we believe that the charter makes the licentiates of the Faculty both *physicians* and *surgeons*. It does not, however, give them the title of M.D.

The London Surgical Home.—We understand that the medical services rendered at the "Home" are gratuitous; but we really do not know the exact arrangements of the institution. Patients pay various sums, according to the quality of accommodation afforded them. We may add, that we should only be too glad to hear that the medical officers are paid. It is utterly incomprehensible to us that patients who can pay £2:10 per week for accommodation there, are unable to pay the doctor some sort of fee.

Therapeutical Inquiry, No. III: Oil of Male Fern in Tapeworm.—In addition to those already acknowledged in the Journal, Dr. Fleming has received schedules from:—Thomas Thompson, Esq., Queen's Hospital, Birmingham; Dr. Beddoe, Clifton; Dr. W. Cooper, Bury St. Edmunds; Henry Anderton, Esq., Wavertree, Liverpool; Dr. W. M. Kelly, Taunton; Vincent Jackson, Esq., Wolverhampton.

COMMUNICATIONS have been received from:—Dr. J. Birkbeck Nevins; Dr. Mayo; Dr. Lodge; Mr. R. Prosser; Dr. William Paley; Mr. T. T. Griffith; Mr. C. H. Marriott; Mr. Bottomley; Dr. Beatson; Dr. A. T. H. Waters; Dr. Hartshorne; Dr. Gibbon; Dr. J. B. Pitt; Mr. C. B. Rendle; Mr. William Copney; Mr. R. W. Dunn; Mr. D. K. Jones; Dr. W. Ogle; Mr. March; Dr. Cormack; Mr. D. G. Niven; The President of the Edinburgh College of Physicians; Dr. Fleming; Dr. J. Walker; Dr. H. Marshall; and Dr. Swayne.

A Lecture

ON THE

ACUTE NECROSIS OF GROWING BONES.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN.

BY

THOMAS SMITH, F.R.C.S.,

ASSISTANT-SURGEON TO THE HOSPITAL.

[*Concluded from page* 81.]

The *local symptom* of most note, and usually first in the general order of things in this disease, is enlargement of the limb, caused by subperiosteal effusion. This appears externally as a painful swelling of a firmly œdematous character, diffused in its outline, pallid in colour, or only faintly mottled over with red, and generally shining on its surface. The local symptoms will now perhaps begin to concentrate themselves around the articular end of the bone and neighbouring joints, which will be attacked by acute suppurative inflammation, as in the following cases; for one of which I am indebted to Mr. Marsh of the Children's Hospital, and for the other to Mr. Paget.

Case xviii. A boy, aged 2½ years, of weakly constitution, three weeks before admission complained that "his foot was bad," and became feverish and restless at night. The leg and lower part of the ankle became swollen and very painful. After a few days, matter was let out at the lower part of the leg.

When he was admitted, under Mr. Holmes, into the Children's Hospital, the leg, especially at the lower part, was swollen, œdematous, and red in patches. A probe could be passed through the opening that had been made down to bare bone. Next day, a collection of matter was let out higher up the leg, from over the tibia. The limb was intensely painful; there was no affection of the knee-joint. The following day, another collection was opened on the front of the leg. The bone was found bare; the periosteum thick, and raised from its connections by pus, which was thin and sanious in character. The child's health suffered much. The ankle-joint became the seat of abscess; and six weeks after his first attack, the limb was removed at the knee-joint.

The tibia from this patient, which I now show you, presents the following appearance. The lower epiphysis is dead, and lying loosely separated from its shaft, which latter seems to be necrosed in its whole extent; the upper epiphysis being unaffected. The periosteum is completely separated from the bone for about half its extent; elsewhere there intervene between it and the bone deposits of semi-ossified lymph. This patient eventually died, soon after the stump was healed, from an attack of acute pneumonia.

In this case, the lower epiphysial end of the tibia seems to have been first affected; since it was about this part of the bone that the swelling first showed itself; and after death, the softened, separated, and rotten condition of this part, seems to indicate that it has been longer dead than the shaft of the bone.

In the next case, taken from the *Guy's Hospital Reports*, the upper epiphysis of the tibia seems to have been first attacked.

Case xix. George E., aged 15, five weeks before admission, felt pain in his knee, which he thought resulted from a blow. Inflammation and suppuration followed at the end of three weeks. The knee-joint became involved; and he died with symptoms of pyæmia.

The *post mortem* examination showed the tibia to be necrosed; the knee-joint disorganised; and evidences of pyæmia in the lungs, spleen, and kidneys. The iliac and femoral veins contained a softening clot.

Case xx. The patient, a boy, aged 14, of strumous diathesis, on December 4th, 1853, a week before his death, jerked up a school-slate by the sudden action of the extensor muscle of his thigh, and suffered immediately afterwards from a little pain and stiffness in the knee-joint. He was ordered a blister; and, three days afterwards, as there was no improvement, leeches. The boy was no better for these; but, on the contrary, became delirious; the whole thigh swelled. On December 11th, more leeches were applied. The thigh at that time was much swollen, without redness. There was tenderness on pressure from the hip to the knee. The knee-joint was slightly distended, and the upper part of the leg a little swollen. The boy was feeble and sinking; and, in spite of ammonia and stimulants, he died.

Post Mortem Examination. The tissues of the thigh were loaded with serous effusion. The substance of the crureus muscle was studded with small purulent deposits of the size of pins' heads. The knee-joint contained about three ounces of bloody pus; and its synovial membrane was ulcerated in two places. The periosteum of the femur was highly vascular; it was easily separable from the bone along the inner side of the shaft; and at one point, near the inner condyle, its surface was highly granular for about the size of a shilling, and the corresponding part of the bone was roughened, as if from acute ulceration. The bone itself was redder and bluer than usual, especially in its lower half. The lungs were congested; and there were pins'-head spots of puriform deposits in the left upper lobe. The infundibula of the kidneys yielded a little pus-like urine on pressure; and some of a similar kind was found in the pelves of these organs.

More frequently, the swelling will extend along the shaft of the bone, matter will form beneath the periosteum, the surface will show here and there a patchy redness; and, if the patient survive, the pus will make its way slowly and most painfully to the surface, disclosing at the bottom of the abscess a bare bone and extensive separation of the periosteum. The shaft and epiphysis are rarely attacked together; and the former is much more prone to necrosis than the latter.

It is to be borne in mind that the bone found denuded in this disease is not always dead, nor will it necessarily die. Much of it will doubtless die; but one often sees fresh adhesions form between the periosteum and bone; such points of separation and reunion being marked by fresh deposits of new bone adhering closely to both. Periosteum above and bone below. This may be seen in some of the bones before me; indeed, the fact is familiar to many of you.

The local symptoms of this disease are almost unimportant, compared with the *constitutional irritation* which accompanies them. This is, as one might imagine, extreme in degree, and of that type to which one usually applies the term typhoid. But there is added to all this a worse evil, a more imminent danger; I mean that of *pyæmia* or *blood-poisoning;* and it is on this that I would specially dwell.

So soon as the subperiosteal effusion has taken place, which, as I said, was the first local change, from that time the patient's life is in danger from the liability to general infection of the blood. In an article on the Causes of Pyæmia, in *Guy's Hos-*

pital Reports (1861), Dr. Wilks says: "A cellulitis of a limb surrounding a bone is eminently effective in the production of pyæmia; and thus it has been thought that the implication of some part of the osseous system is a favouring cause for the purulent infection. This is highly probable from the perusal of our cases," of which he brings forward about one hundred and fifty; in more than half of these, some bone was implicated. I believe we may seek for the cause of pyæmia in these cases in the peculiar local conditions of the subperiosteal effusion. We may fairly conclude from the *post mortem* appearances, that the pyæmia has been occasioned in these cases by the introduction of some morbid material into the blood, whether it be decomposing lymph or blood, or whether it be pus; and that this admixture has taken place at the part affected is rendered highly probable by the frequency with which the *deep veins* of the limb are found plugged with fibrine in these cases. Now beneath the periosteum of a growing bone, when raised by effusion from its connexions, we have conditions most favourable for the admixture of pus or other decomposing material with the blood. We have in this disease, as one of the earliest changes, a collection of lymph or bloody serum, strongly disposed to undergo a suppurative change, bound down by the periosteum and all the superjacent textures of the limb, and as it were forced into the open mouths of the veins of the bone, which have been but recently torn from their connexion with the periosteum, and which, from their remaining connexion with the bone, are disposed to remain patent. If then pyæmic poisoning of the blood takes place, as I believe it often does, from the introduction of pus or degenerating lymph into the blood through the mouths of open veins, we have in this disease local conditions peculiarly favourable to such an introduction.

The infrequency in adults of pyæmia connected with acute periostitis and large subperiosteal effusions may seem to contradict the explanation I have offered you; but I believe that the very diminished vascular connexion (to which I have before alluded) between the periosteum and the bone, as age advances, is quite sufficient to explain the decreasing tendency to general blood-poisoning in these. Of the twenty-three cases reports of which I have collected, there were but two that escaped pyæmia—both of these recovered. Of the other twenty-one, all of whom suffered with well marked symptoms of pyæmia, but two survive; one of these now lies, some months after his first attack, in a garret in Gray's Inn Lane, with the pus streaming from sinuses in his forearm and thigh which lead respectively to the necrosed shafts of the corresponding bones;* the other, after suffering from secondary pneumonia seven months after the first attack, is reported, "Wound still discharging".

This pyæmia shows itself during life by the ordinary symptoms of rigors, profuse sweats, and rapid sinking; and, at death, leaves most unequivocal traces of its nature and identity in the pericardium, pleuræ, parenchyma of the lungs, kidneys, or liver, or in the larger joints. In the pericardium and pleuræ, as has been shown by Dr. Kirkes and others, we may find marks of acute adhesive inflammation, with a strong tendency to suppuration. In the solid organs, we find yellow fibrinous-looking deposits in various stages of disintegration, either as firm yellow lymph or completely formed abscesses. As I before mentioned, the patient is exposed to the dangers of purulent infection quite early in the disease—indeed, so soon as effusion beneath the periosteum has taken place, and before the effusion has degenerated into pus. Thus in the case (No. 1) of the little girl to whom this femur belongs, though the *post mortem* examination disclosed pyæmia, no pus had formed around the bone.

How early in the disease pyæmia sets in, may be seen by noting the date of death in the twenty fatal cases I have here before me: in nine of these, death took place before the twelfth day.

Of the ultimate termination of this malady I can only speak in general terms. I have here the list of twenty deaths and only three recoveries. This proportion represents too strongly the fatal tendency of the disease, as many of these cases are recorded on account of the severity of their symptoms or their fatal termination. I can only say that, when once the disease is fully developed, and the periosteum is separated to any considerable extent from the shaft of the bone, the patient, if a young person, is in danger; and, should symptoms of pyæmia show themselves, the danger is imminent, though recovery is more possible than in adults. To show the power of recovery from this disease possessed by young people, I will read you the case of a young lady, aged 12, seen by Mr. Paget, who kindly furnished me with the following account.

Case xxi. A young lady, aged 12, two days after exposure to cold, complained of pain in her right knee. In a day or two she became feverish; and the pain increased, and was referred to the lower part of the corresponding thigh. Leeches were applied; restoratives enjoined; and she took salines. A week after her seizure, she was seen by Mr. Paget. She was suffering from severe constitutional disturbance, sleeplessness, and occasional delirium. The whole of the right thigh was enlarged; the skin of it was smooth, and rather paler than the opposite limb. Deep pressure over the bone gave pain. The knee-joint appeared quite unaffected. The limb could be jarred without pain; but the patient could neither move it, nor bear it to be moved. She was ordered support, wine and nourishing diet, and iodide of potassium. Three weeks from the first attack, she was again seen. In the interval she had had, and was still suffering from the effects of, double pneumonia and inflammation and swelling of both parotid glands; and she had a gum-boil at that time. She had swelling on the right ankle-joint, and pain in her shoulders. She suffered from profuse sweatings; her pulse was 120. In a day or two the right lower limb became generally œdematous and swollen; and there was tenderness over the femoral vein, just as in phlegmasia dolens. After this, the left hip and knee joints were attacked with pain and great tenderness on pressure; the least movement causing her great suffering. Six weeks after her first symptoms, fluctuation was detected over the right femur; and two or three ounces of pus were let out. Subsequently there was a free discharge of pus from this opening; and, a month later, another abscess was opened just above the patella, containing a pint of pus. The case went on well; the discharge lessening, and the parts getting sounder, until the following April, the seventh month of her illness; when the right thigh became suddenly bent just below its middle, evidently from fracture of the shaft of the femur, whatever new bone might be around it. Subsequently the bone reunited, and she regained her general health.

* He has since died of exhaustion.

The last account I have of this case reports a wound still discharging in the thigh. Here recovery took place after symptoms which, I think, we may fairly conclude indicated general pyæmia.

I would for a moment draw your attention to the spontaneous fracture of the thigh which occurred in this case, just to remind you that this accident is an occasional though not a frequent complication of necrosis attacking the shafts of long bones.

The most serious *local lesions* of this disease are, necrosis of the bone to a greater or less extent, and destruction of the neighbouring joint by suppurative inflammation.

In the *most favourable* cases, the subperiosteal effusion will clear up without proceeding to suppuration, and the patient will perfectly recover. Of such cases we have seen here, in the out-patient room, four or five during the last two years. If *suppuration* take place around the bone, the danger to life is greatly increased; and, in the most hopeful cases, the patient will not escape without necrosis of some portion of the subjacent bone; but, as I before said, and as is well known to many here, the necrosed portion of bone will often bear no relative size to the amount of bone previously denuded. In *less favourable* cases, the loss of bone is greater in extent, and the suppuration may extend to the neighbouring joint. In *any case* where the necrosed portion of bone is large, convalescence will be most tedious, as in young bones ossifying lymph is quickly and abundantly poured out from the under surface of the periosteum, and the dead part is pretty closely and thickly encased, often before its detachment from the living bone is complete.

Case xxii. A boy, aged 3½, was brought to me at the Children's Hospital, as his mother noticed that he was lame. There were pain and a firmly œdematous swelling over the lower part of the left thigh; there was great tenderness on pressure. He was admitted into the hospital, suffering from severe constitutional disturbance. A day or two after his admission, a swelling appeared on the left radius. On the fifteenth day of his illness, I made an incision in the deep parts of the thigh, and let out a quantity of pus from beneath the periosteum of the femur, which was found bare and rough. The swelling over the radius seemed to be subsiding; when his parents, thinking he was going to die, removed him from the hospital three weeks after he was first attacked. Six months afterwards, I saw him. Pus was streaming from three sinuses in the thigh, and from two over the left radius. The boy was emaciated and hectic. The parents not liking to part with him, and refusing to allow of any treatment, I saw no more of him, but heard of his death seven months after the commencement of his illness, from exhaustion—a termination which might, I believe, have been avoided, had the parents not refused to allow of any surgical interference.

I might well feel some diffidence in speaking to you of the *treatment* of this malady; but the less so, as I cannot but believe that the best general treatment for these cases is such as is suggested by the ordinary rules of practical surgery and the dictates of common sense. There are, however, one or two nice and more difficult points in particular instances, which are matters of opinion, and to which I shall direct your attention.

Following, then, the general principles of surgery, in the earliest stage we have periostitis with a subperiosteal effusion of lymph, liquor sanguinis, or blood. Iodide of potassium internally, and leeches and fomentations externally, are the remedies which naturally suggest themselves; and such I have found to be the most efficacious. When suppuration occurs, or a suspicion of it arises, a small incision down to the bone may be made, to be subsequently enlarged, if matter be formed: to be closed at once, if no matter exist. *Very* early incision, unless suppuration has taken place, from my own experience I cannot recommend. As the admission of air to a collection of sanious lymph will often determine its suppuration, I would as well in these cases, where local suppuration were equivocal, be guided by the patient's general condition; and if rigors had occurred, and there was great constitutional irritation with great local tenderness, I would make an incision down to the bone.

Happily, the disease attacking either a shaft or epiphysis of a bone shows but little tendency to spread from one to the other; these parts, as I believe, having as it were separate centres of vitality, as well as of nutrition and growth. Still, occasionally it suggests itself, soon after the onset or during the progress of this disease, as it attacks the long bones of the lower limb, whether the patient's chance of recovery might not be increased by amputation; and on this point I would speak with some diffidence. So long as the disease is confined to the shaft of the bone, there can be no necessity for such treatment; but should the disease first attack the epiphysis, or should it subsequently invade that part of the bone, and should the joint (as is generally the case) be attacked by suppurative inflammation, two questions arise; first, and most immediate: How will the patient's strength bear up under this additional source of irritation? and, secondly: What chance of useful reproduction is there for a bone necrosed both in its shaft and epiphysis? The reply to the first of these considerations must be sought in the circumstances and condition of the patient in each individual case, and the question of amputation be thereupon decided. To the second I venture to answer myself, that if the shaft and one epiphysis be necrosed, there is but little hope of a useful reproduction of the bone; if the shaft and both epiphyses be affected, there is no hope of such restoration. Therefore, if the shaft of the tibia were affected with acute necrosis, and suppuration occurred in either the ankle or the knee joint, showing that the lower or upper epiphyses were also implicated, I should decide the question of amputation upon the constitutional condition of the patient. If, together with necrosis of the shaft of the tibia, suppurative inflammation attacked both knee and ankle-joints, I would amputate at once, provided the patient's constitutional condition allowed of it.

Alcoholic Drinks. In the year ending at Michaelmas last 94,908 persons—260 a day—were proceeded against before justices in England for drunkenness, or for being drunk and disorderly, and 63,255 of them were convicted. The great majority were only fined, but above 7,000 were committed to prison. The returns show a great increase over the previous year, for only 82,196 were then charged with drunkenness, and only 54,123 convicted. Of the persons thus charged in the last year 22,560 were females, and more than 10,000 women were convicted for being drunk. Coroner's inquests in the year 1862 found 211 verdicts of deaths from excessive drinking, 145 men and 66 women thus ended their days.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ROYAL LONDON OPHTHALMIC HOSPITAL.

CLINICAL ILLUSTRATIONS OF CERTAIN FORMS OF AMAUROSIS.

Under the care of J. Hutchinson, Esq.

Case I. *Right Eye lost Suddenly and Completely at the Age of Twenty: Atrophy of the Optic Nerve.* Mrs. Wilkinson, a widow, aged 48; fairly healthy, brown complexion, had very good health in early life. Her right eye had been quite blind for twenty-five years. She could not see shadow. "It went in her sleep one night; and she had never seen the least glimmer of light out of it since." It now looked outwards, and was also somewhat thrown upwards. The globe had been occasionally very painful since. She knew of no cause whatever for the loss of the sight. She was in excellent health at the time. She was under medical care for some time, and had much pain; was leeched and blistered. The other eye was also affected. She had since borne four children; and had three living, all healthy. She had preserved good sight in the left eye until within the last year.

The pupils were of equal size; rather oval vertically. The right dilated, when the left was covered, to four times its natural size, and remained dilated. It contracted immediately when the other was opened. The left pupil was of usual sensibility.

She said that the left eye ached; and that latterly everything had "appeared mystified," and "darkness sometimes came over it." She could read No. 6 (with the left eye), but not easily. She now lived by washing. She had small-pox in infancy; and measles very severely a year before the loss of her eye.

Ophthalmoscopic Examination. *Right Eye.* The optic disc was large, and very conspicuous as an abruptly defined circular plate of dead white. Its vessels were small, but not of extreme tenuity. I have seen them in other cases very much less. The whole fundus was deficient in blood-supply; but I did not notice any other peculiarity.

Left Eye. The vessels were larger and more numerous than usual. The optic disc was small and of a deep pink-brown tint. There were no patches. Excepting having a too abundant supply of blood, the fundus was in every respect normal. The contrast between the two optic entrances was most striking. The large dead white patch in the one, with its slender vessels, and the smaller, less conspicuous, highly vascular area in the other, were most dissimilar.

I judge the case to have been one of intracranial disease, followed by atrophy of the optic nerve; or, to be more precise, rather of some disorganising change in the optic nerve-trunk of the right side anterior to the commissure. I cannot else account for the changes, as seen in the fundus, being limited to the optic nerve. If the disease were central, the sight in both eyes would have been impaired.

It is to be noted that, although she had been unable to see with the right eye for twenty years, yet the iris retained its sensibility and activity, the pupil being of the same size as the other, and quite as active under sympathetic stimulation.

All the media were still clear, and the retina and choroid still normal. Although the eye diverged and looked upwards, yet there did not appear to be any muscular paralysis; and she could direct it easily.

Case II. *Defective Sight from Childhood; Large Surfaces of Exposed Sclerotic at each Yellow Spot; State of Vision Stationary; No Special Diathesis.* Edward Stratton, aged 18, healthy-looking, never had any illness. His father had suffered from impaired sight. He was brought up from Cornwall in order to have an opinion as to his sight. I found that he could only just make out single letters of No. 20 with the left eye; but with the right he could slowly read ordinary print. His focal distance was short; and, in order to see clearly, he habitually turned his head on one side. The pupils were of normal size, and moderately active. There was no strabismus.

Under the ophthalmoscope, both yellow spots were found to be the seats of disease. The left was occupied by a very large circular white patch, which, at first sight, might have been mistaken for an enormous optic entrance, but which showed no emergent vessels. There were, however, one or two interrupted blood-trunks. At the margins of this were masses of black pigment. The patch glistened, and was evidently one of exposed sclerotic. The optic entrance itself was of normal appearance. In the right eye there was, near to the yellow spot, an irregular patch of very much smaller size; white in parts, and in others dotted with pigment. I had great difficulty in making him direct his eyes so as to expose the parts desired, as the yellow spots were no longer the parts with which he saw best. There was not the least reason for suspecting hereditary syphilis, or, indeed, any other special cause. The mother's history was that his sight had been defective all his life, and was not more so now than for years past. He had been able to pursue his school studies. I saw his elder brother, and he presented no indication of hereditary taint.

Case III. *Large Patch of Subretinal Lymph in Right Fundus, with other smaller ones.* Mrs. Lack, fairly healthy looking, of dark complexion, aged 45, married, with two grown-up daughters; said that her sight had been failing for a year past; but until two months back she did not discover that the defect was in the right eye. With the right she saw all objects smaller, whether distant or near, *e.g.*, the clock-face looked smaller, but she could see it; around the candle-flame she saw a halo. She had been accustomed to work at needlework, but not lately. She never had pain in the globe, nor congestion. The pupils were of equal size, and active; vision was misty. From this account of symptoms we were scarcely prepared for what we found.

The pupil dilated widely with atropine. The fundus of the eye, optic disc, yellow spot, etc., in the right eye appeared normal; but, on making her look downwards, a large patch of greenish-yellow homogeneous lymph was noticed. This patch entirely concealed the choroid, and was crossed by the retinal vessels. The trunks of the latter were coated by margins of lymph. The margin of this patch nearest the optic nerve was abrupt; but that most distant was less so, and near it were numerous smaller patches and flakes of effusion. There was no history of any form of illness. She considered that she had always had good health.

Case IV. *Atrophy of Retina and Optic Nerves (symmetrical), gradually Supervening after Small-pox.* Wm. White, aged 35, most severely pitted with small-pox, came complaining that his eyes were weak, and had been so since the small-pox. They had become worse lately. He had perfect sight until, to use his own expression, the small-pox fell in them. There was not the slightest corneal opacity; and the only noticeable circumstance was, that both globes were constantly oscillating in a rotatory manner. He thought that for sixteen or seventeen years he had not been able to read "because the letters all went into one." He cannot spell out No. 20. He had been able to keep at his work as a labourer, but only with difficulty.

He was not deaf, and had not suffered in any way, ex-

cepting his sight, since the variola. He had never been vaccinated. He had brown hair, and grey irides. It was twenty years since the small-pox. He was a thin, pale man. The irides were of good lustre.

The pupils dilated widely with atropine. The lens, humours, etc., were quite clear. The fundus oscillated in such constant motion, shaking like the head in paralysis agitans, that it was difficult to focus any part. Voluntary effort increased rather than diminished this; and when he was told to fix his eye on any object the fundus only shook the more. The optic discs in both were yellow white; large, with ill-defined margins, and extremely anæmic. Some of those who examined the eyes thought there were no vessels visible in one of them, and the merest threads in the other. I could, however, distinctly perceive vessels of extreme smallness in both. In both, the fundus was dotted over with patches of pigment. Both retinæ and choroids were atrophied. Considering the extent to which the disorganisation had proceeded, the wonder was that the man could see at all.

Original Communications.

OBSTRUCTION IN THE RECTUM CAUSED BY A CARCINOMATOUS TUMOUR; SUCCESSFULLY RELIEVED BY LUMBAR COLOTOMY.

By T. B. Curling, F.R.S.

On Feb. 14th, 1863, Dr. West requested me to accompany him a short distance into Essex to see a lady who was labouring under obstruction of the bowels from a tumour in the rectum. We found her in bed, weak and depressed, and suffering from constant sickness. There had been no action of the bowels since the 9th. Mr. Davey of Romford, who was in constant attendance, met us in consultation, and gave me the following account of her case.

She was 36 years of age, the mother of eight children, and had always enjoyed good health, with the exception of an intermittent fever contracted in India, and a miscarriage six years ago. Her mother died of cancer of the uterus. At the end of September 1861, being then two months gone in pregnancy, she rode fifty miles on horseback, and immediately miscarried. There was no hæmorrhage or other untoward symptom, and she recovered almost completely in about three weeks. She then began to complain of bearing down and obscure aching pains in the uterus. There was no discharge; but the uterus was large and rather tender, and the catamenia were irregular. These symptoms persisted, more or less, until August 1862; when, during a visit to her native place in Scotland, she wrote word that she was quite well, and able to climb the hills and exert herself as well as ever. After one of these hill-climbing expeditions, she was suddenly taken with profuse menorrhagia and a return of her old pains. As these symptoms continued, she was advised to see Dr. Graham Weir of Edinburgh, who found the os uteri patent and ragged, bleeding freely when touched; the uterus hard and large, and but slightly moveable in the pelvis. He diagnosed cancer. After a residence of some months in Brighton and London, she returned to her home in Essex early in January 1863. At that time, the uterus was completely immoveable, and of cartilaginous hardness; and a large scirrhous mass had formed in the anterior wall of the rectum, and compressed the bowel against the sacrum. There was constant tenesmus, and she had lost flesh and become very sallow. A fortnight afterwards, a recto-vaginal fistula formed; and with the exception of very small quantities of liquid matter, all the fæces passed by the vagina. On Feb. 13, no fæces having passed by the vagina or bowel, and medicine having failed to obtain evacuations, Mr. Davey made an examination, and found both the rectum and the vaginal fistula completely closed, so that a No. 6 male catheter could not be passed. Dr. West was summoned, and concurred with Mr. Davey in the necessity for an operation.

After my arrival on the following day, I made a careful examination of the rectum, but could find no passage, the bowel being obstructed by a solid hard tumour of considerable size. The sickness and depression rendered the case urgent, and an immediate operation was decided on. Chloroform having been administered by Mr. Davey, the colon was opened in the left loin. The bowel was reached without difficulty; but it was contracted and deeply seated, so that it had to be dragged to the surface before being opened. The margins of the opening in the bowel were secured to the skin with three sutures. The irritability of the stomach quite ceased by the following day; and on the 16th, she was able to take food freely. There was a free fæcal discharge from the loin.

On the 18th, her general condition was much improved. The bowel had sunk, so that the opening was deeply seated, the skin attached to it being inverted, which continued until the sutures ulcerated through. The wound, however, went on well, and became gradually reduced in size and depth; and after a month there was a slight tendency to prolapsus.

Towards the end of March, a fistulous communication took place between the bowel and bladder, and the urine escaped freely by the wound in the loin; only a small quantity of flatus and urine tinged with fæces passing through the urethra. She became gradually weaker, and died of the cancerous disease on May 9th, having survived the operation three months.

Mr. Davey wrote to me that she was almost entirely free from pain after the operation, and improved very much in spirits, complexion, and general condition; and about six weeks before her death she could walk about the house, and went out daily in a Bath-chair. The wound in the loin was perfectly healthy in appearance, and had contracted to about three-fourths of an inch in diameter. The aperture in the colon was round and smooth, and afforded ample room for the escape of solid fæces. The mucous membrane sometimes prolapsed to the extent of an inch. The body was not examined after death.

This is the eighth case of lumbar colotomy in the adult which I have performed or assisted in; and of these, five survived and derived advantage from the operation. In this instance, life was prolonged some months —not, indeed, without serious drawbacks, owing to the continuance and advance of the carcinomatous disease; still it must be remembered that the operation was unattended with pain, and was followed by an early relief of distressing symptoms. The success which has attended the operation of lumbar colotomy in persons weakened by organic disease and want of nourishment, shows that it is not so formidable and dangerous as is commonly supposed. The inconvenience of an artificial anus in the loin is not considerable, and is far less than what is caused by the incontinency which usually exists in cancer of the rectum.

ARTIFICIAL ANUS.

By Thomas O'Connor, Esq., March, Cambridgeshire.

I was called on May 28th, 1862, to A. C., a woman 65 years old, of very thin spare habit and unhealthy aspect. She had a fall down stairs a week before; she rolled from the top to the bottom of the stairs; and from that time complained of pain and tenderness in the belly,

with frequent sickness. This story suggested that there might be a hernia. I asked if she had a swelling in either groin; to which she replied she had not. I, however, placed my hand on the usual situations of rupture, and found a swelling of about the size of a large hen's egg in the left groin, which I assumed to be an oblique inguinal hernia. I told her she was ruptured; and that this, no doubt, was the cause of her suffering.

I proceeded to reduce the hernia by the hand. After about twenty minutes manipulation the swelling disappeared, having given clear and unmistakable evidence, as I thought, of the return of a protruded bowel into the cavity of the abdomen. The bowels had not been relieved for two days. I gave a black dose, which acted freely during the night and next day. I then advised that a truss should be worn. Being an exceedingly modest person, she would not trouble me to adjust a truss; she said she could do that herself, with the assistance of a neighbour who had some experience in trusses in her own person. I sent three or four sizes for her to choose from, called in two days, and found her very comfortable with her truss.

My visits now ceased, but in a week (June 7th) she again sent for me. The truss hurt her, and she asked whether I would exchange it for another. She was now suffering from an acute attack of diarrhœa. I removed the truss, and found a hard swelling, considerably larger than the former, and, it appeared, higher up. Having carefully examined this, I pronounced it an acute abscess, and treated it with leeches, evaporating lotions, and subsequently with poultices.

On June 12th, the diarrhœa was less severe. On June 15th, the eighth day from the leeching, fluctuation was distinct; but, as the abscess pointed, I did not open it. On June 17th (the tenth day), on placing my finger on the apex of the tumour, I discovered a rough pointed substance, which I extracted with a forceps, and found it to be a triangular piece of bone, about half an inch long. This was followed by about half a pint of fœtid purulent fluid, mixed with blood and flakes of curdy matter. I filled the cavity with lint.

On June 20th, the diarrhœa ceased: the bowels soon becoming constipated, and requiring the occasional use of aperients. The strength also began to falter. I ordered bark and acids, port wine, and beef-tea.

On June 23rd, air escaped from the cavity in considerable quantity. On the 24th, fæces were mixed with the secretions.

Sloughing now commenced, and extended in every direction, demolishing in five or six days the whole of the soft parts in a line leading from the anterior superior spine of the ilium inwards to the linea alba, downwards to Poupart's ligament, and backwards to the bowels, a considerable track of which became exposed. The external iliac artery was denuded, and the common iliac was reached with the finger. An opening into the cavity of the abdomen was formed, large enough to receive a pint slop-basin. Large quantities of fæces now passed through this opening, and very little *per anum*. Having a suspicion that an accumulation might have taken place in the lower colon or rectum, I injected some tepid water, with a view of clearing the bowel. With the first stroke of the piston, the stream passed out through the artificial opening; it was, therefore, probable that the sigmoid flexure was the part of the bowel involved in the new anus.

The treatment consisted in filling the cavity daily with lint dipped in oil, placing over it a stiff linseed poultice, crossed in two or three places with adhesive plaster, and secured with a light flannel roller. About a pint of tepid water was injected into the bowel *per anum* twice a week. The medical part of the treatment consisted of opiates at night to procure sleep, of which she had a scanty measure; bark, quinine, acids, and wine, in large quantity.

On July 10th, the artificial anus had its sphincter fully developed. The circular fibres of this muscle mimicked very prettily those of the sentinel of the natural outlet. On July 16th, very little fæces passed through the artificial opening. The lint was no longer placed in the cavity; simple ointment on lint was placed over the opening, and a compress of sheet-lead secured over it. On August 4th, no fæces had passed through the opening for five days.

This case passed from my care at this date; the person being a pauper residing in a Poor-law district of which I had charge for a short time, but which I resigned at this period. I, however, did not lose sight of her. The parts are now, and have been for some time, quite healed. The new anus is obliterated; and the poor woman informs me that she enjoys as good health as at any time during the last twenty years.

Now comes the interesting question, What was the first swelling, which I assumed to be a hernia? We shall probably be directed to the answer by the bone which escaped from the second swelling, or that which I describe as an acute abscess. Did she swallow the bone with the broth which she used as her daily food? She informed me she converted whatever meat she could get into broth, as the most economical form of cooking it. She had no recollection of having swallowed a bone; but the poor woman's habits were intemperate; and this frailty of hers, coupled with the appearance of the bone, and the absence of all evidence of caries of the spine, sacrum, or pelvic bones, strengthens the assumption that she swallowed the bone; that it became entangled in some part of the bowel; and that, from what I have already stated, that part was probably the sigmoid flexure of the colon; that, obedient to the law observed by foreign substances entangled in living tissues—namely, of directing their course, by intestinal absorption, to the surface in the direction where there is least resistance—it pinned the bowel, or one surface of the bowel, to the soft wall of the abdomen, leaving the channel of the bowel free and open, until its progressive and silent course was disturbed and its relation with the surrounding parts altered by the fall down stairs. An aperture was, perhaps, then formed, through which air from the bowel, and perhaps a jet of fluid fæces, were forced into the cellular tissue constituting the first swelling. If this were the course of events, the air was forced back, by my manipulation, into the bowel through the same opening by which it came out; and so kept up the delusion of the presence of a hernia. The truss subsequently applied made matters far worse; for by its pressure and friction it continued to disturb the bone with every movement of the body, and so had some share in producing the second swelling or abscess. The woman informed me she had no swelling in the groin before this time; consequently, there was no pre-existing hernia.

STRANGULATED FEMORAL HERNIA: REDUCTION BY INVERSION.

By Thomas T. Griffith, Esq., Wrexham.

Mrs. Jones, aged 72, a farmer's wife, of spare habits and short stature, had long enjoyed good health, but was the subject of crural hernia on the right side. She had never worn a truss; and the tumour was usually in an unreduced state. On Monday, June 1st, strangulation appears to have taken place, followed by vomiting and constipation. On the following day (Tuesday), she was seen by Dr. Dixon, who, having detected the hernia, attempted its reduction by the taxis without success. He prescribed means for allaying the irritable state of the stomach, and enemata to solicit the action of the bowels.

The next day (Wednesday), in the evening, I was asked to see the patient with Dr. Dixon. We found her depressed, with frequent vomitings, no action of the bowels, and thirst, with a dry tongue; pulse small, wiry, 90. The hernial tumour was hard, hot, incompressible, tender, and not distended by coughing. The right iliac region was sore on pressure, and tympanitic. Under these circumstances, I made a very cautious but ineffectual trial of the taxis; and we then decided that an operation offered the only means of safety to the patient. Previously, however, I was anxious to try the effect of inversion of the body. The patient was placed in the vertical position, with her head on the floor. A careful employment of the taxis produced no sensible effect. She readily consented to the operation; and when, after a short interval, I was about to perform it, she said that the swelling was softer. On examination, this appeared to be the case, and we decided upon another trial of inversion. In this posture, with flexion of the thigh, the taxis produced a partial return of the hernia; and in a short time the whole passed into the abdomen. Comparative ease and relief from vomiting soon followed. Calomel and opium were given; and subsequently one grain of calomel effected the free action of the bowels. The pulse sank to 72, and she had good sleep.

I did not again see the patient; but Dr. Dixon kindly furnished me with details of progress and treatment. She had a narrow escape from alarming prostration, and it was only through the instrumentality of unremitting care and judicious treatment that she gradually recovered. Some difficulty still attends her wearing a truss.

As a means of reducing hernia, the inverted position with the taxis has long been known, and is especially adverted to in Mr. Hey's valuable work *On Surgery* (pp. 123-131); but he does not speak encouragingly of it. Recently cases of it, with a successful result, have been reported by Messrs. Jessop, Power, and Bowman; and it will probably be now admitted as one of the remedial measures to be employed before resorting to an operation. It must in a degree act by gentle traction on the contents of the sac, and probably still more by opposing the influx and facilitating the efflux of blood—an observation made by Mr. Bowman in speaking of the case under his care. This would best explain the fact in the above case of softening of the swelling after the first inversion, and would suggest the repetition of the procedure, should a first or second trial of it fail.

M. Pasteur on Putrefaction. As a natural sequence to his investigations on fermentation, M. Pasteur is now engaged upon *Researches on Putrefaction*. His present paper relates exclusively to the cause of putrefaction, which he says is determined by organised ferments of the genus *Vibrio*. The author has investigated the nature of the putrefactive changes which take place in matters exposed to, and protected from, air. These it appears are effected by two classes of infusorial ferments, one of which cannot exist without oxygen (*e.g.*, *bacteria*) and the other cannot exist with—*vibrios*. In some cases, when the action of the former causes a pellicle to form on the surface of a liquid, and so prevents the absorption of oxygen, two distinct chemical processes go on simultaneously. In the interior of the liquid vibrios transformed nitrogenised matter into more simple but still complex bodies, while on the exterior the *bacteria* burn these matters up, and reduce them to simple binary forms, as water, ammonia, and carbonic acid. Gangrene, M. Pasteur says, is not putrefaction properly so called, but a condition of a part in which the liquids and solids react chemically and physically on each other without the normal acts of nutrition. Death, he adds, does not put an end to the reaction of liquids and solids in the body,—a sort of chemical and physical life continues to act.

Transactions of Branches.

LANCASHIRE AND CHESHIRE BRANCH.

ON THE TREATMENT OF RHEUMATIC FEVER.

By J. Birkbeck Nevins, M.D.Lond.; Lecturer on Materia Medica, Royal Infirmary School of Medicine, Liverpool.

[*Read June* 24, 1863.]

The plan of treatment about to be laid before you is one for which I am not able to claim the credit of originality, but it is a method which I have adopted for above fifteen years both in private practice and in an union hospital containing above one hundred and fifty beds; and I think that, if its advantages were more generally known, it would be more frequently practised. During this period I have made trial also of the various modes of treatment which have prominently occupied the attention of the profession; viz., the opiate, the alkaline, the lemon-juice, and the do-nothing treatment; but I always return to my accustomed plan, with confidence rather increased than diminished by the comparison with others. At the same time, I am bound to confess that this treatment will come before you with one very serious defect, which it is vain now to attempt supplying—viz., the absence of detailed clinical reports of the cases treated; and I am unable, therefore, to say how many have been cured, or how many days have been required before the patients could walk about, how many before they could leave the hospital, or how many before they could go about their work as usual. Such phrases as "I feel very confident", "I am thoroughly convinced", and the like, are the nearest approach to accuracy now attainable; and I am well aware how much this absence of exactness lessens the value of any conclusions respecting the result of treatment in such a disease as rheumatic fever. With these preliminary remarks, I will now proceed to the details of the method.

It is impossible to observe many cases of rheumatic fever without being struck by the periodicity of the disease, as shown by the general aggravation of the pain and other symptoms as night comes on, and also by the copious sweating, which enfeebles the patient, rather than relieves him. The long continuance of the illness, and its liability to return after apparent recovery, and the length of time requisite for regaining strength, are also well known features. In some of these particulars, but especially in its periodical exacerbations and in its sweatings, Heberden and others, and Dr. Davis of University College, in a very able paper on the subject, have at different times noted its similarity to ague, and advocated the employment of cinchona or quinine for its cure; and it is this drug upon which I look as the basis of the treatment to be proposed to you. At the same time, the experience of the profession generally has shown the great value of iodide of potassium in chronic rheumatism; and, remembering the tendency of this disease to become chronic, I always combine this medicine with the quinine, and commence their administration *from the earliest date at which the patient comes under my care*. The presence of acute pain and high febrile excitement does not, in my experience, form any objection to their employment; and the thick creamy fur upon the tongue disappears more rapidly under their use than under the different methods which I have compared with it, either in my own practice, or when noticing that of my brethren in the profession. The dose never exceeds two grains of quinine four times a day, with five grains of iodide of potassium added to each dose.

The pain and loss of rest are, however, so distressing to the patient, that we have been advised to administer opium in quantities only limited by the effect produced. And the employment of this drug as far as may be necessary for subduing the pain is a very important point; and I therefore always leave two or three doses of opium pill or of Dover's powder with the nurse, which are to be given successively, if the patient is in severe pain; but I very rarely indeed find that the patient has even asked for more than a single dose in the twenty-four hours, which I attribute to the speedy and more permanent relief obtained by the following element of the treatment, to which I attach very great importance. This is, *the employment from the very first of steam-baths, even when the patient is so helpless that it is impossible to move him from the bed* on which he is lying. These steam baths relieve the pain and check the distressing perspirations in a degree which I have failed to obtain by any other mode of treatment; and they are administered with the greatest ease in the following manner.

A couple of common red bricks are to be placed in an oven hot enough for baking bread, and in half an hour or little more they are sufficiently heated for the purpose. The patient's body-linen having been previously removed, these two bricks are to be folded up in a piece of common thick flannel thoroughly soaked in vinegar and laid upon two plates; and one is to be placed about a foot distant from one shoulder, and the other about equally distant from the opposite leg;* and the bedclothes are then to cover the bricks and the patient closely round his neck. A most refreshing acid steam bath is thus obtained; and the supply of steam may be kept up, if necessary, by removing one brick and replacing it with another hot one kept in reserve. When the patient has been in the bath for about fifteen or twenty minutes, the bedclothes and plates should be removed, and *the patient instantly mopped all over very rapidly with a towel wrung out of cold water*, and then should be quickly rubbed dry.† Dry warm linen must be put on at once, and dry bedclothes must replace those which were on the bed previously. The patient generally experiences great and speedy relief from this bath. The exhausting acid sweats are materially diminished; and the necessity for opium, as already mentioned, is almost at an end.

But here the objection naturally presents itself: a patient in rheumatic fever suffers so severely from the slightest attempt to move him, that we are frequently obliged to leave him several days without changing his linen, from the pain occasioned by the attempt to remove it even leisurely; and we have just been told to change it quickly, which implies that the case cannot be a very severe one, or this direction could not be carried out. The difficulty is really of the most trifling character, if the simple precaution is adopted of tearing the night-shirt open from top to bottom down the back. The sleeves are then slipped over the patient's arms almost without moving them; and the torn edges of the linen are gently tucked under his sides, from which they can be just as easily withdrawn the next day. And by this means he is freed from the discomfort of lying day after day in linen soaked with acid perspiration; and this is done without the smallest pain to himself or trouble to his nurse. For many years I used large lumps of quick lime, and wrapped them up in clothes soaked with cold water; and, as soon us the lime began to slack, the patient was enveloped in a steam bath from simple water; but in many places it is difficult to obtain quick lime, and the vinegar is also more refreshing to the patient; so that the vinegar and hot bricks have now quite superseded the lime-bath.

These, then, are *the essentials of the treatment: quinine and iodide of potassium from the first, and the steam bath, with the subsequent cold sponging;* and, as an adjunct, opium in small doses, when necessary to procure sleep.

It now remains to speak about the success of the treatment. During the fifteen years it has been in use, I have only had occasion to apply a blister over the heart in three instances; and this was done because the patient complained of uneasiness in the chest, not because there was any distinct evidence of pericarditis. There has not been one case of distinct rheumatic affection of the heart; but the absence of clinical reports puts it out of my power to state how many cases have been thus treated. I can merely say that they have been numerous.

Next, as regards the duration of the disease; it is extremely rare that it is necessary to give two steam-baths in bed, the patient being almost always able to have the second whilst sitting upon a chair; from which you will draw your own conclusion as to the rapidity of improvement. I am surprised when the patient is not able to walk about the room, a little at any rate, in little more than a week; and I have a strong impression that he is more frequently able to do this within the week than not. But here, again, the absence of exact reports must be taken into account. I further think that from two to three weeks is the average duration of the case before the patient is able to walk up and down stairs and to go out of doors for exercise or pleasure. Relapses are not common; and the patient has not the lingering convalescence which I have observed under other methods of treatment.

The steam-baths and subsequent cold douche should be continued after the patient is able to walk about, as they contribute to the healthy action of the skin, and promote the free mobility of the joints.*

If there is great tenderness of any one particular joint, an opiate embrocation, containing in addition either chloroform or tincture of aconite, should be gently painted over the part two or three times a day; but, in the early stage, the employment of friction appears unadvisable whilst the pain is very acute.

The recommendations of the method now presented to you are: that the patient's strength is husbanded from the first, and he has neither the protracted disease nor the lingering convalescence often observed. Pain and sweating are more quickly relieved than by any other treatment I have seen. Relapses are very rare; and so far I have not seen any case of cardiac affection occurring as a consequence of the rheumatism. I have a strong conviction that, if the method is fairly used in two or three cases, it will leave the same favourable impression upon the minds of those who try it that it has produced upon my own, and upon the students who have watched its employment in the hospital to which I have alluded.

* Care must be taken not to put the bricks too near the body. I have known the thigh blistered in a patient who was unable to move away from the heat which was accidentally very near it. A dry napkin thrown over the wetted one will prevent this accident, if the bed is too narrow to allow sufficient space.

† The under sheet can be removed, and a dry one substituted by fastening the corners of the dry sheet to those of the damp one. Very little difficulty is generally met with in simply drawing the old sheet from under the patient, when the dry one follows it, and is left in its place.

* These baths are very easily given by placing the patient naked upon a chair, and putting a can containing a couple of gallons of boiling water under it. Blankets are then to be folded round his neck, and made to surround him like a tent, reaching to the floor. In about five or ten minutes, a red hot brick should be put into the can, which renews the supply of steam. The patient soon perspires; and in fifteen or twenty minutes the blankets should be removed, and a couple of quarts of cold water should be poured over his shoulders; or, if he is afraid of such heroic treatment, he should be mopped from head to foot with towels wrung out of cold water. By this means he is invigorated instead of feeling weakened, and depressing perspirations do not follow the bath. The patient should sit upon a pillow or doubled blanket, on a close bottomed chair, not upon an open cane-bottomed one. I have known a patient scalded by the accidental neglect of this precaution.

MIDLAND BRANCH.

NOTES ON HÆMATOMA OF THE EXTERNAL EAR IN THE INSANE.

By W. Phillimore Stiff, M.B., Physician to the County Asylum, Nottingham.

[*Read at Derby, July 2nd*, 1863.]

The subject which I am about to introduce to your notice, that of sanguineous cyst of the ear in the insane, is of importance in a medico-legal point of view. Some writers allege that these hæmatic cysts are the result of injuries either self-inflicted or from the employment of violence on the part of attendants and nurses. The statement of Gudden, in support of the latter view, has been most extensively circulated (see British Medical Journal, May 1861, page 469; *Medical Critic;* and New Sydenham Society's *Year-Book.*) He maintains that these swellings are entirely owing to mal-treatment; and points out that ears closely resembling those of the insane are not unfrequently met with amongst sculptures depicting pugilistic athletæ. Singularly enough, in his efforts to bring this home to the attendants, he avers that he has never met with an instance in which the injury could be traced to the patient himself or to other patients. How this can be reconciled with the fact, that patients frequently fall on the ear in fits, and are struck on it by their own associates, I am at a loss to imagine. Again, in the lately published work of Dr. Kramer, *On the Aural Surgery of the Present Day*, the observations of that author are calculated to encourage the theory of the physical origin of the disease. He says: "The causes of these bloody tumours on the cartilage of the ear are unknown, though we must admit that they are especially likely to be produced by violence (blows on the ear), which, perhaps, explains their more frequent occurrence on the left ear." (New Sydenham Society's edition, page 41.) In the *British and Foreign Medico-Chirurgical Review* for January 1858, I published a short memoir on this peculiar disease, illustrated by engravings after photographs of the altered ears; and I therein advocated the contrary opinion, based upon observation and inquiry, that the lesion is not occasioned by physical injury, but that it is the result of a spontaneous hæmorrhage arising out of a pre-existing diseased condition of the vessels of the pinna of the ear.

Two cases came under my notice last autumn, strongly confirmatory of this opinion. Both were to be seen running their course together, but distinct in their appearance and characteristics. The one was a well marked example of hæmatoma, arising without any external interference; the other, a case of severe contusion of the ear after a blow, not presenting any appreciable swelling, but only ordinary interstitial ecchymosis, although this patient was pre-disposed to hæmatoma, and was the subject of partial ossification of the cartilage of the opposite ear.

Case I. September 30th, 1862. R. H., aged 71, had confirmed chronic mania. He had been insane fifteen years; he had the appearance of having been a free liver; was phlegmatic; inert; muttered to himself; had hallucinations about spirits, that they pulled his inside out. This morning I observed that the left ear was thicker than usual, owing to a circumscribed hæmatoma; not noticed the day before. There was no discoloration; no bruise. The ear had not received any blow, nor been interfered with. The swelling was of about the size of a broad bean; it felt tense and elastic, and was limited to the scaphoid fossa, antihelix, and concha, partially; was not painful. The fluid could be displaced slightly. There was no pitting on pressure; nor external inflammation. As usual, the posterior surface of the ear was not implicated, although the skin was more lax and not so firmly attached as on the anterior surface. On Oct. 20th, the hæmatoma was less swollen; it was flabby; and its fluid contents were diminishing. On Dec. 20th, the swelling had been apparently stationary during the last month. On Jan. 15th, 1863, it was undergoing the shrivelling process. On March 16th, it had become firmly indurated; ossification had taken place; the skin was adherent to the cartilage; elasticity was lost. No treatment was required.

Case II. November 26th. T. B., aged 58, had confirmed hereditary chronic mania; he said that he wrestled with the devil; was mischievous and disorderly; and attacked his neighbours viciously. He received during the night a violent blow with the fist over the left ear, which produced a well marked bruise of irregular shape. The concha and greater portion of the anterior surface of the pinna were discoloured. There was no appearance of hæmatoma; no blood was effused between the cartilage and skin, but the latter showed interstitial ecchymosis. The posterior surface was similarly affected, as also the integument over the mastoid process against which the ear had been driven; skin nowhere broken. This patient was predisposed to hæmatoma, and had the characteristic appearance of old ossific deposit in the unbruised right ear. The bruise lasted about six weeks, when the ear regained its natural colour, and left no further evidence of having suffered injury.

It is admitted on all hands that these effusions occur most frequently amongst the insane, or in patients affected with serious lesions of the nervous centres. It has been shown by several pathologists that there is a preexisting state of disease before the occurrence of the sanguineous effusion. The disease may be observed in both ears in different stages; and occasionally the cartilage may become ossified without the occurrence of the stage of effusion. When blows are received by the same class of patients over the analogous structures of the eyelids and nose, the same morbid changes do not take place. Epileptics are less liable to it than chronic maniacs. Cartilaginous nodules are sometimes developed after wounds of the ear; but their history, course, and pathology, are quite distinct.

In two specimens of hæmatoma occurring in the ears of the same patient, Mr. Toynbee informed me that he had found the cartilage of the right ear greatly hypertrophied, and in some parts ossified. It had Haversian canals and corpuscles like normal bone. Bony matter was deposited in the left ear, which did not pass through all the various stages.

I entertain no doubt that the disease depends upon internal or centric causes; and is, probably, one of the results of the atheromatous diathesis. It runs a well-defined course; the duration varying from a few days to several years; and, unlike contusions, leaves structural alterations and disfigurement of the organ.

These two cases corroborate, in a remarkable manner, the views of those who consider that the phenomenon is the result of disease and not of accident, and they may be regarded in the light of a crucial experiment, decisive of the question at issue; confirming the fact, in the one instance, that hæmatoma may be developed without the intervention of external violence, and disproving, in the other, that it could be produced by a blow in a person predisposed to the affection.

Test for Grease. If whilst camphor is actively moving on water, the most minute particle of certain greasy substances only touch the water, instantaneously, as if by some magic shot, the camphor is deprived of all motion, and repelled. The scene of previous activity is changed to the immobility of death. By availing ourselves of this curious property of camphor, we may detect grease in quantities so extremely minute, as would almost appear fabulous. (*Chemical News.*)

Progress of Medical Science.

Pseudo-gangrenous Bronchitis. A man, aged 40, a paper-maker, of good constitution and habitually enjoying excellent health, was seized early in April with cough and abundant expectoration of matter having a fœtid odour. These symptoms appeared when he was apparently in the best health, and were unattended by any constitutional disturbance. The patient ate and worked as usual; he was troubled only by the frequency of the cough, by the abundance of the expectoration, and by the daily increasing fetidity of his breath. His fellow-workmen complained of the odour, and this symptom became so unbearable that he was obliged to enter the hospital de la Pitié, under the care of M. Empis.

On admission, his breath, especially when he coughed, was extremely offensive. His sputa consisted of glairy transparent colourless matter, very frothy on the surface, holding in suspension a number of small unequal masses of opaque mucus, which floated free in the colourless portion of the sputa: the whole sputa had a peculiar very disagreeable odour, resembling that of gangrene of the lung. On pouring the sputa into a basin of clear water and stirring the mixture, the opaque masses did not communicate to the water the least muddy tint, as purulent sputa do.

The conformation of the patient's chest presented nothing remarkable; percussion elicited a normal clear sound in all points of the lung; on auscultation, there were heard behind, over a space 6 or 7 *centimètres* in diameter below the angle of the right scapula, some moist mucous *râles*, with unequal bubbles, which were partly displaced by coughing. There did not appear to be any pathological modification of the voice.

The patient felt no oppression, and could make large and deep inspirations without the least pain. His sleep was often interrupted by the cough and by desire to expectorate. He was not able to lie on the left side, from a feeling of suffocation when he did so. He had a good appetite; ate and digested well; and had never had fever.

In a clinical lecture on the case, M. Empis remarked that the fetidity of the breath and sputa gave at first the idea of pulmonary gangrene. But the sudden manner in which the expectoration was produced, without having been preceded by any symptoms of disease, and the general state of the patient, so little in harmony with the severity of the general symptoms ordinarily met with in patients affected with gangrene of the lung, forbad the idea of this condition to be entertained. Gangrenous fetidity of the breath and expectoration does not belong exclusively to pulmonary gangrene, and may be met with in certain diseases of the bronchi independent of true gangrene. Laennec more than suspected this, when, failing to find the pathological characters of pulmonary gangrene in patients who had had fetid bronchorrhœa, he suggested that the fetidity of the expectoration depended on a general disposition to gangrene, which excited the mucous secretion of the bronchi. Since that time, M. Briquet has pointed out that, in addition to pulmonary gangrene properly so called, there is an affection of the bronchi which resembles true pulmonary gangrene in the special fetidity of the breath and sputa, but which differs from it in its symptoms, in its pathological anatomy, progress, and frequently favourable termination. M. Lasègue has called this condition *curable* gangrene.

The quantity of the expectorated matter varies much. In the present case, it was about a quart daily; but frequently it amounts to several quarts in twenty-four hours. In cases of long standing it contains, in addition to the elements already described, a greyish finely granular matter, not at all viscous, which is deposited at the bottom of the vessel. It is partially miscible with water, to which, when beaten up in it, it communicates a more or less muddy tint. The fetidity of the breath varies in degree; on some days it is slight, while on others it is very intense; it may disappear, in favourable cases, with the catarrhal secretion with which it is connected. The expectoration is not unfrequently preceded by the formation of vomicæ, which burst in coughing, and discharge their contents.

In most cases, there are no remarkable physical signs; there may be no general symptoms, or there may be slight febrile reaction; but in no case is the disease attended with the severe symptoms which ordinarily accompany gangrene. When death occurs, it takes place as the result of exhaustion produced by the excessive secretion, unless the patient be carried off rapidly by some acute complication, such as pneumonia or erysipelas.

The pathology of the disease does not appear to be positively determined.

M. Briquet believed that the extremities of the bronchial tubes become dilated, and affected with gangrene independently of the other parts of the lung. M. Empis criticises the latter notion at some length, and says that it seems to him more rational to admit that the disease consists in a special pathological alteration of the mucous membrane of the bronchi, in virtue of which they become dilated, while at the same time their internal surface secretes a prodigious quantity of fœtid matter. The disease then may be theoretically resolved into dilatation of the bronchi; bronchorrhœa; and gangrenous fœtor. But these are neither successive nor subordinate one to another; they advance equally, and it is their union and indivisibility which constitute the special character of the disease. (*Gazette des Hôpitaux*, 2 Juin 1863.)

Vicarious Menstruation and its Influence on Ovulation. M. Puech, in a work on this subject, gives the following conclusions. 1. Vicarious menstruation (supplementary hæmorrhage) is said to occur when at the monthly periods a discharge of blood takes place from other parts of the body than the genital passages. 2. Any part of the body may be the seat of these hæmorrhages; nevertheless, certain situations are preferred, amongst which M. Puech has noted the stomach in 32 cases, the breasts in 25 cases, the lungs in 24, and the nasal mucous membrane in 18. In all the carefully observed cases, there have been hysterical symptoms or exaggerated nervous sensibility. 4. The catamenia are generally absent (183 cases); but in 15 there has been noticed to be a slight escape of blood at the same time. 5. The genital organs are generally healthy; but sometimes they are altered. In eleven cases, there was either accidental or congenital atresia. 6. Except in these latter cases, the absence of the catamenia does not imply sterility; unless there be some grave disorder of the economy, ovulation continues, and rupture of a Graafian follicle attends the appearance of the supplementary menstruation. 7. Pregnancy is therefore possible, and has been observed to take place; it causes the suspension of the vicarious menstruation, which reappears after delivery or at the termination of lactation. 8. Although compatible with health, and capable of continuing from puberty to the critical age, vacarious menstruation is a pathological act: it has even in several cases produced death. (*Gazette Méd. de Paris*, 25 Avril 1863.)

The Unstriped Muscles of the Skin. M. Sappey, in a paper read before the Biological Society of Paris, observes that smooth muscular fibres are completely

absent in the palms of the hands, the soles of the feet, the skin under the nails, and the skin of the external auditory meatus, eyelids, nose, and lips. On all other parts of the skin their existence is readily recognisable; and they are disposed in different manners, according as they are seated in the deep or in the superficial layers of the skin. Those which occupy the deep layers of the derma are distinguished by their number and size; they form the principal element in these layers, and pass in all directions. Most of them lie parallel to the derma. Immediately above the muscular fibres are the sweat-glands, and at a higher level the sebaceous glands, with which these fibres have no connection. This arrangement is seen in the areola of the breast, and in the scrotum and skin of the penis. Above the integument of the testes and penis there is found, in fact, a muscular layer which for the former forms the dartos, and for the latter an analogous membrane hitherto undescribed. The dartos, considered hitherto as a distinct covering of the scrotum, is in reality only its deep layer; and in the same way the dartos underlying the integument of the penis is evidently only a dependence of this integument.

The muscular fibres found in all other parts of the skin occupy the most superficial layers of the derma. They are every where attached to the hair-bulbs at their deeper extremity, and, dividing into several parts, are lost in the subepidermic layer. In general, there is but one fibre to each hair-bulb; and the fibres are generally much more developed at birth and in children than in adults and old persons. By their fixed or deep end, these fibres are inserted into the hair-bulb immediately below the corresponding sebaceous gland, round which they turn to mount more or less perpendicularly towards the free surface of the skin; hence they embrace the sebaceous gland in the concavity of their curve. They cannot contract without pressing on the sebaceous glands; and their special use is evidently to regulate the excretion of the sebaceous matter. This explains why they are so remarkably developed in early life; for it is in the last two months of intrauterine life that the sebaceous secretion attains its greatest activity, being then especially required to protect the skin of the fœtus from the action of the amniotic fluid. The anatomical and physiological relations between the sebaceous glands and the muscles which compress them are so intimate, that the smooth muscles must be looked on as forming incomplete contractile envelopes, analogous to those which surround most of the abdominal viscera and the ducts of glands; and it is an error to attribute to them the function of elevating the hair-bulbs and hairs.

That their function is to elevate the hairs, is a conclusion which is easily arrived at if the muscles of the hairy scalp be alone examined; for it there appears as if the contraction of the muscular fibres must raise the hair-bulbs in a direction perpendicular to the skin. But, if the smooth muscles in the scalp lie in the direction in which the hairs are inclined, it is because the sebaceous glands lie on this side when they are single; and, when there are two, the largest occupies this situation. In other parts of the body, where the hair-bulbs are seated perpendicularly to the integument, it is easy to ascertain that the muscle is always situated on the same side as the sebaceous gland; that it surrounds this body; and that, if it be attached to the hair-bulb, it is only to have a fixed point below the gland so as to be able to compress it more efficiently. Those parts where these compressing agents are much developed, as the skin of the limbs and breast, rarely become the seat of accumulations of sebaceous matter; while such accumulations are frequently met with in the ear, eyelids, and alæ nasi, as well as in the hairy scalp, where the muscles become atrophied with age, while the sebaceous glands exist in large numbers. (*Gazette Médicale de Paris*, 13 Juin, 1863.)

On account of the remarkable ignorance generally prevalent in the profession, respecting the laws which regulate the conduct of the Royal College of Surgeons of England, it is our intention, at an early date, and when the pressure on our columns will permit, to publish copies of the Charters of the College of Surgeons. Very few copies of these Charters are in the hands of the profession; consequently, it is very desirable that they should be rendered more generally available.

British Medical Journal.

SATURDAY, AUGUST 1st, 1863.

THE MORTALITY IN OUR INDIAN ARMY.

The Royal Commission appointed in 1859 by Lord Herbert, to inquire into the mortality and diseases of the Army in India, has just presented its Report.* Two huge volumes, each containing 1,000 pages of closely printed matter, attest at once the importance of the subject and the industry of the Commission. A smaller octavo volume, which contains merely the Report and a *précis* of the evidence, has been issued for members of Parliament; and it is this smaller work which the public generally will chiefly use. But for the profession the two large volumes will have most attraction; for it may truly be said that, independent of their special interest, they constitute a most comprehensive treatise on hygiene.

The Report itself occupies ninety-three pages. It commences with some general statistics of mortality and expectation of life in India, passes on to a review of the chief sanitary conditions under which Europeans serve, and closes with a series of suggestions. We extract, almost at random, a few facts from the Commissioners' summary.

Taking the present century, the mortality among the Company's European troops has been 69 per 1000 per annum. The mortality is least under 20 years of age, and increases on the whole with age; being 56.4 per 1000 from 20 to 25 years of age, and 61.6 per 1000 from 40 to 45 years. At the age of 20, the expectation of life is only 17.7 years in India, as against 39.5 years at home; showing a loss to the soldier serving in India of 21.8 years. A man returning from India at 40 years of age loses, on an average, four years of life. The mean period of service in India is only 8.6 years. For every 100 men, 11 recruits are required annually. One thousand men are reduced to 96 in twenty years of service, in the following way. About 404 die; 146 are invalided; 35 buy their discharge; 90 retire from expiration of

* Report of the Commission on the Sanitary State of the Army in India, with Appendix. (Parl. Papers, vols. i and ii.)

service ; 10 are promoted ; 197 are transferred ; 18 desert ; 3 disappear from other causes ; and 96 remain. Half the army in India consists of men who have served less than six years ; not more than one-fourth are veterans of ten years service. Out of an army of 70,000 British in India, 5,880 men (or 8.4 per cent.) are constantly sick.

With these and other facts of the like kind at the outset of their Report, the Commissioners proceed to consider the causes of this great sickness and mortality. These are, of course, numerous—some inevitable, many removeable. But the statements made by the Commissioners, by many of the witnesses, and especially by Miss Nightingale in her vivid summary of the evidence, prove an almost incredible amount of carelessness and neglect of the most ordinary sanitary rules. It is indeed wonderful that we only lose 69 per 1000 by death annually ; and it may safely be anticipated that, if the Government will at once initiate the improvements suggested by the Commission, we shall see a still more extraordinary improvement take place in the health of the Indian than has occurred even in the army at home. The Commissioners might have brought forward the parallel case of the West Indies, where the mortality has been lessened to such an extent that even Jamaica gives only a death-rate of 20 per 1000.

The Commissioners first discuss the influence of climate, that bugbear which has frightened so many aspiring souls, and that convenient explanation which has glossed over so many errors. They state that they have been struck with the absence of direct allegations against climate in the stational reports. "The reporters do not attribute the soldiers' mortality to the climate of the stations." No doubt there are unhealthy stations ; and the Commissioners do not underrate the influence of heat, moisture, and the evolution of malaria which, over a wide surface, influence the sanitary condition of a people. But they affirm, and no one will doubt the assertion, that European troops are exposed to many other conditions besides those of climate which injure health. To the study of these conditions the Commissioners devote the greater part of the Report ; and we soon find ourselves passing over the familiar ground of bad locality, impure water, defective drainage, overcrowding in barracks, badly arranged barracks and accessories, and, in fact, of all those topics which compose the gist of the "Health of Towns" and all subsequent Reports.

The case which the Commissioners make out against the Government of India for criminal and fatal neglect of fundamental sanitary laws, both as applied to Europeans and natives, is overwhelming. It is impossible that these serious charges can be allowed to be quietly shelved. We do not hesitate to say that the public attention of this country must become forcibly directed to this topic ; and we are happy to see that Sir Charles Wood has publicly stated that the subject shall receive his attention. If Sir Charles Wood takes the matter up, we know it will be done ; but he must take care that his subordinates do not oppose his orders. Already we hear rumours among Indian officials that the Report exaggerates matters ; that the errors, if they exist, will soon be put right ; that sufficient machinery already exists for remedying the trifling evils, etc. It will be a lasting reproach to this country, and the greatest condemnation of its rule in India, if such wretched trifling with a matter so momentous be allowed to arrest the first serious attempt to improve the health and well-being of a hundred millions of persons.

We will not enter into any account of the sanitary evils enumerated by the Commission. Our readers have but to call to recollection the condition of the worst English or French town they know, and increase fiftyfold all the abominations of a filthy and careless race, and they will have some idea of the great Indian cities which we honour by the proud name of cities of palaces. And, on the other hand, take an English barrack, and in a slightly different shape erect it in Hindostan ; or, at any rate, preserve its intrinsic features, though its form may be altered ; and the Indian barrack and its customs can be but too often truly pictured. Then imagine all that worshiped routine which, after years of protestation on the part of medical officers, still thinks spirits essential for troops ; still supposes that the same kind of food is suitable for all latitudes ; still believes, or did so till very lately, that throughout the length and breadth of a vast country like India, the same clothing will be precisely fitted for all temperatures ; and still contents itself, when tremendous attacks of cholera or fever sweep away both Europeans and natives, with vague reasonings about climate or occult influences, instead of looking to bad customs and unhealthy habits as the true causes of that great mortality ;—and then, if the imaginations of our readers are strong, they may perhaps form a correct idea of the extraordinary evidence brought forward in this Report.

But now what are the remedies ? The Commissioners make thirty-nine suggestions, thirty of which, at least, merely recommend the most ordinary rules of hygiene, such as improvements in ventilation, water-supply, drainage, barrack accommodation, internal economy of regiments, etc. The other suggestions are—

That the period of service be only ten years in India.

That the strategical points of the country which must be occupied be now fixed with special reference to reducing, as far as possible, the number of unhealthy stations.

That hill stations be provided ; and that a third part of the force be there located in rotation.

That the sanitary regulations now in force in England be applied to India.

That properly trained army medical officers of health be appointed to this service at the larger stations.

That Commissions be appointed for each presidency, to give advice and assistance in all matters relating to the public health.

That a permanent Commission, consisting of the War Office Commission and of two officers of the Indian Government, be formed in this country to assist the Indian Commissions.

That a code of sanitary regulations be issued under authority.

That the present system of army statistics be extended to all Indian stations.

That a registration of deaths be established in the large cities of India, and be then gradually extended.

Such, then, are the recommendations; and now it is for the Government to act. The cardinal measure which will bring about all the rest is to appoint at once the Commissions in India and at home. Let this great work be commenced without delay by the electing of sensible earnest men, who will deal with this subject as it must be dealt with, carefully, calmly, and patiently, and yet vigorously and firmly. Let those Commissions be formed of the best medical and engineering officers who can be found in India; and let the Government determine to give them the fullest support. Then, as we have seen how two or three determined officers have staved off the great financial crisis which loomed over India, and out of chaos have educed order, and out of the nettle, danger, have plucked the flower, safety; so we shall see how this dark cloud of disease and mortality and untimely death will clear away, and will disclose to us the spectacle of a healthy and contented people, and of a vigorous and effective soldiery.

THE WEEK.

A COUNTRY Fellow of the College of Surgeons complains, and with a manifest show of justice and truth, that the Fellows of the College who reside in the country have not a fair share with their London Fellow-brethren in the election of Councillors. The fact is patent. Under the present mode of election, the London Fellows must naturally always carry the election. It is utterly impracticable for the country Fellows, as a body, to leave their practise, incur heavy travelling expenses, and journey to London, for the purpose of exercising this privilege of theirs. *Le jeu ne vaut pas la chandelle.* But is it right and good for the profession, that the election of Council should be made almost wholly by the London Fellows? Our readers must remember that the body of Fellows was originally established for the very purpose of forming a constituency to elect the Council—who had previously elected themselves. Therefore, to deprive a Fellow of his vote, is to deprive him of the power of exercising one of his chief duties as a Fellow. And surely, unless some relief be given to the country Fellow in this matter, he is, to all intents and purposes, deprived of the exercise of this privilege and duty. A correspondent suggests that country Fellows should be allowed to vote, after the same fashion as members of Oxford and Cambridge Universities now vote under Mr. Gladstone's law. It is difficult to understand what objection could be raised to this proposal. The Council can settle the mode of election by a bye-law; and have, therefore, the power in their hands, if they only have the will to use it. An election of this kind, with a proper mode of taking the votes, in which the whole body of Fellows have a share, would assuredly be the best means of putting an end to all improper canvassing. Besides this, candidates are much more likely to be equitably treated and fairly judged of by Fellows at a distance, than they are by their own personal friends and acquaintances. Fellows in the country would (as a body) naturally judge of a candidate solely by the light of his professional fame. The candidate's reputation would, in fact, be the chief guide to them in voting. But the London Fellows, who now carry the elections, are, of course, in part guided by the strong ties of personal friendship, and, as we may be sure, these personal ties naturally exercise a very considerable influence over his vote. At all events, it is very certain, that the country Fellows have a strong case—so strong, indeed, does it seem to us, that we cannot doubt their voices will be heard in the College, if they desire it. It is assuredly unreasonable that the London Fellows should monopolise this privilege, if the privilege can, and with advantage, be extended to the whole body of Fellows. Thus, on the one hand, the Fellows in the country are just as capable of making a good selection as are the Fellows in London; and, on the other, their choice is (as we have shown) much more likely to be candid and impartial than that of the London Fellows. Moreover, on the ground of fair play, the country Fellows have a right to more full representation at the Council Board than they at present possess.

WE have heard that the governors of St. Thomas's Hospital have determined that the Stangate site is the best and most fitted for their future hospital to stand upon. They hope to purchase this site for £90,000. If this purchase is effected, we may expect that a model hospital erected on the grandest scale, and in full operation, will rise up there in the course of about three years from the present date.

The late horrible attempt at murder by a lunatic in a railway-carriage deserves other consideration than that which has been given to it by the public press. This press is satisfied with calling upon railway directors to put in their carriages means of communication with drivers and guards. But there is a far more efficacious means of arresting the hands of these murderous lunatics; and we need hardly tell the profession that it is the wisely taking such proper care of the lunatic as shall prevent him either injuring himself or others. In cases of this description, the public must suffer if it refuses to listen to the voice of reason and of science. The murderer in the case alluded to had previously shown signs of lunacy, such as would, in the eyes of a medical man, have justified his not being permitted to travel by himself. But such is the jealousy of the public regarding the personal liberty of lunatics, and such their wonderful suspicion of the ignorance and one-sided views of mad-doctors, and of all doctors, that until the murder is actually committed, the murderer is regarded as sane. Those signs which to the eye of science are clear indications of madness, and of a possibly dangerous, suicidal, or homicidal mania, are ignored by judges and juries, and the public press, and by the public at large. Consequently, the daily journals are constantly giving us examples of murders committed by lunatics. Be wise enough and humane enough to arrest the lunatic before he commits such fatal acts, is what medical science teaches. In justice to the wretched individual himself, and to society at large, take the man with his premonitory symptoms of insanity and subject him to treatment, while yet there is a hope of his final recovery. Do not wait until he destroys life before you take charge of him, and then shut him up for life as a criminal lunatic.

We understand that Mr. Cæsar Hawkins continues to hold his office of Examiner of the Royal College of Surgeons, although he is no longer a member of the Council. We rejoice to hear that such is the case; for as Mr. Cæsar Hawkins holds the office of Examiner at the pleasure of the Council, it is now evident that the Council have, at last, determined to acknowledge practically the terms of the Charter, which permits, or rather, we should say, indirectly enjoins, the electing by the Council to the Court of Examiners of Fellows who are not members of the Council. Mr. Cæsar Hawkins is the first Fellow of the College not on the Council who has ever held office as an Examiner. The fact is one of great significance. It is the admission—forced though it be—of the great principle involved in the Charter of the College, that Examiners should be elected from outside, and not solely from the members of the Council. We will venture to prophesy that never again will the Council venture to secede from the principle which they have been now forced to bow to, in order to keep Mr. Cæsar Hawkins on the Court of Examiners.

In the seventeenth century, the medical corporation of Paris was powerful and very wisely organised (*Les Médecins du Temps de Molière*). Not every one who wished could enter into it. The faculty, jealous of its celebrity, refused admission to all who did not please them. The number of doctors was very small, and increased very slowly. In Paris, in 1395, there were 31 doctors; in 1500, 72; in 1566, 81; in 1625, 85; in 1634, 101; and in 1675, 105. At the present time, there are about 2000. The expenses of the examination then amounted to about 6000 *livres*; at this day, the expenses scarcely reach 1200 *francs*. This was one means for keeping down the number, especially as at the same time the expenses of admission to other faculties varied between only 500 and 800 *livres*. The profession of medicine did not, as now, offer few resources to the physician. We cannot return to those days; but certainly we may be allowed to express a regret that the number of physicians of this day is not more restricted. We have lost two great things. We have lost the *prestige* which is attached to a title then so rare, and the independence which a position of fortune gives in the world. In those days, the doctor was respected by his patients in proportion as he was less dependent upon them; and he was sure to reach a position of ease. Now-a-days, we very much doubt whether patients have any respect even for the heads of the profession. At all events, it is certain that the great body of medical men, who are poor and have to struggle for daily bread, are little thought of—far less thought of than they deserve.

At the anniversary of the Hospital for the Cure of Stone, held last week, it was stated, after the dinner, that "the late Sir Benjamin Brodie was so convinced that stone could not be properly treated in a general hospital, that he took a house in Lisson Grove, in order that persons afflicted with the disease might be properly attended to." As this appeared in one of our daily journals, we feel bound to state that it is perfectly incorrect. Sir Benjamin Brodie's name stood first on a list of medical names at the foot of that memorable protest issued some years ago against special hospitals, and especially against this Hospital for Stone.

The well-known Grosvenor Place School of Medicine has ended its career with the late summer session; the lease of the present premises then expiring.

The French medical journals announce that "colonial medical officers" are wanted for the province of Constantine, in Algeria.

An absolute majority of votes are required for the election of candidates for the Academy of Medicine of Paris.

Some of the journals have despatched M. Velpeau to Constantinople, in order to reorganise the School of Medicine for the Sultan. M. Velpeau, however, has no mission of the sort on hand; nor, we should think, desires such a one.

A French journal asks, "What is a scientific society without its journal? It is a body without a soul, a sound without an echo."

The worst ventilated Society-room—and, therefore, least in conformity with sanitary principles—in London, is probably the meeting-room of the Royal Medical and Chirurgical Society. We find, however, that its badness is equalled or eclipsed by the hall of the French Academy of Sciences. Like many other preachers, these learned and scientific corporations are the last to put in practice the good things which they are continually suggesting for the benefit of humanity at large.

Dr. Porak, mayor of Trautenau, and deputy to the legislative body of Vienna, is reported as the practiser of an act of *fraternity* on a brother practitioner. Through his influence at head-quarters, he obtained an order for the expulsion of a colleague, Dr. Pauer, who had settled in his locality. The affair has made a great stir, we read.

One would have thought that the smelling of a rose was an innocent business enough; but Dr. Canuti says it is not. He informs us that persons exposed to the odour of gardens in which roses alone are cultivated, are, when the roses are in full bloom, subject to severe coryza. And of all roses, the Damascus is the most pernicious in this respect. Sometimes, this coryza is accompanied with a pustular eruption.

M. Mattei, in a paper just read to the Academy of Medicine, says that, according to his experience, the mean duration of pregnancy in women is 265 days.

The learned botanist, M. Decaisne, in a paper read before the Academy of Sciences, discussed the question of the ancient opinion of the variability of vegetable species, and the modern opinion of their invariability. After enumerating the arguments on both sides of the question, he pronounces in favour of the variability-theory; founding his views on recent experiments and what he considers a more exact interpretation of facts.

A celebrated Parisian hospital surgeon, says *L'Union Médicale*, once observed that he had three times practised amputations of the arm, in cases where the operation was necessitated through the ignorant "manœuvres" employed by a well-known religious community. A few years ago, we saw, under M. Velpeau's care, a young man in whom a famous female bone-setter had broken the thigh. On one occasion, a poor fellow was brought into M. Gerdy's ward at St. Louis, whose eye had been destroyed in a quarrel, and who for a week had worn over the injured eye a pitch plaister, stuck on by a cobbler who pretended to be a great curer of diseases. The result of the treatment was inflammation, which extended to the brain, and death.

M. Lecoq says of the functions of the vessels of plants:—"Not only do the vessels contain air of a variable composition, but there goes on in them an actual circulation of a more active nature than that in the tracheæ of insects. The air in plants moves before the juices, and certainly with greater rapidity."

The *Gazette des Hôpitaux* relates a case of chorea cured, and permanently, by an attack of fever caught in the hospital.

Medical journals are looking up in the French departments. Three have appeared during the past year—*L'Union Médicale de la Seine-Inférieure*, *Le Médecin de Campagne*, and *Le Bulletin Médicale de Dauphiné*.

The busy bee, *L'Abeille Médicale*, tells us that the office of its editor is situated close to the Ecole Pratique at Paris. "The place is very quiet, and in winter a death-like silence reigns there. But in summer, when the course of physiology is going on at the *école*, the scene changes. The different rooms, which no longer contain *subjects*, are now filled with living dogs, which are shut up, probably without bread or water, ready for serving their turn at the lecture-room. At all events, whether through starvation or through instinctive dread of the place, the poor brutes bark and howl night and day, so as to disturb all the neighbourhood. We thereupon took the liberty of complaining to the police, and especially because all this howling was close to the ears of the women in the Maternity Hospital. The police were reasonable, and visited the school; and soon returned to inform us that there would be no more barking. 'You will hear no more of it,' the commissary said. 'What! are the dogs no longer to be kept in the dissecting-rooms?' 'Oh yes! but it appears that they have cut something about the dogs' necks, which stops their crying.' We understand the poor brutes have been subjected to two painful operations (section of the laryngeal nerves) before other tortures are inflicted on them. And this is all they have taken through our interference! If we had known it, we would have quitted the place, instead of becoming the cause of this refinement of cruelty!"

A bone-setter in France lately gave the following certificate to a member of a sick society: "I certify that M. is suffering from a luxation of the great asiatic nerve."

THE NEW ARMY MEDICAL WARRANT.

[*Communicated.*]

The increasing unpopularity of the army medical service, the almost entire failure in the supply of candidates for admission into its ranks, and the resignation of some of its most gifted officers, worn out and disgusted with the treatment they have received, have at length had some effect. A new warrant has been issued, with reference to the rank of medical officers; their grievances have, it is supposed, ceased to exist; they are congratulated by the organs of the military authorities on the concessions which have been made. What more can they want now?

It too often happens, when great injustice has been continuously inflicted, and grievous wrongs long left unredressed, that any turning of the tide in favour of the injured—any attention paid to their complaints—is regarded above its value; a great concession is supposed to have been made, and every one rejoices at the magnanimity of the bestower of the boon. There is reason to fear that such a feeling may arise with regard to this modification of the warrant, and that students of medicine, deceived by its specious promises, may be led again to seek for admission into the service. A little examination, however, will show that the warrant is hollow and valueless; that it conveys no real advantage, and leaves the position of the medical officer, as to rank, as unsatisfactory as ever.

One of the great grievances of which the medical officers of the army have hitherto had to complain has been, that the rank granted them has been only nominal and unreal. They have been made to rank as junior to combatant officers of the same grade, and not in accordance with the dates of their commissions. This the new warrant professes to redress, declaring that medical officers will for the future rank with combatants according to the dates of their commissions; but then follow reservations which almost entirely nullify the declaration, that "relative rank shall carry with it all precedence and advantages attaching to the military rank with which it corresponds."

The medical officer is denied by the warrant all right to the presidency of courts-martial, courts of inquiry, committees, or boards of survey; and when these are presided over by a junior officer, the surgeon, should his opinion be required, is to be called as a witness, instead of taking his proper place as a member. In this way, a return is secured, in another form, to the old practice by which the medical officer of many years standing was made to appear on committees as junior in rank to the newly-joined ensign. The denial of the right to act as president of a court-martial or committee at once implies that the medical service is inferior, in the eyes of the authorities, to the combatant branch; it is a distinct refusal to recognise the rank which the warrant professes to confer. With reference to choice of quarters also, the medical officer's right is made subject to a most important limitation. That, in this case, a commanding officer should take precedence of him is, doubtless, unavoidable, and no objection can be raised against such a rule; but when it is laid down that there are other cases in which special quarters may be permanently appropriated without reference to date of commission, there is reason to believe that the surgeon will constantly find himself superseded by junior officers, in whose favour special appropriation of quarters has been made, and that he will have to content himself with the accommodation provided for the subalterns of his regiment. In this case, again, it is evident that the rank professedly granted is virtually nullified and denied.

A further difference is again made between the rank of medical and combatant officers by the denial to the former of certain salutes. The medical officers of the army do not covet these honours; but they cannot help feeling that the refusal of them indicates inferiority of position. Common sense dictates that where different honours are paid the rank cannot be the same. It is obvious that on this point, again, the concession at the outset of the warrant is revoked and denied at its close.

The language in which the high privileges of the warrant are conveyed is well worthy of remark, displaying, as it does, an evident desire to depreciate the status of the medical officers of the army. They have ever, heretofore, been considered as military, though non-combatant, officers. They are now described as a "civil department." This is an insult. The surgeons of her Majesty's armies are not civilians; but military, though non-combatant, officers. They wear the military uniform, are subject to military law, march with their regiments to the field of battle, and share the dangers of every military operation. Though essentially non-combatant, having their own special and all important duties to perform, it has sometimes happened that medical officers have been compelled to become actual combatants, and have done good service in the field.

In the performance of their duties, they are, as often as other officers, exposed to the fire of the enemy, and may be called upon, at any moment, to perform under it the most delicate and difficult operations, demanding the highest degree of nerve and self-possession even in the quiet and seclusion of the hospital ward or operating theatre. But even these labours have been looked upon with that jealousy and dislike which characterises the demeanour of the military authorities towards the medical service. The autobiography of the late Sir James M'Grigor contains proof of this. Writing on the subject, he says:—

"In the proper execution of their duties, medical officers are frequently under fire; and during the late war, the cases of wounded medical officers were numerous. Some had been killed; and not a few lost limbs in sieges or in battles. Yet it has been ignorantly advanced by some military men that the medical officers have no business in exposed situations; and in this professed opinion they would deny the medical officer a pension for the loss of a limb. Yet it is well known that the cases are numerous wherein the lives of officers and soldiers have been saved by the zealous medical officers of their regiments being at hand to repress hæmorrhage."

Many other passages might be adduced from the work above quoted to prove that army surgeons have ever been ill-treated and undervalued by the military authorities, and that inefficiency and disaster have been but too frequently the result. The condition of the service has, indeed, of late years been slowly and grudgingly improved; but the spirit of dislike to it still remains, and as long as it exists will continue to lower the tone and diminish the efficiency of the service, to the detriment of the soldier and the loss of the state. The higher class of students will wisely continue to decline to enter a service which refuses to them the position and consideration of gentlemen and men of science; and in spite of the so-called competitive examinations, inferior men must be admitted, and placed in charge of that most costly and invaluable commodity, the life and health of the British soldier.

It is to be hoped that the short-sightedness of the policy which depreciates the efficiency of the army medical department will soon be felt, and the proper remedy applied. But no half measures will be effectual—no mere empty words or promises never meant to be fulfilled. A royal warrant must be issued, improving the condition, and granting, without reservation, the just requirements of the service. Till such time, the students of medicine should continue to decline to enter its ranks.

It remains only to declare what these requirements are.

In the first place, the rank required by the medical officers of the army, and without which they will not be satisfied, must not be relative, but *bonâ fide* military rank. It must place them, in all points, on an equal footing with their combatant brethren; it must give them precedence according to the dates of their commissions, and entitle them to all honours and salutes without exception. It must entitle them to act as members or presidents of courts-martial and courts of inquiry on all subjects; and when such courts have reference to medical officers or medical matters, medical officers should be specially selected to preside over them. There are only two admissible reservations as to the rank of medical officers—the one withholding from them purely military command; the other providing for the precedence, in all cases, of a commanding officer. But although command in military affairs is necessarily denied to the medical officer, there are other matters in which he should be allowed to exercise command, or an influence amounting to command. It should be clearly laid down that his representations on sanitary matters have the force of commands, and should be implicitly obeyed by commanding officers, in the absence of military reasons to the contrary. It should not be optional, as now, with commanding officers, to follow or ignore the advice of their regimental surgeons. They should be bound to follow it, or to furnish their reasons for declining to do so. At present, the position of the medical officer, as a sanitarian, is most unsatisfactory. He may make suggestions, which will receive no attention; but he is powerless to remove evident causes of disease if his opinion is opposed to that of his colonel.

Secondly—Reforms are required with reference to the duties which the medical officer has to perform. His proper work is the preservation of the health of his regiment and the care of the sick. This must occupy a very large proportion of his time, and its remainder should be left entirely at his own disposal for the study which is indispensable to keep him *au courant* with the progress of medical science. At present, his leisure is too much taken up in the preparation of returns and other matters which require no professional skill. A fitting establishment should be allowed for the performance of these and other subordinate duties.

Thirdly—All ranks of the service should receive a higher rate of pay than is now granted to them. The pay of the higher ranks may by some be considered fair; but it is to be remembered that that of the lower grades is certainly insufficient, that years pass before the higher ranks are reached, and that the prizes of the service are few. If proof be wanted of the insufficiency of the pay, it is enough to point to the fact that the supply of candidates for entrance into the service has failed. In commercial language, the market value is not offered for the commodity required.

But *bonâ fide* rank, enlarged influence, and increased pay, are not alone sufficient to secure the status of the medical service. As individuals, its members are of no estimation in the eyes of the military authorities. The service, as a body, must be recognised by the state—its indispensable usefulness acknowledged. The fate of an army, the happy or disastrous termination of a war, the issue of the nation's life and death, may turn upon the efficiency of the medical service. An engine of such might is not now governed and represented as it should be. The head of such a department should have power and weight in the councils of the empire. In England, he should be a privy councillor; in India, a member of the government, with a secretary in the Medical Department. The medical service would then no longer be a collection of officers without power or influence, looked down upon and despised; but a body respected and all potent for good. Men of the highest scientific attainments would flock to its ranks; and under their well directed sanitary efforts, preventible diseases would disappear, the sick diminish in number, and the vast expenditure they are the cause of largely decrease. Let the present system be continued, and every evil will increase, while the service will fall lower and lower till its inefficiency is complete.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association will be holden at Bristol, on Wednesday, Thursday, and Friday, the 5th, 6th, and 7th days of August.

President—GEORGE BURROWS, M.D., F.R.C.P., F.R.S, London.

President-elect—JOHN ADDINGTON SYMONDS, M.D., F.R.C.P., F.R.S.Ed., Clifton.

All the meetings will take place at the Victoria Rooms, Clifton.

WEDNESDAY, *August 5th.*

1 P.M. Meeting of Committee of Council.

2.30 P.M. Meeting of the General Council.

4 P.M. First General Meeting of Members. The retiring President (Dr. Burrows) will make a few remarks. The new President (Dr. Symonds) will deliver an Address. The Report of Council will be presented, and other business transacted.

9 P.M. Through the kindness of the Committee, a *Conversazione* will be held at the Literary and Philosophical Institution, Bristol.

THURSDAY, *August 6th.*

11 A.M. Meeting of the Members of the New Council.

12 NOON. Second General Meeting of Members. The Address in Medicine will be read by WILLIAM BUDD, M.D. Papers and Cases will be read.

3.30 P.M. The Address in Surgery will be read by AUGUSTIN PRICHARD, Esq.

The Report of the Medical Benevolent Fund will be presented.

Papers and Cases will be read.

9 P.M. By the kind invitation of the President (Dr. Symonds) a *Soirée* will be held at his residence, Clifton Hill House, Clifton.

FRIDAY, *August 7th.*

12 NOON. Third General Meeting of Members. The Address in Chemistry in its Relations to Medicine will be given by WILLIAM B. HERAPATH, M.D., F.R.S. Papers and Cases will be read.

3.30 P.M. The Address in Midwifery will be read by J. G. SWAYNE, M.D. Papers and Cases will be read.

6.45 P.M. Dinner at the Victoria Rooms. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice, as soon as possible, to Dr. MARSHALL, 8, The Mall, Clifton.

Members are requested to enter, on arrival, their names and addresses in the Reception Room at the Victoria Rooms, where cards will be supplied which will secure admission to all the proceedings.

Refreshments will be provided in the Victoria Rooms during the Meetings.

Members who wish for previous information may communicate with Dr. MARSHALL, 8, The Mall, Clifton.

The "Queen's" (situated close to the Victoria Rooms); the "Bath" (Clifton); and the "White Lion" (Bristol); are among the best hotels.

A clerk will be in constant attendance at the Victoria Rooms during the days of the meeting, and will give information regarding lodging-houses, which are numerous, and where beds may be had from two shillings a night upwards.

Papers have been promised by T. S. Fletcher, Esq., of Bromsgrove (On Vaccination and the best Means of Extending it); Graily Hewitt, M.D., of London (On the Operation of Transfusion in Obstetric Practice); Lionel S. Beale, M.B., F.R.S., of London (On the Deficiency of Vital Power in Disease, and on Support); George F. Burder, M.D., of Clifton (On the Climate of Clifton); W. O. Markham, M.D., of London (On Venesection; B. W. Richardson, M.D., of London (On the Abstraction of Blood as a Remedy); A. P. Stewart, M.D., of London (The Use of Belladonna in Intestinal Obstruction); R. W. Coe, Esq., of Bristol (On the Social Aspects of Syphilis); W. M. Clarke, Esq., of Bristol (On Excision of the Knee-joint); G. D. Gibb, M.D., of London (Illustrations of the Causes of Hoarseness and Loss of Voice); Thomas Nunneley, Esq., of Leeds (On the Calabar Bean); Charles B. Radcliffe, M.D., of London; Thomas K. Chambers, M.D., of London (On the Statistics of Fever); Erasmus Wilson, Esq., F.R.S., of London (The Dermapathology of Celsus); I. Baker Brown, Esq., of London (Three Cases of Artificial Urethra); Morell Mackenzie, M.D., of London (Hoarseness and Loss of Voice, treated by the Application of Galvanism to the Vocal Cords); George Harley, M.D., of London (On the Calabar Bean); S. J. Goodfellow, M.D., of London (On the Treatment of Pneumonia); George Budd, M.D., of London.

Papers and Cases will be read in the order of the dates at which notice of them has been received by the General Secretary.

Notice of Motion. The following resolution will be proposed by Dr. B. W. Richardson at the meeting on Wednesday:—

"That a Committee be formed to consider and report on the question, whether it is possible to establish, under the direction of the Association, a Relief Fund, which shall enable the widows of members, or the orphans of members, or members themselves during sickness, to receive pecuniary aid by annuity or otherwise, on the principle of mutual protection and right; and that the Committee report as early as convenient to a special meeting of the Association."

Philip H. Williams, M.D., *Gen. Sec.*

Worcester, June 30th, 1863.

FORMATION OF A BENGAL BRANCH.

On May 27th, a meeting of thirty-one British and native medical practitioners residing in Calcutta was held at the house of Dr. S. G. Chuckerbutty, for the purpose of forming a Bengal Medical Association, which should also be a Branch of the British Medical Association. Dr. Norman Chevers, principal of the Calcutta Medical College, was unanimously called to the Chair.

Dr. Chuckerbutty explained the object of the meeting, and moved the first resolution. He said:—

The object for which I have invited you to meet here to-day is the formation of a Medical Association in Calcutta, to be called the Bengal Branch of the British Medical Association. The subscription by each member to the British Medical Association is a guinea a year; for which he is entitled to all its privileges as well as to the weekly Journal of the Association. You must all be familiar with the vast amount of good which the Medical Association in England has done and is still doing, in producing a high professional tone and in advancing scientific knowledge. It is needless, therefore, to dwell at length on its advantages. They are patent to all who have taken the least trouble to peruse the medical periodicals of the day. The connection between that Association and ours will be one chiefly of an honorary character; for we shall not reject a member, if he conform to all the local rules, merely because he cannot afford also the additional guinea for the British Medical Association. In every large society there must be men whose means are small, and yet who may be useful members. This class of gentlemen will be welcome to our Association; and the only practical disadvantage in their case will be, that they will not be entitled to the Journal of the Parent Association. Others, who are better off, will, of course, if they like, pay their additional guinea, and so partake of the benefits of both the Associations. The extra payment, however, will not be compulsory in any case; and the chief advantage of this sort of connection will be the privilege of getting our transactions published in the British Medical Journal. It would, no doubt, be preferable to have a journal of our own; but I fear the time is not yet come to enable us to sustain such a publication. That will be the fruit of much previous toil and professional combination.

In matters political, combination is strength; with us it means something more,—it means progress. The Association of the members of a learned profession like ours, for the purpose of mutual improvement and common protection against quackery and other evils, can be productive only of good. It is a sure sign that we are fully alive to the duties and responsibilities of our position, and that "sordid gain" is not the only thing which engrosses our thoughts. At the same time, it would be prudish to deny that the mercantile part of the business forms a considerable item in our calculations; nay, that few in our profession can afford to be so altogether unselfish as to do without pecuniary considerations. The practice of medicine is our calling; our trade, if you will have it so, by which we live. There are no two opinions about that. But then it is an intellectual calling—a calling which demands the active exercise of all our faculties, a calling which makes us minister to the relief of human suffering, and a calling which opens to us an unlimited field for the display of the finest feelings of our nature. The pursuit of this calling is attended with pleasure and pain, far different from what attend mere trading transactions. There are persons with whom the desire of gain is a ruling passion, and who rejoice or grieve as they are successful or disappointed in making money. With the medical man it is quite otherwise. It is not the pecuniary speculation; it is the cure of his patient which is the grand object of his ambition. In this he often succeeds, often fails. His satisfaction when he succeeds is altogether unalloyed; his distress when he fails, though it may be owing to the incurable character of the disease, is sufficiently painful; but when that failure proceeds from his own ignorance, he is conscious of a pang more acute than his probable worldly loss would alone account for. Thus, of all men, the medical practitioner is daily put in mind of the gravity of his office, and that he must prepare himself with all diligence for the delicate duties he is called upon to discharge. I feel confident now that you will all agree with me in thinking that it is incumbent upon the members of our profession to avail themselves of every means in their power to acquire the fullest knowledge upon each subject; and further that, as the experiences of no two persons are exactly alike, the submission of individual results to the test of free and public discussion is the safest way of insuring any material progress. The mutual interchange of ideas, the friendly comments, the discovery of errors, the addition of information from different quarters, the growth of a kindly interest in one another, and the maintenance of an *esprit de corps*, are only a few of the immediate advantages of Association. The stimulus to scientific research, and the public respect and confidence which

the earnest pursuit of truth will, at all times, inspire, are other collateral benefits which follow and which operate so largely for the human good. To sustain the faltering, to encourage the timid, to guide the enthusiastic and to draw lessons from the learned, are functions no less important in the diffusion of knowledge than the instruction of schools. The school-days with all must come to an end; nor is it desirable that they should be prolonged beyond the passing of the necessary examinations to qualify for the profession. The real battle of life commences only after the school forms have been left behind; and it is now that the practitioner has to go through a dangerous probation. He is called upon for the first time to apply the medical knowledge he has been hitherto acquiring to actual practice, and doubts and hesitation are now apt to paralyse his mind. What would he not give at this juncture to have the opportunity of comparing his own ideas with those of others, and of learning from his seniors the stores of wisdom slowly accumulated in the course of long years? For such a person the meetings of a Medical Association must possess a strong attraction. Then again, what a comfort would it not be to a timid man to find that what he has done others had done before him, and that he need not repine if he have failed like them! What trouble, what failures, what disappointments, would it not save persons of an ardent disposition to subject themselves to the criticism of older men who had already trodden the same path before them! And what instruction would not even grey-headed practitioners derive from their younger brethren in investigations which require leisure, youth and industry! It is hence neither to the inexperienced alone, nor to the timid alone, nor to the ardent alone, nor to the grey-headed alone, that a Medical Association offers its advantages; it promises to be equally beneficial to all. So, I trust, none of us will hold himself aloof from so desirable an undertaking on any of these pleas, seeing that we all alike need information in one way or another; and, besides, that it is our duty to assist whatever may serve to advance the honour and interests of our common profession. It has been said that the natives of Bengal make capital school-boys, but that this early promise is never fulfilled in the years of manhood. Now, I, for one, do not believe in the truth of that allegation. I think it is quite unfounded, and that it was made on insufficient data. However, it is needful, in order to disprove it, to make the vindication not only in words but also by acts. Our actions must show that we do not cease to labour with the close of our college career; that, though we make no ostentation, nevertheless we continue to work, to observe, to think, to compare, to calculate, to reason with even greater earnestness than we did in our younger days; that we do really profit by the experience of advancing years; and that we are not too proud to accept knowledge though it may come to us from our juniors. I may say this, at least, of myself; that the older I grow the more am I convinced of my own deficiencies and shortcomings, and the more do I feel the necessity of an association of my professional brethren where I could share in the fruit of their industry, and, while profiting myself, contribute also my own mite to the general stock of knowledge. And what I feel, I doubt not, others must feel too more or less. For we know very well that the field of observation in medicine is too large for any one individual to successfully occupy alone the whole range of it. Some by choice, some by necessity, some by accident, devote themselves only to certain parts of it; and it is fortunate that they do so; for, without specialists, medicine could hardly have made the vast progress it has accomplished. Take, for instance, in civil practice, the obstetrician, the ophthalmologist, the dermatologist, the psychologist, the dentist, the aurist, the operative surgeon, the stethoscopist; each of these has paid particular attention to one branch of medical practice, and, hence, in that speciality he is tacitly admitted by all men to be an authority, being vastly superior to the mere general practitioner. Or take again, in military practice, the naval or army surgeon; the circumstances of his position during war compel him to adopt rules and measures totally different from those which hold good during peace or in common civil practice. He sees injuries of a particular class on a large scale under the most trying conditions; and these conditions accordingly modify his rules of practice. On the subject of military surgery therefore, he becomes a specialist by virtue of necessity, for he is obliged to master carefully, and be guided by, a class of circumstances which do not occur in civil practice. Thirdly, we may take a practitioner who has no special liking for any particular subject, nor is he obliged to devote himself to one from necessity; and yet he may be so struck by a fortunate *run of cases* in his practice of a novel character that by shere accident he knows more about them than any other mortal. He becomes thus a specialist almost against his will by mere chance or accident. All these different kinds of men may hence most advantageously become the instructors of each other, as well as of the great body of the profession who claim no special knowledge of any sort.

Thus much for the mere practical part of our vocation. There are, however, other kinds of knowledge upon which that practice is most wisely based, and an intimate acquaintance with which is, at least now-a-days, held indispensable to the scientific physician and surgeon. These are anatomy, physiology, pathology, chemistry, materia medica, all very extensive subjects, in which numerous labourers are engaged all over the world to make fresh discoveries, to achieve new triumphs. I do not see why those of us who have the necessary strength and opportunity should not join these bands of pioneers of science, and favour our Association with the results of their investigations. Lastly, there are a host of other subjects of professional importance, such as natural history, statistical returns, medical topographies, epidemiology, sanitary reports, etc., which are here yet in their infancy, and the culture of which would be of the highest practical utility. Why should not the Bengal Medical Association receive valuable contributions on all these matters?

But, over and above all these things, what I wish most to see in this country is a high tone of *professional honour*. In the infancy of society, it is true, there are few occasions for the display of chivalrous sentiments. Then the struggle for existence supersedes every other consideration. The produce of the chase, the wild berries of the forest, and the fish cast on shore by accident, are the rude provisions upon which people in such communities have to subsist, and in proportion to the scantiness of the food is the acerbity of the struggle between individuals to obtain a morsel of it. In young colonies, too, as those of Victoria and California, and in a state of famine even in older countries, the sentiment of honour has to give way before the more imperious necessity of the moment. But in all well-regulated civilised societies the sense of honour is the vital spring of prosperity. Without good faith how could business of any kind be carried on at all? Good faith merely, however, is not professional honour. That means more; it means purity of principle and intention, and a desire to give every man his due. It is such a sense of honour which is the great charm of a good physician. A medical man who conducts himself honourably on all occasions and towards everybody, being upright in his personal behaviour, upright in all pecuniary relations, and upright in his bearing towards his brother practitioners, is the very *beau ideal* of our noble calling. Any one who can lay his hand on his heart and say that he has acquitted himself satisfactory in all these respects, possesses in perfection the sense of professional honour. Such a man was the late Sir Benjamin Collins Brodie, and his great name hence became synonymous with all

that was honourable and right-minded. To imitate him in this to the utmost of his ability ought to be then the highest ambition of every good man among us. But I am sorry to confess that the tone of professional feeling in this country is not yet in many cases of that high order. It is not at all unusual here to meet with breaches of etiquette. In my own experience I have noticed many instances of them. To speak ill of others seems to be the stock in trade with some persons, whereby they hope to serve their own selfish ends. This seems to be the case with certain ex-students of our medical college; nor is the evil unknown even among men of a higher grade who surely should know better. It will, therefore, be a most impotant duty of the Bengal Medical Association to help us in raising the tone of professional honour to the same noble platform that it occupies in European countries, and this we hope to do through the moral influence that it must necessarily exert.

I myself see no difficulty whatever in doing all this and more, if we are only true to ourselves and determined not to forsake our post. I say, then, gentlemen, let us gird up our loins and resolutely push on. Let us redeem the honour of this country and add lustre to our names. Let us at once form a Medical Association and invite the cooperation of all legitimate practitioners in the good work we have proposed to ourselves. Let us urge on, and God will help those who know how to help themselves.

The plan of operation I would propose is to have weekly or monthly meetings for the ordinary business of the society, and annual meetings for the purpose of receiving reports and addresses upon the different branches of knowledge, *in sections*, one after another, much in the same manner as in the British Medical Association. This would combine all the advantages of medical societies with those of the more catholic Association. The ordinary meetings will be mostly attended by gentlemen living in and about Calcutta, and their business will consist in discussing all interesting cases of disease and pathological specimens occurring in hospital and private practice almost every day, and in receiving the results of experiments and individual observations. The annual meetings will be a sort of festive occasion once a year, when the Mofussil as well as the town members will come together to hear the retiring President's address on the operations of the Association during the expiring year, and also addresses from eminent members upon the progress of knowledge in the various sections, to receive reports and contributions which any gentlemen may choose to present on this special occasion, and to elect the office-bearers for the following year. The debates will be continued from day to day until the whole business is concluded, which, occupying only a limited number of days during a short time, will be a great convenience to members coming from a distance. It will give a pleasant holiday to all hard-worked practitioners who, by the increased facilities now offered by the lines of railway, will thereby have the opportunity of knowing more of each other than they could have done under the old rude ways of travelling. Then, any town members and others, who might wish to be hospitable, might invite the Association to meet in their houses on given days, promoting by such friendly receptions the happiness and enjoyment of all. Indeed, we may hereafter follow in this respect the practice of the British Medical Association, and meet in different towns in different years. For that, however, the circumstances of this country are not yet ripe, nor will they be so till the railway system is more complete and the habits of the people are considerably changed. In the meantime, therefore, it will be sufficient for us to inaugurate the plan of ordinary and annual meetings, leaving all further improvement to the working of after years.

I do not wish it to be understood, however, that the Association I have proposed is to receive nothing but elaborate communications. Elaborate communications are very good things in their way and much to be desired; but even the oldest societies in Europe do not always get them; much less are they to be expected by a new and inexperienced one. With all such institutions there is a day of small things, and the day of small things is not to be despised because it does not immediately give us brilliant results. That which begins in a small way may, for aught we know, begin in the safest way. All things must have a beginning, and of a nursling it is not right to expect the wisdom of maturer age. We ought, therefore, to be satisfied if our infant Association receive at first only verbal communications or mere statements of facts and cases occurring in the practice of its members. We ought to be satisfied if we have at first meetings even once a month or once in two months, by day-light if necessary, to save expense or to avoid hurting the feelings of the poorer members who may not be able to subscribe, and yet whose natural pride would be wounded if other people paid for them. But this would be an extreme case which I must say I do not anticipate. I would also propose that we should meet in some easily accessible place in the native part of the town if possible, for I know that few of our native brethren would be willing or able to pay for conveyances for such an object, and that we shall certainly lose most of them if our place of meeting be any distance from the heart of their own quarter. Our principal object for some time must be to secure members, and the more of them we have the more certain shall we be of ultimate success. We want earnest and devoted souls, we don't want comforts; we want sound intellectual food, we don't want gilded halls; we want humble and patient workers, we don't want the pomp and parade of the affluent; we want labour by the light of heaven, we don't want costly lamps for which we cannot pay. The good of the profession is the single object of our desires; and, so, let us have an Association, let us have members, let us have meetings, let us have facts to discuss and, if our means will not permit anything grander, let us meet like honest men in the broad day-light in the most accessible spot to our poorer brother practitioners, without waiting for lighted chambers in the most fashionable quarter of the town. If we proceed in this humble spirit, with an earnest determination manfully to do our duty, I doubt not our efforts will be crowned with success. At all events it will do us no harm even if we did fail, for that will be owing to no fault of ours. But when did you ever hear of men failing in a laudable work of this kind if they entered upon it in a proper frame of mind? Where there is a will there is a way; and where there are resolute spirits engaged in a difficult enterprise no obstacle will be too great for them to overcome. Invoking, therefore, the blessing of God Almighty upon our proposed Association, I beg now to move the first resolution:

"That this meeting form itself into the Bengal Medical Association, of which every qualified practitioner of medicine is eligible to be a member."

Dr. Fayrer seconded this resolution. He addressed the meeting in a few but earnest words, dwelling most strongly and appropriately on the necessity of such an Association to promote the honour and the interests of the medical profession. The motion being put to the vote, was unanimously carried.

Mr. Shircore moved: "That the following gentlemen be nominated members of a provisional committee to draw up the rules for the conduct of business, and also to request the British Medical Association to allow this Association to be one of its branches:—Dr. Joseph Fayrer, Dr. S. G. Chuckerbutty, Dr. Mohindro Lal Sircar, Dr. Juggobundo Bose, Baboo Kanylal Dey, Mr. Tameez Khan."

This was seconded by Babco Kanylal Dey, and carried unanimously.

Dr. Mohindrolal Sircar proposed—

"That Dr. S. G. Chuckerbutty, as the projector of the Association, be appointed Chairman of the Provisional Committee, with authority to call its meetings and arrange other matters of business."

Dr. Sircar spoke at considerable length on the advantage of the Association. In the course of his remarks, he said:—The interest of humanity demands that medical men should always keep pace with the progress of knowledge that either directly or indirectly bears upon the healing art; that they should act in accordance with the strict principles of professional ethics; and that their rights and privileges should be religiously guarded against the inroads of charlatans and quacks. For the attainment of these various objects, what seems to be the most important agency? We all know the most common maxim, and Dr. Chuckerbutty has already referred to it. Union is strength even in the inanimate kingdom—more so in the irrational animate kingdom—most so in the rational kingdom of man. In the inanimate kingdom, the strength results from the simple addition of the separate strength of each element. In the irrational animate kingdom, the strength is multiplied considerably by the presence of the volitional factor in each individual. In the rational kingdom of man, the strength of union is not only considerably augmented by the volitional factor as in brutes, but is rendered progressively increasing by the presence of another most important factor—that of improvable reason, assisted by the agency of language. There is no doubt, therefore, when we organise ourselves into a body, there will be at each of our occasional or regular meetings considerable addition to the previous stock of our individual knowledge; and we shall then feel the necessity, I had almost said enjoy the luxury, of acting in harmony with, instead of against, each other. Dr. Burrows, in his address at the last annual meeting of the British Medical Association, has, in allusion to this subject, very beautifully said: "Each occasion of contact and honourable collision with his fellow-labourers tends to improve the outer and the inner man. As the pebbles on the sea-shore, by their contact and collision with each other at each succeeding tide, gradually lose their primitive roughness, and assume a graceful and polished exterior, and, when moistened by the spray of the ocean, appear in a most attractive guise; so is man by coming in contact with his fellow-men, by social and intellectual intercourse, raised to a higher order of being." It is true that the struggle for existence amongst professional men, especially medical men, unhonoured, unrewarded, nay, abused as they generally are by the very public for whose welfare they devote all their energies,—I say that the struggle for existence may be sometimes so hard that weaker brethren may be almost tempted to carry on that struggle after the manner of the inferior animals that perish; in other words, they may endeavour to live at the expense of the other practitioners, by running them down by gestures or words or deeds. To these, an Association like the one we have in contemplation (and, after the resolutions that have been unanimously passed, may I not hopefully add, we have already formed?) will prove of inestimable service. They will learn the value of patience. They will learn that they can maintain their own dignity only by maintaining the dignity of the profession to which they have the honour to belong. They will learn that great is truth, greater honesty; and both will ultimately triumph and prevail.

If in thus keeping ourselves foremost and uppermost in the swelling tide of ever advancing knowledge, if in strictly adhering to honourable principles in our mutual dealings, we could always command the respect of the public whose interests we consider our highest privilege to seek, and could secure our rights and privileges, then perhaps we could solely devote our time and attention to strictly scientific pursuits, then we could leave politics and other matters to other hands. But all diseases are not curable; many diseases, which our interference can do nothing for, are sometimes better left alone and to nature; nay, it is an undeniable fact, however mortifying it may be to our pride, that quacks and charlatans, stepping in when we desert our patients, often effect cures which perhaps we had been retarding. To these various facts are we to attribute the distrust and suspicion with which our real services are looked upon. To them are we to attribute the most unmerited abuse showered upon individual members and the profession at large, by persons displaying the grossest ignorance of our science. To them are we to attribute the slowness with which our opinions are received. To them are we to attribute the readiness with which the body politic frustrates our most cherished plans and schemes for the benefit of public health. To them are we to attribute the rise and triumph, however temporary, of various systems of quackery, as hydropathy, homœopathy, and what not. Against them we ought to guard ourselves; and we can only do so by forming ourselves into an organised body. Thus constituted, we shall be in a better position to deliberate calmly and dispassionately on the most important and practical part of our profession. When each of us brings his stock of knowledge to the meeting, we shall see that we shall have more reason to humble ourselves for our ignorance of the operations of nature, than to plume ourselves upon our achieved triumphs. We shall then learn to depend more upon the conservative powers of the organism than upon our own interference. We shall feel practically the value of Bacon's immortal aphorism, "Man is the interpreter and minister of Nature," not her lord. We shall, as a consequence, be more guarded in holding out promises when they are certainly to disappoint, and thus to gain for ourselves confidence and respect. In this way gradually, but certainly, we shall succeed in maintaining our own status; and when we thus prove ourselves to be the important and needed section of the community, it will be very hard for others to trifle our opinions; nay, our united opinion will acquire a momentum which even the ruling bodies, the powers that be, will find it impossible to resist, and which perhaps they will find sometimes necessary to welcome.

Baboo Nilmadub Mookerjee seconded the resolution, which was unanimously carried.

Dr. Juggobundo Bose proposed the following resolution, which was seconded by Baboo Brojonath Carforma, and unanimously carried:

"That, as soon as their report is ready, the Provisional Committee be empowered to call a general meeting of the Association, to which that report is to be submitted for consideration; and, on its being received and adopted, the Association shall at once proceed to elect its office-bearers for the current year, who are to be charged with its future business."

On the motion of Mr. Tameez Khan, seconded by Baboo Brojonath Bundoo, a vote of thanks was unanimously passed to Dr. Norman Chevers for his able conduct in the chair.

In closing the proceedings of the meeting, Dr. Chevers observed that, when he entered the room that evening, his insight into the proposed objects and constitution of the Association was by no means clear. Having now heard the question fully stated, he considered the plan to be excellent, and likely to work thoroughly. He felt the present occasion to be one of great and solemn importance. A small body of European and native medical men had come together for the first time, to form, for their mutual improvement, a society which he believed would probably live and flourish as long as the medical profession in Calcutta should endure. He reviewed the progress of the various medical societies which had been organised in Bombay and Calcutta, insisting upon the novelty and great importance

of the present movement, the leading object of which was to unite the European and native members of the profession into one body for the promotion of medical science, and for the maintenance of professional honour and good feeling. He considered that the professors of the Medical College ought to take a very active part and interest in working out the great objects of this body, whom he should now address as *the Association*. Every skilful labourer, whose heart was truly in his task, took honest pride in the work of his own hands. The artist when he sent out his great picture, the sculptor when he sells his statue, was not satisfied to know that silver rang on his palm, and that his pocket was heavy with yellow dross. The first desire of these men was, that their works might have a world-wide fame. Medical professors had this feeling perhaps in a higher development. Consequently he and his brother professors were not satisfied, after the University had conferred the degrees, to lose sight of those students with whom they had so long laboured; they took a vivid and cordial personal interest in their pupils' after success; and it would give them true pleasure to meet their young professional friends often in such a society, and to be assured that they were practically working out in the city those lessons which they had been taught in the school. A society for the promotion of high professional honour and good feeling was a good thing every where. Such a society was a great desideratum in Calcutta. He considered, however, that its objects would be readily carried out. There was no want of the essential elements; there was abundance of honourable principle; there was no lack of generous feeling: by mutual association, these would soon become moulded into working systems. He had grown grey in the profession; and his whole experience had combined to establish the principle that, to rise to the highest position as a medical man, it was unnecessary to employ unfair "pushing" and to make stepping-stones of one's brethren's faces. He was sorry, but not discouraged, to find that the number there assembled was small. Still they would remember how few those were who, pressing shoulder to shoulder, held Thermopylæ. If thoroughly united and steady in their purpose, those now present were fully capable of making the Association a great success.

Correspondence.

THE DERBY HOSPITAL.

LETTER FROM WILLIAM OGLE, M.D.

SIR,—I thank you for the passing compliment in noticing the part which I have taken in the Derby contest. It is, however, a disappointment that you can offer no better solution to the difficulty, than that our hospital hook ought to have been *gilded*. No doubt a salary would bring candidates in troops, as we have for poor-law medical service; but surely it is of first importance to uphold the dignity of the office. May the day be far distant, when mere pay shall be thought adequate to secure honourable service in any department of the profession.* Better pay and better position to the house-surgeon—*two* house-surgeons instead of one, if you please; but *the* physicians and surgeons must either be honorary, or they will cease to exist except in name.

The hint that the Derby mode of cutting the Gordian knot is an indication of the advent of the "one faculty" system, is much more worthy of your pen. If the governors had said, "We will abolish the distinction between physician and surgeon"—a distinction which practically does not exist outside the hospital—if they had said, "We will elect the best legally-qualified medical man whom we can find; we only require him to take the same class of cases in the hospital which he accepts in private practice"—I would have supported them; indeed, I proposed this alternative. But, no! they say, "We will keep up the old-fashioned distinction; we will have pure surgeons and pure physicians (*if we can get them*); if not, we will take a general practitioner"! an insult to the physician, to the general practitioner—a double insult, being an insult under colour of a compliment.

If I mistake not, I have been fighting the battle of the general practitioner quite as much, and more, than of the physician. I say more than of the physician; for I have felt all along that the physician (worthy of the name) needed no special pleader. I was, as I have said already, prepared to give up the distinction between him and the general practitioner, if the time were come; and, therefore, even when speaking in support of the distinction, the full force of my argument was directed to the importance of so ordering our hospital ethics, as that we might secure the services of the first medical men in the neighbourhood—gentlemen who are in a position to restrict themselves to first-class and to consultation practice. This is the kernel of the nut; first-class practice is in abeyance. Hospital physicians and hospital surgeons (pure) are rare because consultations are rare, and consultations are rare because

I am, etc., WILLIAM OGLE,
Senior, and now sole, Physician to the Derbyshire Infirmary.

Derby, July 21, 1863.

P.S. Derby has upwards of 50,000 inhabitants. Even inclusive of the house-surgeon at the Infirmary, there is not more than one medical man to every 2000 people. There is a neighbourhood second to none in wealth and general intelligence; and we have been advertising for a physician for three months, and cannot get one, because says one, "There is no room for him"; says another, "You must give a salary"; says a third, "There is something rotten in the state of Denmark." Let your readers determine who is right.

* When the patients pay, then and not till then, can I see any professional prospect of having paid doctors to our hospitals.

LARGE CALCULUS FROM THE FEMALE BLADDER.

LETTER FROM F. H. HARTSHORNE, L.R.C.P.ED.

SIR,—At the late meeting of the Yorkshire Branch of our Association, Mr. H. Jackson exhibited a calculus weighing five drachms and two scruples, which had been removed from the urethra of a female by vaginal section. The report of the meeting in our JOURNAL states that "no record of so large a stone removed from the urethra of a female, had been met with by Mr. Ward or Mr. H. Jackson; and Dr. Aveling stated that he had not been able to meet with one."

I believe that the largest stone upon record which has been removed through the female urethra is in my possession. It weighs ten drachms; its length being two inches, and its circumference three inches and three-quarters. This, with two other calculi, were removed through the urethra without any incision. The patient is still living, in good health, and has perfect command of her bladder. An account of this case will be found, with a woodcut, in the "Transactions" of the Shropshire Branch of the British Medical Association, reported in the JOURNAL, Sept. 4th, 1858, p. 747.

I am, etc., FREDERIC H. HARTSHORNE.

Broseley, July 20th, 1863.

MODE OF ELECTION OF COUNCILLORS OF THE COLLEGE OF SURGEONS.

Sir,—The College of Surgeons has lately undergone considerable excitement in the election of Councillors; and, if one may "compare small things with great", the contest has been as palpitating and triumphant as the late scene in the House of Commons on the question of the retention of the Exhibition Building, which will, no doubt, impart to foreigners exalted notions of a calm deliberative assembly.

The combat for place and power—the *honor nomenque*—has been fought with equal zeal among the six candidates for the office of Councillor. Two gentlemen high in position have been displaced, and three new Councillors elected. This has been a "severe blow and disappointment" to the admirers of the routine system; but victory has been gained exclusively by London surgeons, and chiefly by London voters. Where is the country champion of the country Fellows? Why did not *one* appear in the arena of conflict? Mr. Turner of Manchester beat a retreat to the more agreeable pastime of the banquet. By ignoring his candidature at the last hour, he precluded the possibility of bringing into the field some other gentleman whose reputation in the provinces would not have sullied the dignified bench of Councillors in the board-room of the College. I have no desire to pit a country against a town Councillor; but, as the College is no longer a London College, but that of all England, a small infusion of country magnates would be useful whenever the Council discusses questions affecting country practitioners; besides, it would be a legitimate expression of a compliment to rural men.

In these days of rapid progression by steam-power and pen-power, the literature of the profession is widely disseminated throughout the country; and the hospitals of the large provincial towns would supply the amplest materials of surgical erudition and experience. Bucolic surgeons need no longer be Bœotians. Can a thorough-bred metropolitan surgeon comprehend the varied condition and requirements of country practitioners as correctly as gentlemen living habitually in the country? Certainly not! The education, habits, and general tone of medical men in rural districts differ much from their more polished *confrères* in town. The Æsculapians of the black country, the potteries of Staffordshire, of the wilds of western Yorkshire, and the miners of Cornwall and Merthyr Tydvil, are very different in intellectual and social aspects from those of the metropolis; and I conceive a Councillor acquainted with them would better suggest advice in relation to them than a mere London man.

The present mode of election at the College, by personal attendance, inflicts a hardship on gentlemen living beyond fifty miles from Lincoln's Inn. Fellows who come from a distance—from Liverpool, Manchester, Newcastle, Bristol, from Northumberland, Wales, or Cornwall—often cannot reach London in time to vote, and are practically disfranchised. Besides the railway fare and hotel expenses, there are the loss of time, the neglect of patients by transferring them to some *locum tenens* in the meantime, and danger of losing them by hurting their feelings. Dr. Watson, in a letter to Dr. Vose in reference to the question of fees, adverts to the difficulties of leading men going to see patients in the country at a distance, and avers that it does not pay. If their time is so valuable to first-class men in the metropolis, that they are ill requited if they get fifty guineas for a hundred miles; by parity of reason, leading surgeons in the great towns must be very ill requited if they make a sacrifice of money, time, etc., by going all the way to London simply to record a vote. The remedy is in the hands of the College authorities and Fellows. Let the College and Fellows petition the legislature for a short Act of Parliament to enable them to vote, as the Chancellor of the Exchequer passed a Bill to enable the clergy to vote by proxy at Oxford and Cambridge. Mr. Gladstone's humane and considerate Bill relieved many a rector, vicar, or curate from the hotbed of political and polemical warfare, as well as the fatigue and danger of travelling to Oxford and Cambridge on occasions of elections. It enabled them to record their votes on *stamped voting-papers witnessed by a magistrate or clergyman.* Besides this easy mode of unexcitable and passionless voting, there is abundant proof of the efficacy and security of voting, free from the chances of fraud, in the plan adopted in the elections of the Medical Benevolent College and many other institutions. There is everything to recommend the use of *proxy-papers;* they save time, money, and personal convassing, and avoid many disagreeable collisions. The choice, moreover, would more likely be founded on real recognition of high claims, instead of being influenced by private friendships to serve mutual purposes.

I am, etc., R. W.,
A Fellow by Examination of the Royal College of Surgeons of England; one practically disfranchised this year.

July 1863.

THE TREATMENT OF DISEASE.

Letter from C. R. Bree, M.D., F.L.S.

Sir,—The paper of Dr. Lionel Beale in your last number is a most important contribution to those who are engaged in the study of the treatment of disease. And who is there in the vast phalanx constituting the medical profession who ought not to be a student of disease? Years may pass over the practitioner's head; he may store up what he calls experience of the past; and he may, with the most praiseworthy object and the most profound philanthropy, bequeath the results of such experience to the rising generation; but, unless that man founds his practice upon the study of disease, he may as well—nay, far better—throw his manuscript and his life-long records into the first river he comes to in his morning walk. So-called experience has, indeed, much to answer for. It is the formation of principles affecting the lives of thousands of human beings upon the baseless shadow which is cast over medical science by strong prejudice, and mistaken views of results untested in the crucible of philosophy. Experience, as the word is usually used, is, I say, the bane of medical science; for it puffs up the ignorant with a false knowledge, and gives a colour—a fatal colour—of truth to that which is intrinsically untrue. But there are appearances, now growing into strong realities, which will inevitably destroy the influence in medical science of a miscalled and dangerous experience.

Let it then be known throughout the length and breadth of the land, that the professor of that science which is alone the basis of sound medical treatment—physiology—in the first medical school of Scotland—Dr. Hughes Bennett—and the professor of the same chair in at least one of the first English schools—Dr. Lionel Beale—have both enunciated in clear and unmistakable language the great dogma destined to reform the practice of medicine, that "bleeding is not the treatment for inflammation". It is impossible to overrate the importance of this grand truth, which has been for many years gradually making way in the minds and practice of the observant and the thoughtful practitioner. Amid the din of contending opinions—amid the claims of experience on the one hand, and the dogmas of theoretical speculation on the other—physiology has been silently and surely making her way. She has been pointing out in language which is unanswerable, for it is the language

of truth, that all the assumed phenomena upon which are based the practice of bleeding in inflammation are pure fallacies; that the *rubor*, *calor*, *tumor*, and *dolor*, do not constitute its definition; that the theory of a determination of blood to an inflamed part is unsound; that the notion of reducing the amount of blood in an inflamed part or organ by bleeding is purely fallacious. At the same time, observation has come to the assistance of physiology. It has pointed out that those who are bled in certain inflammatory disease almost surely die, while those who are nourished or stimulated as surely recover; that inflammation does not attack the vital organs of the strong and the robust, but those of the pale and weak. Hence that beautiful series of facts by which Bennett has established the doctrine of an exudation as the primary fact of inflammation, and not its result; and by which he has been led, by great research and ability, to an analeptic, as opposed to an antiphlogistic system of treatment.

I need hardly say that this is a subject of vast and surpassing importance. The lives of thousands of human beings daily hang upon the just appreciation of this matter. The memories of two of the greatest men of modern days—the statesman Cavour, and the warrior Stonewall Jackson—demand that the cause of their deaths be examined by the light of modern science. Truth speaks in language which all can understand; and to this we cannot—we dare not—turn a deaf ear.

Let me then entreat my medical brethren to bring a calm and philosophic spirit to the examination of this question. Let us avoid a too learned diction, or a too refined mode of reasoning. Let us not rely upon books, or authorities, or dogmas, or beautiful classical writing, or scholastic theories; but let us rather examine the question with the light of common sense and that true philosophy which makes facts the basis of its theory. Let us give up our prejudices, and forget all about what we call our experience. Let us meet the question as men upon whom rests a deep and a lasting responsibility. It is, I repeat, one of immeasurable importance; and the credit of a noble profession, the honour of a great science, the dictates of humanity, and the loud demands of justice, equally call upon us to settle it for ever. I am, etc., C. R. Bree, M.D., F.L.S.,

Physician to the Essex and Colchester Hospital.

Medical News.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 28th:—

Atkinson, Warner, B.A.Lond., Harrington Square
Barrow, Thomas Samuel, M.D.St.And., Chelsea
Booth, William Reuben, Great Queen Street, Westminster
Cornish, George Bishop, Taunton
Folliott, James, Canonbury
Frost, Walter, Portland
Haynes, Stanley Lewis, Pall Mall
Hills, Rowland, Newcastle-on-Tyne
Hughes, David, Cilian Ayron, Cardiganshire
Hughes, William, Eglwyswrw, Pembrokeshire
Jackson, Henry Willan, Cumberland Terrace, Regent's Park
James, Joshua, Bristol
Kennedy, John, Edinburgh
Knott, William Parsons, Blisworth, Northamptonshire
Lisle, Richard Philip, Cardiff
Meade, Warren, Midleton, co. Cork
Meyrick, Edward Webber Warren, Cork
Renshaw, Charles Jeremiah, M.D.St.And., Ashton Mercy
Rodgers, John, Omagh, co. Tyrone
Scott, Thomas, Omagh, co. Tyrone
Simpson, Walter, Islington
Thyne, Thomas, Edinburgh
Watson, James Jonathan, Kilburn
Whiteley, John, Wakefield
Wright, Morden, Islington

DEATHS.

Churchill, James M., M.D., at Watford, aged 66, on July 27.
Neligan, John Moore, M.D., at Dublin, on July 24.
Ogilvy, James, M.D., at Coventry, aged 54, on July 25.
Satchell. On July 19th, at Tunbridge Wells, aged 1 month, Margaret Ada, daughter of *William C. Satchell, Esq.

The German Hospital is to be rebuilt for the accommodation of seventy in-patients.

Mr. Hancock. The students of Charing Cross Hospital have presented Mr. Hancock with an address of warm congratulation on the occasion of his election to the Council of the College of Surgeons.

Female Blondinism. The Queen has, we are glad to see, recorded her disapprobation of the brutalising exhibitions of Blondinism, which have already caused so many deaths.

Condition of Milliners and Dressmakers. Mr. Kinnaird asked the Secretary of State for the Home Department whether he would give directions that the Children's Employment Commissioners should institute as soon as possible the inquiry already referred to them into the condition of milliners and dressmakers. Sir G. Grey said he did not know exactly on what branch of the inquiry the Commissioners were now engaged, but he would desire them to take up the condition of the milliners and dressmakers as soon as they could without interfering with any important question now before them.

Death of Dr. J. Moore Neligan. Since our last, the medical profession in Ireland has sustained a blow not easily remediable, in the unexpected death of Dr. Neligan, at his residence, Clonmel House, near Blackrock. Although Dr. Neligan had been suffering for some time from affection of the kidney, and had found it necessary in consequence to exchange a residence in town for the country, still no apprehension of immediate danger was entertained till a few days before his death; and he had been enabled within a week to fulfil his professional duties. On Thursday last, he was so much worse that little hopes were entertained of his recovery; and on Friday evening (July 24), he expired from, as we understand, uræmic poisoning, the result of the chronic malady of which he was the subject. Dr. Neligan's name will be best remembered by our readers in connection with the *Dublin Quarterly Journal*, of which he was for many years the editor, and the character of which was never higher than when conducted by him. To the public, he was known as the author of works on *Medicines* and on *Skin Diseases*, and as the editor of *Graves' Clinical Medicine*—labours sufficient of themselves to perpetuate his name as an assiduous and energetic physician. His connection with the King and Queen's College of Physicians, for the presidency of which he was a candidate last year, was long "in years and honours"; and his loss will be deeply felt by the many whose friendship his professional and private worth had secured to him. (*Dublin Medical Press.*)

The Royal College of Physicians. The President and Fellows of the Royal College of Physicians held a *conversazione* last Saturday evening. Specimens illustrative of the arts and sciences were shown in the library. At one end of the room, a splendid collection of candelabra, vases, inkstands, and other objects of art in aluminium and aluminium bronze were exhibited by Messrs. Mappin Brothers, accompanied by several ingots and bars of the metal and its alloys in the unmanufactured condition. Some large lumps of the new metal, thallium, contributed by its discoverer, Mr. W. Crookes, attracted a large amount of attention; and Mr. Sonstadt showed several pieces of magnesium prepared by the modification of Deville's process, lately patented by him. Mr. Appold exhibited his apparatus for freezing water; and Mr. C. Gore's new gas furnace, with which several

pounds of cast-iron or copper may be melted on a drawing-room table in a few minutes, without a blast, was examined with great interest by the scientific men present. Dr. Lionel Beale's microscopic preparations of the brain met with considerable professional patronage; and the exhibition of the circulation of the cell contents of different water plants through Messrs. Powell and Lealand's 1-25 inch microscopic object glasses was crowded with observers throughout the evening. Several harpoons and other weapons used in elephant hunting in Central Africa were sent by Mr. Frank Buckland; and Mr. John Leighton exhibited a beautifully executed design for a shield, illustrating the months and seasons of the year, which was greatly admired for its poetic treatment and classical simplicity. Although the season is so far advanced, the *soirée* was attended by nearly the whole of the most eminent of the medical profession in London. Refreshments were served in the lower hall, and the company did not separate until nearly midnight.

Vaccination (Scotland) Bill. At an extraordinary meeting of the Royal College of Physicians at Edinburgh, held on Thursday, July 16th, 1863, the following resolutions were moved by Professor Simpson, seconded by Dr. Myrtle, and unanimously agreed to: 1. That the College have had before them, and have considered certain changes in the Vaccination (Scotland) Bill, which the Lord Advocate proposes to have introduced in committee in the House of Lords; and that they are of opinion that, while objections to the Bill still remain, these proposed alterations would remedy many of the defects under which the measure labours. 2. That the College observe with satisfaction that the title of public vaccinator is to be abolished, and that the duties of that official under the Bill, are to be restricted to the vaccination of paupers and recusants,—and in the latter case only when directed by written order of the Parochial Board; that the establishment of vaccination stations is not to be compulsory; that the *onus* of sending the certificate of vaccination is to be laid on parents and guardians, and not on the medical practitioner; that instead of proceeding against defaulters at once by fine or imprisonment, they are to be offered vaccination in the first instance; that the objectionable distinction between the certificates of the public vaccinators and registered practitioners, contained in clause 28 of the original Bill is to be abolished; and that the interpretation clause is to be so altered, as not to interfere with the Medical Act. 3. That the College regret, that the very inadequate remuneration given by the Bill to the vaccinators for performing the operation, and ascertaining and certifying as to its effects, is not to be increased. At the same time, they mark with satisfaction, that their duty is now all but limited to the vaccination of paupers; and that as the appointment will, in all probability, be in most cases conferred on the parochial surgeons, the fee, small as it is, will be an addition to their salary, and is equal to the fee allowed in England, and higher than that in Ireland for the same duty, and that it is, after all, only a minimum, which any Parochial Board, appreciating the value of duly paid labour, can increase. 4. That the College regret that the indirect compulsory clauses have not been restored to the Bill; they feel satisfied that, ere long, new legislation will be required, when they trust the legislature will form a more just estimate of the value of indirect compulsion as a means of securing the more general diffusion of the blessings of vaccination. 5. That the College regret that the Bill contains no provisions by which the migratory unvaccinated population immediately above pauperism, including those who labour in the making of railways, canals, and other public works, can be vaccinated; and desire to express their conviction that, while this is neglected, anything like general vaccination, as a check to small-pox, is unattainable. 6. That the College are of opinion that a movement should immediately be made to obtain through the Privy Council, or otherwise, the means of securing an adequate supply of vaccine lymph for practitioners in the three divisions of the United Kingdom; failing which, all legislation must of necessity prove inoperative. 7. That the College record their thanks to Drs. Wood and Burt, who acted as their representatives both in London and Edinburgh, and by whom the negotiations, which have been so successfully concluded, were carried on. 8. That the College, having been given to understand by their representatives, Drs. Wood and Burt, that the condition on which the Lord Advocate has undertaken to effect the proposed alterations in the Bill, is, that the threatened opposition to the Bill in the House of Lords be withdrawn, and, that this be made known—order these resolutions to be published, and copies sent to each Representative Scottish Peer, and to such other persons as the Council may direct.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—July 25, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 994 / Girls.. 898	1892	1452
Average of corresponding weeks 1853-62		1818	1253

Barometer:
Highest (Fri.) 29.944; lowest (Wed.) 29.441; mean, 29.699.

Thermometer:
Highest in sun—extremes (Mon.) 112 degs.; (Tu.) 70.3 degs.
In shade—highest (Sun.) 74 degs.; lowest (Tu.) 44.1 degs.
Mean—57.3 degrees; difference from mean of 43 yrs.—4.3 degs.
Range—during week, 29.9 degrees; mean daily, 21.7 degrees.

Mean humidity of air (*saturation*=100), 78.

Mean direction of wind, S.W.—Rain in inches, 0.88.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Chloroform in Hospitals: Accidents.—Sir: Your Journal has advocated the publishing of *all* cases of chloroform accident, as they are most useful for further deductive or inductive reasoning on the subject. Two cases are in the newspapers of last month, not noticed in medical journals; and one case that is mentioned in the latter (that of the medical man at Carlisle) proves not to be a chloroform accident at all. The two real cases are, one at the Westminster Hospital—a male adult, for amputation of the finger; instant death by syncope; the other at King's College Hospital—an adult male, for another trivial operation, fistula *in ano*; death probably apnœa. Coroners' inquests were held in both cases. There were two at the London Hospital not long ago, and one at Guy's; but not one of all these five hospital cases has been systematically reported. This is a great pity. In Scotland and Ireland it is said to be the same; the cases are not published; and even the Committee of the Royal Medical and Chirurgical Society think the number of cases unimportant. But not so, as to facts or cases, thinks Dr. Hughes Bennett in his masterly collection of facts as to pneumonia, or the other men now receiving the schedules of the Association. The chloroform problem, however, is now nearly worked out. I am, etc.,

July 1863. Charles Kidd, M.D.

THERAPEUTICAL INQUIRY, No. IV: SCARLATINA.—Mr. Hodson has received Schedules from:—Edward Parker, Esq., Kirkdale Road, Liverpool; Charles Coates, M.D., Circus, Bath; J. Hughes Bennett, M.D., Edinburgh; Wm. Soper, Esq., Stockwell Road, Surrey; R. W. Watkins, Esq., Towcester; John K. Spender, Esq., Bath; W. M. Kelly, M.D., Taunton; Vincent Jackson, Esq., Wolverhampton.

THERAPEUTICAL INQUIRY, No. V: JAUNDICE.—Dr. Harley has received Schedules from the following gentlemen:—Dr. Handfield Jones, London; Dr. Hughes Bennett, Edinburgh; Dr. Charles Coates, Bath; Dr. Charles R. Bree, Colchester; Dr. Patrick Fraser, London; Charles J. Evans, Esq., Hull; Paul Belcher, Esq. Burton-on-Trent; Dr. Thomas Skinner, Liverpool.

LONGEVITY.—SIR: Perhaps you may agree with me in thinking that the subjoined statement is worthy of being recorded as a contribution to the curiosities of life-assurance experience. This day the Board of the Volunteer Service and General Assurance Association accepted a proposal from Glasgow on the life of a gentleman, who states that his grandfather died aged 125, and his grandmother aged 100. He also states that his father and mother are both 70 years of age and in good health. I am, etc.,

JOHN ROSE CORMACK, F.R.S.E.,
Manager and Secretary.

Volunteer and General Assurance Association, 8, St. Martin's Place, W.C., July 22nd, 1863.

COMMUNICATIONS have been received from:—Mr. THOMAS O'CONNOR; Dr. HARLEY; Dr. FRASER; Dr. RANSOM; Mr. HENRY LEE; Dr. MACRORIE; Dr. RANKING; Dr. KIDD; Mr. JONATHAN HUTCHINSON; Dr. W. B. HERAPATH; Dr. BREE; Mr. AUGUSTIN PRICHARD; Mr. GRAMSHAW; Dr. W. FOSTER; Mr. T. MARTIN; Mr. T. M. STONE; Dr. W. P. STIFF; Dr. GOOLDEN; Dr. STYRAP; and Dr. G. A. HUMBLE.

BOOKS RECEIVED.

1. The Diseases, Injuries, and Malformations of the Rectum and Anus. By T. J. Ashton. Fourth Edition. London: 1863.
2. A Manual of Ophthalmoscopic Surgery. By Jabez Hogg. Third Edition. London: 1863.
3. Third Annual Report of the Belfast District Hospital for the Insane Poor. Belfast: 1863.
4. The Discovery of the Physiological Method of Inducing Respiration in Cases of Apparent Death. By Henry R. Silvester, B.A., M.D. Third Edition. London: 1863.
5. Report of Clinical Cases treated in the Surgical Wards of the Royal Infirmary, under the care of Mr. Spence. By F. Steell, M.D. Edinburgh: 1863.
6. On the Discovery of Thallium. By W. Crookes, F.R.S. London: 1863.
7. Anatomical and Physiological Observations. By John Struthers, M.D. Edinburgh: 1863.
8. On Artificial Dilatation of the Os Uteri, etc. By H. Storer, M.D. Boston: 1863.

ADVERTISEMENTS.

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—NESS. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and *inexpensive*, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.



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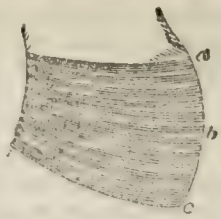
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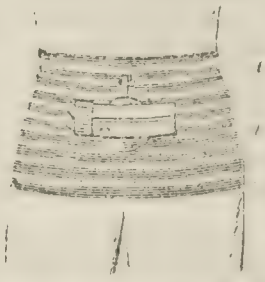


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The *Medical Circular.*
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The *Dublin Hospital Gazette.*

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Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

THE

PRESIDENT'S ADDRESS.

BY

JOHN A. SYMONDS, M.D., F.R.C.P., F.R.S.Ed.,

CONSULTING-PHYSICIAN TO THE BRISTOL GENERAL HOSPITAL.

THERE are two kinds of common place: one which consists in repeating a sentiment which has been frequently expressed before; the other, in saying something which, though it may not have been said before, has been in every one's mind, and indeed has to every one seemed to be so obvious as not to need communication. To the latter head you cannot fail to refer the remark which I am now about to make, and which I cannot avoid making, namely, that the present meeting of the British Medical Association is held under what may be called trying circumstances; trying to the stout hearts, trying to the *amour propre* of this locality; for it is the first meeting held in the provinces since the metropolitan meeting. The events of that meeting are too fresh in the recollection of those who partook of its splendour and its enjoyments, and too well known by testimony to those who like myself were so unfortunate as to have been absent from it, for me to think of telling how it was attended, how it was conducted, and how it was presided over; nor will I uselessly spend time in deprecating a comparison of that meeting with what we are now inaugurating. We trust to your clemency and generosity; and, as the temporary representative of the profession in this place, I humbly beg to offer the Association a hearty welcome to our ancient city and neighbourhood.

The distinguished founder of this Association is reported to have said last year in London, when the proposal was made that the next meeting should take place in Bristol, that he entertained a very favourable recollection of a former meeting in this city. I shall be content, and my fellow members in this district will be content, if this second visit of the Association shall be considered as agreeable to the body generally as was the former. Of this happy result I should despair, were I to think only of the terrible gaps which Time has made in our ranks since then. Thirty years, one of the fleeting generations of men, have passed away since that time. But it is not with a public association as with a private circle of friends. In the latter case there is nothing to be done but to close up the vacant spaces, draw nearer together, and, with the scattered remnant of our company, do battle as best we may against Time and Fate. But it is not so with a public body, which has no essential and inevitable mortality. It has the vital principle of royalty—"the king is dead—long live the king!" Or, in a better comparison, we might say that it has the vitality of organic structures. If its nutrition be healthy, as fast as one set of molecules die away others take their places, and fulfil their functions. Three decades of years are gone since the former meeting of the Association in this city; and these three decades, which witnessed the passing away of so many who brought honour to our profession, witnessed also the production of discoveries and writings, the influence of which must last as long as the science and art of medicine endure. Of the truth of this remark, ample proofs might be culled from those annual retrospects, the origination of which is due to this Association; and, perhaps, it has been not the least important part of the work which the Association has incited. I have not time to particularise, but if any one wished to mark the progress made during this period of history, it would be enough to take up systematic treatises on pathology and medicine published before 1833, and to compare them with those at present in the hands of students. To pass from Alison, Elliotson, and Andral, to Williams, Watson, Paget, and Virchow, would be to pass over a space filled with an immense accumulation of new researches and valuable discoveries.

When this Association met in 1833, Marshall Hall had not undertaken, or at least had not made known to the world, those experimental inquiries which, whatever controversies they begot as to the absolute originality of his views, yet gave a new impulse and a new character to the whole science of neurology. At that time the anatomy of tissues was only such as Andral, and Béclard, and Meckel had left it, that is, at the utmost limit to which the dissection of that time could advance it; for then the microscope had not been brought in to aid the scalpel. The names now so familiar to us, of Vogel, Hasse, Bowman, Henle, Kölliker, were then unknown. At that time the blood as a seat of disease was only adverted to in a faint whisper of suspicion. But no minute researches had been made as to the relative proportions of fibrin, globules, and albumen in various diseases; much less had the microscope been employed in aiding the analysis. The cellular theory of the growth of vegetable and animal structures had not then been broached; and the names of Schleiden and Schwan had not reached this country; nor, indeed, were their observations promulgated in Germany till long after the date we are looking at.

Dr. Bright's great discovery had not attracted general attention, though his *Medical Reports* appeared in 1827. I find no allusion to it in the earliest annals of this Association. It was not till a few years afterwards that albuminuria became a prominent object to pathological inquirers, though we now regard it as not only momentous in itself, but also as having given a great impulse to our modern humoral pathology. It was long after that time that our improved methods of treating phthisis began; uterine pathology was in its infancy; and, however much those who have practised new methods of treatment in the pelvic diseases of women may have been carried away by their sanguine expectations, it must, on a calm and candid review of the subject, be allowed that great improvements have been made since the time when chronic disorders of the female organs were mostly included under scirrhus, fibrous tumour, uterine neuralgia, leucorrhœa, etc. Surgery, especially conservative surgery, can number great achievements that had been previously undreamed of. And there has been one therapeutical movement which did not begin till long after the epoch we are considering, I mean the use of anæsthetics by inhalation. Were there no other discovery to stand out on the medical annals of the last thirty years than the anodyne use of ether and chloroform, it would be enough to make the whole suffering world,

through unborn generations, look back to the intervening era with admiration and gratitude.

I do not profess to take even the most superficial glance at the history of our science and art: I have only alluded to it as prefatory to a question which may, perhaps, be a suitable theme for our consideration at the present time. A review of the progress of medicine, and an impartial estimate of the facts which it surveyed, would be sufficient, one would imagine, to render this question nugatory: How has the art of medicine advanced in the opinion of the public? Surely enough must be known by persons beyond the pale of the profession as to the researches to which powerful and industrious minds have been devoted; enough must be known to increase the confidence of the public in the art which is the ultimate object of those researches. But we will not now consider how the public mind ought reasonably to regard the progress of medicine, but let us ask, What is the fact? How is it regarded?

In all times there have been a large proportion of the public who have traditionally adhered to medicine, though they have not escaped the risk of being occasionally carried away by some quackery of the hour. And the relation of this part of the public has remained much the same, except that occasional secessions from it have been made on a larger scale during the time we have been contemplating than at any previous period; the causes of which I need not inquire into. On the other hand, a portion of the public have at all times entertained a certain amount of distrust of the resources of medicine. And from the satirists and epigrammists of various times might be gathered a curious collection of opinions, by no means complimentary to medical practitioners. There is much of contingent matter in our science and art by the very necessity of things, and the gross results are what men judge by. They do not know the processes; they cannot measure the difficulties, but they can estimate a success or a failure. Lord Bacon says: "Almost all other arts and sciences are judged by acts or masterpieces, as I may term them, and not by the successes and events. The lawyer is judged by the virtue of his pleading, and not by the issue of the cause. The master of the ship is judged by directing his course aright, and not by the fortune of the voyage. But the physician, and perhaps the politician, hath no particular acts demonstrative of his ability, but is judged most by the event; which is ever but as it is taken; for who can tell, if a patient die or recover, or if a state be preserved or ruined, whether it be art or accident? And therefore many times the impostor is prized, and the man of virtue taxed. Nay, we see the weakness and credulity of men is such, as they will often prefer a mountebank or witch before a learned physician." (*Advancement of Learning.*)

It is not surprising then, that, according as a happy or an unsuccessful issue has chanced to impress the minds of men, our profession has become the subject of extravagant eulogy, or of abuse and derision; for the feelings of the observers are by the very nature of the case highly excited on the subject, and to a degree that both warps their judgment and gives emphasis to their expressions. There are on the one side surprise, and delight, and thankfulness at life saved or anguish soothed; and on the other side disappointment, grief, despair, when a life is unexpectedly extinguished, or when pain goes on baffling every effort made to quell it. Such contrasts of feelings in different persons, or alternations of them in the same person, must naturally belong more or less to the public.

But, while one can understand and make the utmost allowance for the disappointment often felt by those who have sought the help of medical art, one might expect, if they know anything of the amount of study and labour which has been bestowed upon medical science, and if they consider how the individual practitioner whom they consult has made it the main business of his life, one might expect them to say to themselves: "Well, whatever may be the shortcomings of medicine, it is plain that well-informed practitioners must, at all events, know far more of the matter than we do. If they know but little, we know less; if they can give us but little help, whence can we get more?"

And this, indeed, does represent the feelings of a large number of persons; but with others there is an under-current of doubt and distrust, even when they yield a sort of external confidence to medicine. And of this scepticism, were it of an enlightened, inquiring form, we ought by no means to complain. It is obvious that a great deal of it within the last quarter of a century has been caused by the extensive circulation of works, which have made it a special object to infuse doubt and dissatisfaction into the public mind as to the claims of medical science and art, as hitherto taught and practised, and to favour the introduction of new methods and systems. But over and above this, there are other causes which, though individually slight, have by their cooperation done a great deal towards unsettling general faith. Such are the seeming success that has resulted in certain cases from the abandonment of medical treatment, and trusting entirely to unassisted nature; the apparent benefit derived from methods of treatment disapproved by regular practitioners; the seeming success with which patients sometimes take the law into their own hands; the prosperous results ensuing on the seditious and treasonable advice of their friends, in contravention of the authority and injunction of the medical adviser; the conflicting opinions and directions of practitioners themselves, not merely as one man differs from another in drawing practical corollaries from the same established truths, or in applying them in individual cases, but as to the whole system and process of cure, as, for instance, whether reduction or support should be the ruling object; the absurd prevalence of fashions of treatment among the faculty, so that the same methods and remedies seem to be applied to a vast variety of seemingly dissimilar disorders; the ununise and rash admissions of eminent men as to some certainty and inefficacy of medical science and art, admissions which may be fittingly and honestly called unwise and rash, because the qualifications are not appended or cannot be understood; such admissions, torn, as it were, from their context, being easily garbled and turned to mischievous purpose against the real interests of mankind, as well as of the medical profession. Upon each of these heads we might expatiate at some length did time allow us; but I cannot doubt that they severally and conjointly operate in lessening the confidence which is due to medicine.

The scepticism of educated men out of our profession may be somewhat judged of by an extract from an article in the *Saturday Review* for Oct. 11, 1862, on "Physiology and Medicine;" also from one in the *London Review* for Jan. 24, 1863, entitled "Doctors."

"It has been a convenient doctrine to set down the success of dissenting medicine to the general want of scientific instruction, and to an ignorant impatience of disease among the unreasonable mass of mankind, prompting them to have recourse to whatever irregular short cut might be offered for escape from bodily suffering. But in this, as in some other matters, men in general are not such fools as wise professors think them. Cold water and hot air, nay, even such coarse specifics as those of Morrison and Holloway, have not recruited their votaries exclusively amongst the ignorant and the credulous. The plain truth is, that people

have followed quacks because they have not found in the doctrines or the practice of the regular profession reasonable ground for confidence. Even those who knew nothing of the numerous revolutions that have over and over again upset the prevailing doctrines as to the nature of disease and remedial action, have seen that there could be little certainty about a system which changes all its outward practices every ten or twenty years. If bleeding, calomel, starving, stimulants, warm rooms, open windows, have each been tried in turn, and, as it seems, without any marked advantage one over the other in effecting cures, it was not surprising that sceptics should doubt the inspiration of the oracle whose utterances were found to be so changing. Those who examined further, and discovered that the doctrines which were successively invoked to authorise each new system of treatment rested on arbitrary assumptions, not demonstrated, nor, for the most part, capable of demonstration, began to suspect, for the most part, that the difference between regular medicine and quackery was not so profound as they had been used to believe. Both appeared to be in the dark as to first principles, and to appeal for support to empirical evidence. After analysing all that medical science could say in the great majority of cases of disease, the only reason to be given why you should swallow a given drug was the fact that many others, who seemed to be affected in a way similar to yourself, had taken the same drug and had survived the dose. The doctor, often uncertain of the nature of your disease, was quite ignorant of the cause of it. He had no evidence as to the action of his drug, or even whether it acted at all upon the cause of disease; and lastly, he had no certainty that the drug would affect you in the same manner as others who had taken it. The very utmost he could urge was a belief, more or less probable, that the same drug had been serviceable in cases presumed to be similar. Was there any essential difference between his process of reasoning and that of the honest quack, who, by a nearly similar process, had worked himself into a belief in the virtues of a specific?"

The writer in the *London Review* asks:—"But can any one at this moment seriously declare that there is such a thing as a science of medicine? What there is is this. There are a few facts—a very few—distinctly known, and beyond the reach of controversy; and the number of them increases but slowly, if it increases sensibly at all. There is a pharmacopœia of drugs, about the use of which no three men agree completely, and about which, whatever agreement there is, is derived from simple empiricism. There is a vast amount of chemical research, which appears to bring more physiological difficulties to light than it serves to explain, and passes by a number of organic laws to which it is powerless to afford the slightest clue. It may be urged that all true science is founded on empiricism. So it is; but does any true science end with it? Can the doctors point to any one new law of their profession which they have laid down from the consideration of general principles, whether those general principles have been derived from practice or not?"

I cannot forbear adding another short quotation from the same article, because of the compliment offered to my surgical brethren. After remarking on the rapid progress of the science of farming, the writer is so good as to say,—"The practice of surgery has made great steps in a still shorter period, and has discovered in chloroform a source of blessing to the human race, which will compare with any since the invention of steam. The legitimate gratitude of mankind is attested by the fact that there is not a single novel or drama of modern times in which a practising surgeon plays the part of a fool."

I quote from these journals, not because they have any special authority in relation to the subjects which we are considering, but because from the well known ability and learning of their conductors and contributors, they may be held to represent the higher culture of our people. It will have been noticed that these adverse criticisms on medicine include two principal charges:—1st. That it is not a true science; and 2nd. That the practice consists of mere empirical processes, that is, processes that have been ascertained, or only thought, to be useful in the cure of diseases, but which have not been founded on any real knowledge of the mode in which they act beneficially.

Now, What is strictly a science? Is it not an account of phenomena, representing accurately their arrangement in space, and their order in time;—an account which classifies them as occurring in certain groups to which names have been affixed, names that, to persons duly instructed, recall the collection of facts;—an account which, from a great multitude of complex qualities and events, selects and gives prominence to those which are essential to the collection as distinguished from the accidental, and which discriminates, out of successive phenomena, those which are only occasionally, from those which are invariably, antecedent; an account which enables an observer to read the past and the future in the present, that is, to tell what must have preceded the phenomena under observation, and to state certainties, or high probabilities, as to the future; an account which enables an observer, from facts presented to his senses or reported to him as the subjective sensations of others, to say what changes have occurred or are going on in processes beyond the reach of direct perception? Now, if such an account of phenomena be not entitled to the designation of a science, I do not know what is. Yet such is medicine; and there is not one of my hearers, I will venture to say, who will not be ready to own from his own knowledge, often tested, often leaned upon in great crises, that the description I have so briefly sketched rather understates than overestimates that scientific observation and registration of phenomena on which our pathology is constructed, and which guides us in our recognition of the causes of diseases, and our expectations as to their course and issue.

To the other allegation, that medicine, as an art, is merely empirical, it is a sufficient answer that the art is, for the most part, founded on and directed by the science to which I have adverted. To say that it is a mere bundle of traditions, shows so profound an ignorance that it must excite extreme wonder in the mind of anyone who has even only the most superficial acquaintance with therapeutics. One is at a loss to account for the origin of so strange a delusion in the minds of these disparagers of medical art. One source however may, perhaps, be traced to the misrepresentations which are unhappily to be found in writings where one would have least expected them. I regret to confess that there have been writers on our art, who, in their anxiety to impress what they consider some all-important principle of treatment, and which has an exaggerated importance in their eyes, either because it has something of novelty or because they have taken a distinguished part in its recognition or recommendation, speak of other principles as valueless, or hypothetical, or erroneous. Other writers again, who, from practical inaptitude, have incurred much disappointment in the exercise of medical art, have, instead of recognising the real cause of their failures, been ready to fancy that the art itself is of little worth, and that the sick might as well be left to the natural tendencies to cure. All periods of medical history might furnish specimens of this kind of detractors; men driven by disappoint-

ment into disaffection, and whose treasonable words have been caught up by some of the unthinking or malicious multitude.

If a teacher of medicine really wishes the public to be rightly informed as to the character of medical art, he should endeavour to set forth the fact, which all my hearers will admit to be true, that the difference between the scientific physician and the empiric consists in this, that the former does not rest his art on arbitrary assumptions, nor on the mere observation of specific remedies. The rational physician endeavours to learn first of all the order of events in the healthy organ and its functions, the nature and causes of the disturbance of this order in which disease consists, and then the events which precede the return to a healthy state; and from these various sources of information, together with a knowledge, which has been acquired in various ways, of agents which influence the natural actions of the living body, he endeavours to help or hasten the processes which repair, and to restrain those which are hurtful.

Surely that kind of knowledge deserves to be characterised as scientific, which enables a physician to determine, from a combination of direct and inferential signs, that there is a collection of fluid in one pleura, and so unhesitatingly that he requests the surgeon to plunge a trocar into the chest; or which pronounces that a seemingly mechanical closure of the larynx is caused by the pressure of a tumour within the chest, exerted on a nerve which animates the muscular fibres at the opening of the glottis; or which can declare one case of paralysis to be caused by a clot of blood in the right or left *corpus striatum*, and another to be caused by disorganisation of a portion of the spinal cord. I mention these instances as some of the least uncommon.

If this be not scientific medicine, it would be difficult to say what could be so called. Obviously there is much yet to be learned. But I suppose that this remark may be applied to every science and art. Ours is not the only science which has attained to more proximate than ultimate principles. It may be true, for instance, that as to the operation of medicines we only know that one increases or arrests certain actions in the intestines, another in the kidneys, another in the brain, another in the heart, another in the lungs, another in the uterus; and that we do not know why substances which reach the organs through the blood, should exert a preferential action on one organ rather than on another. Jalap may have an elective affinity for the intestine, opium for the whole encephalon, aconite for the sensory ganglia, strychnine for the spinal cord, ergot of rye for the uterus; and this may be all that we can at present say of these well known relations. But when the chemist announces that sulphuric acid prefers potass to magnesia, and that silver prefers chlorine to nitric acid, etc., is he twitted with the limitation of his knowledge, and put into the same category with the empirical alchemist, because he cannot explain the cause of those elective affinities?

There is no more prevalent mistake, as to the practice of medicine, than the idea alluded to in one of the extracts which I have read to you; namely, that our art consists chiefly in a blind administration of specifics. Now, you know very well that in an enormous majority of instances drugs are given in order to produce some well known physiological effect, that is, a change in degree or kind of some function or functions, which change has been known, when effected in other cases, to abate or remove the disordered state of functions of which the patient is the subject. Belladonna is prescribed to a person in a paroxysm of asthma, not because it is a specific for that disorder, but because it is known to diminish muscular contraction, the excess of which in the fibres of the bronchial tubes makes the spasm of asthma. Elaterium is administered to an ascitic patient, not because some one suffering like disease has been better after taking it, but because that substance drains a large quantity of serum from the mucous surface of the intestines; both reason and experience having proved, in numberless instances, that dropsical collections disappear by absorption after the action of powerful hydragogues, just as effusions in the pleura disappear after blisters.

The professors of rational medicine may differ in their explanations of phenomena so complex, intricate, and changeable as those of disease; and they may have marked preferences for various instruments and methods of cure; and they may often change their opinions under the influence of new observations and discoveries. The growing disposition among the more enlightened may be to withhold the more violent procedures, those which interfere most artificially with natural processes, and to study with more and more care the natural tendencies to cure, and the natural tendencies to dissolution, and to make it the aim of their art to play off the conservative against the destructive tendencies. And in doing this they may, as I have said, differ greatly in their procedures; and some of their measures may be taken up and laid aside, and taken up again with various degrees of favour, owing, as I believe, not so much to the fluctuations of medical opinion, as to the variations of the subject matter; that is, the changing character of diseases, the changing constitutions of men, operated upon by the changing series of meteorological agencies, of social customs, and of personal habits.

Is it not unreasonable, not to say ungenerous, to fasten on the professor of medical art a reproach that belongs less or more to all human arts? Are mistakes and uncertainties confined to medicine? Can constant and unerring procedures be claimed for, I will not say agriculture, horticulture, and the breeding of animals, for these, like medicine, have to do with organic nature; but for arts which profess to be founded on calculations of the invariable relations of measure and number, on rigid observation of invariable antecedents and consequents? Are engineers never out in their calculations—never beaten in their undertakings? Do their tunnels never fall in? Are their railways never undermined by springs, or swept away by tides? Have their ships never proved all but incapable of launching, from having been built upon a mistake as to the proportionate antagonism of friction and gravitation? Are they agreed as to their methods? They do not seem to be able to decide even the best form of a gun-barrel. Yet, they have only brute matter to deal with—matter, ponderable and measurable—with quantitative proportions known and acted upon, and machines that may be stopped and set to work at will. They have not to discover and rectify faults in machinery while still in motion; no perplexities are thrown into their problems by such incalculable agencies as nerve-force, vital chemistry, cell-growth, and the ever-shifting phenomena of human individuality, the uncertainties of human sensibility, the perturbations of emotion and passion, the caprices of humour and temper, the fickle purpose, the wavering will, and all those contrarieties of man's constitution which make him ever the same, and yet not the same, and which, operative enough as they are in health, become a hundredfold more prominent in disease and more embarrassing, because they must be excused, and often can neither be reproved nor reasoned with.

I confess that I do not see how the art of medicine can ever take its right place in public estimation, till the public mind has acquired the requisite knowledge

and the requisite cultivation of its reasoning powers to judge of it, for both of these are really needed. Knowledge alone will not suffice; for, if it could, we should be at a loss to account for cases which occur every now and then, in which men who have undergone a certain amount of medical training, and are possessed of an average amount of medical knowledge, have not only declared their disbelief in medical science, as taught in our schools, but have espoused some of the foolish theories and practices which have been set up against it. Such persons illustrate the uselessness or even mischievousness of knowledge, unless regulated by logic, and, I may add, by common sense. But on the other hand, mere logic and common sense will not be sufficient without the data on which they should work. It is simply want of knowledge, which explains the disparaging terms in which our art is sometimes spoken of, as we have seen, by men of high intellectual culture. We must also admit that the respect which it receives from the majority of well-educated persons is due, not so much to actual knowledge, as to conventional acquiescence in the claims of a learned profession, and to the presumption that able, vigorous, and conscientious minds cannot have given their best thoughts and hardest labour to the elucidation of a certain class of natural phenomena, without having arrived at some definite truths and some sound principles of action. For, in judging of medical theories and medical practice, it is ever to be borne in mind that, with a very few exceptions, they have not been devised and inculcated by men withdrawn from the outward world, and absorbed in dreamy abstract meditation. They are not the excogitations of the solitary recluse who sits in his cell, painfully weaving the web of thought from his own interior, "toiling out his own cocoon." But whatever their real worth may be, they are at least founded on a long and patient observation of nature. Therefore, a candid and intelligent bystander may reasonably admit that such study cannot be profitless. Let a human mind, moderately well prepared, be set in front of the aspects and processes of nature, steadily enough and long enough, and it cannot but receive an impression more or less faithfully representing the facts. There must be an image on the mind; but, as in the work of the photographer, the definiteness of the delineation, and the exactness of the shading, will depend on the care and skill with which the plate has been prepared and handled. If the able and intelligent men, who sometimes speak slightingly of medical science, would but consider that there *must* be a nexus between the different parts of nature; that there is a necessary pre-established correlation between the phenomenal world and the percipient and reflective powers of man, they could scarcely fail to see that it is an absurdity, and almost a blasphemy against the constitution of the universe, to maintain that some of the grandest and finest minds God ever made, had, over long series of years, been engaged in laborious contemplation, and study, and experimental inquisition of those facts which we call disease, and morbific agents and remedies, and that their honest endeavours had been vain and profitless. It would be tantamount to saying that man, who was born to live by the sweat of his brow, might plough, and harrow, and sow, in a kindly soil, and that, as the result of his labours, there would be nothing to reap but tares and thistles.

As to the unthinking public and the airy satirists, we can afford and consent to excuse the one, and to smile at the other; but from the serious and well-instructed members of the community, we expect a more reasonable consideration of this subject.

Now, if we desired to enable those who are outside of the profession to form an estimate of the amount and the kind of labour performed and endured by our brethren, we should not, for the immediate purpose in view, take them to those spheres of arduous exertion, where men are engaged in the duties of practitioners. But to judge whether the professors, and teachers, and learners of medical science and art put themselves in the way of acquiring such knowledge as may best fit them for the fulfilment of the ends of their profession, I should desire to take the inquirer first into our medical schools, and point out the pains taken in teaching and learning the grammar of the art in the work of the dissecting room, the laboratory, and the museum. I would then advise him to resort to the lecture-rooms, and hear how patiently, and often eloquently, the results of hard scientific investigations and profound reasoning are expounded; and then to the hospital clinique, where the actual sensible facts of morbid nature are at once presented, explained, tracked, and commented upon for the instruction of students. Then I would take him to the private studios, where experimental philosophers are extorting the secrets of nature from nature's own works, by the scalpel, the test-tube, the balance, and the microscope; often labouring, month after month, year after year, baffled but not beaten, still toiling on, and even when partially successful, waiting till results have been obtained so sure and unquestionable as to warrant them in undertaking the responsibility of promulgating their observations and conclusions. And then I would have him attend the meetings at which those results are announced, and watch the eager and joyful welcome with which a real addition to our stock of truths, to our practical resources, is hailed, and what jealousy and distrust attend hasty conclusions and questionable inventions. And finally, I would persuade him to spend a few days in our libraries and reading-rooms, and point out to him the shelves containing Transactions of Societies, Reports of Hospitals, and Annual Retrospects, and tell him, that there he may find some satisfactory evidence of the amount of intelligence, research, and conscientious endeavour expended in building the art of medicine on firm scientific foundations.

He will thus find proof enough that the rules of the inductive philosophy have been followed, whether or not they have ended in that which its great regenerator announced as one of its chief aims, "the relief of man's estate." He will find that the facts have at least been drawn from nature, however they may have been arranged; and that our science does not derive its inspiration from one or two *dicta*, which are not philosophic truths, but merely strong and rather coarse antithetical expressions of some aspects under which certain phenomena may be viewed; and that it does not seek to curry favour with the uninformed by telling them that they are competent without study to judge of its merits. Its teaching appeals for appreciation to those who are engaged in like pursuits, and who are the only qualified judges of the worth of such labours.

Should our supposed inquirer take the trouble of doing what we have suggested, we can fancy that he might say: "Now that I see on how rational a basis your art is founded; now that I am impressed with the thorough going exertion devoted to the study of that wonderful piece of workmanship which you profess to repair and keep in order; now that I see with what skill you have unravelled the texture of the organs even to their ultimate molecules, fixed the functions and modes of working of the organs, and are learning more and more every day of the composition of the blood and of that vital chemistry that governs its relations at once to the tissues which it feeds and to the forces which it evolves; now that I know something of the researches into the operation of those ex-

ternal agents which are ever drawing organisms into life, maintaining their health, driving them into disease, and working their disintegration and death, whether by slowly sapping processes or by specific malignity, or by help of the mysterious influences whereby epidemics even yet overcome or evade you; now that I can take some slight measure of the vast stock of observations on the actual changes which disease makes in the structures, and on the order of the phenomena in dynamical interruptions and aberrations; some notion of what has been done by sagacious insight and toilsome comparison towards recognising during life those perilous processes which in other cases have left the ruin and ravage which your necroscopy has so painfully traced and so accurately recorded; now that I know how rigidly, nay sceptically, you have tested the worth of alleged specifics, or general remedies, or methods of cure; now that I have some faint idea of what your science has done and what it still aspires to do, I marvel that it does not command universal respect and confidence—not the superstitious reverence which is given to an authority the limits of which are lost in a cloud of mystery, but the intelligent deference which may be reasonably yielded to superior knowledge and superior resources."

Now here we have to repress the enthusiasm of the imaginary inquirer, excited as he is by his recent studies and acquirements. He must be reminded that the information of which he has just become possessed, is precisely of that kind which the public generally cannot acquire. We only wish, and it is not an unreasonable wish, that literary gentlemen who address the public upon medicine in journals which, from the ability with which they are conducted, naturally and deservedly carry a great weight of authority, would prepare themselves for this particular work by a little study of the subject. It is not fair to content themselves with a hasty glance at books so rash, however honest in intention, as Sir John Forbes's "*Nature and Art in the Cure of Disease*," or so one-sided as a recent "*History of Medicine*;" much less to allow themselves to be influenced by the disparaging statements of writers who are trying to devise new systems in replacement of what they persuade themselves have become old and effete. These dreamers build their airy castles on ruins no less airy and fanciful. The buildings which they mistake for ruins are really substantial and impregnable fortresses.

But while we maintain that there is a solid scientific foundation for medicine, we do not wish to ignore the difficulties of the art—difficulties depending on the exceeding complexity of the phenomena to be dealt with. So great is this complexity, that nothing surprises me more than that enlightened physicians should sometimes attempt an extreme simplicity in their aims. Good Heavens! Does the working of the human machinery turn upon one or two springs or wheels, which are all that are to be handled? The great variety of chemical elements in the solids and liquids; the diversity of the organs and their component textures; the separate and peculiar endowment of the different parts; the high probability that many a nervous fibril which at present looks homogeneous or identical in structure with other fibrils, has its own peculiar life and function; these and many like considerations should warn us against attempting a simplicity for which Nature gives us neither pattern nor warrant. Had she only one or two forces or principles of action in the body, we might be content to pursue methods only eliminative, evacuative, or revulsive, or stimulative, or restorative, or sedative; but as it is not so, we will pursue all of these and more, if we can find them, and we will not disdain to use specifics if we light on them, though we should prefer to know the rationale of their operation.

Of the difficulties of the art, there is one which will always present itself even to the most highly educated practitioners; namely, the individual personality. They may be masters of the genus and species *homo*; they may be learned in all his varieties, his races, his variations with climate, and land, and province, and town; his modification by civilisation, by birth, by breeding, by intellectual occupation, by trade and calling, by wealth and poverty, by labour and leisure; but they have still to recognise the individual man. There he is with his own physiognomy and make and build, the set of his head, the squaring of his shoulders, the curve of his back, the planting of his foot. He walks to the consultation-table, he turns round in his bed, he puts out his tongue like no one else. He is John or he is Thomas; and he is no other. And his inward man is no less his own and of no other. His heart and his lungs and his liver, in the infinite variety of nature, are his own no less than his face. He may behave under the most common disease as no one else does; and the most ordinary remedies may affect him in a peculiar manner. He may have the apex of one lung just touched with tubercles, and he may die in three months. Or one lung may be full of them, and the other half-full, and he may live three years or more. He may be kept awake by opium, and sent to sleep by coffee, and so on. But here, as in so much else that belongs to Medicine, it is but too easy to make overstatements. The differences of individuality must not be exaggerated; or we may have to infer that every son of Adam requires an Art of Medicine altogether for himself—for his own peculiar use. If the similarity between men and men, and between their relations to other existences, did not prevail enormously over the differences, there could be no general rules to guide the conduct of man towards his fellows. Men could not be fed or trained, or taught, or governed, or healed. It is enough to bear in mind, that there is so much of individuality as must constitute one of those difficulties of the Art, which those beyond the pale of the profession can very inadequately appreciate.

But nothing more strongly denotes the sagacity of the practitioner, than the quickness with which he apprehends and measures the special requirements of the individual man by help of what he observes, and by what he is told of his patient. Of like value is the tact which enables him to decide that, although of two kinds of treatment in a certain disease one had been successful in eight cases out of ten and the other in only two out of ten, yet in the case before him the second method is to be preferred. Such qualities, together with promptness in determining whether to quiet or lower, or to rouse and sustain; a wise boldness in setting aside the consideration of the particular pathological change for a time, and concentrating the whole attention on the patient—these are gifts and acquirements that no mere learning or science can impart. They belong to mother-wit or common sense, and they make the common ground on which the skilful practitioner, and the clever nurse, and the intelligent wife or mother, may meet and work together for the salvation of the patient. It is the want of such qualifications that often deprives the practitioner of the authority and influence that otherwise might be accorded to his learning.

It is, I once more repeat, more in the practice of the art that medicine is judged of, than in the science which is its rational basis. And till something of the latter has been learned by the public, so that the difficulties of the art may be comprehended, till then its occasional shortcomings will sometimes shake the allegiance which is its due, and render some part of the public ready to transfer their trust to systems of arrogant pretensions and of seeming occasional success.

But in the progress of mankind we may be certain

that rational medicine will maintain its supremacy. It is impossible that it should be otherwise. The road which it takes is the right one, and the science must win nearer and nearer to its goal. If Nature is to be made our servant, we must understand her operations. If we wish to employ her powers under new conditions, we must thoroughly know their nature and their extent. The time may seem short in proportion to what has to be learned; but the time is not to be measured by individual lives nor even by generations. The poet may complain that

"Science moves but slowly, slowly, creeping on from point to point";

but still it does move, and it not only moves, but it moves securely and without fear of retrogression. How securely, no one need doubt or be ignorant, who heard or read those masterly expositions at once of its progress and its principles which were delivered before this Association last year; and like proofs will, I doubt not, abound in the addresses which have been promised for the meetings which are before us.

These remarks, as you will have noticed, have reference mainly to what there is of speculative scepticism afloat as to the true character of medicine. I need not remind you, on the other hand, of the abundant practical evidences which are presented to us of the public trust in our art. I need not allude to the proofs which meet the busy practitioner in every step of his daily rounds, and in the invasion of his night rest, and which throng in his consultation-room. He might say much of the touching, often painfully touching trust reposed in his skill. Nor is it worth while to dwell on the feelings of the public, as evinced in their anxiety to provide at great cost for their poorer brethren the advantage of medical help in Hospitals and Dispensaries; or on the confidence of the Government of the country, as expressed in their appointment of medical officers to the great public services. No naval or military expedition would move without its proper medical staff. And private enterprises are incomplete without a like equipment, from that of the passenger ship that crosses the ocean in a few days, to that of the travelling amateur who will not trust himself in deserts or even in remote cities without a medical companion. But there is one proof of a most solid and substantial kind as to the confidence placed in medical science, to which I must advert for a moment. It is often said as to political characters, that the statesman who carries the country with him is he on whose wisdom the moneyed class depend, the great authorities in Lombard Street and the Exchange. Now almost every day indications of the faith reposed by this class in medical science, are brought before us in the examinations which we have to make and in the reports to fill up for the security of the enormous wealth which is held by the Insurance Companies. Were medical science a mere collection of doubtful guesses, vague conjectures, traditional prejudices, and ever varying hypotheses, would all this wealth be staked on the opinions of medical referees, opinions founded on facts that have been elicited and even extorted from subjects who are often anxious to conceal them? But I need not pursue this subject.

Besides other titles to public estimation won by the profession, there is that which is due to the increasing amount of mental culture among our brethren, and which must inevitably lead to their gradual elevation in the social scale. At all periods in the history of our art, there have been men eminent at the same time for their professional skill and for their general learning. Dr. Freind thus speaks of some of the Greek physicians:—"If we compare any of the Greek writers in our faculty, from the very first of them—Hippocrates—to the time we are now speaking of, with the very best of their contemporaries of any art or profession whatever, they will be found not at all inferior to them, either in the disposition of their matter, the clearness of their reasoning, or the propriety of their language. Some of them have even written above the standard of the age they lived in, an incontestable instance of which is Aretæus. * * * Galen himself was not only the best physician, but the best scholar and writer of his time: so great an honour have these authors done to their profession, by being versed in other arts and sciences as well as their own." (*History of Medicine*, vol. i, p. 220.)

It was not less so in later times. Jerome Cardan was so celebrated for his practical skill, that an archbishop of St. Andrew's sent for him from Padua; and, on his way, the Italian physician prescribed for our poor young king, Edward the Sixth. But he was not less renowned for his learning. He invented a system of arithmetic, and a system of algebra. He wrote treatises on the sphere, on circles, on Ptolemy's geography, and on Euclid's Elements; also on astrology, on chiromancy, on physiognomy, on fate, and on games of chance. Among his miscellaneous works we find mention of epigrams and poems, and of discourses on wisdom, on consolation, and on the immortality of souls. His professional writings were considerable, the chief being a *Commentary on Hippocrates*; also a work entitled *Contradicentia Medicorum*, and another, *De Malo Medendi Usu*. In the 17th century flourished Sir Thomas Browne, author of immortal works, which not only proved him to be master of all the science of his own and of past ages, but which now, after having been for a time partially forgotten, are placed on the same shelf with the best productions of English literature. And in the next century, Dr. Meade was not only the most eminent physician in London, but his name was dear to every one in Europe who cared for science, and learning, and the fine arts. But why should we go for instances beyond our own locality, when we can remember Dr. Prichard, who possessed an amount of knowledge and power that might have been divided amongst several persons, every one of whom would have been endowed sufficiently to attain to high renown in the several departments of science with which Prichard's name is indissolubly united? Ethnology, the science of language, psychology, and practical medicine, may all point to him as one of the illustrious dead.

If the present time does not present any instances of various learning, quite comparable to the names which have just been noticed (though we do not forget the elegant and erudite contributions to science and literature which we owe to the accomplished pen of Sir Henry Holland); still, if I do not mistake, there are in this day a far greater number, than at any previous period, of members of the profession fairly imbued with the science and learning of their time. And I think I may venture to add, that there is not now so much reason, as formerly, for fearing the disapproval of the public on this account. It is but too true, that once the general accomplishments of the medical practitioner were regarded with suspicion, as if that man could not be trusted in the exercise of his art who showed a capability of acquiring some knowledge of other subjects, and who made his recreations, and embellished his life, by the study of polite letters and fine arts. In those times he might mount his hunter, or sling his fowling-piece over his shoulder, or walk to the bedside in the attire of a sportsman; and he might spend his evenings in the theatre and the assembly-room, and his nights over whist and billiards; but were he known to be illustrating some obscure point in history, or even elucidating some matters of natural science removed from the duties of his professional routine, his reputation was in peril; but if he was suspected of an ode or a sonnet, the jeopardy was extreme! The members of the legal

profession were liable to the same suspicion of unfitness for their calling, if they occasionally refreshed their minds with science and literature. But happily we live in wiser and better times; and now I believe that those among the public whose approbation is worth having, are as ready to confide in a practitioner who shows mental capacity and mental training in matters of which they are competent to judge, as in one who has merely a character for cleverness in things about which they are unable to form a correct opinion.

At a first view it might seem that I have spent too much time in discoursing, before the members of a learned profession, on such a subject as the kind or degree of estimation in which that profession is held by the public. Our art being founded on the sure basis of a true science, it might seem more worthy of its dignity to be indifferent to the opinions of the uninitiated. Bent on the pursuit of truth, we should be deaf alike to applause and to disapproval. This might be, if the investigations were carried on only in the abstractions of the library, or in fields remote from the haunts of men. But the truths we seek are for the most part gathered where human beings are thickest, and with many of whom we are on terms of closest intimacy. The votary of medicine studies amidst the sanctities of hearths that are not his own; by bedsides, where husbands and wives, and parents and children, in the anguish of their pain or grief, are weighing every word he drops—are scrutinising the play of every feature in his countenance. His philosophy does not range the stars, or dive into the recesses of the earth's caverns; it walks in the trivial paths of daily life; its matter is the commonest experience of suffering men and women; its speculation is mingled with, nay, grows out of and ends in the daily duties of the calling by which he earns his bread—*Laborare est cogitare.*

If, then, we gather our science and reflect upon it, and turn it to its proper uses, in the midst of our intimate relations with our fellow-creatures, we cannot, by the constitution of our minds, or by the necessity of things, avoid taking account of the opinion which is held of the science we thus learn, and the art we thus practise. If it is of importance to us, it is equally so to those we have to deal with. Precepts will not be obeyed, unless their authors are respected. And that that respect should be entertained, I may say, without fear of contradiction, that every medical philosopher, every medical practitioner who deserves the name, would gladly see the mass of mankind studying in order to obtain some idea of the principles on which medicine proceeds, and of the methods by which she endeavours to accomplish her purposes. She throws open her studios and workshops, and invites the world to enter. To her mysteries no password is necessary. All who have the requisite knowledge may be free of her guild, and that knowledge may be acquired by all who choose to undergo the necessary labour.

We do not deny, that, over and above the love of science for its own sake; over and above the desire of seeing mankind profit by the discoveries and applications of medicine; over and above the anxiety to obtain independence, or even to succeed in the primitive objects of labouring life; over and above the simple wish to do our duty; over and above all these motives there is the aspiration for fame and glory, "that last infirmity of noble minds." A thirst for honour, fame, glory—or, if you prefer to call it, a simple love of approbation, is one of the strongest of the springs which give motion to the machinery of human life. It is an instinct implanted in man by his Maker. Like all his instincts, it is to be controlled by reason and to be directed to its legitimate ends; but still it belongs to the nature of man, and it is not to be ignored, much less to be blamed or derided. All men who do great deeds are moved by it, though some avow the impulse more unreservedly than others; and I do not doubt that the sentiment smouldered with a strong heat even in the bosom of Wellington, though it did not flame out visibly as in Nelson and Napier. To suppress it is to do violence to our nature; to pretend to be above it is the hypocrisy alike of the arrogant self-sufficient stoic, and of the dull passionless ascetic. To say that it should be subordinate to and concurrent with duty, were a needless platitude. Happily, in our profession the two principles may work co-ordinately and harmoniously. And in the splendid roll of worthies which the annals of our art can display, we may observe with pride how inseparable was their glory from their duty, the one sustaining and animating the other. To them might be applied, as truly as to any of the heroes of war or civil fight, those thrilling words of the Laureate—

> "Not once or twice in our fair island story
> The path of duty was the way to glory;
> He that ever following her commands,
> On with toil of heart and knees and hands,
> Through the long gorge to the far light has won
> His path upward and prevailed,
> Shall find the toppling crags of duty scaled,
> Are close upon the shining table lands,
> To which our God himself is moon and sun."

In the foregoing remarks, I have only thought it worth while to consider the public appreciation of medicine as a science and art. I have said nothing of the position which the profession takes in its moral aspects, and especially in regard to benevolence and charitable action. And nothing needs to be said. It may apply for its character to the public and to a higher tribunal. It may be said, and in all humility and reverence, that if at some time an account should have to be rendered of the callings to which men have devoted their talents and their exertions, though it may not be demanded what territories have been conquered, what foes subdued; nor by what intellectual mastery the forces of nature have been made subservient to the will of man, or what discoveries have been achieved in science, or what inventions in art; nor what beautiful forms have been fashioned, what glorious thoughts conceived, or in what harmonious words set forth; nor what polities have been founded, what laws laid down, with what energy enforced, or with what wisdom and eloquence expounded; nor what indisputable dogmas have been defined, or what casuistical difficulties resolved; but should it be asked, with terrible simplicity, what has your calling done for the afflicted sons of men, for the hungry, the naked, the sick, and the imprisoned?—then I do not think much fear need be entertained for the comparative sentence to be awarded to that calling which you and I have the privilege to follow.

I almost feel that some apology is necessary for having discoursed on such subjects before such an audience as that which I have the honour of addressing. But it seemed to me that, as the well-being of the profession, though depending mainly on its own internal constitution, organisation, and conduct, must derive a reflex influence from its relations with the outer world, the consideration of these relations might not be altogether inappropriate to the commencement of the Annual Meeting of an Association, the objects of which are not only the mutual improvement and instruction of its members, and the promotion of mutual goodwill, but also the advancement of the character and the elevation of the aims of the profession. Of these, we must all agree in esteeming the highest to be its utility to our fellow-creatures. And it cannot be doubted that this utility is in no small degree dependent on the estimation in which the profession is held, and on the confidence with which its help is appealed to.

THE

ADDRESS IN MEDICINE.

BY

WILLIAM BUDD, M.D.,

HONORARY AND CONSULTING PHYSICIAN TO THE BRISTOL ROYAL INFIRMARY.

VARIOLA OVINA, SHEEP'S SMALL-POX; OR THE LAWS OF CONTAGIOUS EPIDEMICS ILLUSTRATED BY AN EXPERIMENTAL TYPE.

"L'épidémie est l'effet et non la cause de la contagion."—*Gendron de l'Eure.*

"Veluti in speculo."

In complying with the request of the Association to deliver the Address in Medicine for the present year, I shall follow the example of my immediate predecessors, and confine myself to a single theme. For reasons which will, probably, be readily understood by many who hear me, the particular theme I have chosen is one bearing on the subject of epidemics. There is no need in an assembly like this to dilate on its importance.

There are few secrets in nature which it is of greater moment to us to penetrate, than that of the rise, spread, and deadly power of these terrible scourges. In the aggregate, take the world through, they cause more untimely deaths, more sickness, more sorrow, more loss of labour, bodily and mental, than any of the other ills to which humanity is subject. They attack us in the cradle, they pursue us through youth and manhood; in old age, they still linger about our path. They are among our greatest hindrances in the battle of life, even when they do not end life itself by a sudden and invisible stroke. Every year, in all lands, a vast hecatomb of men prematurely gathered to the grave bears witness to their power.

To rescue mankind from the grasp of epidemic disorders should, therefore, be the settled, as it must always be the highest, ambition of our art. With Jenner's immortal discovery before us to show that such an ambition is neither presumptuous nor vain, the growing attention paid, of late years, to this great subject is easily understood.

In England, as is well known, a society has been established for its sole and special cultivation. In the annual reports of the French Academy of Medicine, epidemics have long occupied a large space. In Germany, as, indeed, in all countries in which medicine is studied as a science, they are fast rising as objects of inquiry into the prominence which their importance deserves.

Unfortunately, the advance of knowledge bears, as yet, but scant proportion to the efforts spent in its pursuit. This, as it seems to me, may be mainly traced to two causes; first, to an exaggerated estimate of the difficulties of the subject; and secondly, to want of clear views as to the method to be followed in its investigation. Authors have occupied themselves far too much in dwelling on the inscrutable nature of epidemic poisons, and in accumulating epithets to signify the hopelessness of attempts to discover the laws of their action. This practice hinders the advance of science, by discouraging inquiry; and, still more fatally, by begetting a prejudice against precise views, on the plea that such views are unattainable, and cannot, therefore, be in accordance with truth.

The difficulties of the subject are obvious. The material causes of epidemics are invisible; and the laws which govern invisible things must needs be hard to make out. But that they may be perfectly made out is clear from this, that the invisible powers of nature, such as gravitation for instance, are the very powers of which our knowledge is the most sure and precise.

On the other hand, the problem of the epidemiologist has in it at least one element of simplicity which is denied to the student of other diseases; namely, that its chief concern is with the history of a single cause. His principal task is to trace, in each case, the biography, if I may so speak, of a single species. The method most in vogue in inquiries of this kind, is to accumulate a mass of statistical details—meteorological, physiological, topographical, and other—relating to the particular epidemic disease which may happen to be in question, often with the most impartial indifference as to whether these details establish anything of importance, or not.

If we had not experience to appeal to in proof of the assertion, it would not be difficult to show, on philosophical grounds, that this mode of proceeding must necessarily be extremely barren of results. Evidence so collected is, no doubt, of value; but it is chiefly as furnishing data for the real discoverer to work upon.

Statistics afford much important information on epidemics; but it is all of a general kind. The really vital questions they leave almost untouched. Neither on the mode of being of the morbific agent without the body, nor on its mode of action within, do they throw any but a dim and distant light. Happily, there is another principle at our service which is of far greater promise.

The chief difficulty of the inquiry arises, as I said before, from the fact, that its subjects are, for the most part, not objects of sense, but only known by their effects. In the face of this difficulty, the only sure way of proceeding obviously is to begin with the study of those types which in their mode of action offer something tangible for the observer to lay hold of; something that may enable him to bring the diffuse, vagrant, and impalpable thing to book—if I may use such an expression—and to put to it definite questions with some chance of definite answers.

What we want is some clue, however slender, to guide us through the obscurity in which the truth lies hid. Now, exactly such a clue is found in that most remarkable of properties; the power which certain epidemic disorders possess of spreading by contagion.

In the act of contagion, we are brought into direct relation with the epidemic poison at one very important phase of its existence. Before this address is concluded, I hope to make it clear that in the conditions which often attach to this act, there are data which will carry us very deep into the secrets we most desire to know.

The first position I would take, therefore, is, that if we wish to obtain clear views on the subject of epidemics generally, our surest plan is to begin with the study of the contagious group.

The next position speaks for itself. It is, that of this group we should select those which, from peculiarities in the mode of evolution of the virus, admit of being propagated artificially; which offer, in other words, the incomparable advantage of being studied experimentally.

If we were asked to define what other conditions we would most desire, in order to make our task the more easy, our answer would be, that all the sufferers should be under our own eye; that their incomings and outgoings and intercourse with one another should be known to us; or, better still, should be determined by our own will. It will be seen at once that, taken together, these are conditions which are not to be met with in human life. They are only to be found, in fact, in the case of the domestic animals.†

Since we last met, the West of England has witnessed an epidemic among one of the chief of these, in which all the conditions just enumerated were fulfilled to the letter, with one more added, almost equal in value to all the rest. The pest, in the case to which I refer, was entirely new to the country in which it raged. For a century, at least, nothing has occurred in this island more deeply instructive to the epidemiologist than the remarkable outbreak of the disease popularly known by the name of small-pox, which ravaged the Wiltshire flocks last autumn. For this, I need scarcely say, is the event of which I speak.

On the 13th September, 1862, while the disorder was still rife, I visited the diseased flocks, and enjoyed the great privilege of studying the malady from the life, under the able guidance of Professor Simonds. I beg to take this opportunity of returning publicly to that gentleman, my best thanks for the great kindness he showed to me on that occasion.‡

As there were still, at that time, some six or eight hundred patients in all stages of the disorder, it was not difficult, under such able teaching, to become acquainted, even in the short compass of a single day, with its leading characteristics.

Awaiting the fuller and more accurate record of this outbreak, which I trust we are yet to have, from one or both of the eminent men who advised the government in the emergency, I will ask your permission, in default of a better topic, to occupy the remainder of the short hour allotted to these addresses in laying before you the more salient points of the information I then acquired, together with some reflections which have been since suggested to me by the study of the disease in veterinary works.† In doing this, it is hardly necessary to observe that I shall not treat the subject in its bearing on agricultural interests, but confine myself to its purely scientific and medical aspects.‡

After what I have already said, no apology will be needed for thus bringing to the notice of gentlemen whose lives are passed in watching the diseases of men, a disease which is peculiar to one of the lower animals. The very name which this distemper bears —small-pox in sheep—attests its human interest, as the series of relations which suggested this name, attests the entire applicability of any inferences drawn from it to the great and important group of which human small-pox is the type. In passing under review the phenomena of this outbreak, we shall, in fact, find ourselves reviewing the phenomena—and I may add discussing the questions—which most press upon the mind in regard to the contagious fevers of our own race.

As the disease itself, except as a matter of common report, is probably new to most of my hearers, a few preliminary words as to its history and characters may not be out of place.

As to its history in past time, but little is known. Its first origin, like that of human small-pox, is lost in the mist of ages, and hidden by the same impenetrable veil which hides the first origin of all other created things. Like human small-pox—on what grounds I do not exactly know—it is supposed to have first come into being, in the great, mysterious, maternal East. In Europe, it can be traced distinctly back only to the sixteenth century. The first clear account of the disease in any European tongue, is to be found, it is said—for I do not speak of my own knowledge—in the writings of Rabelais. From an early period it has covered a very wide area in the Old World. India and Africa have been infested by it from time immemorial. America still lives in happy ignorance of this ovine plague; but there is no province in continental Europe whose flocks have not suffered severely from it. In Italy and Spain, the *clavelée*, as the French call the malady, is the one great dread of the flockmaster. In Bessarabia, Austria, Prussia, Holstein,

† There can be no more striking proof of the little way the philosophy of this branch of inquiry has made among us than the small space given to epizootics by the professed epidemiologist. The only scientific accounts of them must be sought for in the works of veterinarians. With the exception of our distinguished associate Mr. Ceely, of Sir H. Holland, and of one or two others, the allusions of English physicians to the diseases of animals are only remarkable as betraying their ignorance of the whole subject.

‡ With the liberality characteristic of the true man of science, Professor Simonds communicated to me at once all he knew of the history of the outbreak, and at the cost of infinite pains demonstrated to me all the leading features of the disorder.

† The sources from which what follows is mostly drawn, are—1. Information acquired in my visit to Allington; 2. Professor Simonds' masterly monograph on *Variola Ovina;* 3. Hurtrel d'Arboval's admirable articles on "Clavelée", "Clavean", "Clavelisation", "Vaccination", and "Vaccine", in the *Dictionnaire de Médecine Vétérinaire;* Professor Trousseau's *Clinique Médicale;* and various articles on the Wilts outbreak, by Professors Simonds and Gamgee, in the *Veterinarian* and the *Edinburgh Veterinary Review.*

‡ For this reason, I shall make no reference, for instance, to the animated discussion which has sprung up as to the way in which these two interests were affected by the practice of inoculation in the infected district.

Denmark, and Holland, it is a standing scourge. The whole north of Erance is the scene of frequent epidemics of it. But, until some seventeen years ago—with, perhaps, one doubtful exception—the disease had remained entirely unknown in this country. Up to that date, the shepherd of Picardy, watching with dismay his dying and plague-stricken lambs, covered with the well known blains, might look with envious eyes across the narrow channel, and almost see on a clear day, browsing on the white cliffs of the sea-girt island opposite, countless flocks that from all time had lived in virgin immunity from the pest at his feet.

"The circumstance is easy to explain," says Hurtrel d'Arboval, "if we reflect that in almost all cases the disease is the result of contagion, and if we consider the severe measures enforced in England against the importation of foreign sheep into that island." (*Dictionnaire de Médecine Vétérinaire*, article '*Clavelée*', p. 264-65.)

The time had now come when this long-standing contrast was to cease. With the triumph of free-trade, the measures referred to by the French veterinarian were relaxed, and foreign sheep were admitted without stint. Before the year 1847, the whole number imported amounted only to a few hundreds, selected, too, for the most part, by the English agriculturist for some special merits, with all the care to ensure freedom from disease which such a proceeding implies. A few years afterwards, the number had grown to several hundred thousand; and the sheep, instead of being picked out from the foreign fold by the English buyer, were sent wholesale to the English market as an article of common commerce by the foreign flock-master. Unfortunately, the change fell upon an evil time. Quarantine and all other measures intended to prevent the introduction of disease from abroad had fallen into discredit, if not into disuse. Contagion, as a cause of epidemic disease, had come to be looked upon as a thing of small account. Worse still, the strange and fatal delusion had got hold of men's minds, that the specific poisons of specific contagious disorders might be bred for the nonce, anywhere, out of filth, organic impurites, or what not. It seemed to be a waste of power to be taking precautions against the importation from without of what might turn up any day as a home product.

Want of acquaintance with the epidemic and contagious maladies of foreign live-stock had, no doubt, its share, also, in allaying the vigilance the occasion so much needed. And so it happened that the barriers were thrown down, without those precautions being taken which alone could render the proceeding safe. The result has been that, within the short space of sixteen years, England, which for the whole thousand years before had never known this plague, has thrice seen it commit great havoc in her flocks. Thus have we become indebted to the British government for events disastrous to agriculture; but, could they be made to tell their whole tale, of the utmost value to science.

On the characters of the disease itself I need not dwell long. The name it bears enables me to dispense with any lengthened description. What human small-pox is to man, that precisely, and in all ways, is this disease to the sheep. It is a contagious eruptive fever, which spreads in what is called the natural way, but is susceptible also of being inoculated. Like small-pox—and, I may add, like all the other contagious fevers—it unites the two fundamental characteristics of having a period of incubation, and of occurring but once in life.†

By comparing the drawings here exhibited, you may see how close and striking is the outward resemblance of the eruption in the two diseases. Its distribution in each is exactly alike. The skin, the nostrils and fauces, and the upper part of the respiratory tract, are its common seat in both. In both, the mode of evolution is the same.

The ovine eruption begins under the form of papulæ, confluent or discrete, culminating in a vesicle which is often marked by a central depression, and is filled by lymph, which, at first translucent, ends in becoming opaque. It forms crusts, which fall away by a slow desquamation. It leaves pits. Not rarely falling upon the eye, it leads to blindness. It is a frequent cause of abortion; the dropped lambs being, in this case, often covered with variolous pustules.

There is the same parallelism between the two in the constitutional disturbance. Ovine small-pox is ushered in by high fever and great general distress, which are relieved for a time by the eruption, to recur again under the typhoid form in the suppurative stage. It is often attended by bloody urine and extensive ecchymoses. It kills in the same way as its human antitype.

If you examine the drawings minutely, you will observe some marked differences. The papulæ, for instance, are much broader in the sheep, varying in breadth from that of a fourpenny-piece to that of a shilling: having the appearance of large flat warts occupying the whole thickness of the skin, and imbedded in it. Other points of difference might be noted if need were, and if time allowed. It is rather, however, with the points of resemblance than with those of difference that we are here concerned. It is sufficient to our present purpose to know that this is a typical member of the great group of contagious fevers, which are propagated by a specific poison, which have a period of incubation, which multiply as they go, and which occur but once in life.

The farm in which this remarkable disease suddenly made its appearance in June last year is situated in the parish of Allington, about seven miles north-east of Devizes, and at the foot of the range of chalk-hills known as the Beckingham Downs. In gazing upon that fine, open, breezy country, the idea of pestilence is the last that would ever occur to the mind. The sheep first attacked were the property of Mr. Joseph Parry, a gentleman noted for the pure breed and healthy character of his flock.

As far as there is evidence to show, the outbreak itself began, as such outbreaks generally do, with a single case. Towards the latter end of June, Mr. Parry, riding alongside one of his folds containing about three hundred ewes, observed one of them lying on the hurdles, at the point of death. She was, in fact, in the last stage of variola ovina, and died shortly after. The carcase was put aside, and little was thought of the circumstance. In the course of a few days, other sheep of the same lot were attacked, and died in the same way; and Mr. Parry was soon made aware that his flock was becoming the prey of a new and fatal scourge. The two-year old ewes had up to that time been kept with their lambs; but, it being thought better to separate them, the lambs were removed and put with other lambs on the farm, the ewes being turned among the general breeding stock—making altogether a thousand ewes and seven hundred lambs. Unfortunately, both ewes and lambs carried the infection with them.

† For the sake of simplicity, the word "contagion" is used throughout this essay as signifying the communication of a specific disease, through whatever medium, by specific germs thrown off by subjects already suffering from it.

In about a fortnight—which, I may remark, is about the average period of incubation when the disease is taken in the natural way—the same symptoms began to show themselves in the flock generally. From this time the march of events was swift. By the end of July, more than four hundred sheep had been attacked, and two hundred or thereabouts had already perished. So rapidly and with such fatal effect did the leaven work.

Things were at this pass when, on the 1st of August, Professor Simonds, who had been summoned from London, arrived at Allington. "As the best means of saving the rest of the flock, and of putting a definite term to the outbreak, this gentleman resolved to inoculate the whole flock"—an operation that was performed without delay.

Before the epidemic ceased, it had spread to eight or nine other farms, and nearly 800 sheep had fallen a sacrifice to it. When I visited Wiltshire on the 13th September following, there were still, as I said before, some 700 sheep in various stages of the disease. Of these, some few had taken the disease in the natural way, but by far the greater number by inoculation.

To the physician, not the least interesting thing was to see a measure, which once had so great a vogue as a means for disarming the malignity of human small-pox, employed with the same aims, and with precisely the same results, in the corresponding disease of the animal. In both, the common result was the evolution of a disease of incomparably milder type than when taken in the natural way. But the great importance of the phenomena presented by inoculation consists in the clear light they throw on the nature of the disorder. In the great majority of the inoculated cases, the variola appeared in the mildest possible form. The eruption was limited to a single vesicle, and constitutional disturbance was slight or altogether absent. In some few, the course of events was otherwise; and the malady, although inoculated, took a malignant turn. One such case I saw. A sheep that had been inoculated some days before—in result, no doubt, of some individual predisposition—threw out a confluent eruption. The animal was at once sacrificed. Had the papulæ been allowed to develope into vesicles, there would have come from the minute atom of virus inserted by the lancet a few days before, a new crop sufficient to communicate the same disease to all the sheep in Wiltshire.†

Here, then, in results free from all ambiguity, and open to the eye, the great fact is revealed, that it is in the body of the sheep that this strange poison is fashioned and multiplied; and that the disease itself is the process by which it is bred.

In this one experiment almost everything is comprised. We see, first, how minute a germ is sufficient to produce the disorder; we see, again, how, by reason of this very minuteness, signs of general disturbance are absent until growth has taken place; and, lastly, in the immeasurable multiplication which follows, we understand in what way provision is made for the extension of the disease, until, from a single first case, a whole epidemic is evolved.

The spectacle presented to us is indeed not new. To the physicians of the last century, as seen in the case of human small-pox, it was sufficiently familiar. But, for some reason or other, we have been singularly slow in applying the lesson it so plainly taught.

I may add, that one of the main points of interest in the fact here recorded is, that it repeats in one of the lower animals a series of relations that had already been observed of another and kindred disease in man. We thus see, by the light of another pregnant and typical instance, exactly what a contagious fever is.

† Professor Simonds has recorded several exactly similar instances in his work on *Variola Ovina*.

But what a form is this for disease to take! The phenomena, striking as they are when the result of inoculation, are still more so when they occur in the natural way. In the first instance, the mode of admission of the poison, at least, is known; in the second, it enters in through paths yet to be traced. Here, as in so many other cases, our perception of the marvellous nature of the facts is dimned by our familiarity with them. In some sense, their succession is, no doubt, more or less clearly apprehended; but the language habitually used to express them seems to me to fall far short of an adequate statement of the mystery. What in the whole range of medicine is so striking as this invasion of the yet living and unbroken frame by a power which, like an evil spirit of the olden time—unseen, untraceable, and unbidden, enters in and takes possession, and holds riot and revel there, to issue forth again reinforced by a countless progeny? What so wonderful as this *imperium in imperio*, in which the majestic spirit that animates the human form is dethroned, and the noble form itself is often marred and laid in the dust, by a thing in comparison with which mildew and toadstool stand high in the scale of being?

To resume, then, we have it as the result of experiment, that the virus of variola ovina is bred in the body of the sheep. By the same means it has been ascertained that this virus is incapable of breeding in the body of any other animal, or, at least, of the great group of animals that are familiar to us, and that, like sheep, come into relation with us in our daily life. Pigs, horses, poultry of all kinds, dogs, cats, rabbits, monkeys, and even the goat, which in nature and organisation is but one remove from the sheep, have all been inoculated with it in vain.† The same fact holds good as to the ox tribe; and lastly, as to man himself. The experiments have been often repeated in various countries, and always, as far as I have been able to learn, with the same negative result.‡

As it was supposed that the virus might prove a substitute for vaccine, and might possibly give even a greater security against small-pox, the experiments on the human body have been more numerous than those on any other species. In spite of some few assertions to the contrary, nothing seems better ascertained than that man is entirely insusceptible of it.§

The experiments of the French and German schools fulfil every scientific requirement, and seem to be conclusive as to the point. The operation, performed, over and over again, on large numbers of unvaccinated children of different ages, always proved abortive. That the failure depended neither on constitutional peculiarity in the subjects, nor on defect in the ovine virus, was shown by a double test. The virus which had proved inert on the children promptly took effect on sheep, while on the other hand, the same children were afterwards vaccinated with success. These results have been verified in this country by experiments on a large scale by Mr. Marson, and by our honoured associate Mr. Ceely, whose name is the best guarantee for the accuracy of the facts. Conjointly, these gentlemen have performed no fewer than 250 vaccinations on the human subject, with the virus of sheep-pox.

"I ovinated twenty-five subjects," says Mr. Ceely, "whose ages ranged from three to fifteen years, some

† At one of the infected farms in Wilts, there was a goat which passed its whole time with the diseased sheep, and was inoculated more than once, but entirely without effect.

‡ See for details, Hurtrel d'Arboval's articles, "Clavelée", "Clavean", and "Clavelisation", in the *Dictionnaire de Médecine Vétérinaire*; and Professor Simonds' work on *Variola Ovina*.

§ The chief, if not the only, witness on the other side is Sacco; but his evident desire to be looked upon as the author of important discoveries, and the fact that not one of his many alleged results have been verified by experiment in other countries, throws great discredit on his statements.

twice and thrice over; in none were there fewer than six punctures each time, making not less than 180 punctures: no specific disease resulted, but a prompt and devious papular or diffuse inflammation, or more rarely a common local pustular. In the majority of these twenty-five individuals the virus employed was liquid. When any recently charged points were used, subsequent re-inoculation with liquid virus took no other effect. Nearly all the above subjects were shortly afterwards vaccinated with current vaccine lymph, which in each case exhibited the normal effects. I may as well add, also, that the same kind of ovine virus which did not succeed on children, took promptly on sheep." (Simonds *On Variola Ovina*, page 154-5.)

Whether future researches may show these statements to be too absolute, I do not know;† but as they stand at present, they are in entire conformity with what common observation teaches.

In connection with this epidemic in Wilts, perhaps the most striking thing of all, was, that while the sheep were dying, by wholesale, of one of the most terrible of plagues, they were the only animals that suffered; so deadly was it to them, so entirely harmless to every other living thing. In more than one instance indeed, as we shall presently see, the infection passed from flock to flock, over a distance of nearly a mile in length.

But while even to be pastured in fields a mile away from an infected fold, was pestilence and death to sheep, the horses, dogs, oxen, swine, and other live-stock—even the starlings and flies which passed nearly their whole time on the sheeps' backs, with the organs thought to be most prone to receive infection, immersed in the variolous discharge, continued to enjoy the most perfect health.‡ Especially striking, considering the name the disorder bears, was the immunity of the *men* who had charge of the diseased flocks. Yeoman and shepherds fed largely on mutton, men whose bodies might not inaccurately be described as consisting in great part of mutton built up into man—might be seen there, handling the diseased animals in all manner of ways with the most perfect impunity. It is as if we were dealing with some chemical, of reaction so delicate that its presence can only be revealed by a single test; or rather (for this, no doubt, is the truer analogy) with some parasitic animal or plant, which finds in the organism of a single living species the only conditions of its life. I need not dwell on the extreme importance of this as a characteristic of a poison which is a standing source of wide-spread epidemics.

I may remark, however, that, in greater or less degree, it is a characteristic of the whole family of contagious poisons. Some few among them act in the same specific way on more than one kind, but the greater number seem to affect only a single species. In the most fatal epidemics of scarlet fever, yellow fever, measles, typhoid fever, and typhus, for instance; and it is most strange that so little stress should have been laid on a fact of such profound significance—the animals attendant upon man and in closest communication with him, never appear to suffer from the same plague. The value of the present instance consists in the fact, that it does not come to our knowledge by way of vague inference more or less open to doubt, but is established by the joint and irrefragable testimony of experiment and observation.

The same may be said of one more point on which I have to touch,—and nothing can show more decisively how entirely these contagious fevers are one family group than that you will all anticipate what I am about to say—the variola ovina, whether natural or inoculated, once occurring, exhausts the susceptibility to the same poison for the remainder of life. So that this poison not only breeds exclusively in the body of the sheep; but, as a rule, can breed even in the sheep's body but once in life.† So subtle, so incomparably specific are the conditions attaching to the reproduction of these contagious poisons. But if the propagation of the disease, as studied by the light of inoculation, be thus instructive, its spread in what is called the natural way, as illustrated by the course of events in Wilts, was scarcely less so.

It will be remembered that the outbreak which began with a single case in Mr. Parry's flock, extended, before it died out, to eight other flocks. In nearly all these instances, not only had there been no direct communication, but, in more than one, the flock which became affected secondarily was separated from the flock which gave the infection, by a wide space. One of these flocks I visited. The field in which the sheep were then pastured was at least three-quarters of a mile, as the crow flies, from the sheep that had communicated the taint. The two flocks, the owner assured me, had never been in closer proximity than this. In the natural dread of so costly a scourge, he, as well as all the other sufferers, had guarded his sheep with the most jealous care; but the disease was, nevertheless, transmitted.‡

Still more memorable was the infection of Mr. Church's flock, whose farm at Hillswood must be some fifteen miles distant from the site of the Allington outbreak. This gentleman's sheep had been pastured in a field bounded by the high road, and over this road sheep from the infected district had passed to and fro. This was, as far as could be discovered, the only connecting link between the flock and the original focus of the poison. What makes the case the more remarkable is, that the sheep which had travelled along the road, although subsequently affected with clavelée, had not at that time suffered from it. The importance of these facts in relation to epidemics generally, will be at once seen. When events, at all parallel to these, occur in man, they are set down at once as altogether excluding the idea of propagation by communication of the morbific germ from the sick

† I make this reservation, because it is easy to see, *à priori*, that experiments which issue in merely negative results require to be repeated a great number of times before absolute reliance can be placed upon them. Any one who will read the account of Mr. Ceely's admirable researches on the origin of vaccine, or who has undertaken experimental inquiries of this kind himself, will understand how necessary this condition is. But, after all, we scarcely need the evidence of experiment to show that this disease is peculiarly a disease of sheep.

‡ Professor Gamgee states, on the authority of Mr. John Percival, that a sheep dog belonging to Mr. Stephen Neate of Allcannings, whose flock suffered severely, took the disorder. In the many works I have consulted on the subject of clavelée, although the liability of animals, other than the sheep, is fully discussed, I have found no mention of a similar fact. It would have been well, under the circumstances, if Mr. Percival had tested the identity of the canine disorder by inoculating from the lymph it produced. It was at one time reported that Mr. Parry's dogs had clavelée; and, curiously enough, they were affected with a pustular eruption, but it bore no relation to the disease in the sheep.

† I say as a rule, because exceptions to it happen under the same circumstances, and in about the same proportion as in human small-pox and in the other contagious fevers. Professor Gamgee has lately recorded an instance of such exceptions occurring on so large a scale as to imply either some peculiar liability in the particular flock, or something spurious in the antecedent attack.

‡ The case of Mr. Harding's flock, of Etchilhampton, was still more remarkable. "The spot where the sheep were folded" (I quote from an account in the *Veterinarian*) "was about a mile and a half distant from Mr. Parry's farm, and in the intermediate space were other farms occupied by flocks belonging to different proprietors, and every care had been taken to prevent either direct or mediate communication with Mr. Parry's flock. As an additional precaution, the sheep had been driven to the part of Mr. Harding's farm most distant from Mr. Parry's." In one instance, the germ of the disease was apparently carried a distance of more than twenty miles by some lambs, which, although affected with clavelée afterwards, had not then suffered. Before his flock was attacked, Mr. Neate sold some of his lambs. These lambs stopped at Aldbourne, on the road to Ilsley, beyond Marlborough, on August 22nd, but were taken back by their former owner as soon as he found his flock infected. A case of clavelée occurred at Aldbourne shortly afterwards.

to the healthy.† And yet nothing can be more certain than that in the case before us the disease was propagated *in* this way. To argue the point at any length would be a waste of words.

The fact, first, that since sheep were first pastured on these uplands, this pest had never before appeared; and secondly, that the only sheep in all England that suffered were the neighbours of Mr. Parry's, and were affected long subsequently to his, is in itself sufficient. This admitted, it becomes interesting to inquire in what probable ways the germ was transmitted from one flock to another. Several modes may be specified as having possibly intervened. The virus might have been conveyed—

1. By flies, or by starlings.
2. By men who had visited diseased flocks.
3. By sheep from the infected district.
4. By atmospheric dispersion, as it was cast off by the diseased animals.

Some have attempted to throw ridicule on the first of these supposed modes; but it was impossible to spend a day among the diseased flocks without seeing the great probability, to say the least, of its having had a share in the dissemination of the poison. From the disease being seated on the skin, the sheep were infested by flies and other insects to an extreme degree; all busy either in feeding on the variolous discharge, or in depositing eggs. The starlings, in their turn, came in quest of the flies. On approaching every fold of variolous sheep, a swarm of flies, and a great flight of starlings, rose into the air from their backs. As it is probable the attentions of neither were confined to the diseased flocks, it is easy to see how the virus might have been conveyed from one flock to another by their agency. That the disease may be carried from flock to flock by men has long been proved.

Professor Simonds related to me two decisive instances of the fact, which had fallen under his notice in former epidemics. Numerous others are recorded in works on clavelée.

As Mr. Parry's flock was at first, naturally enough, an object of great curiosity to his neighbours and was visited by many of them, it is quite possible that the disease may have been in part transmitted in this manner. An instance has already been related here of its probable communication by sheep—themselves unaffected.

For reasons on which I have not now time to enlarge, it was pretty certain, however, that the poison was chiefly diffused through the air. This is no doubt the way in which the virus of human small-pox is mainly distributed, and the spread of the two diseases appears to follow exactly the same laws. The well-known fact that both spread most rapidly and widely in hot weather, and especially in the absence of continued rain, is best explained by this view‡ The result may be brought about in two different ways: first, by atmospheric dispersion of the dried crusts resolved into impalpable dust; and, secondly, by the poison being wafted gently through the air in the form of nebulæ; to borrow Professor Simond's fine and suggestive expression—"as it rises from the sheep's bodies."

† Human maladies are, it is true, not often transmitted through the air—on a large scale, at least—over such wide distances, for the simple reason, that sick men do not live "in the open air", like sheep, and are not massed together in the same way. But the difference is one of degree only. On the other hand, some of the most fatal and destructive of the epidemic diseases of men are propagated by discharges, which are often cast upon the open ground, and become the source of a widely diffused miasm. As these discharges are liquid, they are sometimes carried by gravitation to long distances, and the area of infection is thus greatly enlarged.

‡ As regards human small-pox, this was first remarked by Sydenham, and has been verified by all experience since. Hurtrel d'Arboval states that variola ovina has been always observed to spread most in dry seasons. The absence of rain, I imagine, is the really important element.

Those who have had the good fortune to engage much in field-sports—a form of enjoyment equally invigorating to mind and body, and for men whose chief business in life is the observation and interpretation of nature, one of the best modes of training—will have no difficulty in conceiving this last mode of transmission. On a good scenting day, and with a favourable breeze, I have seen a pointer wind a covey which I had marked down a few minutes before,—and which had had no time to run,—very nearly the length of a long field. If the infinitesimally minute particles emanating at such a distance from some ten or twelve partridges, insensible as these particles are to us, can impinge on the olfactory nerve of the dog, with sufficient efficacy to enable him to recognise his game, and to excite his whole frame to spasmodic action, it is easy to conceive how, under favourable conditions of weather, the emanations from a large flock of sheep stricken with variola may be wafted by a gentle breeze through thrice that space, with full power to propagate the specific disorder.

Looking now, in a broad way, at the whole series of the events I have narrated, their interest is extreme, as showing, with singular precision and clearness, in what way and by what exact process of development, an exclusively contagious disease may, from a single first case, grow, in a short time, to an epidemic of large proportions.

As we have already seen, the disease eventually spread from the case of the ewe that lay dying by the hurdles, to eight other flocks, and many thousand sheep, occupying an area of several square miles, and extending into three counties. It is no objection to the facts that artificial propagation played a part in their production; for, had events been left entirely to their natural course, the spread of the infection would have been incomparably more rapid and wide.

Indeed, had not man intervened, had not the most stringent measures been taken to prevent the spread of the disorder, there can be no doubt that it would not have remained limited to the area to which it was restricted; but, as in all other countries in which the same precautions have not been adopted, would, like its congener, human small-pox, have overrun the kingdom, and become naturalised among us.

Now, what I wish you particularly to observe is this: that when events of this same kind occur in the case of man—when small-pox, typhus, typhoid, scarlet fever, or any other contagious fever, spreads thus widely and becomes epidemic—it is generally supposed that some new element has come into play, of an entirely different order from those which are in operation when the extension of the disease is confined to a single group. The case is not often, it is true, put in this distinct way. The phrases used are more or less vague, like the ideas they represent. If nothing more were meant than that, when a contagious disease becomes epidemic there must be a concurrence of conditions favourable to its propagation by its known mode of multiplication, no exception could be taken to the view. But it is clear, from the terms in common use on this subject, that much more than this is implied. The two characteristics are put in direct opposition to one another, as things essentially different, if not antagonistic. Thus, small-pox, typhus, and the rest, are said, for instance, to be both contagious *and* epidemic. In the same way, variola ovina, the very disease of which we here treat, is said to be both contagious *and* epizootic. Even in their etymology, the two words express an antithesis.

Now, if this language mean anything, it means that when a contagious disorder becomes epidemic, the morbific agent has come into being in some condition, and by some mode of development, other

than that which occurs when it is propagated by direct contagion from one individual to another.†

The events observed in Wiltshire are of incomparable value, as showing by data, which are scarcely inferior in severity and precision to those of the exact sciences, the entire fallacy of this view. For, be it observed, this epidemic in sheep was, in all essential things, the exact counterpart of the epidemics which infest mankind. There was the same evidence of growth from a small beginning until a large community was involved; the same commingling of cases in which the operation of contagion was evident, with others in which the connecting thread was lost in the mazes of a vague and manifold diffusion; and others still in which, from the nature of the events, under the common view of them, the very idea of contagion seemed to be altogether excluded.

Now, the strength of this case is, not merely that we see where and how the specific poison is actually bred—not merely that we have ascertained by experiment how marvellously exclusive are the conditions attaching to its growth—not even that in its immeasurable powers of growth we recognise an adequate source for all that follows; but that we exclude the intervention of every other source by the overwhelming evidence of a thousand years of antecedent immunity.

Every other element was here before, but clavelée never; the germ of the disease is introduced, and the result is what we witness. The history of human small-pox teaches, indeed, the same lesson; but in this outbreak of ovine variola we read it in characters still more plain.

To say that in the epidemics of contagious disorders other conditions may not intervene, in an important way, in the common result, would, of course, be absurd. But it is essential to all clear views of these high and complex questions, to see with the utmost clearness that these conditions are secondary only, and act solely in promoting the growth and dissemination of the one essential thing.

When locusts, from being more an object of interest to the naturalist than a serious cause of alarm to the grower of the mulberry and the vine, rise into swarms which darken the air, and sweeping beyond the bounds of their native habitat destroy the vegetation of half a continent, we all know that there must have been an unusual concurrence of conditions favourable to the multiplication of the insect. But we all know, with the same certainty, that it is the breeding power of the locust itself that has brought these countless hosts of winged enemies into the field.

Three other topics remain on which a few words must be said before I conclude. What precise relation does variola ovina bear to human small-pox? How came it to spring up in Wilts? What were the means by which, after it had risen to so great a head, it was finally extinguished?

The relation of the disease to human small-pox, interesting as it is, need not detain us long. In the introductory part of this address, we have seen how curiously close, as well as various, are the points of analogy between them. The name assigned, by common consent, to the ovine distemper shows better, perhaps, than anything else how striking they are. It is impossible, in fact, to see the malady—as you may yourselves, in part, judge from inspecting the accompanying drawings—without the idea of small-pox at once starting to the mind. But to presume upon actual identity in a case like this, on the ground of mere resemblance in outward characters—however accurate this resemblance may be—is to proceed on a false principle.

In the absence of other evidence, indeed, we must be content with such light as evidence of this order affords. But, in the present instance, there is another test that touches the root of the matter much more nearly.

These two diseases—the variola ovina and the human variola—are both things that breed. Each perpetuates its own species. If they be not two species, but one, it is clear, therefore, that in some way the one must have been derived from the other.

Now, tried by this test, the case seems to be decisive against the identity of these two distempers. We have already seen that man is proof against the ovine disease. He neither takes it in the natural way, nor can he be inoculated with it. The sheep is equally proof against human small-pox. Had human small-pox the power to generate this disease in the sheep in the natural way, British flocks would not have enjoyed so long an immunity from it. The inoculation of the sheep with small-pox virus is, on the other hand, always abortive; or, at least, produces nothing of the nature of clavelée. This, perhaps, would have sufficed of itself to decide the question. But there is another experiment, which, were it only for its subtle and delicate interest as a piece of scientific evidence, and for the train of associations it wakes up in the mind, I cannot withhold.

Vaccination, as we all know, offers a specific protection against human small-pox, which is all but complete; against ovine small-pox it offers no specific protection at all. It has been proved by experiments on an enormous scale, performed under every condition to insure accuracy, that vaccinated sheep, when afterwards exposed to the infection of *clavelée*, take the disease in large proportion in the natural way; and that, when inoculated with it, they not only incur the usual consequences, but suffer quite as severely as unvaccinated sheep.†

Until evidence to the contrary shall arise, the conclusion, then, seems to be inevitable, that variola ovina and human small-pox, closely as they resemble one another, are of distinct species. They are as two kinds of thistle—as one sort of mushroom to another sort—or as two species of algæ—like almost to identity in looks and outward guise, identical in all their laws of growth and being, but yet specifically different. This being so, the close resemblance between these two diseases becomes a matter for new interest. That, being so like that, to judge from first impressions, one would almost swear they were the same thing, each should have, against the other, such specific limitations of growth and power, is a fact of the deepest significance.

It is one more fact to show—if further proof were needed—what intensely specific things these contagious principles are; and, although we are in the habit of speaking of them as so many *poisons*, how different in essence they must be from our idea of poisons, when the word is used in its chemical sense. It only adds to the interest to know that the example here adduced is an example of a general fact.

I have endeavoured to illustrate the relation of human to ovine variola by a parallel drawn from or-

† This is shown still more strikingly by the language of not a few writers, who altogether invert the true relation, and while admitting certain disorders to be contagious, hold that they only become so when strongly epidemic.

† There is, indeed, evidence to render it probable that for some weeks after vaccination sheep are somewhat less prone to take clavelée in the natural way; but there is clearly nothing specific in the protecting influence. Louis has remarked that typhoid fever hardly ever occurs in persons who may at the time be the subject of any other morbid disturbance. The two facts are, probably, of the same order. The failure of vaccination as a preventive of clavelée is the more important, because it produces in the sheep a disease which would appear to be the exact equivalent of vaccine. Hurtrel d'Arboval states that lymph taken from the resulting vesicle, and used for vaccination, produces the normal effects of that operation in man, and affords the same protection against small-pox.

ganic nature. This parallel might be carried much beyond the present case, with strict adherence to nature and truth. For, if we extend our survey from the contagious diseases of man to those of the lower animals—not to speak of those of plants—we shall see that, as in the living flora there are tribes of thistles, of mushrooms, and of algæ, so among these morbific principles there are whole tribes also, bearing exactly similar and equally close resemblances one to the other, and yet specifically different.

In studying these things on an enlarged scale, we become, in fact, gradually aware that the singular agents which lead this parasitic existence, constitute a whole order to themselves, in their mode of growth and perpetuation, in their likenesses and differences, as, indeed, in many other things, the exact reflex of the organic types that people the world without, and on whose substance they prey. How have they all come into being? What, for instance—for the question will recur—is the relation between these two forms of variola, which in the drawings here look so wondrously alike? Although specifically different, may there not after all be some genetic connection between them? May not the one possibly be derived from the other by some such metamorphosis as that which naturalists begin to suspect is the key to that mysterious resemblance which runs through the organic types of the outer world? Or, rather—for this would probably be the truer way of putting the question—may they not be derived from some third, different from either, but the common progenitor of both?

These are problems of the future; problems of deep and various interest, but which must be postponed in the presence of the more pressing questions of the hour and day.

The origin of this remarkable outbreak in the Wiltshire flocks now comes to be considered. In regard to this point, I may as well state that the obscurity which hung over the first introduction of the pest is not yet wholly cleared away. At first the event seemed to be quite unaccountable. Mr. Parry had made no recent additions to his flock; and the seeming seclusion in which his sheep had for some time lain, appeared to shut out the idea of infection from any extrinsic source. These being the circumstances of the case, this outbreak was at once eagerly cited, by more than one writer of the dominant school in these matters, as a glaring instance of the spontaneous generation of a specific eruptive and contagious fever.†

This was the theory. The fact, divested of all theory, was simply that the specific germ, whatever its origin, which infected the first sheep, had not at that time been traced to its actual source. But, between inability to trace a minute and impalpable germ on the one hand, and proof of its spontaneous origin on the other, the distance is wide indeed. How wide, let mildew and mushroom, and all the countless kingdoms of organic types that breed by minute and impalpable germs, bear witness. If the evidence brought forward to show that this sheep-fever had sprung up spontaneously were of any worth, evidence of exactly the same order might be adduced to show that all these things spring up spontaneously too. Not only, however, has the spontaneous figment no real basis of its own, but the presumptive evidence against it, derived from the nature and history of the disease, is overwhelming. We know, in fact, how and where the poison of variola ovina is bred, and we have seen how incomparably specific and exclusive are the conditions attaching to its evolution.

Those who have weighed well what was said on this head will require, if I mistake not, something more than mere negative evidence to convince them that this is a poison which can be bred *de novo* out of the common conditions of sheep-life to be found in a Wiltshire farm. Against such a conclusion there is at once to be placed the decisive testimony of a thousand years of prior exemption. Since the Saxon first fed his flocks on those Wiltshire downs, this scourge had never once made its appearance there. Until nineteen years ago, the same might be said of England at large, under all the countless varieties of season, breeds, and sheep management, through these long, long centuries.

Enormous as is the weight of this fact as an argument against spontaneous origin, even when taken singly, its full force can only be appreciated when we contrast this immunity of ages with the frequent infraction of it during the short seventeen years which have succeeded to them. Of these two facts, each gives the interpretation of the other. Variola ovina was unknown among British flocks until seventeen years ago, because up to that time we virtually excluded the sheep of those countries in which the disease prevailed; it has broken out thrice since, because since that time we have admitted these sheep in enormous numbers and without restriction.

As regards the question of origin, the situation of this last outbreak was not without its significance. "Scotch farmers, we trust," says a Scotch writer, "may never see this disease: they are out of the way of the imported sheep." London is, in fact, the port through which they nearly all come in; and it will be observed that, of the three outbreaks of the pest which have already occurred in this country, not one has happened in Scotland or Ireland, or even in the north of England, but all in the south, and in those very districts which recruit their flocks most largely from the London market.

These considerations, which from the first were accessible to any one who would lay his mind open to them, might have prevented, one would have thought, that hasty resort, on the occurrence of the first difficulty, to a baseless and extravagant hypothesis, which it is so humiliating to think of, and which must look so strange in the eyes of men who cultivate the exact sciences. Since then a new fact has come to light, which shows how entirely premature such a proceeding was. About a fortnight or three weeks before this Wilts outbreak, a lot of foreign sheep infected with variola were sold at Smithfield to go into the west. This being so, two points in the topography of Mr. Parry's farm, brought into prominence by the local discussions on the origin of the outbreak, acquire special significance. On the first, Professor Gamgee lays great stress.

The farm, which, as we have seen, is situated at the foot of Beckingham Downs, was in part inclosed, in part open down. Now these downs are traversed in various directions by great sheep-tracks or driftways, which emerge, it is said, in the very heart of the open part of the farm. Through them sheep are driven in large numbers, partly for the sake of the wayside herbage, and partly for the evasion of tolls. "Many instances have occurred", Professor Gamgee says, "of the spread of contagious disorders, such as scab, the foot and mouth disease, rot, etc., from these infected flocks passing over the downs along the Wans Dyke—the oldest of these tracks"; and he suggests that it is more than probable that the sheep-pox was brought to Allington by the same secret and devious paths.

The next point, which was, I believe, first brought to notice by Professor Simonds, is probably still more important. For some weeks before the beginning of the outbreak, Mr. Parry's sheep had been confined to

† I speak here of *medical* writers, commonly so called. I must do the two eminent veterinarians who had charge of the diseased flocks the justice to say, that they neither of them, for a moment, gave any countenance to the popular cry in favour of spontaneous origin.

two meadows in the lowland part of his farm.† At first sight, nothing could seem more complete than the insulation of these two fields. On looking a second time, an attentive observer would not fail to note that they were bounded through their whole length by the Kennett and Avon Canal. Along this great waterway trows are slowly dragged through all hours of day and night. In their multifarious cargoes, animal manure, and the raw materials from which animal manure is made, including skins, bones, and other offal, are said to figure largely. Now, if it be true, as reported, that a lot of the variolous sheep, just referred to as having been sold at Smithfield a few weeks before, died of clavelée on the banks of the Avon lower down, the appearance of this disease in a flock browsing on the bank of the Kennett and Avon Canal is no mystery. Under any view, it is extremely difficult to believe that the appearance of the foreign pest in these two particular fields had nothing to do with their proximity to a highway used for such traffic.

Here the case stands at present. Whether or not it will ever be more fully cleared up, I do not know. Probably not. In the present temper of the farmers of Wilts as to sheep's small-pox, the man who should be proved to have been even an unwitting instrument in conveying it to their flocks would not be likely to have a very pleasant life for some time to come. Under the circumstances, there is too much reason to suppose, therefore, that any information bearing on this point which might be forthcoming, would be suppressed by the only persons that have the power to give it. Meanwhile, we may rest assured that, if we have hitherto failed in tracking the infection home, the failure is not due to any real want of continuity in the thread, but simply to the inherent difficulty of following unbroken the course of such a gossamer. As for myself, I confess that I am quite indifferent whether the broken ends which we now hold be ever reunited, being of opinion that in the present state of science, when we see a case of variola ovina spring up, we are as much entitled to infer that the germ from which it came was derived from an antecedent case, as we are to draw the same inference in regard to human small-pox.

If, however, any should be disposed to cavil at the fact that the origin of clavelée in Wiltshire has not yet been made out in its every link, I would point to the two former appearances of the disease in England, in which even this last ground of objection is taken away. These first two outbreaks, indeed, as being much more wide-spread, and as offering a far greater number and variety of instances in which the communication from flock to flock could not be traced, were, if possible, even better illustrations of epidemics generally than that we have been endeavouring to follow. In both, as I have said before, the exact trail of the infection was tracked from the foreign seaport to the two farms in Berks and Norfolk, from which it afterwards spread so widely.

The measures by which, after it had risen to so great a height, this pest was finally suppressed, were simple enough. They were founded, in fact, on the single principle that variola ovina is an exclusively contagious disorder, to be extinguished only by preventing the spread of contagion in all possible ways. Perfect insulation of the diseased flocks for several months, as enforced by Order in Council; instant separation of the sick from the healthy in the infected flocks themselves; the immediate slaughter and burial of all badly diseased animals; the disinfection of tainted homesteads, and of the tainted fleeces of the sheep—this was the code of measures brought into action against this new enemy. Carried out with the vigilance and untiring energy which are often so sadly wanting when the interests of health only are concerned, but which never fail when the interests of the pocket are largely at stake, they perfectly succeeded. Before the beginning of November, this scourge, which from the ewe that lay dying by the hurdles had extended to some eight or ten thousand sheep, had come to an end; and, by measures directed solely against contagion, British flocks were once more delivered from a great peril, and the nation from incalculable loss. That the result should thus answer to the theory was the only thing needed to put the seal to the history, and to make the whole case logically complete.

Thus have we seen a great epidemic unfold itself, from its first small beginnings to its final extinction, in which the *rationale* of the whole series of events is made as clear as day. In these events, a specific germ, endowed with the faculty of immeasurable multiplication, open to various modes of untraceable dissemination, and having power over a single living species, is the only new element. In the incalculable minuteness of this germ, and in its equally incalculable faculty of growth, we find a key to all the phenomena. Manifold, complex, subtle, and intricate as the results are—in all these things so characteristic of epidemics generally—it comes before us with all the force of absolute demonstration, that they all fall under the single great law of the evolution of a specific type by continuous succession. What, above all, in this spectacle, is most to be prized, is the admirable clearness with which this great truth comes out. As we see with what precision, one by one, all the essential data bearing on our problem are elicited by experiment or made plain to observation; as we observe how the few remaining ambiguities which experiment and observation leave untouched are at once swept away by the great fact that the disease before us, although prevalent from all time in other countries, is new to our own—we seem to have left the vague realms of physic, where a balance of conflicting probabilities constitutes for the most part our nearest approach to truth, for the precise and rigorous demonstrations of the physical sciences.

Not less valuable is the whole history of this disease, for the signal record it bears against the doctrine of spontaneous origin as applied to contagious disorders. Resting on purely negative data, this doctrine is a mere figment of the mind.

The offspring of a crude and early stage of scientific culture, it has come down to us as a tradition of that phase so familiar to the student of the history of science, in which things are thought to be what they first seem, and the outward semblance is taken to be the real relation. In the nineteenth century, it is an anachronism. Among the contemporaries of Eschricht, Owen, Milne Edwards, Pasteur, and Carpenter, it should have no place.

It is to the last degree significant that wherever, in its application to this group of diseases, the question can be tried by experiment, or by the light of geographical distribution, or of data equally binding, it receives a decisive negative. Only in connection with the types that cannot be so dealt with does it still linger. Discountenanced by the whole analogy of nature, shown to be untenable in every case in which definite evidence can be brought to bear, this

† In a paper by Mr. Gamgee, in the July number of the *Edinburgh Veterinary Review*, I find the following passage:—"The lowland portion of the Allington farm is skirted by the canal, and it is said that the sheep were near this canal when the disease broke out. I find, however, that the first case occurred amongst a portion of the flock that had been driven daily to the down for about a week. My authority is the shepherd who drove them."

When I was Mr. Parry's guest at Allington, the origin of the outbreak was the subject of much conversation; and at that time Mr. Parry's own impression certainly was, that for some weeks before the appearance of the disease, his flock had been confined to the two meadows in question.

belief in the spontaneous origin of specific contagious diseases has already received its death-blow, and, like the strictly correlative belief in the spontaneous generation of plants and animals, is doomed soon to take its place among the things of the past.

This address, already too long, would, nevertheless, fail of all its purpose, if I brought it to a close without applying the truths it was intended to illustrate to the contagious fevers of our own race. For the present, I will content myself with a single example.

The fever I shall take is one with which you are all familiar; the typhoid fever of man. Like variola ovina, this, too, is a contagious fever, having a period of incubation, occurring but once in life; a fever which multiplies as it goes, and is marked by a specific eruption. For, although the character of which I speak, in the last instance, is seated on the intestine and not on the skin, you cannot doubt, if you will look at the drawings and photographs here exhibited, that such is its true definition.

Compare these drawings for a moment, with unprejudiced eye, with the drawings by their side, representing the eruptions of human and of ovine variola; remembering the while, that in each case you have before you the one and only specific mark of a contagious fever, and you will not, I think, fail to see that, in all, you are looking on phenomena of the same order.

But the several characteristics just enumerated are the highest conceivable by which two diseases can be related. Nothing can show more forcibly how entirely they touch and spring out of the essence of the morbific agent in each case, than the fact that they are found alike in the animal and in man. These two things, the ovine and the human fever, are, clearly, in the highest and most intimate sense of the words, things of the same sort. In all their modes of being they follow the same law. They are members of one family, in fact, as much as two kinds of mushrooms are; and, I may add, in the same sense.

Knowing the law of propagation of the one, we may apply it to that of the other, with the same certainty as we apply the law of propagation of one kind of mushroom to that of another.

If typhoid fever, like variola ovina, has a period of incubation—an interval, that is to say, in which, after the reception of the germ, no appreciable morbid phenomena occur—we have learnt by experiment what this implies.

We know that in the contagious fevers this most significant of characteristics depends on the fact which, in one of these two cases, *is patent to the eye*, that these diseases are caused by poisons which only develope their effects by growth within the living body, from a germ which, in the first instance, is too minute to exert any sensible action upon it. By the surest of inductions, therefore, we become possessed of the great cardinal truth, which I have already enunciated elsewhere, that the human body is the soil in which the typhoid poison breeds and multiplies, and that the fever itself is the process by which it is evolved.

Once more, if typhoid fever, like variola ovina, occur, as a rule, but once in life, we know—for in one of two we have ascertained the fact by experiment—that this is because, even in the living body, this poison cannot breed a second time. By the help of the same analogy, we may be equally sure that it never springs up spontaneously, but is perpetuated solely by the simple law of continuous succession.

Lastly, we may assume with the same certainty that the intestinal eruption represents the chief, if not the only out-come of the specific poison, since it is from the *variolous* eruption, the exact connterpart of this, that we charge our lancet when we proceed to the inoculation of the ovine disorder. But if so, what an opportunity is here! This typhoid poison, thus cast forth in a liquid form to infect the ground and the sewer, slays every year, in England alone, its eighteen or twenty thousand men. As it issues from the body, it is entirely within our power. By destroying it we may bar the succession, and throw the impenetrable shield of science between the poisoned shafts and the next group of victims.

It is easy to see how many difficulties may stand in the way of the universal and perfect accomplishment even of this simple act. The extent to which it may be enforced depends much on ourselves. If we put only half the energy into the work which the Wiltshire farmers displayed in preventing the spread of the clavelée among their flocks, we shall soon reduce the twenty thousand who perish annually from typhoid fever in England to a low figure, and pave the way to the speedy and entire extinction of the pest. For myself, I never see the exuviæ which contain its deadly seeds cast carelessly upon the world, without thinking how many homes may possibly be made desolate by that single act, and how great is the inconsistency which passes Acts of parliament, and imposes heavy penalties to prevent the destruction of some five or six hundred lives by arsenic and other poisons, and yet allows a poison which destroys its twenty thousand every year, to work its will upon the people.

One word more, and I have done. I said, that in applying the case of clavelée to the illustration of our own diseases, I would confine myself to a single example. But it is obvious, that the principles which that disease brings so clearly into view, apply with the same strictness to the propagation of the whole group of contagious fevers, and with greater or less promise of success to their prevention also.

If, instead of allowing our minds to be diverted by the baseless and obsolete notion that these fevers may spring up spontaneously, or by the unscientific idea that they may be generated by filth or other external conditions, we concentrate our attention on the great truth that it is in the living body only, that the specific poisons on which they depend are bred and perpetuated, we shall soon learn ways greatly to abate their ravages.

If I might be allowed to express the one sentiment that fills my own mind in relation to this subject, it would be this:—that it is high time we should join, with concerted aim and more earnest purpose, in efforts founded on this principle to deliver our fellowmen from these great scourges. To this course we are, in fact, moved by every high consideration that can impel men to action.

These fell disorders are always crossing our path. They defy our art, and seem to mock our power. Their presence is a standing humiliation to us. They cause the greatest and the bitterest tragedies we are called upon to witness. They leave desolation and mourning and widows and orphans in their track. Take the single case of scarlet fever, and what heart-rending scenes does not its very name evoke. Let this terrible fever sweep through a community and one seems to have for months ringing in one's ears "the voice of Rachel weeping for her children, and will not be comforted, for they are not."

Unhappily, this great Hydra of contagious diseases is not a thing that can be slain, like the Hydra of old, in single combat. Thanks, however, to the power of human genius we have already discovered that of its myriad heads, some at least are mortal. And, although to no one of us will ever be given the strength to repeat the exploit of Hercules, we may hope that, when science has forged the fitting weapons, by banding together as one man we may yet rid the earth of the monster.

THE

ADDRESS IN SURGERY.

BY

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Introduction. I should disappoint the reasonable expectation of my hearers, as I should conceal my own feelings, if I began my paper without an introductory word or two; particularly as an opportunity does not often occur of speaking in this way *ex cathedrâ*.

It is a post of no slight honour to be the surgical representative of this great Society; but the responsibilities and difficulties of the situation are equal to the honour, and I must be allowed to remind you, at this early stage, that our meeting here at Bristol follows in close rank that most successful assemblage of the British Medical Association in London last year; and that I stand up here in the place of one of the magnates and chief authorities and ornaments of the surgical world, whose fame is world-wide, and whose practical and eloquent address gave no small share of its *éclat* to our last meeting; but who did not, I am sorry to say, like the more considerate prophet of old, leave his mantle behind him, to clothe with some of his own powers his less fortunate successors. The kind consideration, however, with which I have always been received by my fellow-members, encourages me to hope that it will, in like ample measure, be accorded to me now; and that any shortcomings that may be noticed, will be attributed to want of ability or want of time, or to anything rather than want of desire to fulfil the duties worthily. The only points on which I will not yield to my predecessor in the office of delivering an Address in Surgery, are, in respect of zeal for the noble science and art which we profess, and wish to maintain the dignity of the profession, and the honour of the society to which we belong.

The gentlemen who have preceded me in this office for the last few years, have expressed and acted on the idea that, what with our "Retrospects" and "Abstracts" and "Year-Books," a special report of the progress of surgery is unnecessary and unprofitable. I think, on the other hand, that a brief and well-digested annual report, dealing simply with the actual improvements or changes that have been introduced into the theory or practice of surgery, given under the sanction of the British Medical Association, would be far preferable to, although it would not take the place of, the crude mass of heterogeneous materials offered for our assimilation, through the press, every six months. But, although I thus differ from them in this matter, I shall on the present occasion so far follow their example as to confine myself to one subject, which I hope may be of practical interest to the society.

At the annual meeting of the Bath and Bristol Branch, in the year 1857, when I had the honour of giving the President's address, among other topics I brought forward the subject of the treatment of *Carbuncle*; and I wish now to complete what I then briefly alluded to.

Those of my hearers who imagine that the disease has been thoroughly disposed of already, and that its pathology is settled, and its treatment well understood, will be surprised to hear that in both these respects very different, if not opposite, doctrines have been broached by surgical writers of no ordinary repute during the last few years; and these opinions I must bring forward in order to justify my choice of a subject; which, however, I have been principally led to make because the question is of an eminently practical nature; because I believe that the ordinarily received treatment, as practised by most surgeons, and as taught in our schools and surgical works, is not the right treatment; and because I think that a change in this respect will be followed, among other advantages, by a greatly lessened mortality.

I offer no claim to novelty or originality in the views I have to bring forward, for the priority belongs in many particulars to others; but I have tested them in practice, and have the fullest conviction, founded on some experience, that they are established on the firm basis of theoretical and practical truth; and I hope to prove that the plan of treatment I am about to advocate is, in every particular, in strict accordance with a true view of the pathology of the disease.

Increase in Frequency. Carbuncle is undoubtedly becoming more and more frequent in this country; and there is good reason for believing that very long ago, although not unknown, it was very rare even in this simple form of which I am speaking; as distinguished from that fatal form of carbuncular inflammation known as the malignant pustule, which has been so fully disposed of last year by my colleague, Dr. Budd. The two diseases are essentially different; malignant pustule occurring always on exposed parts of the body, and arising from external causes, namely, direct inoculation with poisonous matter; while carbuncle arises generally from internal causes, and has its usual habitat on covered parts. In most of the old books on surgery, reference is made to carbuncle; but it was evidently a rare disease. The early descriptions of it were generally accurate, and its constitutional symptoms and dangers were more dreaded than they are now. Of the number of cases in proportion to the population, or to other diseases, there is no record in these old writers. The late Mr. Lloyd, who was for many years a colleague of Abernethy, said in one of his clinical lectures, that in his earlier professional days, boils and carbuncles were almost unknown.

The following numbers of registered deaths from carbuncle, quoted from the reports of the Registrar-General, are sufficient to shew that the mortality from this cause is on the increase. In the year 1842 forty deaths in all England were registered, in the proportion of twenty-nine males to eleven females; and in the nine years from 1847 to 1855 the numbers were as follow:

Year.	Males.	Females.	Total.
1847	50	27	77
1848	58	33	91
1849	64	17	81
1850	102	32	134
1851	112	49	161
1852	167	66	233
1853	190	62	252
1854	218	82	300
1855	177	78	255

In other words, there were six times as many deaths from this cause in 1855 as in 1842. The mortality has also been given in another form, viz.: in 1851, nine died of carbuncle out of every million persons; in 1852, thirteen; in 1853, fourteen; in 1854, sixteen; in 1855, fourteen. From these numbers we may also conclude that many more men are attacked than women; the proportion of deaths being five men to

every two women in the nine years mentioned above, when no less than *one thousand one hundred and thirty-eight* men died; the total mortality being *one thousand five hundred and eighty-four.*

There is reason to believe that it is relatively more fatal in men than in women, partly because among the poorer classes men are less able to give way to the disease, and submit to the loss of time necessary for its early treatment; and partly because of the more intemperate habits of many men who are attacked by it. The harder and less vascular skin of the men also causes it to spread more extensively in the subcutaneous tissues before the salutary central sloughing of the cutis takes place.

I have no opportunity of giving the proportions of deaths in every hundred cases of carbuncle, and without such information it is impossible to know the entire number of cases; but it must undoubtedly amount to many thousands annually; and if nearly three hundred die, a still larger number must have narrow escapes of their lives, with more or less local mischief or damage to the general health.

This increase in the number of cases seems to prove that continued changes are taking place in the maladies we have to treat, and that the term "change in the type of disease" does not deserve all the obloquy thrown upon it in the late controversy between the supporters of the alcoholic treatment, and their opponents of the old antiphlogistic school.

Period of Life. The malady in question is one of the middle and advanced periods of life. It is very rare below thirty-five years of age, and most frequent from forty-five to fifty-five. I have had several patients beyond eighty years of age, all of whom have recovered; and the deaths of some few children from this cause are registered every year. I have never seen it in a young child. The same amount of local inflammation in the looser and more vascular tissues of the young subject, in the great majority of cases, would produce abscess, or perhaps diffuse phlegmon, or phlegmonous erysipelas, and not the circumscribed induration known as carbuncle.

Causes. Among the occasional causes of carbuncle must be named the application of blisters, irritating plaisters, and liniments, which will produce the disease in certain low states of the health, but not in others; whilst the internal or predisposing causes are weakness of circulation arising from long illness, or organic disease, especially of the kidneys, and mental distress or old age; in which cases it may apparently arise independently of any local irritant. Some writers have even attributed it to the effect of diseased meat, or diseased wheat; but this is very improbable. It is seen sometimes in men who have been over-fed, and have become plethoric; but more frequently in the opposite condition of the system. I believe that in the majority of cases there is a local cause; and I look upon the disease very much as a local one, if any disorder arising spontaneously can ever be so termed.

Some few experiments as to the possibility of producing the disease by inoculation with pus from a carbuncle, have been made by Dr. Laycock, and they afforded negative results. This does not appear to be a mode of inquiry which we can follow out with much hope of good; and the proceeding itself, of course, cannot be without risk to the subjects of the experiments. We may, perhaps, infer from these results that there is nothing very actively specific in the secretion; and this is what we might have expected, for carbuncle is not like a fever or a blood-disease, or an eruption from some general constitutional taint; and its previous existence in no way promises immunity from future attacks.

Description. Carbuncle is a disease of the integuments of the body, involving the skin and superficial fascia. Its usual seat is in the back or the neck, occasionally on the limbs; but almost always on one of the *extensor* surfaces of the body, where the skin and subcutaneous cellular membrane are thicker and harder and less vascular than on the flexor surfaces. I have not unfrequently seen it on the head, neck, back, nates, the back of the arm and forearm, the dorsum of the hand, and the front of the thigh; but scarcely ever on a flexor surface. A surgical friend, who has had the largest field of observation in this neighbourhood for many years, has informed me that he had one case in a lady, where the disease was seated on the abdomen, and proved fatal by producing peritoneal inflammation.

Mr. Syme says that it affects the skin only, and is not subcutaneous (*Lancet*, March 8, 1856); and the late Mr. Lloyd, of Bartholomew's, agreed with him. On the other hand, Dr. Collis, of Dublin (*Dublin Quarterly Journal*, August 1859), considers the essence of the disease to be an inflammation of the fascia; and between these, the two extremes, we have the opinion of the majority, that it is a cellulo-cutaneous disease. As the former authors recommend very long incisions; and their opponents make them very deep, so that the fascia be divided as far as the skin; and as the believers in the *via media* sometimes practise one kind of incision, and sometimes another, and sometimes none; and as all found their mode of treatment on their own particular views of the pathology, it becomes a matter of importance, especially to the patient, to decide the question, and, if possible, to set it at rest.

If I trouble you with a brief account of the origin and progress of a carbuncle, it will not be with the idea of telling you anything that you are not as well acquainted with as myself; but to remind you of some points which will assist us in understanding its true nature, and the effects of remedies.

Carbuncle begins like a boil, with a flattened surface and extended base; and is, I believe, from the beginning, in this respect different from the ordinary boil. The point is red, and sometimes even contains a minute drop of pus; but this is under the cuticle, secreted by the skin, and quite distinct from the pus afterwards found underneath the whole thickness of the skin. From this small point the morbid action extends rapidly in a completely circular form; and, if left to itself, attains in a few days considerable size; the hardness and tumour-like appearance being quite disproportioned to the affection of the skin, which, except in the central point, appears to be altogether secondary. By the time the disease has attained the size of a crown-piece, the skin has become livid and dusky; but without any feeling of fluctuation, or the so-called "boggy" state peculiar to the earlier steps of diffuse phlegmon, or the latter stages of carbuncle itself.

After a period of time varying from seven to ten days or a fortnight, the livid skin begins to give way in one or two points near the centre, and these increase in number every day. From the apertures thus formed some white solid matter protrudes, and subsequently they give vent to some reddish and very thick purulent secretion; indicating that the subcutaneous tissue has lost its vitality, and that, partly from the tension, and partly because the vessels supplying it have been cut off, the centre of the skin is about to slough. When this takes place, and there is a patch of dead skin as large as half-a-crown in the middle of the carbuncle, the progress of the circular induration ceases, and the redness becomes more circumscribed. Under favourable circumstances, in a case of this kind, the pus finds its way through the slough and at points in its circumference, and the process of separation is slowly completed; a white mass with a very peculiar odour being gradually turned out, leaving a granular surface, which nature is generally competent to heal.

When the death of the skin is retarded, the carbuncle, on the other hand, spreads with more rapidity, and may attain a very large size, extending even across the entire back, or neck, or whatever part it may have fixed itself on; and I believe that this extension of the disease is in a great measure a mechanical process, the resistance of the skin being sufficient to force the morbid secretion on every side into the spaces of the areolar tissue, where it sets up a similar destructive action. If the formation of these morbid products be still further encouraged by warmth and moisture applied externally in the form of poultices, and by the indiscreet use of internal stimulants, the growth is still more rapid and extensive; and, before the natural relief takes place by a free sloughing of the skin in the centre, a very formidable mass of disease results. The entire subcutaneous cellular membrane, with any adipose tissue that exists in the part, is killed by the pressure and inflammation, and dies as far down as the deep fascia; and the functions of the anastomosing capillaries and nerves of the skin are ultimately destroyed.

The slough which is turned out is of a very peculiar structure, consisting of thick and white cutis, cellular membrane, and fat, the dead matter branching out underneath as far as the circumference of the indurated mass; and, in addition to this, there is a considerable amount of puriform secretion and coagulable lymph filling up all the interstices, and whitening the tissues, which have for many days been macerated in it. Some of the soft white matter extruded from an open carbuncle bears much resemblance to the semitransparent and very soft granular tissue deposited around diseased joints and the cancellous parts of bones.

The smell of the slough is also peculiar, and very difficult to describe, being altogether different from the well known odour of putrid dead animal matter; and this smell is due to the secretion, which seems to be a living fluid teeming with cells, rapidly multiplying, and preserving, to a certain extent, the solid parts from undergoing the ordinary decomposition.

Microscopic Examination. The microscopic examination of the protruded mass is of interest. The fluid part is undoubtedly pus, with cells well marked and of regular form; and among them, in very varied numbers, are to be seen the smaller and still more regularly formed blood-corpuscles.

The solid matter is composed of the natural tissues of the part, modified by the disease. The harder superficial portion, white, thick, and tough, shows here and there the follicles of the skin. The deeper shreds of hard tissue, which often keep the slough in its place for a long time, are the cellular membrane soaked in pus, and exhibiting all its various elements, which have become very distinct. We see ordinary straight fibre of considerable length, involving within its meshes the cells of pus, and probably lymph, or so-called fibrinous exudation, to which some of the induration peculiar to the disease is due; and we have very numerous small portions of elastic fibre, curved into all kinds of shapes, but all very short; and we have also fat-cells of various forms and sizes, some separate and clear, and highly refractive, and others filled with a dark yellowish-brown matter, which is the fat in a crystalline state.

The addition of liquor potassæ has a very marked effect on the whole. The blood and pus are converted, of course, into a clear gelatinous mass, adherent to the glass like thick mucilage, and losing all appearance of definite structure, but disappearing in solution by the use of a large quantity of the alkali. The residue shows the straight and elastic fibre with wonderful distinctness; the latter being a tangled mesh of bright hard fibres, easily separable from one another. A portion of the slough, which has been shaken in a small quantity of liquor potassæ, loses the greater part of its bulk, and scarcely any solid matter except white and yellow fibre remains.

I have treated a firm and solid slough of considerable size, which had been separated from a carbuncle by the natural process, and without any aid by treatment, with caustic alkali, and have found that the whole of it disappeared in solution except a few shreds of fibre. This complete disintegration (for so it might be called) of this mass of dead tissue by the potash, was to me a most satisfactory experiment, and I shall have to make some reference to it in the latter part of my paper.

When the slough has completely come away, and only a granulating sore with flattened edges remains, the resulting gap to be repaired varies, partly according to the size of the original disease, but more especially according to the mode of treatment pursued, as I shall presently show. In general terms, I may say that the healing process is tolerably rapid, and the resulting scar is comparatively small, and seldom productive of any inconvenience.*

General Symptoms. The general symptoms are not in proportion to the extent and severity of the local disease. The patient feels pain, but the amount of it is very different in different cases. In the lower part of the back it is generally greater than in the case of a carbuncle of corresponding size in the upper part; and the cutaneous nerves being cut off with the vessels, a large livid mass may often be pressed and manipulated freely without producing more than a moderate degree of uneasiness. In other instances, the pain is described as if a heavy and hot coal were being pressed into the flesh, justifying the name anthrax, which is given to the disease.

There is little antecedent fever, but the affection of the general system progresses *pari passu* with the local disease, as in erysipelas; if but little of the skin is affected, the patient suffers but little; if a large surface is attacked, the symptoms increase also: and, on the other hand, if you check or control the local disease, you destroy the general symptoms. In this respect erysipelas differs essentially from the other exanthemata, when the risk of the patient bears but little relation to the amount of cutaneous eruption.

A moderate amount of fever is often present, indicated by a quickened pulse, sleeplessness, white tongue, loss of appetite, and frequently constipation; but these symptoms may be referred more to the presence of a troublesome and perhaps painful local disease, than to any specific poisoning of the blood. When the slough is formed, and is becoming properly separated, the fever ceases; and after this period the constitutional symptoms depend simply on the drain on the patient's vital resources required for the completion of the sloughing process, and on the exhaustion produced by copious discharge.

To relieve these different states, of course different plans of treatment are available. It must be admitted, at the same time, that when nothing but a healthy and healing granular surface remains, the feeling of renewed vigour experienced by the patient shows that the system is relieved of something deleterious, and that, in the words of some of the olden writers, his body has been purged of some of its evil humours.

Causes of Mortality. Before coming to the treatment, it will be necessary to advert to the causes of death, of which the three chief are: 1. Exhaustion of

* Since writing the above, a man has come under my care complaining of a hardened and contracting cicatrix on the back of the neck on one side, in whom a large carbuncle had been treated by incision in the usual way two years before, and the scar which remained had been of continually increasing trouble to him, having the hardness and peculiar contractility of a cicatrix after a burn of the fourth degree.

the patient's powers of life by excessive and long continued discharge and sloughing; 2. Hæmorrhage after the incision of the diseased mass, generally recommended and practised; and 3. The constitutional disorder known as pyæmia. To these may be added the occasional extension of the morbid process to the deeper and more important tissues, which can only occur when the disease is on the abdomen or front of the chest, a very rare contingency, or when the membranes of the brain are attacked, as in erysipelas, should the head be the seat of the carbuncle; and, lastly, deaths have occurred from tetanus.

1. The first cause, or Exhaustion, is seen when a large and neglected carbuncle has sloughed, and a vast cavity remains extending from under the detached skin, from which great quantities of pus and shreds of dead tissue are daily discharged, until the patient's life is worn out, and he can no longer assimilate sufficient food to replace the constant loss of material, much less to repair the chasm which the disease has made in the body.

2. Death from Hæmorrhage does not occur immediately; but sometimes the flow from the divided capillaries is so great and continued, that there is not sufficient strength left to hold out in the subsequent stages, for the completion of which, in a satisfactory way, a greater amount of vital power is necessary than in the first or inflammatory stage. It is seldom that any vessel of large or even moderate size is divided.

3. I believe that Pyæmia is the most frequent cause of death. The rigors and general depression, with other signs of poisoning of the system, which I need not enter into before such an audience as the present, will raise an alarm and anxiety in the surgeon's mind which is only likely to end at the same time as the patient's life, for the result is almost inevitably a fatal one. There is a peculiar and deceptive hopefulness about patients suffering from pyæmia, from whatever local mischief it arises, which is well marked in these fatal cases of pyæmia, and which has been noticed by other surgeons besides myself. I believe that this terrible accident of purulent infection occurs from the direct introduction of pus into the veins of the part, and that some cause which produces a flow of blood, or a breach of continuity in the living parts, is a necessary condition of its origin.

With respect to the deaths from tetanus, I think that interference with the sloughs by cutting or traction, before nature has separated them, may probably lead to the onset of this fearful addition to the patient's risks; for I have noticed in other cases of tetanus, that it has speedily followed the removal of partially separated bone, or a shred of half-dead fibrous tissue from a crushed finger or toe, when this simple operation had been performed merely to save the patient's time.

Treatment of Carbuncle. I now come to the treatment of carbuncle, the last and most important part of my paper, on which I lay the greatest stress; for it is almost the only part connected with the disease which really allows of any difference of opinion, and the remarks which I have to make will relate almost exclusively to its local management, with a very brief reference to its general treatment.

When we consider that *nearly sixteen hundred* deaths occurred in nine years, and that they amounted to three hundred in one single year, and that the vast majority of these were adult men but little beyond the prime of life, and that if the disease had been early and properly treated most of them might have been saved, we must admit that the subject is one of high importance, and not unworthy of the consideration of our Society, made up as it is of practical and busy men. To say that with an altered plan of treatment none would die, would be to borrow the words of the quacks and advertising doctors, real or pretended; and with them I have no desire to be classed.

It seems to be accepted by all who have written on the subject, that when the carbuncle has once formed, it cannot be cured without giving exit to a slough or core; and the indications are, therefore, to stop the progress of the complaint, and to expedite the separation of the dead tissue. In a work on surgery, called *Several Chirurgical Treatises*, published in 1676, by Richard Wiseman, Sergeant-Chirurgeon to King Charles II, to whose most sacred majesty he dedicated his "Chirurgical Labours", the author says that too much bleeding is to be avoided, that incision may be made, and this is the particular treatment which he recommends; but he adds that some surgeons advise caustics, or the actual cautery.

This surgeon of the old times has written a wonderfully entertaining book, for a surgical work, and, in his remarks about carbuncle and several other subjects, was much in advance of his times. He gives numerous cases of severe gunshot wounds, and other injuries, which occurred in the battle of Worcester and the other fights between the Cavaliers and Roundheads. He was at the same time a firm believer in the cure of scrofula by the king's touch.*

Another writer of the seventeenth century, Lazarus Riviera, who published a series of surgical cases, strongly recommended caustics.

For the last fifty years the approved treatment has been by what is called the crucial incision, which is to be made boldly and freely through all the indurated tissues, across from one edge of the red circumference to the other, and again at right angles, so as to free the slough and destroy the inflammation; and it must be allowed, that, in the great majority of cases, this plan has been successful. Other means have from time to time been recommended, and some very recently, viz., no incision, but poultices, or iodine (Dr. Rigby, *Med. Times and Gazette*, vol. ii, 1858); or turpentine (Theilman, Berlin, *Med. Times and Gazette*, Sept. 29, 1855); or belladonna (Mr. Cooke, *Med. Times and Gazette*, Sept. 29, 1855); or white paint, or a cupping-glass, or watery extract of opium (Mr. Shillitoe, *Med. Times and Gazette*, vol. i, 1858); or opium plaster (Gutzeit, *Dublin Hospital Gazette*, April 1, 1859); or subcutaneous incisions (Mr. French, British Med. Journal, vol. ii, 1862, p. 52); or lead plaster (Mr. Hunt, Association Med. Journal, July, 1853); or acid nitrate of mercury (Mr. Startin); or some other novelty, none of which have, I believe, survived the period of their first publication in the journals.

The caustic plan has been revived, and with the sanction of well-known surgical names. Dr. Physick, of Philadelphia, seems to have been the first to bring it once more prominently before the profession; and in May, 1857, the present Mr. B. Travers published (*Lancet*, vol. i, 1857) two or three very interesting and convincing papers on the subject, and it was then that my attention was first drawn to the caustic treatment, before which time I had invariably marked a deep cross on the carbuncles, as my neighbours did. In Nov. 1856, Mr. Higginbottom published (*Lancet*,

* Although the following extract has no reference to my subject, it will prove that the author anticipated the treatment of the present day in other subjects besides carbuncle. Speaking of hernia, he says:—"If, after the forementioned endeavours to reduce the hernia (whether it were by reason it had been too long relapsed, and the excrements grown hard and dry in the intestine, or that they were stuffed with crudities, or inflamed by the constriction in the production, etc.), you do not succeed, you ought to consider what the impediment is, and proceed accordingly to let blood, purge or vomit, or put him into a semicupium, keeping on his bag-truss the while; after which, he may, if occasion require, be carried to and fro on the back of a strong man with his head downwards, by which the prolapsed bowels are often reduced. Mr. Smith, the truss-maker, told me he had made such an engine, by which he set them on their heads, and thereby reduced many, which could not otherwise be relieved.

vol. ii, 1856) a short but very comprehensive little article, recommending a plan very similar to that which I am about to advocate. Mr. Syme, on the other side of the question, says, in his ordinary very distinct mode of expression, "the application of caustic is the extreme of absurdity."

I must, at this point, proclaim myself an unflinching advocate of the caustic plan of treatment in a slightly modified form, and a strenuous opponent of the crucial incision. The caustic to be preferred is the stick of potassa fusa, and it is to be used freely but carefully in the following way. In whatever stage the carbuncle is, the potash is to be applied and rubbed in freely in the centre, until an eschar is fully formed. In the earlier stages, if the skin is still unbroken, it must be used for several minutes, until the death of the central portion is ensured, and the size of the slough to be made varies of course according to the size of the carbuncle. In general terms, the diameter of the skin to be destroyed should be a fourth, or even a third, of the diameter of the indurated and inflamed mass. This is generally sufficient to stop the progress of the disease: but it is far better, at the same time, to use some application of an opposite nature to the circumference, and for this purpose the nitrate of silver in substance, or in strong solution of two scruples to an ounce, may be used, according to Mr. Higginbottom's plan, or, as I prefer it, a strong solution of iodine in collodion, which has a very excellent effect in destroying the erysipelatous element of the disease. I believe that my father was the first to use a strong tincture of iodine for erysipelas of the head and face; and the *pigmentum iodinii* of the Bristol Royal Infirmary, made by the solution of forty grains of iodine in an ounce of rectified spirit, has now come into general use in such cases.

We have lately added to our Pharmacopœia here a "*Pigmentum iodinii c. collodio*," made with a scruple each of iodine and iodide of potassium to the ounce of collodion, and with very favourable results, for erysipelas, whether idiopathic or following surgical operations; with the exception that, if used on the face, the eyelids must be left intact, for it causes so much contraction of the surface, that there is danger lest the patient should not be able to shut his eyes afterwards, and this accident I have seen before now.

Mr. Higginbottom, in his paper quoted above, speaks most truly of the nitrate of silver as a preservative, and the potash as a destructive agent, and seems to have found, as I have, that this fact is not sufficiently recognised or appreciated. The contraction of the collodion film acts very beneficially on the capillaries of the skin, and the particular effect of the iodine is more continued, because of the mechanical adhesion of the collodion to the surface. With this pigment the indurated part is to be daily painted, without waiting for the first layer to come away, and the relief from it after the use of the potash is very marked. Poultices are to be avoided altogether. A dressing of the resin ointment, mixed with an additional quantity of turpentine or some camphorated spirits, is to be used daily over the surface, and in most cases no change need be made until the patient is cured.

The other points in the treatment are the greatest attention to cleanliness in the dressings, and the removal of the discharges, which are easily ensured by warm bathing and cotton wool; and the strictest care is necessary not to interfere with the slough by any dragging or cutting, so as to cause an effusion of blood.

To a carbuncle which has begun to slough by the central apertures, the caustic is to be applied in the same way, and the effect is to turn the sloughing skin into a gelatinous black mass, which melts away and is gradually removed with the dressings, the iodised collodion pigment being applied around the circumference as before. By this plan of treatment the slough certainly separates earlier than by the incision, and comes away in a half dissolved state; and the disease being checked at the margin, contraction of the entire sore goes on from the granulating process within, frequently for many days before the more solid part of the eschar has been quite thrown off from the living tissues.

The chief advantages which we claim for this plan of treatment, as contrasted with the incision, are two in number; viz., firstly, and principally, the safety of the patient; and, secondly, the rapidity of the cure.

1. *The patient's safety;* the proofs of which we may conveniently examine under the same heads as those used before in describing the perils of the disease, or the causes of mortality. The risk of hæmorrhage, from which some patients die, is altogether done away with. At the time of the application of the caustic, when the skin is beginning to slough, a few drops of blood escape sometimes, but they are at once dissolved by the caustic, and this is the only blood shed in the progress of the case; and, if the potash is applied still earlier in the treatment, not one drop is lost, and this is no slight advantage.

Exhaustion, as a cause of death, is rendered much less probable, partly because no blood is lost, but principally because we imitate and support nature's efforts by making an artificial slough, of comparatively small size, and the suppuration is only what is required for the separation of the dead skin and cellular membrane, the further secretion being very much lessened by the early loosening of the slough and the application of the iodine paint.

Thirdly, I believe that pyæmia or purulent infection, the most frequent cause of death and the most hopeless complication, will not occur by this method of treating the disease.

I have already stated my conviction that pus finds its way into the open mouths of the divided vessels, and thus the system is contaminated. A cut through the hard, brawny tissues must leave many vessels held open mechanically, in the midst of the suppurating and sloughing membranes, in the state of all others best adapted to cause the entrance of the poison.

The only two fatal cases of carbuncle which I have been ever called to, were of this nature. Both were clergymen, middle-aged, well nourished, and in fair health at first; and in both the treatment had been by incision. In one the sloughing process was never completed; in the other the wound had even healed, and become firm, and the patient sank from numerous extensive formations of pus in the joints and cellular membrane, in various parts of the body.

A medical friend of very large experience in India, where the natives, soldiers, and others, were always under his care, and where carbuncle is a very common disease, informed me some years ago that he had long given up the incision because of the mortality from pyæmia, and that his treatment has been much more successful since.

Seiche treated eleven patients in the ordinary way with incision, and six died; five of them from pyæmia. He treated twelve with collodion, and all recovered.*

The risk of death by the extension of the inflammation to the deeper and more important structures of the body, or by tetanus, is nearly the same whatever plan of treatment is adopted; but these dangers are not great, because of the extreme rareness of these accidental complications. Whatever difference there

* *Year-Book of Medicine and Surgery*, 1862, page 165. The mortality was excessive according to this statement—six dying out of twenty-three. The mere application of collodion seems an inefficient remedy.

is must be in favour of the caustic method, because the slough is more speedily loosened.

2. *The Rapidity of the Cure.* The second advantage which I claim for the caustic, viz., shortening of the time required for the cure, although not equal in importance to the safety of the patient's life, is nevertheless no slight one. It is not quite so easily capable of absolute proof; but I have as little doubt about it as about the others.

The explanation of the case is sufficiently easy. Important time is saved at first, because the slough is formed more quickly. A cut will let free the tissues, and check the inflammation and the progress of the disease at the circumference; but whether the skin has sloughed already or not, the central part will, in almost every instance, die, and have to come away; and the special chemical effect of strong caustic alkali upon the tissues of the part, in whatever state they may be, whether living or dead, saves the patient's time in another way. As I have before noticed, the potash is a powerful solvent of the tissues: pus, blood, and the gelatine of the skin and the fat, are liquefied and dissolved by it, if used in the concentrated form of potassa fusa; and the slough already formed and the skin which is about to give way become semifluid, and are washed away with the secretion; the solid elements remaining being the white and yellow fibre of the skin and areolar tissue, with pus, coagulated lymph, and some of the cellular membrane and fat which the caustic has not been able to reach.

It is important to remember that the action of the remedy upon the part to which it is applied, is chemical entirely; and that the good effect upon the rest of the disease, is from the early formation of a slough which is easily broken down in its substance.

The resulting sore is undoubtedly much smaller by this treatment. After incision, the quadrants of skin partly slough, and are partly retracted, so that ultimately the sore is circular, with a diameter of the length of the cuts; whereas by the potash and iodine plan the centre gives way, and all the rest of the skin retains its vitality and its former position; and even though the edges appear at first to be undermined, by the time the slough has come away the greater part is generally filled up by granulations; and, as I have before said, contraction of the whole sore has commenced.

To complete my remarks, I must shortly allude to the general treatment. The indiscriminate use of stimulating food and drink is to be avoided. Some gentle aperients are required at first; and afterwards the medicine best suited for the majority of cases, is a mixture of ten grains of chlorate of potash with ten minims of the tincture of the sesquichloride of iron. Food in a nutritious and fluid form is required, and occasionally wine or beer, if the discharge is very free, and the pulse seems to require it; and if there is much weakness with sweating, quinine and acid, and perhaps an opiate at night.

Mr. Higginbottom, whose name deserves all honour, for he is a staunch and honest opponent of the vices of the alcoholic treatment, makes the remarkable and very satisfactory statement that he has never prescribed alcohol in any form for this malady, and that he never saw a fatal case.

The question of pain will arise, and may with some be an element in the determination as to the plan of treatment; but it has no weight at all compared with the question of the patient's safety. When a large surface is touched with the caustic freely, there is sometimes much pain; but in those cases a long incision would be necessary, and patients dread the caustic much less than the knife; and I have used the freezing mixture of pounded ice and salt, applied for five minutes to the surface, with the effect of almost destroying the feeling without interfering with the chemical action of the alkali. The advantage in this respect is all in favour of the caustic; and the freedom from pain which the patient experiences, as soon as the first burning has passed, is very marked.

I have introduced no accounts of cases, although I have treated many in each way; for their usual progress may be satisfactorily described in general terms.

In conclusion. Although the plan is not new, and although it has been urged, as I have before said, by higher names than my own, and although its advantages are so striking and intelligible, it is very clear that the idea has not taken root effectually, as it ought to have done; and no opportunity could offer itself more likely to bring it prominently before the profession, than that which I now take of making it the subject of the surgical address before this assembly.

I am not without hope that I shall have convinced some of my hearers, and that they will be induced to give it due consideration and a fair trial; and with this I shall be well content. And this hope must be my justification for bringing so trite a subject before you. I may be allowed to remind my hearers that ten years ago I had the honour of reading the Surgical Address at a meeting of our Association at Swansea; and in those earlier days the difficulties of the situation were less, and more time was available in the midst of professional duties, than at present, when few quiet hours are to be obtained. And if my task has been performed now by snatches, or too quickly, or, it may be thought, incompletely, I have at any rate been able to speak on this occasion with the authority of more experience; and I will trust myself and my essay confidently to the kind consideration, and, I hope, friendly criticism of my hearers.

Decimal Measures. Out of the fact that uncivilised man reckons with his fingers, and has 10 fingers to reckon with, has arisen a numeral system, or machinery for counting with the number 10 at the bottom of all its arrangements. Every time we multiply by 10, we add simply a round 0,—1, 10, 100, 1,000, etc. To divide by 10 we have only to cut off the last figure; to divide by 100 we have only to cut off the two last figures, calling any surplus they may represent, so many parts of a tenth or hundredth; whereas in the arithmetic of everyday life, as it now stands, we are continually working sums out by an act of calculation resting upon every figure; also, if we are duly careful, running over each of our calculations twice, as safeguard against error, and thereupon, if we find error, running over it all a third time to ascertain which of the two differing calculations was the right one. All this trouble we give ourselves artificially, by using measures of value, weight, and capacity that are not in accord with the method of counting. Let us measure and weigh by tens, as we count by tens, and we may rub every trace of vulgar fractions off the slates of our national scholars, and set free for more useful knowledge half the time now spent in learning by heart confused or complex tables, and in the practice of long arithmetical processes that no longer touch on the real business of life. We do not this only. France and other countries of Europe have preceded us, Russia and others having declared themselves ready to follow if we follow the good example that has been already set, the whole mass of waste labour in conversion of foreign into English or English into foreign measures will be done away with, and a great hinderance to international commerce will be destroyed. Between French and English houses great mistakes are sometimes made in ordering and executing orders, and where those mistakes have not been felt there is very often enough doubt and hesitation about measures of quantity to turn the scale against relations with the stranger. (*All the Year Round.*)

British Medical Journal.

SATURDAY, AUGUST 8TH, 1863.

THE ANNUAL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association has been held at the Victoria Rooms, Clifton, on Wednesday, Thursday, and Friday of the present week, under the presidency of Dr. Symonds.

The entire account of the proceedings will be published next week; in the meantime, however, we give a brief outline of what took place at the opening meeting on Wednesday.

On that day, the Members, to the number of about two hundred, met and heard a valedictory address from the able retiring President, Dr. Burrows; who rightly alluded in terms of congratulation to the success which had attended the London meeting of last year, both in regard to its scientific, professional, and social effects.

Dr. Symonds then took the chair as President, and delivered a highly philosophical address, which our readers will find published in full as the first article in this day's number.

The Report of Council was then read by the General Secretary, Dr. Williams. In consequence of the increasing pressure of his professional engagements, Dr. Williams intimated, through the Council Report, his desire to resign his office. The report, after some remarks from Mr. Steele, was passed.

A vote of thanks was passed to Dr. Melson and Dr. Hadley, the auditors of the Association; and they were re-appointed.

A vote, thanking Dr. Burrows for the performance of his duties as President of the Association, and appointing him a Vice-President, was carried by acclamation, and acknowledged by Dr. Burrows.

Mr. Watkin Williams was proposed as the successor of Dr. Williams of Worcester in the post of General Secretary.

Dr. Richardson then brought forward his proposal for the appointment of a Committee to consider the possibility of establishing a Medical Provident Fund. The motion was seconded by Mr. Daniell, and carried.

The alterations in the laws, of which notice had been given by Dr. Markham, were withdrawn.

THE MEDICAL COUNCIL AND REPORTERS.

As our readers are aware, the question, "that reporters be admitted to the meetings of the General Medical Council," has been put, discussed, and negatived by that body. But the fact that eleven votes were given for and eleven against the motion—the President negativing by his casting vote—shows that a considerable difference of opinion in Council prevails on the subject. If the Council have erred on this occasion, they have, at all events, erred on the safe side. The vote, as it now stands, can any day be amended, which it could not have been, had it gone the other way. We are inclined to think, however, that on another occasion, should the question be again brought forward, the majority for exclusion of reporters will be greater than it now is. The amendment of Sir C. Hastings—that reporters should be admitted on those occasions when the Council was acting judicially—seems reasonable and just. On the general question, we must say that we have not yet heard anything like a satisfactory reason given why reporters should be admitted; nor do we exactly see what service they could render to the profession by their presence. It has been, indeed, suggested to us by a member of Council, that they would, at all events, furbish up a good deal of matter for the journals which would *amuse* the profession. Of this we have no doubt; nor do we doubt also that we should in this way also be furnished from time to time with sketches of "personal explanations", "rejoinders" and "replications", and occasional "sets to" between impassioned and fervent members of Council; but we certainly very much doubt whether reports of this character would add much either to the reputation of the Council or to the real edification or advantage of the profession at large. Of course, the popular view of the case would be, that the whole proceedings of the Council should be bared to the profession and the public; and we would assuredly recommend this view of it, if we could see that any kind of good could result therefrom. Those who are most fervent in supporting the admission of reporters do not show any good reason in favour of their views; they merely say that these things ought to be all done openly.

But the objections against the admission of reporters are assuredly not small. The oratorical portion of the Medical Council, with the public for their audience, would certainly address themselves to the public through the press. The proceedings of the Council would be prolonged through displays of popular eloquence, and their expenses thereby greatly increased. Popularity-seeking councilmen, again, would attempt to further their popularity outside the Council by proving themselves liberals and patriots within the Council. Then, again, the Council would run the risk of losing that special character which we should wish, above all, to see it retain—viz., of calmness, deliberation, and judicial solemnity. We should be very sorry to see it degenerate into a discussion forum, or even an upper-class kind of debating society.

It must not be forgotten, also, that there is no kind of concealment of the work done by the Council.

The whole of their proceedings—of the actual doings—are printed and published. We believe that the opinion of Sir Benjamin Brodie was decidedly adverse to the admission of reporters; and we are willing to confess that his opinion in such a case impresses us as worthy of serious attention. He, no doubt, considered that the men who sit in that Council are not raw apprentices to medical politics—are men who have made up their minds and are fully instructed before entering the Council on all matters which interest the profession; and have no need of the eloquence of their colleagues to stir up their feelings, nor of their long speeches to repeat well known facts and the usual wearying repetitions and platitudes of general debate.

However, if it can reasonably be shown that any great benefits would result from this publication, or that the good attending publication would counterbalance the evils above mentioned which may result therefrom, we will willingly go in for the reporters-admission proposition. But if the chief benefit to be derived therefrom is the delivering of dreary lectures, the dishing up in the journals of spicy speeches and of eloquent popular and patriotic dissertations, we think the reporters are better excluded. Such spicy speeches would, of course, afford capital food for the journals ; and, served up with an occasional dash of personality, a small taste of scandal, and a few personal explanations, would undoubtedly enliven the dry reports of the Council's proceedings. Whether they would add anything to those somewhat obsolete or compromised articles called "the honour and dignity of the profession", we must venture to doubt until better informed.

THE WEEK.

Mr. Bottomley's correction of the "misstatements made in the Journal respecting his views upon vaccination" does not show any significant error in the statements there made on the subject. If we were wrong in saying that Mr. Bottomley did not attend the meeting of the Board of Guardians at Croydon on the invitation of the Chairman, then it must follow, we suppose, that Mr. Bottomley went there on his own invitation. We do not think this betters the case. Mr. Bottomley, again, denies that he said "doctors should work cheaply or for nothing". In answer to this, we must observe, that Mr. Bottomley was reported to have said that "he considered it to be the duty of all medical officers to vaccinate children brought to them without fee or reward". If he did say so—and he has not denied that he did—then we must repeat that this is surely equivalent to saying that doctors ought to do work for nothing. Mr. Bottomley's views about the duty of the legislature in the matter of vaccination may be all quite true ; but this is not the question here. What we objected to Mr. Bottomley was, that at a very critical discussion between medical men and Poor-law guardians, he put himself forward (in our opinion, quite wrongly) to defend the guardians, and in a way injurious to the interests of the profession. That Mr. Bottomley may have done all this from the best and most conscientious of motives, we will readily admit; but that he was wrong, the general sense and opinion of his medical brethren must have clearly shown him.

The University of London have issued regulations respecting the degree of Master in Surgery, which it obtained the power of granting under its last charter. The first examination for the degree will take place in March 1864. There are, therefore, now two rivals sprung up to the College of Surgeons; viz., the College of Physicians and the London University.

It seems probable that the unjust treatment practised upon the medical officers of the army may meet with its appropriate result. There are, we understand, at present, only eight candidates who have entered their names for the competitive examination in the Medical Department of the army, which takes place in August, there being seventy-eight vacancies. Other signs there are that this branch of the service is becoming short-handed. For instance, we are told, that what with resignations, etc., the number of surgeons on duty is so reduced, that leave of absence is constantly refused, even to those who have returned to England with their regiments after long absence abroad.

Our readers will find in the Journal of May 30th, 1863, an article headed "Medico-clerical Prosecutions". It was an account of unfair treatment practised on Mr. White of Sherborne, as union medical officer. We then added, that Mr. White had determined to bring an action for libel against the clergyman concerned against him. This action has lately been tried ; and the verdict is what is called an open one.

"The jury retired for an hour and twenty minutes, and then gave a verdict for the defendant; but at the same time they could not help expressing their regret that the defendant should have written to the Poor-law Board a letter liable to such uncharitable constructions against the plaintiff, but without costs."

Dr. Robertson fully sustains the character of the *Journal of Mental Science*. In the July number we find papers : from Professor Laycock, On the Naming and Classification of Mental Diseases and Defects ; from Dr. Sankey, On Melancholia ; and from Dr. J. C. Browne, On Homicidal Insanity. Reviews, also, we find in it of French treatises and German mono-

graphs touching mental affections. Dr. Arlidge gives the Quarterly Report on Foreign Psychological Literature; and Dr. Robertson, the editor, that on English Psychological Literature, besides excerpta from Asylum Reports, etc.

Mr. Ceely of Aylesbury has been appointed by the Privy Council to investigate an outbreak of *typhus charbonneuse*, which has broken out in the neighbourhood of Swineshead, Lincolnshire.

The current number of the *Quarterly Journal of Microscopical Sciences* contains some interesting physiological papers. Dr. Ciaccio of Naples describes the Distribution of the Nerves in the Cornea in Man and Animals. Dr. Roberts describes the Appearances of the Blood-corpuscles under the Influence of Magenta and Tannin. Besides these there are: Remarks on Light, by B. S. Proctor; Notes on Indian Desmideæ, by Julian Hobson; Notes on the Colouring Matter of the Red Sea, by H. J. Carter; Descriptions of New and Rare Diatoms, by Dr. Greville; a translation from the German of Dr. Cohn, on the Contractile Filaments of the Cynareæ; etc.

The medical profession in America is denounced by the *American Medical Times* as an "indolent profession." Our readers may be curious to know in what sense the charge is made. We, therefore, give them some of the words of the aforesaid respectable journal. Whether or not any of the negligent ways attributed to the American doctors can be fairly laid to the charge of any of our brethren in this country, we will leave to the consideration and the consciences of the readers of these lines. We will only venture to hint, that the lesson contained in them is worthy, in many respects, of consideration, even by ourselves.

"Every one interested in the welfare of medical science must have been struck, within the past year or two, with the growing inactivity of the profession as a body. The love for work by the great mass of the medical men seems to have been lost almost past redemption. No one can complain that the stimulus to exertion is not sufficient; for in every section of our country are to be found societies that are ready to invite discussion, and medical journals willing to open their columns to every one who is zealous in the cultivation of his science. Some of our best societies can scarcely get together a quorum; and many of the most valuable papers that are read before them almost utterly fail to wake up any interest or provoke any interchange of opinion. Too many there are who attend our societies, who have scarcely energy enough to listen more than ten or fifteen minutes to a memoir before their eyes are heavy, and they nestle themselves for a comfortable nap until the time for adjournment arrives. We must not shut our eyes to the fact, also, that most of the older and more influential members absent themselves for months at a time from scientific deliberations, and deprive those who really are interested in the pursuit of knowledge, of matured opinion and healthy counsel. A certain character of meetings are always well attended; but this can, perhaps, be explained in the character of the refreshments which are to be served at the end. Again, if we look into medical literature, we can find still other proofs of a lack of vitality in scientific pursuits in the paucity of contributors to the different periodicals. With all the great resources afforded by large hospitals, dispensaries, and the like, what a comparatively small amount of material is collected therefrom to serve the common good. How few there are of those who enjoy unbounded opportunities for clinical experience that place the results of these labours upon record. There is no excuse for this. The never failing excuse, want of time, is too senseless a one to be at all considered. It is the lack of energy to turn spare time to account. We are compelled to make the mortifying statement that many of our most celebrated practitioners, especially in New York, who have almost grown grey in the service, have hardly made a single record of their doings. May posterity give them the deserving punishment by forgetting them. We have among us too few devoted students; too few who quietly, persistently, and untiringly work for the 'very work's sake,' and who strive to give others the benefit of their labours. We are afraid, however, that we have to look for most of these among the rising generation, inasmuch as too many of the older members are past conversion."

Mr. Samuelson has read a paper to the French Academy of Sciences containing an account of micrographic examinations made by him of the air at Hull, Liverpool, Japan, Alexandria, Tunis, Peru, and Melbourne. In the air of all these places he finds present a greater or less quantity of corpuscles belonging to the three kingdoms, animal, vegetable, and mineral. The conditions under which the infusoria live, and the action exerted on them by physical agents, were the objects of his researches.

Urethrotomy has recently been much discussed in Paris and at Lyons. We read, as the result of the discussion at Lyons: "The operation of Mr. Syme has won the day; it has now its place marked out in the operative therapeutics of strictures; but this operation has its special indications and restrictions. It is not opposed (as some persons at first wished to make it appear) to dilatation, nor to scarification; but, on the contrary, it is to be resorted to when these other means of cure fail. And what the surgeon has now to do is to determine the precise limits within which its action should be confined. If urethrotomy is less frequently indicated than Mr. Syme seems to recommend, it is now shown by him to be much less dangerous than was generally supposed. Mr. Syme has been singularly lucky in his operations. Of 108 cases, he has lost only two. In France, the results of the operation have been much less brilliant."

Mr. Henry Lee's lectures on "Syphilitic Vaccination" have been translated into French by Dr. Baudot.

The Pharmaceutical Congress of France meets this year at Toulon, on the 17th, 18th, and 19th of August.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 3RD, 1863.

R. GREENHALGH, M.D., in the Chair.

CASE OF TUBAL GESTATION: DEATH. BY JOHN MARSHALL, ESQ. DESCRIPTION OF THE PARTS INVOLVED; WITH REMARKS. BY GRAILY HEWITT, M.D.

The patient was married, aged 27, and had had children. On March 31st, Mr. MARSHALL was called to see her, and found her suffering from vomiting, collapse, and severe pain in the abdomen. These symptoms continued for about twenty-four hours longer, at the end of which she died. At the time of the illness she was about two months advanced in pregnancy, and just before death she confessed to Mr. Marshall that she had taken medicine to procure abortion shortly before the illness supervened. After death large coagula of blood were found in the pelvis and abdomen. The uterus and appendages were submitted to Dr. Graily Hewitt for examination. The left Fallopian tube was distended to the size of a sausage, and contained coagula, together with the remains of the placental structures of an ovum. The tube had ruptured at the junction of the inner and middle thirds of its length, and coagula hung by a sort of pedicle from this opening. The placental mass was loosely attached to the Fallopian tube wall, and the walls of the tube were thickened and spongy at the point of placental attachment. The fœtus was not seen, and probably had escaped observation among the coagula in the pelvis. It appeared likely that the rupture of the tube was hastened by the taking of the abortifacient drugs; but under any circumstances rupture would probably soon have occurred, as it is usual in cases of Fallopian pregnancy for rupture to occur at or soon after the third month.

Dr. CLEVELAND thought the question whether surgery could be made available in cases of extrauterine gestation a most important one. It appeared to him that the only probability of success attending gastrotomy would lie in the formation of such an accurate diagnosis as would warrant the performance of the operation while the parts were, so to speak, in a quiescent state; but when rupture and extravasation into the peritoneal cavity had taken place, and the patient was found in a state of collapse, he could not see how, at such a time and under such circumstances, opening the abdomen was to prove of service.

Dr. GRAILY HEWITT had great doubts as to the practical feasibility of carrying into effect any operative measures for the relief of these cases of rupture in Fallopian pregnancy. The condition of the parts was peculiar, the number of blood-vessels to tie was considerable, and the condition of the uterus and its appendages wholly different from that present in cases where ovariotomy is practised safely. But this was not all. The chief obstacle lay in the difficulty of the diagnosis. In by far the majority of cases the circumstances do not enable us positively to determine on the diagnosis. It is not certain in many such cases even that pregnancy is present; and he believed very few practitioners would be willing to perform such an operation as opening the abdomen on what must, in most cases, be at best a presumption, that the case was one of the kind supposed. Periuterine hæmatocele he would mention as one of the conditions not rarely presenting symptoms very closely identical with those of rupture of an extrauterine pregnancy.

Mr. SPENCER WELLS said that if it were certain that a patient was dying from internal hæmorrhage owing to the rupture of the sac of a tubal pregnancy, he could see no sort of difficulty in the way of a surgical operation. The Fallopian tube and vessels in the hard ligament would be divided and secured exactly as in every case of ovariotomy. The operation would be extremely simple; what the result would be was quite another question. Dr. G. Hewitt's observation of the stricture of the Fallopian tube in this case raised the question as to the date of the constriction. It could hardly have preceded impregnation, or the spermatozoa could not have passed from the uterus to the ovary. These contractions of the Fallopian tube were of greater importance than usually known. He (Mr. Wells) had recently seen a case of death after symptoms of acute pelvic peritonitis and obstinate vomiting; and it was found that apoplexy of the left ovary, and of the sub-peritoneal tissues around it, had depended upon closure of the Fallopian tube near the uterus by a small cyst, possibly the unimpregnated ovum of the preceding menstrual period.

Dr. GRAILY HEWITT said the facts of the case related warranted the belief that the stricture of the Fallopian tube led to the detention of the ovum in the tube. The canal might be sufficient to allow of the passage of spermatozoa, but not large enough to allow the ovum to pass. The passage of the ovum along the tube, it must be recollected, did not occur immediately after impregnation; and the turgescence of the uterus consequent on impregnation would tend to render a narrow Fallopian tube still narrower.

Dr. HICKS said Dr. Hewitt's description of this case agreed with his own observations. In the *Guy's Hospital Reports* would be found a case of tubal pregnancy which in its details agreed with this one in all particulars, and also another which corresponded to that of Dr. Greenhalgh. In both cases the villi of chorion were not involved in any way in any decidual structure, but merely applied to the surface with which they came in contact; a slight quantity of plastic matter seemed to assist in holding them together.

DYSMENORRHŒA AND STERILITY. BY R. GREENHALGH, M.D.

After taking a rapid glance at the importance, frequency, and close connection of these affections, he directed the attention of the Fellows to the treatment of mechanical dysmenorrhœa, which a large experience had convinced him was by far the most frequent form of this complaint. Having compared the relative merits of dilatation and division of the os and cervix uteri in this affection, he expressed a decided preference in favour of the latter mode, for the safe performance of which operation he had invented an instrument which he proposed to call the "bilateral metrotome." He stated that he had used this instrument in upwards of thirty cases, without a single casualty, and in the great majority with the best results. After giving a description of this metrotome, which he exhibited to the Society, together with a brief summary of the cases operated upon, and enumerated the affections in which he had found the division of the os and cervix uteri most serviceable, he pointed out the necessity of attending to the pathological states of the uterus frequently induced by the persistence of dysmenorrhœa, and concluded by giving a short account of the plan and remedies which he had found most beneficial for the cure of these several conditions.

PREPARATION OF A CONCENTRATED ANIMAL MANURE. A large quantity of manure is made in Lyons by boiling down the flesh of animals (principally horses) in close vessels to a pappy consistence. This material is then mixed with bone-dust, exhausted animal charcoal, ashes, or gypsum, according to circumstances, and is afterwards dried and powdered. Such manure contains seven or eight per cent. of nitrogen. (*Dingler's Polytech. Journal*, 1863.

Correspondence.

MR. BOTTOMLEY AND VACCINATION.

Letter from Henry Gramshaw, Esq.

Sir,—I decline to rest satisfied with the high-handed way in which Mr. Bottomley has replied on the whole question of vaccination.

It is all very well to rush into generalities; to pooh-pooh the public vaccinator, as if he was a myth; to scoff at his eighteenpenny fee; to favour us with a letter on certain reformations which Mr. Bottomley considers appropriate (and with which I, for one, do not quarrel); and to wind up by deprecating squabbles with Boards of Guardians as *infra. dig.* and waste of time. But, sir, we must take the world as we find it.

"Life is real, life is earnest,
Life is not *an empty dream.*"

And, I dare say, Mr. Jeynes, knowing himself to be no myth, but a real, hard-working public vaccinator, and a badly paid one, too, preferred an immediate increase of his fee, from eighteenpence to half-a-crown a case, to all the *theoretical comfort* (may I say "*trash*"?) about "amendments in the law", which it was in Mr. Bottomley's power to afford.

I am a public vaccinator myself; and not long ago, I was present at a meeting of a Board of Guardians, in company with some brother medical officers. We made precisely the same request that Mr. Jeynes did; viz., that our fee should be increased to two-and-sixpence per case. As ours was not a divided house, and no brother theorist favoured the Board with any opposite views on the subject, we escaped all hissing and snubbing. The point was at once conceded; and really I cannot see that Mr. Bottomley would have done us much good had he been present to *obfusticate* the chairman's mind on the occasion.

If our friends and associates who are strongly opposed to gratuitous medical and surgical services take Mr. Bottomley's plan of action as a precedent, some of us will be inclined to exclaim, in the words of Shakespeare,

"Call you this backing o' friends?
A plague on such backing, say I."

I am, etc., Henry Gramshaw, M.R.C.S., L.S.A.

Laxfield Villa, near Framlingham, July 25, 1863.

P.S. Union medical officers will not thank Mr. Bottomley one bit for inoculating Boards of Guardians with the notion that they are bound to vaccinate the children of the poor without any additional fee. I know of no such obligation; and take this statement as sufficient proof that Mr. Bottomley *does* wish medical men to work cheaply or for nothing.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Letter from B. W. Foster, L.K. & Q.C.P.Ireland.

Sir,—In the British Medical Journal of last Saturday, your correspondent Δ refers again to my letter which appeared in your Journal of February 21. I feel constrained by this reference to inform your correspondent, that my letter was not written for the purpose of specially advocating the legality of the degree granted by the King and Queen's College of Physicians; but simply to correct what I considered to be a misconstruction of the judgment of the Court of Queen's Bench in the case of Dr. Barker, and to prevent a misconception of the value of that decision becoming general.

I am glad to see that, in your able and impartial remarks on the subject in the Journal of last week, you take the same estimate of the value of the judgment that I expressed in my letter; and state, that by the decision the College "lost nothing in respect to its claim." The Lord Chief Justice, in giving judgment, specially avoided the question, as can be seen in the quotations given in your leading-article.

Having thus stated the object of my former letter, I would deprecate any further discussion of the matter; as I consider that no good can arise from the revival of a controversy on which so much has so often been written with so little effect. In conclusion, I beg to inform your correspondent Δ, that the law he speaks of, as requiring a degree in medicine as an essential qualification for the Fellowship, has been rescinded by Act of Parliament.

I am, etc.,
B. Walter Foster, M.D.

Birmingham, July 27th, 1863.

OVA OF ENTOZOA IN FÆCES.

Letter from W. H. Ransom, M.D.

Sir,—In your last week's number is a paragraph, in which M. Rayer is stated to have pointed out to the Academy of Medicine that, amongst the novel facts contained in M. Davaine's treatise on *Entozoa*, is the presence of their ova in fæces; and the possible usefulness of this in diagnosis is also alluded to.

Permit me to call your attention to a paper communicated by me to the *Medical Times and Gazette* for June 14th, 1856, entitled, On the Diagnosis of, and Treatment for, Round-worm; and on the Occurrence of a New Species of Tænia in the Human Body. The observations there recorded commenced in 1852; and a reference to the paper will show that ova were found; that this diagnostic point was employed successfully in practice; and that the treatment was directed by it so far as regards the ascaris lumbricoides. But ova were also found of an unknown species of tænia, the joints of which I could by no means bring away.

It is less with a view of raising a question of priority that I write, than from a desire to see this point taken up by my professional brethren in this country more than it has been up to this time.

The method of diagnosis is easy, and readily applied. A half-inch objective suffices; and my figures in the *Medical Times and Gazette* will serve for comparison, although drawn from a quarter-inch. A drop of soft fæces rarely fails to contain two or three ova, if there be ripe females of round-worm in the intestines of the patient.

Since writing the paper above alluded to, I have, however, found instances of persons who had unripe females, and those who had males only; and these, of course, showed no ova in the stools.

The best vermifuge for round-worm which I have used is undoubtedly the well known santonin. It seems equal to male fern for tænia; and I have previously shown how little confidence we can place in any other substance for expelling this parasite.

With reference to the question of priority, I should mention that Wedl, in his *Grundzüge der Pathologischen Histologie* (Vienna, 1854, page 144), figures the ova of ascaris lumbricoides in fæces, together with those of tricocephalus dispar; but his figures are bad, and not easy to recognise—indeed, Wedl himself speaks rather doubtingly as to the ova of the ascaris, and does not apply the fact to diagnosis.

I may here mention that the ova of tricocephalus dispar are present in almost nine out of ten specimens examined; so that I have long ceased to pay any attention to them. The parasite seems to cause no symptoms known to me; and if it had, by no means within my knowledge, can it be expelled. I was not aware of

Wedl's observations in 1856, when my paper was published, or I should certainly have mentioned them.

In any case, M. Davaine has been anticipated by more than one observer; and it seems right that the medical public should know the facts. I am, etc.,

W. H. Ransom.

Nottingham, July 23, 1863.

EXTREMES IN PRACTICE.

Ltter from Thomas Martin, Esq.

Sir,—We are again much obliged to Dr. Mayo for having invited attention to "extremes in practice", on which I took the liberty of submitting a few observations in a recent number of the Journal, grounded on the teachings of my great master, Dr. George Fordyce, in his *Lectures* on his practice at St. Thomas's Hospital (of which he was, in my time, the senior physician), and on my own active practice of half a century in this place. In fact, I am old enough to have prepared medicines for Dr. Mayo, when he was a little boy, from his father's prescriptions at Tunbridge Wells in 1798.

Dr. Fordyce occasionally adverted to the differences of treatment to be observed among different classes of patients. With reference to those in the hospital, who were mostly metropolitan, having feeble powers and not bearing or requiring much antiphlogistic treatment, he had to support these feeble powers and the asthenia by appropriate materia medica, nutriment, and stimulants administered with judicious discrimination; and, although there were no clinical lectures in those days, he had occasionally something to say on the danger of over-stimulation, and his practice was very successful among a class of patients which must have been very much the same as constitute the inmates of hospitals at the present day.

I have practised in a "happy valley"—the Vale of Holmsdale—which, with the hill above and the region round about, is, according to the mortuary returns of the Registrar-General, not only eminently healthy, but it is the healthiest part of England. The prevailing diseases have been more or less of an inflammatory character; although with a proportion of cases of disease sooner or later requiring in their progress supporting or stimulating treatment; each having its speciality, requiring modifications at different periods, depending on the judgment of the practitioner.

With respect to the quantities of ardent spirit administered in the treatment of disease at the present day, I should expect it to defeat its own object. We all know that, in morbid asthenic states of the system, support, nutriment, and stimulants are required; and that more beer, wine, and alcohol will be borne without intoxication than in the healthy condition; but I confess I do not understand the administration of ardent spirits at the present amount, but perhaps the brandy is several degrees below proof. We used to endeavour to nourish and support patients, so as to enable them to bear up and pass through their diseases to a successful issue; but such monstrous administrations of ardent spirits as we now hear of were never contemplated as being necessary or safe.

I beg to avail myself of this opportunity of expressing my disapprobation of the word *drug* being applied to any medicine. Dry-salters and dyers deal in drugs; we deal in the materia medica.

I am, etc., Thomas Martin.

Reigate, July 28th, 1863.

Small-Pox in a Troop Ship. The *Windsor Castle*, from London for Bombay, with troops, has put back to Plymouth, small-pox having broken out on board.

Medical News.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 29th:—

Atkinson, Frederick Page, L.S.A., Romney Terrace, Westminster
Blake, Edward Thomas, Taunton
Bottle, Alexander, Dover
Brewster, Edward, Grantham
Brietzcke, Henry, H.M. Dockyard, Deptford
Bullmore, Charles Forrester, Falmouth
Butcher, Henry Osborne Fawcett, Ware, Herts
Coates, Frederick William, Salisbury
Court, Josiah, Warwick
Davenport, William, Kidsgrove, Staffordshire
Fleming, John, Ulverstone
Haden, Edward Cresswell, Dudley, Worcestershire
Hughes, William Frederick, Barnsbury
Jones, John Thomas, L.S.A., Tremadoc, Carnarvonshire
Lowe, Robert Whillington, Edinburgh
Mickley, Arthur George, Buntingford
Morley, Frederic, Bicker, Lincolnshire
Morris, Joseph, Birmingham
Parkes, Henry McKenzie, Woolwich
Pauli, Churton Gillman, Amsterdam
Soper, Robert Wills, Dartmouth
Starling, George, Old Charlton
Ure, John, Birmingham
Wilson, Henry, Ulverstone

Apothecaries' Hall. On July 23rd, the following Licentiates were admitted:—

Atherton, Ebenezer, Bingley, Yorkshire
Carter, William, Newbury, Berks
Grewcock, John Baily, Falkingham, Lincolnshire
Jeffery, Edward, Nant-y-glo, Tredegar, Monmouthshire
Lisle, Richard Philip, Cardiff
Moore, William Daly, Dublin

At the same Court, the following passed the first examination:—

Coates, George Alexander Augustus, St. Bartholomew's Hospital
Green, Thomas Henry, University College
Jackson, George, University College
Knight, Charles Frederick, Charing Cross Hospital
Knott, Thomas Henry, Guy's Hospital
Langworthy, George Vincent, St. Bartholomew's Hospital
Lush, Wm. George Vawdrey, St. Bartholomew's Hospital
Read, Charles, University College
Viant, Henry, Guy's Hospital

Admitted on July 28th:—

Burn, John, Dartford
Coombs, Carey Pearce, Frome
Fernandes, Albert Luis, Sandal Magna
Gannon, John Palmer, London
Fry, John Blount, General Hospital, Birmingham
Jones, John Thomas, Tremadoc, North Wales
Martindale, John Walker, Windermere
Mudge, Belling Harvey, Bodmin
Ringrose, Basil, Potters Bar, Middlesex
Shillitoe, Richard, Hitchin

APPOINTMENTS.

Barnes, Thomas H., M.D., appointed House-Surgeon to the Newark-on-Trent Dispensary, in the room of J. Cheesman, M.D.

Bell, Oswald Home, M.D., appointed Professor of Medicine in the University of St. Andrew's, in the room of *George E. Day, M.D., resigned.

Edmundson, Joseph, M.D., appointed Assistant Resident Medical Officer of the Clonmel Auxiliary Lunatic Asylum.

Hopton, George O., M.D., appointed Medical Officer to the E Division of the Metropolitan Police.

*Martyn, Samuel, M.D., re-elected Physician to the Bristol General Hospital.

*Skinner, Thomas, M.D., elected Physician to the Orphan Girls' Asylum, Liverpool.

Taylor, George, M.D., appointed Surgeon to attend to Physicians' Cases at the Derbyshire General Infirmary, in the room of *O. B. Shore, M.D.

Poor-Law Medical Service.

Galloway, James, M.D., to the Ireby District of the Wigton Union, Cumberland.

Grattan, M. H., M.D., to No. 4 District of the Ongar Union, Essex.

Heginbotham, Edmund, M.D., to the Bruton District of the Wincanton Union, Somerset.

Shirley, Henry J., Esq., to the Bedfield District of the Hoxne Union, Suffolk.

Somerville, James H., Esq., to the Bloxwich District of the Walsall Union, Staffordshire.

ARMY.

ALLEN, Surgeon R. M., 3rd Dragoon Guards, to be Surgeon-Major, having completed 20 years' full-pay service.
ARMSTRONG, Staff-Assistant-Surg. W., to be Assist.-Surg. 25th Foot.
BALL, Staff-Assistant-Surg. T., M.D., to be Assist.-Surg. 36th Foot.
HENSMAN, Staff-Assistant-Surg. W., to be Assist.-Surg. 20th Foot.
LAND, Staff-Assistant-Surg. J., M.D., to be Assist.-Surg. 21st Foot.
WALKER, Staff-Assistant-Surgeon H., to be Assist.-Surg. 19th Foot.

To be Staff-Surgeons:—

MCDERMOTT, Surgeon P. A., 3rd West India Regiment.
MARTIN, Surgeon C., 2nd West India Regiment.
MORPHEW, Surgeon A., 1st West India Regiment.
SKEEN, Surgeon W., M.D., 4th West India Regiment.

To be Staff-Assistant-Surgeons:—

BOULTON, Assistant-Surgeon E. J., 2nd West India Regiment.
CARDELL, Assistant-Surgeon G., 3rd West India Regiment.
DAVIDGE, Assistant-Surgeon G. A., 1st West India Regiment.
FLYNN, Assistant-Surgeon T. P., 4th West India Regiment.
GRANT, Assistant-Surgeon E. B., M.D., 4th West India Regiment.
GREIG, Assistant-Surgeon J., M.D., 2nd West India Regiment.
PARR, Assistant-Surgeon K. J., 1st West India Regiment.
WALES, Assistant-Surgeon J., 2nd West India Regiment.

ROYAL NAVY.

ARNOTT, James W., Esq., Assistant-Surgeon, to the *Liffey*.
CANN, Thomas, Esq., Assistant-Surgeon, to the *Recruit*.
GROSE, Samuel, Esq., Assistant-Surgeon, to the *Dauntless*.
MACIVER, Donald, Esq., Acting Assistant-Surg., to the *Rattlesnake*.
NATHAN, Henry F., Esq., Assistant-Surgeon, to the *Hibernia*, for service at the Malta Hospital.
WHITAKER, Joseph, Esq., Acting Assist.-Surg., to the *Rattlesnake*.
WHITLEY, Alfred W., Esq., Acting Assistant-Surgeon, to the *Geyser*.

MARRIAGE.

At Gillingham, Kent, on July 30th, John Henry Morton, Esq., to Eleanor Childe, daughter of *James Dulvey, L.R.C.P.(Edin.), of New Brompton, Chatham.

DEATHS.

BARCLAY. On June 16th, at Mercara, Madras, aged 40, Emma Berry, wife of Charles Barclay, Esq., Surgeon 25th Regiment N.I.
BARKER, F. O., M.D., H.M.'s 90th Regiment, at Meerut, on June 9.
CAPEI. On July 15, at Florence, Emma, wife of Lorenzo Capei, M.D.
CARTER, William F., M.D., at Haslar, aged 79, on July 23.
DUSAUTOY, Henry, M.D., at Southampton, aged 54, on July 19.
GRAY, John, Esq., Surgeon, at 25, Old Burlington Street, aged 75, on July 22.
GREEN. On July 25th, at Brighton, aged 71, Persis, widow of the late John L. Green, Esq., Surgeon, of Lewisham.
HOPE, Staff-Assistant-Surgeon William A., M.D., in New Zealand, aged 28, on May 4.
WALLICH, Surgeon N. D. S., H.M.'s 1st Bengal Cavalry, at Dugshai, Simla, on June 9.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY. The Library will be closed from Monday, Aug. 17th, to Saturday, Sept. 12th, both days inclusive.

ST. BARTHOLOMEW'S HOSPITAL. Scholarships have been awarded to the following gentlemen at the close of the winter and summer examinations:—S. Hall; H. Mackintosh; F. W. Richards; L. Powell; F. Bateman; R. Robinson; T. Cuddeford.

UNIVERSITY OF LONDON. We understand that at the late examination in science at the London University, about one-third of the candidates were rejected; that is to say, only about thirty-three out of ninety-six passed the muster-roll.

GARIBALDI'S WOUND. Dr. Occhipinti states that the wound in Garibaldi's foot is completely cicatrised; and that the General now takes horse-exercise. He expects that in two months, Garibaldi will be able to get about without crutches.

EXTRAORDINARY LONGEVITY. The obituary of *The Times* of July 22nd, contained the names of five gentlemen and one lady whose united ages amounted to 512 years, giving an average of 85 years and four months to each, the eldest being 88 and the youngest 83; the lady was 86.

THE NEW MEDICAL ACT. The Committee of the United Society of Chemists and Druggists have decided to offer the most strenuous and determined opposition to this measure, and invite the general cooperation of the trade. (*Chem. News.*)

PAUPER LUNATICS ASYLUM BILL. On Friday week this Bill was read a second time in the House of Lords; and the standing orders having been suspended, it was immediately afterwards read a third time and passed.

SALE OF INTOXICATING LIQUORS. Mr. Lawson has given notice that early next session he will move for leave to introduce a Bill enabling owners and occupiers of property, within certain limits, to prohibit the common sale of intoxicating liquors.

THE PORTRAIT OF DR. TURNBULL, painted by subscriptions of the governors of Huddersfield Hospital, was at the late annual meeting suspended in the Board Room of the Hospital—a memento of his lengthened and valuable services rendered to the hospital.

PRESERVATION OF MEAT. It is worth knowing at this time of the year that meat may be kept sweet for a long time in an atmosphere strongly impregnated with acetic acid. The meat is placed on a wooden support, or suspended, in a close vessel, on the bottom of which some strong acetic acid is poured. (*Dingler's Polytec. Jour.*)

POISONING BY COMMON POTASH. Dr. Lankester, on the 28th ult., held an inquest on a woman who committed suicide with the common potash of the oil-shops. Here is another article to be added to the list of poisons in the next bill, and to be only retailed in a hexagonal bottle with five sides fluted! (*Chem. News.*)

SEIZURE OF ADULTERATED YEAST. The Sanitary Officer of Hull seized last week some German yeast which contained an admixture of clay, and the magistrates ordered it to be destroyed. Although there may be some doubt as to the legality of this proceeding, there can be no doubt that this is the only way to stop adulterations; and it is to be regretted that it cannot be followed in the case of more pernicious mixtures. (*Chem. News.*)

UNIVERSITY COLLEGE, LONDON. The Council have conferred on Mr. Henry Thompson, in consideration of long and valuable service as assistant-surgeon, the title of Surgeon to the Hospital. The appointment of another assistant-surgeon was resolved on by next October. Dr. Russell was appointed assistant to Professor Williamson in giving the Birkbeck evening course of instruction in chemistry for persons engaged in manufactures and like pursuits.

INVALIDS IN THE AMERICAN FEDERAL ARMY. Already, in the progress of the war, the number of soldiers discharged from service upon the surgeon's certificate amounts to considerably more than one hundred thousand, while the average constant percentage sick in hospitals from other causes than wounds, in all our armies, is probably about *seven per cent.* of the entire force. (*American Medical Times.*)

POISONING BY CORROSIVE SUBLIMATE. When a solution of corrosive sublimate is placed upon a bright piece of gold and touched with an iron point, it undergoes decomposition, a thin film of metallic mercury being deposited on the surface of the precious metal. Dr. J. C. Johnston of Baltimore, by the practical application of this fact, has succeeded in saving the life of a gentleman in that city who had swallowed two scruples of the bichloride of mercury. In less than half an hour afterwards he had given his patient a bolus composed of half a book of gold leaf having previously sprinkled a drachm of iron reduced by hydrogen between its leaves. This dose was retained but a short time, when it was repeated with the happiest results; the vomiting and distress ceased; and the man recovered rapidly under the ordinary treatment for gastritis. Dr. Johnston thinks that, if the gold leaf had been rubbed in a mortar with bright iron filings and the mixture given with water, it would have been more speedily successful than the plan he adopted in his hurry. (*Boston Med. and Surg. Journal*, May 7th.)

Magic in Spain. A woman has been arrested at Barcelona for practising magic, and in the very act of making cabalistic conjurations. In her apartment were found philtres to produce affection, pills to ensure long life, powders to produce death, a magical cat, entirely black with the exception of the required tuft of white at the end of the tail, and a quantity of diabolical emblems. All this in the second half of the nineteenth century!

Criminal Lunatics in Ireland. The last Report of the Gaol Inspector in Ireland tells us that the gaols have been generally healthy, and the inmates free from contagious disease. The inspectors state that every one of the abuses with regard to the treatment of lunatics detailed in their last report is still in force. They are still brought to gaols tied down with ropes on cars; and, among the numbers committed from union workhouses, sometimes very distressing cases occur.

Seizure of Unwholesome Meat. The new Act to amend the Nuisance Removal Act of England, 1855, with respect to the seizure of unwholesome meat, has been printed, and is now in force. By it an inspector of nuisances or a medical officer of health may seize not only meat, but all articles intended for human consumption, exposed for sale or in course of preparation, which may be unfit for human food. Magistrates are empowered to inflict a fine of not more than £20 on offenders, or commit to prison for three months. Any persons obstructing the officers are liable to be fined £5.

Iron in the Stars. Merz has communicated a few notes on the construction of the spectroscope and kindred subjects, which are worthy of attention. The author in the first place gives a *resumé* of the results of Fraunhofer with the spectra of fixed stars, and then quotes very briefly from a memoir of Professor Donati, of Florence, which describes the spectra of Sirius, Vega, Procyon, Regnalus, Famalhaut, Castor, Atair, Capra, Arcturus, Pollux, Aldebaran, Rigel, and Antares. From these observations it appears probable, according to Merz, that iron plays the chief part in the atmosphere of all these stars. (*Chemical News.*)

Burnet's Disinfecting Fluid. A correspondent of the *Times* writes: "It is said there have been upwards of twenty cases of twenty of death from taking Burnett's fluid by mistake for medicine. In the last melancholy case, the unfortunate sufferer had taken a whole wineglassful of the fluid instead of Dinneford's fluid magnesia. On stating the circumstance to a chemist, I learnt that my poor friend's life might probably have been saved had carbonate of soda been quickly administered *ad libitum*, as it would have immediately decomposed the chloride of zinc into insoluble carbonate of zinc and common salt. Carbonate of zinc is a white inert powder, which will do no harm; and my friend verified his statement experimentally, by adding to a sufficient quantity of the fluid a strong solution of carbonate of soda. He tasted the product, and I followed his example. The flavour was saline only, without a trace of causticity. The fell poison had become a harmless compound."

Indian Sanitary Commission. In reply to a question from Sir H. Verney, whether the two volumes folio containing the report of the Indian Army Sanitary Commission would be presented to the House of Commons, Lord Stanley said the report of the commission and a summary of the evidence in octavo form had been circulated among members. There was a larger publication, in two volumes folio, containing the report, the evidence, and a voluminous appendix; but he could not say whether it would be circulated among the members as a body, or supplied only to those who asked for it. The latter course would probably be taken, but it rested not with the chairman, but with the head of the Indian Department, to decide that question. Sir C. Wood said the report had for some time been laid on the table of the House.

The Auckland Lunatic Asylum. The condition of these unfortunate inmates is greatly to be pitied; cooped up within narrow yards or cells, they are merely prisoners—vacant, idle, "raging waves of the sea, foaming out their own shame." The nuisance of the asylum is severely felt, and bitterly complained of by the inhabitants of the Grafton suburb, and its speedy removal to a suitable locality, and establishment on a scientific basis, have become imperious necessities. As matters are at present, medical treatment suitable for insane persons is impracticable, and so crowded has the asylum become that, until increased accommodation is obtained, all new cases are under the necessity of being sent to the town gaol. (*New Zealander.*)

Hospital for the Cure of Stone, etc. At the annual festival of this new establishment, Lord Campbell is reported to have eloquently enforced the value of special hospitals, and particularly were they essential for the alleviation of that class of disease with which the institution in Great Marylebone Street was intended to cope. In proof of that, he might mention that, whereas in the general hospitals deaths from stone far exceeded the deaths from any other cause, in their hospital not a single death had occurred. In conclusion, the noble lord referred to the mysterious causes of the disease of stone as furnishing a most cogent argument in support of an institution which supplied the medical profession with the surest data for the resolution of a most difficult problem.

The Oldest Married Couple in the World. There are living at Marulan, in this colony, says the *Sydney Empire*, two persons, husband and wife, aged respectively 111 and 107 years. They are extremely feeble and bedridden, but are in possession of both sight and hearing. They were able to move about until lately, and formerly were extremely active in their habits. The old lady attempts to speak when she is addressed, but cannot make herself understood by strangers. Her utterance is so thick and inarticulate as to be little more than a few unmeaning sounds. The old man, however, although the eldest by four years, and usually lying in an apparently unconscious state, rouses himself occasionally, and can then speak so as to be easily understood. On the occasion of a visit to him a few days since of a gentleman who has known him for many years, the old man, when his arm was lifted by a person in attendance, to show the condition to which he was wasted, suddenly remarked—"That was an arm once," and quickly relapsed into his usual state. The old man arrived in the first fleet, in 1778, and has consequently been seventy-five years in the colony.

Medical Psychology. In Dr. Laycock's class of Medical Psychology and Mental Diseases, at the University of Edinburgh, at the examinations held in July 1863, for certificates of proficiency, the following questions were propounded conjointly by the Commissioners in Lunacy for Scotland and Dr. Laycock:—1. Give a synopsis and brief description of the different forms of mania. 2. State the physiognomical aspect, symptoms, and treatment of acute melancholia. 3. Discriminate between illusions, hallucinations, and delusions; and illustrate by examples. 4. What are the most common cerebral lesions found after death from general paralysis? 5. When may insanity be regarded as incurable? 6. Under what conditions would you feed the insane artificially? Describe the processes followed; and state the reasons for preferring any particular process. 7. What results may be expected to follow from the efforts now being made for the education of idiots and imbeciles? 8. State how a practitioner should proceed in diagnosing the mental condition of a person presumed to be insane, and what precautions are needed in forming and expressing an opinion. 9. A clinical report on a case examined by the candidate at an asylum.

Charing Cross Hospital College of Medicine. The annual distribution of prizes took place on Monday, July 27th. The following gentlemen were the successful candidates:—*Anatomy—Silver Medal*, Mr. Charles F. Knight; *First Certificate*, Mr. Henry Willson; *Second ditto*, Mr. Frederick Le F. Milburn; *Third ditto*, Mr. John W. Jones; *Bronze Medal*, Mr. Wm. G. Sutcliffe; *Certificates*, Mr. A. R. Verity and Mr. R. Y. V. Packman. *Chemistry—Silver Medal*, Mr. Other W. Berry. *Medicine—Certificates*, Mr. Thomas Langston and Mr. C. F. Knight. *Physiology—Silver Medal*, Mr. C. F. Knight; *Bronze Medal*, Mr. O. W. Berry. *Surgery—Silver Medal*, Mr. Edward Dyer; *Certificate and Book*, Mr. William B. Shorto; *Bronze Medal*, Mr. W. G. Sutcliffe. *Materia Medica—Silver Medal*, Mr. Allen Fennings; *Certificate*, Mr. H. Willson. *Botany—Silver Medal*, Mr. O. W. Berry. *Midwifery—Silver Medal*, Mr. J. H. Simpson; *Certificate*, Mr. W. H. Cope. *Forensic Medicine—Silver Medal*, Mr. J. H. Simpson; *Certificate*, Mr. W. H. Cope.

University College, London. The result of the class examinations for the summer term of the Faculty of Medicine was ascertained at a meeting of professors and students held on Friday, July 31st, in the botanical theatre of the College, Professor Sharpey, M.D., Dean of the Faculty, in the chair, and announced as follows:—*Materia Medica. Gold Medal and First Certificate*, Frederic B. Nunneley, of Burton-on-Trent; *First Silver Medal and Second Certificate*, Philip B. Mason, of Burton-on-Trent; *Second Silver Medal and Third Certificate*, Francis J. Grose, of Dinapore, Bengal; *Certificates:* 4, Andrew Stuart, of Bridgetown, Barbadoes; 5, James J. Coxeter, of London; 6, Richard M. Pryce, of Caersws, Montgomeryshire; 7, Frederick T. Coates, of Islington. *Pathological Anatomy. Gold Medal and First Certificate*, Alexander Bruce, of London; *Certificates:* 2, P. Vaudagne, of the Mauritius; 3, Walter Smith, of Bognor. *Medical Jurisprudence. Gold Medal and First Certificate*, Alexander Bruce; *Silver Medal and Second Certificate*, Andrew Stuart; *Certificates:* 3, Henry C. Wigg, of Geelong; 4, Walter Smith; 5, George W. Rigden, of Canterbury. *Practical Chemistry. Gold Medal and First Certificate*, James S. Cluff, of Kildare, Ireland; *Certificates:* 2, Frederick J. Buckell, A.A., of Romsey; 3, William Hoffmeister, of Cowes; 4, William R. Davies, of Carmarthen; 5, George V. Poore; 6, R. Forbes Carpenter, of London. *Midwifery. Gold Medal and First Certificate*, F. B. Nunneley; *First Silver Medal and Second Certificate*, G. Griffiths, of Alltwen; *Second Silver Medal and Third Certificate*, William Ackerman, of St. Just, Cornwall; *Certificates*, 4, Charles Bradley; 5, F. G. Grose; 6, R. Alex. Busby, of Leamington; 7, G. W. Rigden. *Botany. Silver Medal and First Certificate*, Charles J. H. Smith, of London; *Certificates:* 2, W. Hoffmeister; 3, (eq.) F. J. Buckell, W. C. Cass, of Cowes, Frederick C. Bennett.

Action on an Agreement: Bennett *v.* Hickson. This action was tried in the Midland Circuit at Nottingham on July 21st, before Mr. Justice Williams. The plaintiff was a surgeon practising at Worksop, and he brought this action for the breach of an agreement, by which the defendant promised that he and his co-executor, William George Beardsall, would use their best endeavours to establish the plaintiff in the business of Thomas Langley Beardsall, which the plaintiff had bought of them. Mr. Beardsall, a general practitioner, at Worksop, died in 1858, leaving the defendant, John Hickson, who is a surveyor and land agent at Worksop, and his own brother, William George Beardsall, who is also a general practitioner at the same place, his executors. His lordship, on summing up, remarked that it was admitted that Mr. Hickson had done all that was required of him, and that there was no ground of complaint whatever against him. He had, however, agreed for the acts of his co-executor as well as himself; and the plaintiff was entitled to a verdict, if the jury were of opinion that Mr. William George Beardsall had not done that which Mr. Hickson had agreed that he should do. To say of Mr. Bennett, as Mr. W. G. Beardsall had said, that he would soon have to leave Worksop because his charges were so high, and to become his rival for the office of medical attendant upon the Abbey Lodge and Sick Club, could hardly be looked upon as acts that were likely to assist Mr. Bennett in establishing himself in the testator's practice. The jury found a verdict for the plaintiff, with £100 damages.

The last Specific Cure for Diphtheria, and how to Puff it. We some time back gave an account of Dr. Trideau's method, which consists in administering storax under the form of a syrup; but we now find in the *Revue Thérapeutique* a paper by Dr. A. De Grand, Boulogne, late French Vice-Consul at Havannah, in which he mentions ice as an infallible specific. In March and April 1861, the disease in question broke out under an epidemic form. One of Dr. Grand's patients was seized with it; and as he could not immediately attend, owing to the severity of the case another physician was called in, who ordered emetics and aluminous gargles, which produced no effect. At length, Dr. De Grand came, and found the tonsils greatly swollen, and a false membrane covering them. He immediately administered small pieces of ice; and by the following morning the tumefaction of the tonsils had diminished by half, and the false membrane had nearly disappeared. That very evening she was enabled to take food. A few days after, her brother was seized with sore throat, presenting the same preliminary symptoms as those of his sister; but he, profiting by this example, without waiting for the doctor, at once took ice, and was rid of his sore throat in a few hours. Some days later, Dr. De Grand was summoned to a young lady who had been labouring under the disease for the last forty-eight hours; all remedies had failed; and the parents, relations, and friends of the family were plunged in the deepest sorrow. When Dr. De Grand ordered ice, a general cry of astonishment was uttered by all present. Ice for a sore-throat! impossible! it was sheer murder! Dr. De Grand maintained his ground; and, after much expostulation, during which much time was lost, he obtained his end. Before twenty-four hours were over, the patient was in full convalescence. Being at Vera Cruz on a mission, he was requested to see a young man who was attacked with malignant sore-throat, and had been treated without effect by cauterisations with hydrochloric acid and astringent gargles. Here, again, he had to battle with the prejudices of the family; but was at length allowed to administer ice. The young man recovered in the course of the following day. Dr. De Grand has now been using this remedy for the last twelve years without having met with a single failure. This is what he says; but even if only half of what he says were true, the method should be tried by others. Cold gargles have been employed with success by Dr. Blanc of Strasburg; why not ice? (*Galignani's Messenger.*)

Disease among Sheep. On Friday, July 24th, Mr. D. Griffith called attention to the outbreak of disease among sheep in the west of England during the summer and autumn of last year. He described the first appearance of the disease on a farm in the neighbourhood of Devizes, in Wiltshire, stated that the remedy recommended by Professor Simmonds—inoculation—proved a failure, and narrated how the malady spread until it was arrested by Professor Gamgee, of Edinburgh, who substituted separation for inoculation. The results both of the practice of separation instead of inoculation, and of vaccination as a *dernier ressort*, were highly successful as far as present experience went. It was a year since this disease broke out; surely some conclusion as to the means of preventing this disease must have been arrived

at by the gentlemen who had conducted the experiments for the Government! The hon. member concluded by asking the question of which he had given notice—viz., whether the Government intended to take any steps for the prevention of the practice of the inoculation of sheep with the virus of sheep small-pox, or "variola ovina," for the presumed object of mitigating the disease, on the principle of the actual prohibition in force against such practice in the case of the human subject; and what had been the results of the Government experiments of trying the effects of vaccination as a preventive of the sheep small-pox on a certain number of sheep obtained by the Government for that purpose. Mr. Lowe regretted to say that the experiments which had been tried as to the vaccination of sheep by Mr. Marsden and Professor Simmonds during the last six months had turned out unsatisfactorily. Had they proved satisfactory they would have been terminated before now; but before a negative decision was pronounced, many attempts had, of course, to be made. He therefore could give no decisive answer as to these experiments, except that they afforded little hope of extending to sheep or any other animal the same remedy as was found efficacious in the case of the human subject. As to inoculation, the experience of the late epidemic in Wiltshire was much against it, because in those flocks where inoculation was used, 20 per cent. of the sheep died, whereas in those where it was not used only 1·6 died. It was a question, however, whether it would be right absolutely to prohibit a man from inoculating sheep which were his own property, provided he took the precaution of separating them from other sheep in order to prevent the spread of the disease. But that question must be considered in connection with the general question of the diseases of cattle, which would have to be examined during the recess. He might, however, observe that there was reason to believe that farmers could not do a more imprudent thing than to inoculate their sheep.

Varieties.

Poisonous Spiders. We find it necessary to caution our readers against siting on certain places until they have ascertained that no spiders are lurking in the locality; another narrow escape from death, similar to that recorded in our last Friday's issue, having come under our notice. It appears that a woman residing on the Flat was bitten on the lower part of the body, on Sunday last, by a black tarantula, and that shortly afterwards she was attacked with violent pains in the loins and chest. The symptoms increasing by eleven o'clock at night, Dr. Carr was called in to administer relief. He found the action of the heart much impeded, violent pains extending from the head to the feet, the eyelids swollen, and violent fever in the region of the lungs—in short, the woman was dying rapidly. Dr. Carr applied remedies which produced profuse perspiration, resulting in the destruction of the virus and cessation of the pains. It was not, however, until Tuesday evening that the woman was out of danger, when her face presented a most extraordinary sight, the eyelids being swollen to a considerable size, and the features generally being very much distorted. One or two other cases of the same kind have been reported to us, but they do not seem to have been so serious as the two cases we have recorded. (*Talbot Leader.*)

The Conservation of Force. We recognise that matter can never be destroyed, nor created. The principle we refer to, asserts the same of what we term *force*. The apparent conversion of one force into another, where this can be observed, supports the doctrine in a very remarkable manner. In other instances, if we assume the conservation of force still to hold good, our present knowledge and means of observation are at fault, and new fields of intellectual research and discovery are clearly indicated. We may raise a heavy mass of metal, say a hammer, to a certain height, and allow it to fall on a small cube of cast lead or annealed copper. To raise the hammer, a certain exertion of force is necessary; the equivalent of this force is produced when the mass is allowed to fall through an equal distance. By the concussion, the cube of lead, or even that of copper, will be found to be compressed and flattened to a certain extent. Now it might be said that the force,—that of momentum, in the hammer, had been expended in producing this effect; and the expression, correct enough in its ordinary sense, might be taken to signify that this force, originally generated by physiological action, had thus entirely disappeared, and was destroyed or annihilated. But if we now bring the fragment of lead or of copper in contact with phosphorus the latter will be inflamed. Another force, that of heat, has been generated; and careful experiment tends to prove that this will be the exact equivalent of the force exerted in the first instance. The latent heat evolved from the metal may now be absorbed by a portion of the atmosphere, in which it may again become latent, producing at the same time the effect of expansion. In the reduction of metal from its oxide, heat is absorbed; in the oxidation of a metal, heat is evolved. In either case, the quantity of heat bears a constant proportion to that of the particular metal operated upon. We know that another force besides heat is produced by oxidising a metal, such as zinc or cadmium, under certain conditions, viz, in the voltaic battery. The doctrine of the conservation of force indicates that the *electricity* thus produced should correspond to the whole, or to a portion, of the heat which would otherwise be evolved by the oxidation or combustion of the metal. (*Electrician.*)

The Hospitals of Venice. "In these I have been greatly disappointed, as they are vastly larger and better managed than I had supposed. The large Civil Hospital at Venice stands on the banks of one of the principal canals, near the church of San Giovanni e Paolo; it dates as far back as 1485, and consists of the magnificent buildings of the Scuola di San Marco, a religious order devoted to the care of the sick and poor of the city. The buildings are somewhat irregular, but very spacious, and were devoted to their present purposes after the fall of the republic. The whole establishment is capable of accommodating from 1,500 to 2,000 patients. The entrance is through a wide and high hall, with splendid marble floors and columns, beautifully carved wood ceilings and frescoes; and the wards, which are between one and two hundred feet long, with very high ceilings, are grouped around six large court-yards, in one of which is the sarcophagus of Marino Faliero, the decapitated Doge. There are sixty-two halls or wards admitting of extensive classification. There are, for example, lying-in wards, syphilitic wards, fever wards, wards for diseases of children, for female lunatics, for ophthalmic cases, for medical and surgical diseases. One of the principal physicians conducted me over every part of the establishment, and explained everything minutely. In some of the wards there were four rows of patients, owing to repairs going on in the building. Still, I doubt not there were over 1,200 cubic feet of space to every bed, owing to the great height of the ceilings. Every part was scrupulously neat and clean, and the utmost order and system everywhere prevailed. There are 1,000 patients in the buildings, under the charge of 11 principal surgeons and physicians, 14 assistant surgeons, 16 sisters of charity, 8 apothecaries, 1 director or acting principal, and 1 director-general. There are two classes of patients, pauper and pay. Of the latter are three grades: those supported by the district or commune to which

they belong, who pay 55 cents per day; a class of private patients who pay 40 cents per day; and a superior class, who have better accommodations, and who pay 88 cents. In the court-yards are nine cisterns, for rain-water, and one artesian well. This is forty-five *metres* deep, and the water has a taste of sulphuretted hydrogen. Children under seven occupy the basement, which struck me as very damp and unhealthy. The little patients all had a miserable, pale, sad, and sickly look. The apothecary apartment, as in all Italian hospitals, was on a large and splendid scale, and admirably managed. The buildings are of two stories, and the whole thrown into large wards, one of which was devoted to cases of pellagra. All were extremely clean, quiet, and well ventilated." (*Lee.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Botanical Society (Anniversary).

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

A QUESTION OF ETIQUETTE.—SIR: May I ask the favour of your opinion upon the following case?

C. D., a physician in a county town, is medical superintendent of a railway there. His duties are—"To visit immediately any persons who may be injured on the line. To provide surgical assistance for any one requiring it. To give pecuniary assistance to such persons as are prevented from following their employment, and are too poor to keep themselves. And to note carefully the character, etc., of the injuries, so as to prevent the company being imposed upon."

An accident happened on Friday afternoon. Two persons injured in it were removed to their homes in a country village by the next train. The village surgeon (A. B.) was sent for, and saw them. The next morning, a telegraph from the company's secretary informed C. D. of their names and address, and requested him to see them forthwith. He called, announced his name and reason for calling, asked permission to see the patients, went upstairs, and was *then* informed *by the patients themselves* that A. B. was in attendance. C. D. made a cursory examination; said he would not, of course, interfere with the treatment: received from the patients an intimation of cordial thanks; and immediately called upon A. B., to ask him to appoint a consultation for another day. It will be observed that C. D. was in entire ignorance of the attendance of A. B. until it was told to him by the patients themselves; that his visit then ceased to be medical, and was purely ministerial, to obtain information for the company, his employers; and that he took the *earliest possible* opportunity of communicating with A. B., and that he would not, until *after such communication*, give any medical opinion as to either the nature or the treatment of the case.

A. B. says C. D.'s conduct was "irregular". C. D. contends that it was strictly professional; could not have had any other course; and was fair and courteous to A. B.

July 28th, 1863. I am, etc., X. Y. Z.

[Our opinion is, that in a case of this kind, C. D., having discovered that the patients were under the charge of A. B., should not have visited them further without the consent and knowledge of A. B. As the case is one of some general importance, we will give our reasons for this opinion in an early number of the JOURNAL. EDITOR.]

COMMUNICATIONS have been received from:—Mr. AUGUSTIN PRICHARD; Dr. REYNOLDS; Mr. WM. OWEN; Mr. T. M. STONE; Mr. GASCOYEN; Mr. CROSSE; Mr. G. W. HASTINGS; Mr. HENRY LEE; Dr. W. NEWMAN; Dr. W. BUDD; Mr. JAMES DULVEY; and Dr. J. A. SYMONDS.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, June 1863.

ADVERTISEMENTS.

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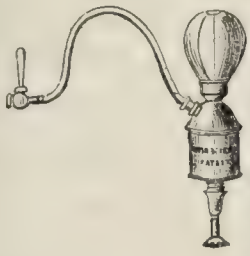
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Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in BRISTOL, AUGUST 5th, 6th, and 7th, 1863.]

THE

ADDRESS ON CHEMISTRY

IN ITS

RELATION TO MEDICINE AND ITS COLLATERAL SCIENCES.

BY

WM. BIRD HERAPATH, M.D., F.R.S.,

BRISTOL.

Mr. President and Gentlemen,—When the members of your Council determined to select me for the performance of the highly honourable and responsible duty of addressing this important gathering of my medical brethren, representing as it does the intelligence and learning of our extensive and most honourable Profession, it is deeply to be regretted that they could not also ensure the necessary leisure to prepare an address worthy of the occasion. Numerous avocations have considerably interfered with the preparation of this arduous work, which has been one of considerable difficulty from various causes; the introduction of this subject itself being quite an innovation in the practice of the Association, and, in fact, it is one hitherto untouched by any one previously on any similar occasion; whilst the purely technical character of the science might, even in the generality of professional minds, fail to induce that interest and attention which all authors hope to produce in the persons of their audience. If, therefore, in the treatment of this subject, I may have failed to give satisfaction to any of my numerous auditory, or if this address suffer by comparison with the highly wrought productions of our worthy and accomplished President, or of any other of those who have similar duties to perform for the other and more practical branches of our noble profession, I trust that the members generally will give credit for my having attempted to make the subject as generally interesting as possible under all the varying circumstances of the case.

The science of Chemistry, although of modern growth, is one having extensive bearings on all other sciences and branches of human knowledge:—arts, manufactures, and mines, alike depend upon its teachings and discoveries for progress and support; whilst even geology, mineralogy, and astronomy must acknowledge that some of their sublimest discoveries have been due to the aid which chemistry has accorded to them at some period of their history. Metallurgy must necessarily depend upon the due performance of the chemical processes of reduction of the metals from the rough ores from nature's store-house; whilst the powers of the microscope and the far-seeing mechanism of the astronomical telescope alike owe their delicacy to the Chemist, who prepared the optical glass and the metallic supports of their various instruments.

But Medicine is even more dependent upon her sister science than any one of those previously named; for she must not only prepare her medicamenta by chemical processes, but the very constitution of the patients' bodies would not be known without an appeal to the aid of the analyst; and the due performance of all the phenomena of life depends upon those silent, hidden, and mysterious chemical processes which go on continually in the natural laboratories of our own bodies, and without an adequate knowledge of which no physician can hope to attain the power of alleviating those numerous ailments to which all alike are heirs, from the noble to the peasant, and from which even the physician himself is not exempt.

"The proper knowledge of mankind is man." How much more necessary is it for the physician to know himself! We will therefore devote the limited time at our disposal to the discussion of those topics of physiological and pathological chemistry which are more interesting at the present moment to the great bulk of our busy professional brethren, and which might be presumed to come daily under their cognisance in the exercise of those duties, which all appear to demand from us more as a right than as a concession from the benevolent feelings of our heart to the common exigencies of our nature.

Chemistry teaches us that the organised kingdom of nature contains four elements, of which both animal and vegetable structures are chiefly composed: these are carbon, hydrogen, oxygen and nitrogen. And as you are all doubtless aware, many of the proximate elementary substances into which our various bodies may be divided by the skill of the analytical chemist, consist of some three of these primary elements; such are, for instance, fats, oils, glucose and dextrine; together with an extensive class of the animal acids; whilst from the vegetable world we have also a large number of proximate elementary substances, having the same chemical elementary characters; and of these, woody fibre, cellulose, gum, dextrine, starch, and sugar, may be enumerated. All these bodies have been proved to be formed of varying proportions of carbon, hydrogen, and oxygen, the number of atoms of which are variously arranged and grouped amongst themselves; which molecular arrangement is sufficient to account to the scientific chemist for the different properties of the substances enumerated.

Some substances derived from both the organised and mineral kingdoms, consist of only two elementary bodies, such as carbonic and oxalic acids and carbonic oxide, in which carbon and oxygen alike enter into their composition, and water, in which oxygen and hydrogen can alone be discovered, when it is absolutely and perfectly pure; whilst ammonia is often illustrated as a compound of hydrogen and nitrogen only, but recent views have determined that oxygen also is one of its constituents—so that now we agree to write it as NH^4O, instead of NH^3, as formerly.

In addition to these binary and ternary classes of organic molecules, there is a large and important class in which all four elementary bodies are combined to form one quaternary group, and of such are almost all the vegetable alkaloids, as morphia, strychnia, quinine, cinchonine, etc.; whilst from the animal kingdom such compounds as urea, uric and hippuric acids may be enumerated. These are all characterised as nitrogenous bodies, as the atoms of the element nitrogen appear to govern the constitution and formation of the molecule. Another small group contains sulphur in addition to these four primary elementary bodies: such products are obtained from bile, and we may enumerate the tauro-cholalic acid and taurine, and cystine, occasionally procurable from urine. From the

brain, we have the oleo-phosphoric and cerebric acids, bodies containing phosphorus as one of the primary elements of their compound molecule.

These illustrations are sufficient for my purpose to bring back to your minds the truths taught you long ago, and thence to start on a fresh excursion into the component elements of the organic world, which will inform us that many other bodies absolutely require phosphorus, sulphur, chlorine, iodine, fluorine, and silicon, as constituents of acids or acid-radicals; whilst they have either potassium, sodium, lithium, magnesium, or calcium, together with iron, manganese, and traces of copper, acting as bases. Most of these elementary bodies, though found in the various tissues of both vegetable and animal structures, are too often disregarded as being too purely mineral for them properly to belong to an organised being; but of what use would the teeth or bones of any animal be, without the phosphate of lime which gives them strength and hardness? and the external skeleton of a crab, lobster, or an echinus, equally requires the aid of carbonate of lime to give it permanence and durability. It follows from this brief *resumé* that there are nineteen or twenty elementary bodies of which organised beings consist; and further investigations devoted to the examination of the human organism alone, prove that the same elementary substances are sufficient to make up its tissue and build up "its glorious form divine".

The spiritual principle of the whole animal kingdom has hitherto eluded the skill of the chemist, as it has equally baffled the research of the anatomist: but in the same way that chemical logic will enable the chemist to demonstrate satisfactorily the existence of a material elementary principle even before its isolation and production in the test-tube, so analogical reasoning proves the possibility and probability of such a spiritual principle as one of Nature's powers. For the same reason that chemistry has failed to detect and demonstrate the existence of this spiritual principle, whose proper domains are the realms of thought and the sphere of perception, so it has hitherto been unable to render any assistance to the elucidation of the diseases and derangements of the mental powers, dependent as they are upon the combined agency of spirit and matter. The true corporeal structure so intimately connected with the phenomena of mind, may be, and has been, subjected to numerous investigations by both the anatomist and the chemist, and even further submitted to microscopical analysis and investigation, without as yet giving any satisfactory evidences of change, during many of those diseased conditions, which, alas, too often afflict humanity. But wondrous are the discoveries which chemistry has unfolded to us during the past half century; and who amongst us can foretell what may not be done in the succeeding age? We are as yet only on the dawn of youth of true organic chemistry; for, as a science, it has only had its birth some twenty years since. Those questions which now appear to us mysterious and profound, will probably, ere long, become clearly explained in proportion as science advances in the path of philosophical investigation. Even now it is scarcely possible for the professional man, after he has left the schools, to keep pace with the progress of discovery; unless he specially devote himself to that branch of intellectual culture. The profound speculations of Berzelius, Laurent, Dumas, Liebig, Mulder, and Hoffman, together with those of such lesser names of note as Wurtz, Lehmann, Kolbe, Stenhouse, Buckland, and Frankland, have created such a mass of materials for mastery and thought, that few minds are capable of the task or equal to the labour.

I will not go further into these enticing fields of chemical investigations, than just to allude to the wondrous theory of compound ammonias, by which it has been demonstrated that various compound atoms, such as ethyle, methyle, amyle, and propyle, together with a host of other bodies of like character, are capable of taking the place of either one, two, three, or even four of the elementary atoms of hydrogen, from the molecule of ordinary ammonia, and producing such compounds as ethylamine, methylamine, propylamine, amylamine, or dimethylamine, trimethylamine, tetramethylamine, when more than one atom of hydrogen has been replaced by methyle, all of which are powerfully alkaline bases, similar in properties to the ammonia from whose type they have been derived, by the principle of substitution. The importance of this discovery is already bearing fruits in the arts of life by giving extensive fields of industry in the production of the new purple, mauve, and magenta dyes from aniline, obtained in the manufacture of coal-gas; and is abundantly illustrated in that beautiful substance magenta, which is the nitrate of rosaniline, already rendered available to the histologist in demonstrating the various structural elements of which his numerous complex tissues are composed.

The discovery of these volatile compound ammonias will, in a medical point of view, be eventually productive of new theories of miasmata, and will probably explain the obscure causes of the wonderful propagation of many epidemic and contagious diseases: as trimethylamine has been separated from the urine of man and found also in the herring, and propylamine has already been discovered to be the cause of that peculiarly disagreeable odour evolved during the decomposition of certain fish, and it has also been discovered in the ergot of rye; and in other organised products of decomposition and disease we might expect to find analogous compounds. In another direction we might anticipate these theoretical views to expand themselves, practically, in the building up of the complex molecules of the valuable medicinal alkaloids, quinine, cinchonine, and cinchonidine, now only obtainable by the aid of pharmaceutical chemistry from the products of the cinchona barks, and for the supply of which we are still almost wholly dependent upon the primeval forests and unsettled governments of South America. After almost unheard of difficulties and dangers innumerable, it is true we have succeeded in creating extensive nurseries of these glorious trees in our Indian colonies, which, in process of time, will render us in a measure independent of such precarious and failing sources of this veritable "tree of life" and monument of human knowledge; but what a glorious future would burst on that man, who, by dint of industry, theory, and scientific manipulations would be able to say, "I can produce quinine artificially, in any required quantity, from substances as comparatively valueless as ammonia, aniline, or methylated spirit."

The bearing of organic chemistry on medicine may be further illustrated by that glorious gift of science to humanity, so well known as chloroform, whose wondrous property of alleviating pain and banishing mortal agony, entitles it to the well-merited appellation of the elixir of life.

Wine, and its product alcohol, also owe their discovery to the chemical processes of fermentation and distillation, practised from the earliest times, and celebrated in glorious verse as the gift of gods to man.

"Ὁτ' ἐγω πιω τον οἰνον."

"When wine I quaff, before my eyes
Dreams of poetic glory rise;
And freshen'd by the goblet's dews,
My soul invokes the heavenly Muse.
When wine I drink, all sorrow's o'er;
I think of doubts and fears no more;
But scatter to the railing wind
Each gloomy phantom of the mind."

But they bear no comparison in their usefulness to

the product of the decomposition of alcohol or methyle by chloride of lime. Yet who can number the lives which have been saved by the agency of alcohol, timely administered by the hands of attendant medicine? whose tongue can celebrate the joys which ruby wine has conferred to the nuptial board and social hour, since Eve first plucked the golden fruit from Knowledge's tree and tempted man to drink thereof? But, on the other hand, who can paint the misery, degradation, and ruin which alcohol has introduced to the world since Adam's fall and Eve's temptation; who can picture the disease, madness, and woe which its indulgence will yet bring upon sensual humanity? Yet the chemist, by his wondrous enchanter's wand, converts it either into chloroform, ether, or aromatic vinegar, to cool the parching thirst, to allay the aching brow, to soothe the troubled spirit, or to rob our surgical operations of all their horrors, and assuage the piercing pangs of labour.

These transformations are chiefly brought about by the manifestations of those mysterious laws of chemical substitutions and organic molecular transpositions, which the changing affinities of various compound molecules exhibit amongst themselves, and the knowledge of which has enabled the chemist to multiply his products of decomposition almost indefinitely. And, as it has only of late years been discovered that the now well-known chloroform possessed such marvellous remedial powers, and "such a charmed agency for good," so may we expect that many of those products, which, as yet, possess scarcely more than a purely scientific interest, will, as time rolls on and they have passed from the cabinet of the chemist to the hands of the practical physician, add to our healing powers, so that we may attain greater and more enlarged powers over disease and death, the mortal enemies of the human race.

It has often served as an illustration of the same law of change, that, by the act of respiration alone, man contributes his quota of carbonic acid to the atmosphere, to be again subservient to the production of vegetation, and return to himself as organised tissue; yet the magnitude of this process of oxidation is scarcely appreciated even by the sanitarian, although its primary importance has been long recognised and admitted by the uninitiated multitude. An adult human being has been shewn experimentally to consume daily about fourteen ounces of carbon in the various articles of food obtained from different sources, which is subsequently expelled in equivalent quantities by the excretions of the lungs, kidneys, and skin, whilst some portion is thrown off as excrementitious in the products expelled from the intestinal canal. Of these fourteen ounces of carbonaceous food, he returns to the atmosphere, as carbonic acid, about twenty-five cubic feet in the same period, weighing about 46½ ounces, and representing about 12.7 ounces of the carbon consumed. In every year of his life he would therefore contribute 290 lbs. weight of solid carbon to the atmosphere: and, supposing him to live the full period of seventy years, he would have thrown off by his lungs alone somewhat more than nine tons weight of solid carbon, equal to twenty-one tons of sugar, starch, cellulose, or paper. It would therefore require about 4500 individuals to exhale by respiration a quantity of carbonic acid sufficient to reproduce all the paper manufactured in the United Kingdom during one year, which, in 1857, was calculated to amount to 65,478 tons. Or, if we suppose this amount of carbonic acid expended in the reproduction of the woody fibre of the oak, every individual member of this Association would evolve nearly sufficient carbon during his lifetime to regenerate two ordinary sized oak trees, weighing about five tons.

If every adult human being discharge daily such an immense quantity of carbonic acid as 46¼ ounces, or 25 cubic feet, how great must be the daily production of such large and densely populated cities as that we now inhabit, containing as it did 130,000 human beings at the last census. Were there not most effective means provided for its removal, the whole population would soon be destroyed by suffocation in its own poisonous emanations; and for this purpose the atmosphere is continually in a state of agitation and movement by the ascending currents, heated by the contact with the warmer soil, or thrown into more violent commotion by the winds of heaven, blowing from every point of the compass, and carrying with them all that which would oppress and destroy all animal life, as well as the whole human race. But these noxious matters are most beneficially distributed over large agricultural districts, and so efficiently mixed up with the whole bulk of the atmosphere, that the most experienced chemists have not been able to discover more than from 3·7 to 6·2 parts in 10,000 equal measures of air obtained from different localities. Our beautiful green pastures and fields of ripening corn, our delightful hedge-rows and princely avenues of aristocratic oaks and ancestral elms, purify the atmosphere of that carbonic acid, of which the plebeian artisan has equally contributed his share alike with the noble and the peer, and all the sacred majesties of the world. Not only is the atmosphere contaminated by the addition of these large quantities of carbonic acid, but human beings and most animals evolve, both from the lungs and skin, ammonia in considerable proportion, and various odoriferous principles which may be readily detected by our senses, and which, when suffered to accumulate in confined localities, as happens in densely populated districts, and in the crowded courts and alleys of large cities, prove highly injurious.

The noxious effects of these organic products may be everywhere witnessed around us; and were there not some provision made for the removal of these deleterious matters, the atmosphere would ere long become so foul and contaminated with impurities, that virulent epidemics would become generally diffused throughout the civilised world.

There is a peculiarly active principle, which chemists have recently isolated and identified as an altered or allotropic form of oxygen, but presenting many of the destructive powers of chlorine, and thus of infinite benefit in disinfecting the atmosphere of those contaminations. Oxygen, in its ordinary condition, requires some intermediate agency to bring its peculiar powers into play upon organic matter; there must be constant moisture and an elevated temperature, occasionally even that of a red heat, for the decomposition and perfect combustion of some animalised compounds. But ozone will act instantly, and at the ordinary temperatures, upon most bodies of this description, and all power for harm disappears as if by the enchanter's wand. In the laboratory, the chemist produces this body by the aid of phosphorus in a state of slow combustion, or by passing electric sparks through atmospheric air; or he obtains a small percentage of the same gaseous odoriferous agent, mixed with ordinary oxygen, during the electrolysis of water and separation into its component gases by means of a continuous galvanic current of electricity.

Among these various methods, nature avails herself of the thunder-storm as the grand producing agent of this remarkable body; and when a house has been struck by lightning, it is well known that the inmates have often become aware of the presence of some remarkable odoriferous principle, which may be compared to sulphurous odours, and which effect is due to the ozone evolved; as may be proved by the peculiar

decomposition of iodide of potassium in the presence of starch, and the elimination of iodine, and production of the characteristic blue colour of iodide of amidin. Now, during the evaporation of water, which is continually going on over the extensive surfaces of the Atlantic and Pacific oceans, electricity is evolved to a great extent; and the atmosphere becomes charged with enormous quantities of aqueous vapour, which acquire a highly electrical condition, opposite in character to that of the surface from which the vapour has been raised.

The moisture and heated air, when it has been elevated by expansion to the higher strata of the atmosphere, and carried, by the revolution of the earth upon its axis and by other causes, towards the cooler and more temperate zones, deposits its moisture in dense cumuli, which become so many highly excited galvanic batteries, ready at a moment's notice to deluge the earth with moisture, and discharge their electricity in the torrent of the storm, hurling destruction on all sides at those trees, buildings, or other elevated points which do not possess sufficient conductive power to withstand their Herculean shocks. The violent electrical tumult of these magnificent storms produces a large quantity of ozone, and purifies the atmosphere of all deleterious agents, destroying the potency of infection by the rapidly oxidising agency of this wondrously active oxygen, and washing away all organic refuse too extensive for such a chemical agency to destroy in so short a period.

We also find that the quieter electrical agency of evaporation and condensation of moisture will evolve ozone extensively, without the tumult or violence of a storm; and these are the more constant sources of the ozone necessary to our existence. We find ozone predominating very decidedly on all the sea-coasts of our island home; and the annual ozone standards in these districts are always higher than in the interior of the kingdom, where the animal matter predominates, and destroys the ozone by the using up of its powers of oxidation and combination.

Hence we have the explanation of the beneficial agencies of the healthful sea-breezes of our coasts, and why our patients become invigorated by the change of occupation and climate which a sea-side residence occasions. Hence we have the reason why a long sea-voyage generally restores power and energy to the debilitated nabob or cachectic invalid from our Australian or Indian colonies, and why even our nautical brethren, as a class, enjoy more health than any other equal number of men under different climatal agencies.

The true elements of food are sugar, starch, and oleaginous materials, on the one hand, as carbonaceous materials; and on the other, nitrogenous products, the so-called protein compounds—albumen, gluten, fibrine, and other analogous bodies. The digestive process is carried on by the aid of the decomposition of common salt or chloride of sodium, the hydrochloric acid produced being the active agent of the gastric juice, assisting the pepsine, or peculiar albuminised ferment generated by the gastric follicular glands; the liberated soda going to the bile to produce the biliary soaps, consisting of the cholate and choloidate of soda, two conjugated compounds of animal hydrocarbons, and containing but a small proportion of nitrogen, whilst one of them contains a large percentage of sulphur. The biliary acids are sometimes called glycocholic acid and taurocholic acid.

These biliary soaps not only serve to neutralise the free hydrochloric acid of the chyme, but to help to form an emulsion with the other oleaginous elements of food, and occasion their absorption by the lacteals, assisted in this operation by the pancreatic juice, which serves as the medium for dissolving these soapy materials.

Chemical experiments readily convert starch into sugar, passing through dextrine. The chief agency in this transformation is that of the dilute mineral acids. The recent experiments of Dr. Pavy have demonstrated the existence in the normal liver of large quantities of a substance called by him hepatine, and since shown by me to be closely analogous to dextrine, if not absolutely identical. Consequently, digestion converts starch primarily into dextrine or hepatine, which is absorbed and laid up in the liver as in a storehouse.

Other experiments clearly demonstrate that fatty matters are readily producible from starch or sugar; as witness the fatty fermentation of saccharine matters into butyric, rutylic, and margaric acids; and we have availed ourselves of this fact in agriculture by giving abundance of starchy materials to those animals which we intend to fatten, whilst we reduce the respiratory power and muscular energy by long and close confinement. It is, however, necessary at the same time to give them albuminous substances; otherwise we rapidly fill their systems with carbonaceous matters, which cannot be got rid of by the pulmonary oxygen. Under these new circumstances, the conversion of starch and albumen into fat evolves considerably more oxygen than can be obtained by respiration; and the liver, *in producing biliary fats, gives up oxygen* to compensate for the want of respiratory powers.

Hence we see the necessity of keeping our gouty patients on a farinaceous diet; for we thus oxidise their excessively nitrogenous blood, and assist in converting the carbonaceous elements of diet into cholic and choloidic acids, urea, and carbonic acid. Every 4 equivalents of albumen, with 20 equivalents of starch or sugar, will produce 6 equivalents of margarine, 12 of water, and 192 of oxygen; uniting with the elements of albumen to produce 4 equivalents of choleic acid, 8 equivalents of cholic acid, 12 of urea, and 26 atoms of carbonic acid; whilst the addition of 40 atoms of water is requisite, and we must also obtain 32 atoms of oxygen from the air by the function of respiration. Were *no starchy elements* employed, the 4 atoms of albumen would require 224 atoms of oxygen (seven times as much) from the air to produce the same products, with the exception of the 6 atoms of margarine.

The functions of the stomach and liver, therefore, are partly to prepare fat and bile from the amylaceous portions of the food; and, in doing so, to break up the effete and worn-out albuminous materials by adding oxygen through the simultaneous destruction of starch; assisted as these powers are by the oxidation of respiration and the addition of water. The ultimate products are on the one hand carbonic acid, water, and ammonia, passing off by the lungs and skin; and on the other hand urea, uric acid, and the other effete products thrown off by the kidneys.

In the carnivorous reptilia, the absence of starchy food and the influence of rest and full animal diet are well illustrated by the production of lithic or uric acid in immense quantities; whilst urea and fat are not products of their digestive process, or the results of the destruction of their effete tissues. They may be said to labour under the lithic acid diathesis, and to suffer from chronic gravel or stone, or to be the very analogue of our gouty aldermanic patients, who may with justice be said to live a purely reptile kind of life.

In diabetes, we get large quantities of glucose eliminated by the kidneys. Under these circumstances, the starchy elements of diet produce less bile, less fat; and the necessary stage of hepatine or dextrine has

been passed through, and has gone beyond that stage at which the process should have been arrested. We will study this process somewhat more in detail, as its importance is very great, and it is a problem of vast interest to the medical practitioner.

Starch, therefore, excluding the gluten accompanying it, contains, according to chemical analysis, twenty-four atoms of carbon united to twenty atoms of water, and its formula is usually written $C^{24}H^{20}O^{20}$. During ordinary digestion, having been first rendered gelatinous and soluble by the action of the slightly acid gastric juice, aided by the increased temperature of the stomach and possibly by the pepsine itself, it becomes converted partially into hepatine or dextrine, a substance which may almost be considered an allotropic form of amidin or gelatinous starch, as it bears so close a relationship to this substance that most chemists give it the same identical formula. However, Dr. Pavy has stated that his hepatine has the atoms in the relation $C^{12}H^{12}O^{12}$, or doubled, $C^{24}H^{24}O^{24}$; but it is quite probable that the analysis was made of a hydrate of the pure material. Another portion of the starch is converted into glucose by the action of the salivary fluid and pancreatic juices; but the far greater proportion ultimately becomes converted into fat, as we have previously shown, by the joint agency of the liver, upon the alimentary starch and effete fibrinous materials. These fatty matters, having been thrown out by the liver as bile, in which we find the copulated biliary acids (cholic and choloidic acids), combined with soda, here meeting with the acid chyme from the stomach, becomes decomposed; the products being again chloride of sodium, water, and liberated fat; this is subsequently made into an emulsion by the pancreatic juice, and absorbed by the lacteals, entering the superior vena cava by the thoracic duct and left subclavian vein, whence it goes at once to the right side of the heart and thence through the pulmonary circulation.

Dr. Pavy has shown us that cane-sugar, when taken into the animal economy, is equally capable of producing dextrine or hepatine; and other observers have also found that animals and man fed on cane-sugar in large quantities equally produce fat with those supplied with amidin or starch. And to undergo this preliminary change into dextrine or hepatine, it would be requisite for anhydrous cane-sugar to assimilate two atoms of water to become dextrine.

During the process of lactation in the female of all the mammalia not purely carnivorous, starch has another duty to perform; and it becomes the source of some of the elements of the natural pabulum of all the junior mammalia; sugar of milk or lactin being one of the principal products of its conversion. Under these circumstances, we have $C^{24}H^{20}O^{20}$ converted into $C^{24}H^{24}O^{24}$ by the assimilation of four atoms of water.

Supposing that the change occasioned by the dilute acid of the gastric juice *fails to stop* at the allotropic stage of dextrine or hepatine, but passes on to that of glucose, we have the formula $C^{24}H^{28}O^{28}$; or the further assimilation of the elements of water to the extent of eight atoms. Normally, the alkaline bile and the soda of the liver become the agents of stopping the conversion of the amylaceous matters at the point of allotropism, in consequence of the soda of the bile neutralising the hydrochloric acid of the gastric juice, in the lower portion of the duodenum and in the hepatic cells.

Hence we see, that under some conditions of system *soda* must be employed as a remedy to hinder the change of starch from passing on into that of glucose. Thus we perceive the reason of the conversion of our starchy food into glucose, and why alkalies, opium, and creasote, arrest the change at the allotropic condition of hepatine or dextrine; just as, in our chemical experiments on starch, we arrest the conversion or hydration by means of chalk, as soon as tincture of iodine ceases to give any evidence of unchanged amidin.

The theoretical action of our principal remedies for diabetes now developes itself.

Under other circumstances, should there be an excess of the peptic element of the digestive process, we get the starchy elements of our diet changed still further into lactic or acetic acids; for we all know that by the aid of casein in a state of decomposition or decay, we can easily change starch, through sugar or glucose, into lactic and acetic acids.

This amyloid substance, glucogen or hepatine, so analogous in its composition and chemical properties to dextrine, has been discovered in the cells of the liver of most animals as well as man. It has also been found in the placenta of the mammalia and in the cells of the amnion in the order *Ruminantia*, but it has also been proved to exist in the tissues of the fœtuses of rabbits, cats, Guinea pigs, sheep, oxen, and pigs; whilst in the skin of the chick *in ovo*, and at the points where the aggregation of epithelial cells shows the incipient formation of feathers and hairs, it is most abundant. The horny structures contain it plentifully; in the bill, the hoof, and the claws, it exists in a large proportion. The muscular tissues of the fœtus are full of it; even from twenty to fifty per cent. can be extracted from the muscles of fœtal calves, during the first seven months of their intrauterine life. During embryonic life, a great part of the fœtal tissues are found to be so impregnated with amyloid substance, that it appears to be the formative material from which the tissues are evolved; and, in fact, it would seem to be as clearly related to their growth and development as starch and sugar are to the growth and development of the tissues of all vegetables.

It follows, therefore, from these premises, that this amyloid substance, hepatine or animal dextrine, is not normally converted into sugar in the animal economy. Although so nearly related to the saccharine principle on the one hand and to starch on the other, it is really a substance intermediate in properties and necessary to the constitution of the animal frame; being more especially serviceable in the building up of the gelatinous tissues of the skin and muscular structures, and in the earlier stages of the formation of hair, feathers, hoofs, and nails.

But by an abnormal progressive action going on in the degree of conversion of the starchy elements of food, we find that hepatine passes on to glucose, and then is eliminated from the animal body as so much refuse material, so much lost matter; fat disappearing from the system, that which has been already formed becomes lost, and there is no longer a production of the adipose substance, of which the chief ingredient is margarine in the human race.

We now have that condition which pathologists have called glucosuria or diabetes; and in this disease it is by no means unusual to find eight, ten, or even twelve ounces of sugar voided every day by the kidneys; and the urea is increased in a corresponding ratio, so that even 800 or 1000 grains of this substance have been frequently found as the quantity expelled from the unfortunate patient.

In that rarer form of disease which has been called diabetes insipidus, a substance has been detected in the urine, having many of the properties of sugar, but which is destitute of sweetness—yet capable of being converted into grape-sugar by the action of dilute acids, and susceptible of fermentation and conversion into alcohol. This will probably eventually be proved to be hepatine or dextrine, as its intermediate characters are so clearly indicative of such relationship to glucose and starch.

Under other diseased conditions of the body, in which the liver plays so conspicuous a part, we find the colouring matters of the bile, the fatty acids, and probably hepatine and taurine, escaping from the body through the kidneys; and now we have those phenomena due to one of the forms of jaundice.

Dr. Macdonnell, in a paper recently published in the proceedings of the Royal Society, says, in reference to this subject, that "the recent researches of Lehmann, Pavy, Bernard, Brown-Séquard, and others, tend to prove that the fibrine, and much of the albumen, of the portal blood vanish in the liver; and that at the same time that it destroys these azotised compounds, it forms its non-azotised amyloid substance, and excretes bile containing so little nitrogen, that it hardly need be taken into account. Are we not, from the consideration of these functions, led to infer that the nitrogen which leaves the liver by no other outlet, may go forth in the hepatic blood in union with the amyloid substance thus changed into a new azotised principle? That thus the liver is a great blood-forming organ, in which there is constantly going on a reconstruction of certain ingredients of the blood; that in it the fibrine, etc., which has done its work is disintegrated, the hydrocarbon of the bile abstracted, and the nitrogen combined with the amyloid substance, which, instead of being converted normally into sugar, emerges from the liver a constituent principle of the protoplasm, from the bosom of which (to use the words of Bernard with reference to the fœtal tissue) organic evolution is to be accomplished?"

Now, during the normal conversion of starch into fat, as previously shown by the action of the effete albuminous or fibrinous materials, a considerable proportion of oxygen must be eliminated from the elements employed; and one portion of the function of the liver may be said to be that of a grand accessory organ to the function of respiration; the products eliminated being highly charged with hydrocarbonous materials and deficient in nitrogenous matter.

The existence of the amyloid substance as a constituent of the muscular and gelatinous tissues, accounts satisfactorily for the presence of hepatine and production of glucose, even in those diabetic patients who have been deprived of amylaceous food during long intervals of time. In this case, they are producing the glucose from destruction of their own tissues, or from those portions of their dietary which also contain the amyloid substance in the normal condition.

During the next generation, our duty will be to examine the nature or constitution of the hepatic blood for its nitrogenous elements, and to make a comparison of its constitution with that of the portal system.

We must endeavour to compare the percentage of hepatine, urea, and other constituents in both the afferent and efferent currents of blood; whilst the fluid contents of the thoracic duct must undergo a complete examination anew.

The function of respiration, when efficiently performed, has been shewn to account for the major portion of the carbonaceous matter consumed in the human organism; but, although the supplied carbon has been eliminated to the extent of nearly thirteen parts out of fourteen as carbonic acid from the pulmonary circulation, it is well known that the true formation of the evolved carbonic acid takes place in great measure within the systemic capillaries, from the oxidation and destruction of those portions of the corporeal frame which have died in doing their destined work, and henceforth require removal from the body as effete tissue and disorganised material.

The new carbonaceous and nitrogenous materials of the food, by the functions of primary and secondary assimilations, undergo those molecular rearrangements of particles and chemically organic combinations necessary to produce by their modifications either fat, cellular tissue, muscular or nervous fibre, or bone—in fact, are employed in replacing those histological elementary tissues which have become exhausted and worn out.

It is not necessary to dilate further upon the manner in which the remaining fourteenth part of the carbon disappears. The kidneys throw out some portion, as creatine, creatinine, lactic acid, and urea; whilst the skin also contributes to its elimination as various fatty or sebaceous products, as well as carbonic and lactic acids. But next to carbonic acid, the principal excretion from the animal body is most undoubtedly urea, as it is one of those ultimate products of destruction of tissue which the processes of oxidation going on in the corporeal laboratory has no further power of destroying. It is scarcely necessary to say that, when thrown off from the body, its permanent character ceases to exist, as decomposition readily ensues, either by heat or fermentation; and its conversion into carbonate of ammonia rapidly occasions the well known phenomenon of alkaline urine. In this condition, it returns to nature's laboratory the principal part of the nitrogenous matters which have been taken into the organism, and formed a portion of the animal frame; the residue of the nitrogen being eliminated from the body as ammonia by both the skin and pulmonary cells, and through the tubular structure of the kidneys as creatine, creatinine, lithic acid, and some other bodies of less importance both in physiological and chemical points of view.

Numerous experiments have shewn that an adult healthy man, who lives well, discharges on an average from 30 to 40 *grammes* of urea in twenty-four hours. It is therefore within just experimental data to say that every man gets rid of 540 grains of urea daily from his circulating medium, by means of his kidneys, or about twenty-eight pounds and one-seventh every year, and, during the seventy years of his natural life, upwards of seventeen hundredweight of urea.

The importance of this elimination has been hitherto much underrated in both pathological and physiological calculations; and it is only of late years, since we have been furnished with Liebig's most excellent method for the quantitative estimation of this ultimate element, that its true import has been fully understood. It is, in fact, *the measure of the imperfection of the respiratory function;* the vital power and combining agency of the nitrogen atom having obtained the mastery over the destructive power of pure oxidation, and effected a compromise between the two functions by the discharge of a substance intermediate in character, properties, and composition, yet differing slightly only in arrangement from carbonic acid, water, and ammonia, the absolute products of true combustion and perfect oxidation.

A city such as Bristol, with 130,000 inhabitants, would produce 1625 tons of urea every year, which enormous quantity, under the present defective method of managing the sewage, is now thrown into the sea, and lost to agriculture; such a product, if it could be possibly saved and utilised, would represent more than 2112·5 tons of carbonate of ammonia and 1841 tons of pure ammonia; which, in money value, would be equivalent to £110,460 sterling. It is almost impossible to calculate the immense money value of the enormous waste which must occur in the United Kingdom from the loss of this material, which an improved and perfect mode of sewage would enable us to collect and employ most extensively in agriculture.

When the quantity of nitrogenous materials consumed is in great excess over that required by the,

organism, as occurs in the generality of our aldermanic brethren, we find disturbance of the respiratory process, an imperfect oxidation in the eliminated products, and a failure in the phenomena of life, which expresses itself in the elimination of a large quantity of carbon and nitrogen as lithic acid gravel, or produces the more severely agonising diseases of renal or vesical calculus, or the horrors and pangs of gout, if the lithic acid be produced faster than the powers of its elimination can expel it from the system in some one of its soluble forms.

Increase the powers of oxidation, and the molecules of lithic acid will disappear from the blood-vessels of our afflicted patients, broken up into urea, or even further decomposed into carbonic acid, water, and ammonia; and now the lungs and skin will assist the kidneys in getting rid of this poison from the system.

Assuming that our patient's powers of oxidation are sufficient to produce the due quantities and proportions of urea and carbonic acid, yet from the occurrence of some interference existing in the eliminating powers of the numerous epithelial cells of the kidneys, these organs refuse to throw off the urea from the body. This substance necessarily accumulates in the system, producing the disease known as uræmic poisoning, and the nervous system soon shows grave and violent phenomena, as witnessed in the convulsions of epilepsy, of scarlatina, and of the pregnant or parturient female; whilst, in other cases, the serous membranes come to the relief of humanity, and the pavement epithelium cell does the duty of the spheroidal or glandular, and serous accumulations or dropsies occur, containing large quantities of that urea which ought to have been discharged for manure; and, should some speedy outlet not be found for this virulent poison, the overcharged system fairly succumbs to the noxious influence, and rapidly increasing drowsiness, thence passing into coma, and closing the scene with an early death, proves the virulence of that poison, which has been produced in our own bodies by the natural action of physiological laws, but whose elimination has been interfered with and interrupted by simple arrest of the normal excretory function.

Assuming the average weight of each individual in this assemblage to be 150 pounds, and that the relative weight of the bones to the whole body would be 10·5 per cent., it follows that the whole skeleton would weigh about 15¾ pounds. Now, dry bones contain on an average 57 per cent. of phosphate of lime, together with some phosphate of magnesia; which proportions would furnish us with about 9 pounds of actual bone-earth, or ashes, upon incineration and removal of all organic matter, and exclusive of the carbonate of lime. Supposing that we extract the phosphorus from these 9 pounds of bone-earth by the most perfect possible method, we should obtain about 21·3 per cent. of that pure body; consequently, our total 9 pounds of bone-earth would give us 1·917 pounds of phosphorus, or nearly 2 pounds of that material to each individual skeleton. I need scarcely say, that such a quantity of so highly a combustible matter would be nearly or quite sufficient "to set the Thames on fire," if properly used; whilst, if it were converted into lucifer matches, it would be the means of radiating more light in the world, and thus driving away a deeper Cimmerian darkness than ever any one of the individuals would be capable of doing in a life time devoted to illuminating their species by their philosophical speculations.

The whole of this immense quantity of inorganic skeleton has been introduced into our bodies slowly and imperceptibly with our food, principally obtained from the *cerealia* directly containing it, or gradually eliminated from the albuminous and fibrinous materials of flesh which contain it as phosphorus in combination with the so-called protein substance or its analogues; and which, having already formed part of the organised structure of some herbivorous animal, has also been in like manner obtained from the herbaceous and seminiferous portion of the *gramineæ*, or other plants used as fodder.

If we consider, then, for one moment, how large a quantity of bread-stuff this inorganic skeleton represents, we are lost in amazement at the results, and clearly perceive that, should we desire to rapidly introduce phosphates into the system, it would be desirable to employ some material more richly impregnated with phosphorus than either muscular fibre or vegetable gluten. For this purpose, eggs would be the best dietetic or indirect source; inasmuch, as the dried substance of white of egg contains 13 per cent. of ash, chiefly consisting of phosphate of lime.

In addition to the large quantity of phosphorus contained in the bony portion of our skeleton, every individual discharges on an average about 45·5 grains of phosphoric acid daily in the urine alone; whilst the fæces also contain a very considerable proportion. It is evident, therefore, that during each year of our lives we eliminate by the kidneys alone, about 2½ pounds of phosphoric acid, equivalent to about 11·2 pounds of bone-earth. Thus, we perceive, each adult throws away more phosphoric acid every year by his kidneys than would suffice to build up his skeleton anew; and he may be said to have discharged his whole skeleton through his kidneys every year that his life has been prolonged. Such a calculation strikes one very forcibly that our organisms demand an immense quantity of bone-earth supplied to us during our natural lives; for one moment will convince us that a man of seventy years of age, would have eliminated a proportion of phosphoric acid by his kidneys equal to about 784 pounds of phosphate of lime, which is exactly seven hundredweight of that material. This would be sufficient, if converted into artificial manure, to produce two tons of this material, enough to spread over ten acres of ground, and render it fertile for reproducing grain crops to a large amount.

There has been great controversy during the past twenty years, in relation to the existence of fluoride of calcium, as a constituent of the bones and teeth of animals and man; but it has at length been conclusively shown that about 1 per cent. of this material occurs in the substance of dried human bone. Consequently, as the skeleton of man is about one-tenth part of his living weight, it follows that there would be about two ounces of fluoride of calcium in the skeleton of a man of that average weight; and I have no hesitation in saying that in the bones of the various individuals in this room, there would be sufficient fluoride of calcium to produce enough hydrofluoric acid to dissolve one pound of glass, or to etch the plates necessary to engrave the whole of the *Pictorial History of England*, or to illustrate the most copiously adorned volume ever published to the world.

A collection of three hundred individuals would give 600 ounces or 36·5 pounds—a quantity sufficient to evolve hydrofluoric acid enough to darken all the windows of the Crystal Palace, and render them wholly opaque.

The osseous frame-work of our bodies is one of equal interest and importance to the chemist, anatomist, and pure surgeon; and whether taken in a merely practical point of view, or only examined scientifically, it well repays us for the time devoted to its consideration; but at this period, it is scarcely necessary for me to allude, except incidentally, to the large percentage of animal matter which bones also contain, on account of which circumstance enormous quantities are annually employed in agriculture, both in a crushed

condition and also even more extensively after having been converted into soluble superphosphate of lime. But when these hard materials of our corporeal framework are submitted to the processes of natural decay, it is astonishing how long they last without crumbling into that dust of which they, as we are told, have been originally made.

The idea of which this dogma is the well-known expression, probably was practically engendered in the mind of man originally from the ancient method of disposing of the dead by the process of cremation, and from the visible products of those burnt offerings which were the earliest modes of attempting to propitiate offended Deity. Ashes alone remained behind as a record of the past. Although, even in the present day, we follow the less scientific and certainly far less healthful mode of sepulture by entombing the remains of fallen humanity, the expression still continues to be commonly made use of, "Ashes to ashes, dust to dust," as a remnant of the former mode of consuming our bodily tenement and disposing of mortality. But when these bony portions of our structure are exposed to the whitening agency of the tropical sun, or left upon the plains of the Lybian Desert, the toiling caravan may be tracked by its long line of bleaching carcases long after all remembrance of the fact has been buried in oblivion and forgetfulness. The soft flesh, blood, fat, muscles, sinews, nerves, and brain, have all disappeared by rotting and decay; and their various organised elements have assumed new forms of combination, and taken on those of the multitudinous volatile bodies and gaseous products of decomposition, in consequence of that slower process of combustion arising from gradual eremacausis and the effects of atmospheric oxidation; while the naked skeleton alone remains, alike the image and typical resemblance of the destroying angel Death, and the personification of Time. Still much organic matter remains united to the earthy materials of the tissues, from which, by chemical processes, considerable quantities of ammonia may be obtained by manufacturing agency, or by that gradual destruction induced by the conjoined effects of oxidation and moisture. These disorganising processes slowly progress through the original structure of the bone, under the ordinary circumstances of burial, or during the usual exposure in a moistened soil, at a certain rate in a century; so that the percentage of animal matter gradually decreases in amount, and the phosphate of lime at length remains pure, and deprived of that power of coherence which the gelatinous tissues had formerly conferred upon the structure of the bone. Under these circumstances, some bones will incur a change of form, and readily give way to the agency of external pressure; and thus we are enabled to account for the misshapen human skulls found on the ancient site of Uriconium or Wroxeter; and when they have been longer exposed to these destructive agencies, we find them even crumbled to decay and reduced to their primeval dust. But, as may be expected on ordinary theoretical grounds, the thicker and larger bones of the extremities resist decomposition for much longer periods, and some of these have latterly excited considerable scientific interest from having been discovered entombed in certain geological formations as long anterior to the present creation as the date of that form of terrestrial surface which was coeval with the existence of the *elephas primigenius*, the mammoth and megatherium, and with the cave-bear, all of which are animals whose types have disappeared and been wiped out of existence by the destroying hand of Time, aided by the grand geological mutations of the relative levels of land and sea which have ensued during the past hundred thousand years of this world's history. Our ordinary chronological notions suffer rudely from the shock of such a sweeping scientific deduction drawn from those durable and immutable pages of the rock; and we are compelled to look on with wonder and amazement at this lasting monument of human duration in Time.

It has been conclusively shown by the researches of Professor Tyndall and other physical philosophers, that the whole of the mechanical powers employed by the united machinery of the world are ultimately derived from the light of the sun; whilst the supremacy of England amongst the nations of the earth depends upon those extensive mines of coal which have been stored up for us in certain beds of the carboniferous series, ever since the geological changes which ensued upon the destruction of those ancient magnificent forests which remain to us as evidence of a former fiat of creative energy.

Most extensively employed, as they are, thousands of years may elapse ere England feels the want, or exhausts her store of mineral wealth; yet all these she owes to that mysterious agency which light exerts upon vegetative power, by which the budding plant and growing tree transform carbonic acid, water, and ammonia, into the substance of their own cells, juices, and tissues; and by that law of mutual dependence which Omnipotent wisdom has ordained, rendering the animal subservient to the vegetable kingdom, by producing, through the exercise of their functions of respiration and excretion, those material compounds which vegetation demands; whilst, by that beautiful power of compensation between the respiration and assimilation of the vegetable kingdom, vital energy is restored to the atmosphere by the constant reproduction of "the breath of life", and deposition within the fabric of the exogenous and monocotyledonous trees or their succulent stems; and wrapped up in the swaddling clothes of its cellular envelopes, the bounteous gift of Ceres lays up those stores of starch, sugar, and gum, together with those nitrogenous proteine compounds, without which animal life would perish, and this whole creation pass away, like those successive faunas and floras of former geological eras ere man began.

In Nature's laboratory, nothing is wasted, nothing lost. As matter was when time began, atom for atom still remains; not one has disappeared, disintegrated, or been destroyed; chemical agency and organic transformation, alteration, and substitution, account for every atom as originally turned out of the Creator's mould. As one generation succeeds another, so one creation follows the former; the present is formed but from the atoms of the past.

In support of this allegation, we may adduce the following well known geological facts; viz., that man is now using for his extensive manufacturing purposes coal obtained from four different stages of the palæozoic period. That mineral is worked in Portugal in the rocks of the Silurian stage; in Spain, its richest mines are derived from those of the Devonian period; whilst in Saxony, it is worked in the Permian formations; and the magnificent coal-fields of England are, as we have already adduced, obtained from the Carboniferous era, the most extensive as well as the most recent of all the four important divisions of the great Palæozoic period of this world's history.

The scientific agriculturist of the present day extensively uses, as a fertilising material, phosphate of lime as an artificial manure, in the manufacture of which he has employed coprolites, massive sharks' teeth, and gigantic bones, with other organic remains obtained from the red crag of Norwich—a fossiliferous deposit arising from a comparatively more modern creation during the Pleiocene era.

These five successive geological eras are the remains of as many different worlds existing in all their

grandeur; sporting in beauty and revelling in loveliness ages before the final appearance of man upon the earth; yet he has long since learnt to employ them all for his especial use and power; and in so doing, he fills the atmosphere with carbonic acid, he covers his fields with bone-earth, and his crops return to him with ten-fold multiplication, his herds fatten and increase in number, and, by consuming them, he may be said to rebuild his own body with the atoms derived from the destruction of no less than five former worlds. It is true that neither chemistry nor geology, will enable him to isolate or identify the various atoms obtained from each era; but these sciences conclusively prove the laws of transmutation and cyclical change.

It may be thought advisable to say a few words upon the various causes assigned to the production of these incessant changes in corpuscular matter, and the modifying powers which induce these energetic actions in the world around us.

Certain physical forces existing above, around, and within the area of our limited faculties, exerting powers of various intensities, and manifesting themselves to our senses in different manners, having been studied under the names of heat, light, electricity, magnetism, together with chemical affinities and motion, are, in fact, the main objects of experimental physics, and various affections of that matter which everywhere surrounds us as objective phenomena. They have been hitherto considered, until very recently, as so many distinct causations of all that of which we become cognisant by our senses. But Grove has conclusively shewn "that they may all be considered as correlative forces, and to have a reciprocal dependence on each other. That neither, taken abstractedly, can be said to be the essential or the proximate cause of the others, but that any may, as a force, produce the others; thus heat may mediately or immediately produce electricity, electricity may produce heat; and so of the rest, each merging itself as the force it produces becomes developed: and that the same must hold good of other forces, it being an irresistible inference that a force cannot originate otherwise than by generation from some antecedent force or forces."

As an illustration of this law, we may adduce a most conclusive experiment, performed by Grove, and related by him in his work on the *Correlation of Physical Forces*, p. 58.

"By a certain arrangement of a daguerreotype plate, in a darkened box, connected on the one hand by means of wires, with a gridiron of silver wire, and on the other, with one extremity of a galvanometer coil, and a highly sensitive thermometer, called Breguet's helix, interposed in the circuit, as soon as light is allowed to fall on the iodised silver plate by the removal of the interposed shutter, the needles of the galvanometer are deflected from zero. Thus light being the initiating force, we get *chemical affinity* on the plate, *electricity* circulating through the wires, *magnetism* in the coils, *heat* in the helix, and *motion* in the needles."

Of these various forces our earth receives as extraneous motive powers those of light, heat, and actinism —emanations radiating from our central sun, and which are so many modes of motion of that imponderable ether which exists not only within the interstices of all corpuscular atoms of our immediate and material presence, but also penetrates to the utmost limit of creation, and appears to be coeval with the existence of space itself, and the universe which it contains. This imponderable ether has the omnipresence and immaterial properties assigned as the characters of omnipotence itself; and, assuming that one eternal mind can bring this universal power into action, and develope either the undulations of light, the motions of heat, and the correlative currents of electricity and magnetism, we get chemical affinity necessarily resulting, and motion everywhere follows as a consequent phenomenon; so that these physical forces may be said to be the fingers by which divinity has acted through the immensity of time, and from all eternity. Natural philosophy here merges on the domains of religion; and both agree in the existence of One Universal Spirit, extraneous to and different from materiality, immense in power, the originator of all power and creator of all change.

The luminiferous undulations of this universal ether, when submitted to the refractive powers of Newton's prism, elicited the philosophical explanation of the gorgeous rainbow, "the harbinger of joy, and pledge of Divine forgiveness to man"; and now the more intimate study of the mysterious lines, within this wondrous arch of seven primitively refracted rays, has enabled the physical philosopher of the present day, not only to analyse the constituents of the solar mass and develope the constitution of his planetary worlds, but lately, by the examination of the stellar spectra, we have pushed our analytical inquiries into the immensity of space, and elicited the wondrous intelligence that the universe itself is filled with self-luminous matter, equal in beauty, rivalling in magnificence, excelling in power, our own glorious orb, the centre of all happiness on this terrestrial globe; and demonstrating by analogical inductive reasoning the astounding fact that, throughout the whole universe of creation, one agency exists, one matter extends, and suns around suns, worlds on worlds, revolve, whose constitution and destiny are the same as our own planetary sphere.* By this it is evident that the Creator's powers have revelled in the immensity of space; and that our globe is but as a drop in the ocean of eternity, only an unit in the grand and inexhaustible scheme of creation's universe; and that man and his spiritual guide are present everywhere throughout the confines of space, even to the remotest nebula which has been visible in the gigantic telescopes of a Herschell or a Rosse. And, however much we might be disposed to tremble at such a development of the theory of the universe which such sublime discoveries unfold to us, we must ever remember that the Godlike author of our pure and spiritualised religion has already declared that "in our Father's house are many mansions, and that he has gone to prepare a place for us; and where, as our accomplished President has so beautifully said, "the new heavens and the new earth, which the highest and purest minds have been inspired to look for, and to prefigure in solemn vision, will infinitely surpass in beauty and in glory all those which have gone before them."

* The discovery of thallium has proved a monochromatic green to exist; whilst the metal osmium gives a pure violet band; thus adding *two* pure colours to the idea of the triple spectrum. That *seven* primitive colours exist is the more probable idea.

Diseases of the Maori. Dr. Rawson describes in the *New Zealander* a disease somewhat common among the Maori children after they are weaned, worse in its nature and results than fever. It cannot be mistaken or unobserved in its attack, for it is accompanied by swelling of the stomach, with constant coughing, and tumours in the neck. He ascribes it to feeding them on potatoes or putrid maize. The neglect of the feeding of children with wholesome food, such as will nourish and strengthen, is the great cause of the death of many before arriving at years of maturity, and is the source of much of the sickness that prevails among the Maori race.

THE

ADDRESS IN MIDWIFERY.

BY

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Mr. President and Gentlemen,—To those who are exclusively engaged in the practice of medicine or surgery, a report on the progress of midwifery may, at first sight, appear to promise little that is either novel or interesting. Some may perhaps be disposed to ask, Can there be any progress worth recording in an Art which mainly consists in watching the operations of Nature? Even in those exceptional cases where Nature is at fault, have not the rules been long well established and clearly laid down by means of which Art assists her in working out what is, after all, a mere problem in animal mechanics?—a problem such as Astruc has stated in the following terms: "Given an extensible cavity, to draw from it a flexible body, of given length and breadth, through an opening dilatable to a certain point."

Such a statement as this may be a correct definition of the duties of a midwife in a bygone age, but it embraces a very small portion of what the public requires from the accoucheur of the present day. Instead of simply solving mechanical problems, he knows too well that he has to deal with some of the most complicated and abstruse vital phenomena, and to contend with physiological and pathological aberrations of a very peculiar kind, originating in an organ so all-important in the female economy, that Van Helmont was led to say of it, "Propter solum uterum mulier id est quod est"; and Plato went so far as to compare this organ to "a wild beast that obeys no reason, but which, when its desires are unsated, wanders about within the body and excites all sorts of irregular motions."

Thus we have the origin of a set of maladies peculiar to women, forming a separate and distinct group, and requiring treatment of a particular kind, which, in the course of time, has come to be assigned to the obstetric physician, and in the present day forms a part of his practice quite as important as the treatment of parturition and its attendant dangers and difficulties. Midwifery, in its widest sense, now includes the treatment of diseases of women and infants, and comprehends so large an array of cases of the most multifarious kind, and of such frequent occurrence, that it cannot be called a "speciality", except by an abuse of language. It would be equally correct to call surgery or even medicine a speciality. As Dr. Tyler Smith has well remarked in his address last year to the members of the Obstetrical Society, "There is a tendency to call us specialists, against which we should all contend. We are not specialists in the sense in which the ophthalmic or aural surgeon follows a speciality. Midwifery is one of the three great departments into which the wants of society and the lapse of time have divided the profession; and if the charge of speciality is brought against the obstetrist, it might with equal justice be urged against the physician or surgeon." Every general practitioner will bear me out when I say that midwifery, in the sense now used, or, as it is more correctly termed, "obstetric medicine", constitutes at least one-third of his ordinary practice. Nor is the literature of midwifery behindhand, as compared with that of medicine or surgery. Let any one who has doubts on this point, or who thinks that there is little room for novelties or improvements in obstetrics, refer to the pages of those medical journals which chronicle the annual progress of the different branches of medical science. Let him look, for instance, at the Sydenham Society's *Year-Book of Medicine, Surgery, etc.*, for 1862. He will find that, during the past year, the British and foreign publications on medicine occupy a space of 135 pages, those on surgery 134, and those on midwifery 95. Let him then compare the space taken up by midwifery with that which is taken up by the several specialities included in the reports on medicine and surgery. In medicine, for instance, he will see that the works on psychiatrik, or the treatment of mental diseases, fill up but a space of 11 pages; whilst, in surgery, those on ophthalmic diseases occupy but 15 pages, and those on aural diseases but 1 page. But, were further proof wanting of the comprehensive character of obstetrics, as compared with the above specialities, the accoucheur can refer with pride to the yearly volume of *Transactions* issued by the Obstetrical Society. These form a record of communications which may safely be said to be second to those of no other medical society in interest and importance.

In bringing before you to-day a short account of the most recent and valuable contributions to obstetric science, I shall endeavour, to the best of my ability, to perform the task which my brother associates have done me the honour of intrusting to me; but, at the same time, I trust you will feel assured that, if I fail to interest you in the subject of my address, this result will be due, not to any lack of new facts and opinions worth recording, but to the manner in which these have been selected and presented to your notice by me.

As the subject is a very wide one, want of time will compel me to limit my remarks as much as possible to facts which have been recorded since the commencement of last year. Midwifery being a science to which the remark, "Orditur ab ovo," especially applies, the first point which, in the natural course of events, would claim our attention, is the physiology of reproduction. But here, again, want of time forbids us to turn aside into the devious and seductive paths of physiological speculation, and commands us to keep as closely as we can to the hard realities of practice. We have no leisure, however great our inclination, for discussing the interesting question of spontaneous generation, or recording the phenomena of metagenesis or parthenogenesis which have been observed among the lower animals. All these topics belong more properly to a report on physiology, and cannot be treated of in an address on midwifery, which will not allow even a brief notice of the function of reproduction as it is performed in the highest beings of the animal kingdom.

I propose, therefore, to-day to restrict my remarks as much as possible to points in midwifery practice about which we have as yet no very clearly defined or well recognised rules. This may be said especially of the

Obstetric Use of Chloroform.

Although chloroform has now been employed in midwifery for more than fifteen years, obstetric authors are not yet agreed as to the extent or the frequency with which it should be administered. The question is yet *sub judice;* and the Royal Medical and Chirurgical Society are now endeavouring to obtain the opinions of a large number of practitioners on this important subject. Pending their inquiry, I do not wish to prejudge the question, so much as to briefly advert to some of the opinions which have been lately broached upon it. Chloroform is one of those good gifts of Providence which, like many other things, has suffered from excessive and injudicious praise. The discovery of an agent which would abolish the pangs of labour was at once hailed as an inexpressible boon by the public. Accoucheurs of sanguine temperament speedily caught the enthusiasm, constituted themselves the apostles of chloroform, and went about preaching the glad tidings of "parturition without pain". With them, the new anæsthetic was a sovereign remedy without alloy, and fulfilled the most opposite indications. It abolished the pains of labour, and yet in no way impaired the muscular contractions which produced those pains. It thoroughly relaxed a rigid os uteri or completely suspended uterine action when the accoucheur wished to turn, yet it never retarded the course of natural labour, nor caused *post partum* hæmorrhage or retention of the placenta from inertia. But it was not long before chloroform, like every other medicinal agent, was found sometimes to occasion untoward results; and then the new anæsthetic had to encounter the bitter hostility of practitioners of the old school, who regarded it as an unmixed evil, and obstinately refused to sanction its use under any circumstances. Men with minds thus constituted are commonly called "bigots" by those of an opposite temperament; but yet it may fairly be questioned whether that term (if we adopt Dr. Johnson's definition—viz., "a zealot, one devoted to a party") is more applicable to those who think nothing good that is new, than to those who think everything good that is new. Men of the former class will be glad to find the objections to the use of chloroform in midwifery stated forcibly and at some length in a communication by Dr. Johns in the *Dublin Quarterly Journal of Medical Science* for last May. In this article it is shown, from the published reports of the Dublin Lying-in Hospital during the mastership of Dr. Shekleton, that there was a mortality of 133 out of 13,406 cases in which chloroform was not administered, or about 1 in 100; whilst out of 342 who had chloroform, 30 died, or 1 in 11. Dr. Johns also states that, during Dr. Collins's mastership, puerperal convulsions proved fatal in the proportion of 1 in 6; whereas in that of Dr. Shekleton, under chloroform, it amounted to 1 in 3, and in Denham's cases to 2 in 3, or on the whole to 2⅗. "It appears that, during Dr. Shekleton's tenure of office, *post partum* hæmorrhage occurred but once in every 257 cases where chloroform was not used; yet after its inhalation this complication was present in 1 of every 49 cases. In Dr. Denham's report, it was present in 1 of every 19 cases; making, on the whole, an average occurrence of 1 in every 39.8 cases." Dr. Johns likewise quotes from the same reports, and from the writings of various authors, to prove that labour is often retarded by chloroform; and that puerperal inflammations, hysteria, and mania are more frequent after its use. Some of the opinions cited are not very clearly or precisely stated, whilst others lose their value from the very evident partisanship of their authors. Indeed, this last objection applies in some degree to Dr. Johns's paper; but yet there are many facts in it which the advocates of unlimited chloroform in labour will have much difficulty in explaining away. Several of these I am able to confirm from my own experience. For instance, I have met with cases in which labour was rendered very tedious from the use of chloroform; so much so that I was obliged to discontinue it; and, after doing so, the pains set in with renewed vigour. And I have seen other cases in which *post partum* hæmorrhage seemed to have been much aggravated if not occasioned by it. I have also frequently observed that the infant remains in a state of half-stupor, and cannot be induced to take the breast for some hours after delivery under chloroform.

I cannot say, however, that I have met with any case where death could be distinctly traced to its use. On the other hand, I have found chloroform of the greatest service in first labours accompanied with unusual suffering and much rigidity of the soft parts, and, in common with most accoucheurs, have experienced the great utility of it in obstetric operations.

A valuable paper on the Use of Chloroform was lately communicated to the Obstetrical Society of London by Dr. Kidd. The author warmly advocated the cause of chloroform, and defended it against attacks from various quarters. An interesting discussion followed, which elicited a variety of opinions on the subject from several eminent metropolitan accoucheurs; some giving it as their experience that the use of chloroform during labour was unattended with any unfavourable symptoms, whilst others had found that it not unfrequently retarded labour, and produced hæmorrhage and other unpleasant results.

After all, the great question to be settled, and which, I hope, will be settled before long by the Royal Medical and Chirurgical Society, is, whether the use of chloroform in labour should be the general rule or the exception? At present, I must say, I incline to the latter view myself, for the following reasons. The ultimate safety of our patients ought undoubtedly to be the primary consideration with us. In comparison with this, the mere saving them from pain is quite a secondary matter. The real question is this: Does the suffering during an ordinary labour compromise the patient's safety so much as the unconsciousness produced by chloroform? I cannot think that it does; and in a normal labour especially, when I do not know by experience that chloroform acts beneficially on the patient, I would rather let well alone, than interfere with the course of nature by giving this or any other medicinal agent.

Passing on from this subject to that of difficult labour and its treatment, we observe in the *Obstetrical Transactions* of last year a most useful and practical paper by Dr. M'Clintock of Dublin, on

Turning in Cases of Disproportion.

The utility of turning in such cases was known to the accoucheurs of the last century, but had been comparatively lost sight of until attention was again directed to it by Professor Simpson of Edinburgh. In a series of able and ingenious papers, the Edinburgh professor conclusively demonstrated the value of this expedient as a substitute for the long forceps in difficult labour from pelvic deformity. In Dr. M'Clintock's paper, the results of seventeen cases, which came under his care in the Dublin Lying-in Hospital, are recorded. In none of these cases was there any considerable deformity of the pelvis, although the obstetric histories of the women clearly showed that there must have been some slight narrowing of the superior strait. In every instance, Dr. M'Clintock experienced some difficulty in bringing the head through the pelvis, and in two cases had to perform craniotomy. In one instance, the parietal bone next the sacrum was fractured. All the mothers recovered with the exception

of one, who died of puerperal fever. Nine children were saved and eight lost. Dr. M'Clintock does not consider the operation to be so favourable to the child as some of its advocates have represented; and thinks that we cannot reckon with much certainty on saving the life of the infant unless the pelvic narrowing is but slight. But he regards the operation as most favourable for the mother, because it saves her from the dangers of protracted labour, and probably from ultimate delivery from high forceps operations or craniotomy.

Placenta Prævia.

The statistics and the treatment of Placental Presentations have been so thoroughly gone into of late years, especially by Drs. Lee, Simpson, Trask, Churchill, and Barnes, that it would be difficult to imagine anything more that could be said on the subject. Nevertheless, a work lately published by Dr. Read of Philadelphia ought not to be passed unnoticed, because it is, perhaps, the most complete and elaborate collection of authentic facts relating to placenta prævia which has yet been published. The cases of placenta prævia which he has been able to collect amount in all to 1628, and of these 380 died; about 1 in 4½. Dr. Read calculates that the average frequency of placental presentations is once in twelve hundred cases. Of the entire number of cases tabulated by Dr. Read, more than two-thirds come under the denomination of partial presentation—as Dr. Read remarks: "Showing most conclusively, that the method proposed by Professor Simpson will be available in only a small fraction of cases, and that the old practice of turning and delivering by the feet, without disturbing the connections of the placenta any more than is necessary for the purpose, must, after all, be our main resort, and the method which, in the mass of cases coming under our charge, will most likely be required." With regard to the effects of separation of the placenta, Dr. Read has noticed this remarkable fact, that there are fewer deaths proportionately where, after artificial separation of the placenta, the child is born by the natural labour-pains, than where, with spontaneous separation, the child has to be delivered artificially. He considers it proved beyond a doubt that it is not the separation which puts an end to the flooding; "but that when this has been done, the uterus is put in a condition for its contractile power to operate to the best advantage; and if enough vitality remain in the system to insure condensation of its walls, the obliteration of the vessels cuts off the supply of blood and the hæmorrhage is at an end."

Cæsarean Section.

The records of Cæsarean Operations during the past twelve months show, as usual, a greater proportion of successful cases with continental than with British practitioners. Amongst the former, Dr. Pagenstecker publishes the particulars of twelve cases. Two-thirds of these were the result of osteo-malachia, a disease which appears to be rather common in the neighbourhood of the author's residence (Elberfield), and chiefly affects poor, ill-fed women, living in damp, badly-ventilated houses in large towns. Out of the twelve cases, seven mothers and eight children died. It should, however, be mentioned that only four of the mothers were in good condition before the operation. Of the seven cases fatal to the mother, the cause of death was in one rupture of the uterus, in one marasmus from osteo-malachia, in two exhaustion from the same cause, in two hæmorrhage, in one purulent peritonitis. The result of the operation was generally much better when it was undertaken before rupture of the membranes. Under other circumstances, the prostration, exhaustion, and want of contractility of the uterus, exercised a marked effect also in leading to an unfavourable result. M. Jurran gives a successful case of Cæsarean section, in which he operated on a woman, aged 27, with a pelvis measuring about two inches and a half in the conjugate diameter. In England, this woman would probably have been delivered by craniotomy. Some fever and peritonitis followed, but ultimately both mother and child did well. In Great Britain, three cases are recorded. One of these is given by Dr. David Johnson in the *Lancet* for Nov. 1st, 1862. The patient was affected with rickets, and the conjugate diameter of her pelvis measured two inches and a half. When first seen, she had been in labour twelve hours, was depressed and restless, and the pains had ceased. The hand and cord were presenting. Turning was attempted, but without success. Craniotomy was then performed; but it was found impossible to extract the head. Finally, the Cæsarean section was had recourse to. The patient died forty-six hours after the operation. The two other cases present several points of similarity. One occurred in the practice of Dr. Dyce of Aberdeen. The other came under my own notice at the Bristol General Hospital, and was operated on by Mr. Coe, the senior surgeon. Both patients were about four feet high; had been in labour some hours, but showed no signs of exhaustion. In the first, the conjugate diameter of the pelvis was two inches; in the second, rather less. In the first, delivery was attempted by turning and craniotomy; and when this was found to be impracticable, the Cæsarean operation was performed. In the second, this operation was at once had recourse to, without attempting to deliver in any other way. There was no hæmorrhage in either case; but in both vomiting continued without intermission after the operation until death occurred, in the first forty-three hours, and in the second forty-two, after the operation. The child, in the latter case, was saved. M. Pihan-Dufeillay gives a carefully arranged list of eighty-eight cases of Cæsarean operation, which are all that he has been able to obtain records of, since 1845. Of these, fifty recovered and thirty-eight died. The author clearly shows, by his statistics, that the duration of the labour before the operation has a great deal to do with the ultimate results of twenty-nine successful cases; the powers were preserved in twenty-four; in twenty, the duration of labour was under twenty-four hours. Of nineteen fatal cases, the powers were failing or gone in fifteen, and in eleven cases the labour had lasted more than twenty-four hours. M. Pihan-Dufeillay concludes that the Cæsarean section, performed under favourable conditions, gives nearly seventy-five per cent. of recoveries. The conclusion to be deduced, both from the cases mentioned above and from those collected by this author, is that the operation should be performed as soon as the diagnosis is clear, and the impossibility of delivery by any other method is recognised.

Bloodletting and Chloroform in Puerperal Convulsions.

During the last quarter of a century there has been a great change in the method of treating diseases in general, but especially those of an acute character. Formerly, the physician looked upon a disease as an enemy which had taken possession of the system, and which it was his business to knock down by bleeding *coup sur coup*, and to starve out by low diet. Now, on the contrary, he endeavours to strengthen the system, by throwing in supplies of food and stimulus, so as to enable it to resist and ultimately expel the invader. In fact, his chief duty now is to perform the function of a "judicious bottle-holder."

I shall not stop here to discuss the relative merits

of these opposite plans; suffice it to say that the latter is now almost universally adopted in midwifery as well as in medicine; and in many instances, no doubt, to the great advantage of the patient. But not in all: on the contrary, I believe we are at present in great danger of undervaluing, or even altogegether abandoning, a therapeutic agent which is sometimes of the greatest value.

It is a good thing, no doubt, to have abolished the use of the lancet in puerperal fevers, and to have substituted chloroform for it in the treatment of rigidity of the soft parts during labour; but to discard it in puerperal convulsions is to throw away, as I believe, one of the most valuable resources of our art. The testimony of obstetric authors has, until lately, been so universally and so decidedly in favour of the lancet in this disease, that it is difficult to account for the comparative disuse of it at the present time, upon any other supposition than that fashion has set in a contrary direction. It is now very much the fashion to substitute chloroform for bleeding in puerperal convulsions, but the practice is based on evidence which is not very satisfactory as compared with that which can be adduced in favour of the old system. Cases by twos and by threes have been published by various practitioners during the last two years with a view to prove the efficacy of chloroform in puerperal convulsions. But many more have been brought forward on the other side in favour of bleeding. Behm has published the particulars of 20 cases so treated. Out of these 17 mothers recovered, and 12 children were saved. Dr. Ramsbotham also has given his verdict very conclusively in favour of bleeding. I lately published 11 cases of eclampsia which had occurred in my own practice. Out of these, 10 mothers and 7 children were saved. In all of these bleeding was the chief remedy, and in most it was speedily followed by very marked and decided benefit. The appearance of these cases in the British Medical Journal led to the publication in the same Journal of five others by Mr. Jones, of Cleobury Mortimer. All of these were treated in the same way, and terminated favourably. But the most conclusive testimony in favour of bleeding is that of Professor Depaul, of Paris. He states that experience derived from a large number of cases, induces him to regard bleeding as the most powerful means of arresting puerperal convulsions. "Bloodletting," he says, "unless copious, does little good." He begins by abstracting sixteen ounces of blood. If this do not diminish the frequency of the fits, at the end of half an hour he prescribes a second bleeding. Speaking of the comparative merits of bleeding and chloroform, he gives the case of a woman who was attacked by puerperal convulsions, and was kept for four hours under the influence of chloroform, upwards of three ounces having been used. Instead of becoming fewer and less severe, the attacks became more violent and numerous, although the patient had been delivered for some hours. M. Depaul then caused her to be bled twice within half an hour, and the convulsions ceased. A similar instance of the success of bleeding in arresting convulsions after the failure of chloroform is given by Dr. Bruce in the *Edinburgh Monthly Journal* for September 1861.

Whilst giving this testimony in favour of bleeding in puerperal eclampsia, I do not intend to detract, in the least, from the merits of chloroform as a palliative, as, in fact, the most effectual sedative we know of, for mitigating the severity of the fits and tranquillising the patient whilst artificial delivery is being effected; or, again, as a curative in those exceptional cases of purely reflex convulsion, occasioned by great irritation of the uterus or some other organ.

But there is no good reason for believing that its *modus operandi* is different from that of any other sedative; I mean, that it can remove that condition of the kidneys from which arises that state of toxæmia that, in nine cases out of ten, causes the disease. It has been attempted to be shown that chloroform, because it produces a transitory diabetes mellitus, can cure convulsions by preventing the change of urea into carbonate of ammonia. But theoretical reasoning of this kind, deduced from animal chemistry, ought to weigh little against the direct proof that practice affords of the efficacy of bleeding in diminishing the albuminuria so characteristic of this disease. In several of my own cases, the convulsions abated, and the albumen in the urine diminished, *pari passu*, in a short time after venesection. But the most conclusive case of the kind which I know is one which my brother, Mr. S. H. Swayne, recorded in the British Medical Journal for June 20th, 1863. A woman, in the seventh month of her pregnancy, was attacked with puerperal convulsions, for which blisters, cold to the head, purgatives, and enemata were administered without effect. The urine, on being examined, contained so large a quantity of albumen, that the deposit formed by it occupied about five-sixths of the whole bulk of the fluid examined. She was bled on the next day to twenty-five ounces. No more convulsions occurred. Some urine passed within twenty-four hours after the bleeding was examined, and the albumen was found to occupy only one-sixth of the whole volume after subsidence. Although the fœtus appeared to be dead, no attempt was made to deliver, because there was no dilatation of the os uteri. The woman went on well for twelve days, when labour set in, and terminated favourably, without convulsions, in the birth of a dead child, somewhat decomposed. My brother remarks respecting this case, that "No other exciting cause for the convulsions beyond the uræmia could be discovered; and that the presence of the fœtus in the uterus had little share in bringing them on or maintaining them, would seem to be shown by the cessation of the convulsions and of the albuminuria, notwithstanding the presence of a dead child in the uterus, and by the uterus remaining quiescent for a fortnight after the first fits. That the improvement was due to the measures employed, especially to the bleeding, can, I think, scarcely admit of a doubt."

Pelvic Hæmatocele.

Considerable attention has been directed of late years to a somewhat obscure affection, which consists in an extravasation of blood into the pelvic cavity in the immediate neighbourhood of the uterus. This affection has been very fully investigated during the last two or three years, and several memoirs upon the subject have been published, especially by Professor Braun of Vienna, Dr. J. Matthews Duncan of Edinburgh, and Dr. M'Clintock of Dublin. The disease has been termed *peri-uterine* and *retro-uterine* hæmatocele; but as the extravasated blood does not always lie either around or immediately behind the uterus, Dr. M'Clintock prefers the term *pelvic* hæmatocele. The effused blood may lie either within or external to the peritoneal sac. The sources of the hæmorrhage appear to be various. The blood may escape from the Fallopian tube, being either an exhalation from its mucous membrane, or coming through the tube from the uterus; it may proceed from the ovary, as a result of hyperæmia during the process of ovulation; it may arise from laceration or rupture of the utero-ovarian vessels contained in the broad ligaments; or it may be a sanguineous exhalation from the peritonæum itself. In the majority of cases the disease is what has been called *metrorrhagic*, and is an accompaniment of menorrhagia, the hæmorrhage proceeding from the ovarian vessels at the menstrual epoch. The disease appears sometimes to arise from coitus, or ex-

posure to cold during menstruation. The symptoms are those of peritonitis of a somewhat localised character, such as hypogastric pain and tenderness with fever, and the formation of a tumour behind the uterus or in the hypogastrium.

The proper treatment, in the first place, is to obviate the shock and depression which are the immediate results of the hæmorrhage; secondly, to combat the reaction and inflammation which supervene; thirdly, to remove, if possible, the tumour which remains. Authorities are much divided as to the best method of fulfilling this last indication. Some, as Professor Braun and Dr. Duncan, for instance, recommend puncturing the swelling; others, and amongst them Dr. M'Clintock, prefer the expectant plan, and do not advise opening the cyst except in the chronic stage, and then only when it gives rise to great pressure and mechanical inconvenience. The propriety of any operation, however, must depend very much upon the size and situation of the swelling.

Thrombosis and Embolia.

The phenomena of thrombosis and embolia have of late years attracted much notice, both in this country and on the continent. Valuable essays on this subject have appeared at different times from the pens of Virchow, Baron, Paget, Kirkes, Simpson, and others; and in consequence of these researches, morbid phenomena, some of them imperfectly known to the ancients, are now becoming thoroughly understood. These are especially interesting to the accoucheur, because the puerperal state is one that, under certain conditions, powerfully predisposes to these affections. The condition of the blood is apt to become deteriorated, from flooding or the imbibition of poison, during or after labour, and a tendency to the formation of clots in the living body is produced. When clots are once formed, they are liable to be carried away with the current of blood, and to give rise to embolism by plugging some more or less important vessel; so that in the end they may cause dangerous consequences, or even death. During the last year, Dr. Robert Barnes communicated an elaborate essay on this subject to the London Obstetrical Society. This was published in the last volume of *Transactions*, and may be read with much profit by all who are interested in the subject. Dr. Barnes has taken pains to collect the particulars of several cases which have been recorded by various authors. These he has arranged under two heads; viz., Table 1, "Cases of Systemic Arterial Thrombosis or Embolia;" and Table 2, "Cases of Pulmonary Thrombosis or Embolia." There are fifteen cases of the first and fourteen of the second. As an illustration of the first kind, the author relates a case (in his own practice) in which a patient was seized, a few days after labour, with symptoms apparently indicating uterine phlebitis. On the fourteenth day sudden severe pain came on in the right leg, and this was followed by loss of pulsation in the arteries of the leg, swelling, gangrene, and death. A very good example of the second kind was published by Dr. Cowan in the *Edinburgh Medical Journal* for November 1862. The case is as follows. A primipara, aged twenty-two, died very suddenly, eighteen days after what appeared to be a perfectly natural labour. After sitting by the fireside for some time she complained of feeling fatigued, and said she would go to bed. As she attempted to do so, she uttered a smothered cry, fell to the ground, and in a short time expired. At the *post mortem* examination, the brain was found to be much injected, but healthy; the left side of the heart was empty and firmly contracted; the right greatly distended with fluid blood. There were three ounces of fluid in the pericardium. Both lungs were highly congested; a fibrinous clot, an inch and three-quarters in length, was found in the pulmonary artery, extending into its left branch. The clot completely occupied the calibre of the vessel, and required to be removed by the fingers.

Phlegmasia Dolens.

Phlegmasia dolens is a puerperal disease somewhat allied to the preceding, and its pathology has lately been the subject of some discussion. Dr. Mackenzie, in the *Lettsomian Lectures on Midwifery* lately delivered before the Medical Society of London, states his belief, as the result of clinical facts alone, that the disease originates in the blood, and is not due to local causes. He states that these views are supported by the facts of cases of phlegmasia dolens in non-puerperal individuals, and he has collected forty instances of this kind. He considers that phlebitis, occurring as a local disease, is never associated with the phenomena of phlegmasia dolens, but that, when it arises from general and constitutional causes, the lesion of the veins is very commonly accompanied with the symptoms of phlegmasia dolens.

On the other hand, Dr. Tilbury Fox, in a paper read by him last year before the Obstetrical Society, brings forward cases to prove that lymphatic obstruction is sufficient and alone necessary to give rise to phlegmasia dolens, and arrives at the following conclusions:—1. That phlegmasia dolens is a local disease. 2. No general symptoms need be present; this implying absence of blood poison. 3. Phlebitis, however produced, cannot give rise to phlegmasia dolens, but œdema only. 4. Phlegmasia dolens may occur in, but forms no necessary part of, blood poisoning, such as tends to phlebitis. 5. Obstruction to the main lymphatic channels alone is capable of giving rise to white leg, and acts by preventing the removal of the lymph from the affected limb. These are the principal conclusions of the author, and, to a certain extent, they corroborate the observations of some of the older authors, such as Hull, Trye, and White. The pathology of this disease is still, in many respects, in an unsettled state, and, before it is fully made out, must be based upon a much greater number of *post mortem* observations, opportunities for which, however, rarely occur, in consequence of the disease being one which seldom proves fatal.

Ovariotomy.

The subject of ovariotomy is one that belongs almost as much to surgery as to midwifery, but yet it is of so much importance, and so much has been said and written about it lately, that I ought not to pass it by *sub silentio*. Ovariotomy is an operation of British origin. It was first proposed by Dr. William Hunter, was warmly advocated by John Bell, and put into practice by McDowell, an American pupil of the latter. The first time that the operation was performed in Great Britain was in the year 1823, and the operator was Mr. Lizars, of Edinburgh. Ovarian dropsy is a disease of so distressing a nature, so constantly terminating in death after prolonged suffering, that we cannot wonder at the readiness with which surgeons should undertake a formidable operation for its cure. According to the statistics, even of those who are opposed to the operation, more than 80 per cent. of those cases that are left to nature, or only treated by palliative means, die within, on an average, a year and three quarters from the commencement of the disease. Accordingly, it was to be expected that an operation, which could be proved to be successful in a majority of cases, should meet with increasing favour from the profession. But yet the fact should not be lost sight of that it is a formidable operation; it kills or cures; as Mr. Erichsen remarks of it, *cita mors venit aut victoria læta*. If successful, it effects a

radical cure: if unsuccessful, it usually causes death in a few days. We should therefore hail with joy any improvements in the method of performing it which may render its success more certain. Some valuable additions to our knowledge in this respect have been recently made, especially by Mr. Spencer Wells, Mr. I. Baker Brown, Dr. Tyler Smith, and Dr. Clay. Mr. I. B. Brown has published a work on ovariotomy—the result of thirty years' experience—in which he gives an account of 42 cases operated on by him. Of these there were 22 successful, and 20 unsuccessful cases. The author accounts for the comparatively small number of recoveries by the fact, that several of the cases operated upon happened many years ago, before the indications for the operation were so well understood as they are now. His later experience gives a far higher percentage of recoveries than his earlier, because he has learnt to reject cases where the health has been much broken down, where tapping has been frequently performed, or where the disease is of a colloid nature, etc. Adhesions of the ovarian tumour to the surrounding parts are not an obstacle to the operation, but they certainly render it less favourable. They were present in 13 of the successful, and in 17 of the unsuccessful cases. Mr. I. B. Brown advises enclosing the pedicle in a clamp, which is to be placed as near the tumour as possible, and to be kept externally. This is to be removed in two or three days. Mr. Brown has also laid before the Obstetrical Society the particulars of 19 cases operated on at the London Surgical Home. Of these 13 recovered and 6 died, thus showing a greater percentage of cures than in the earlier cases. Mr. Spencer Wells, in the course of last year, published the particulars of 9 cases, in which he had performed ovariotomy. These when added to those which he had previously published, made a total of 42 cases; of these 26 recovered and 16 died. Mr. S. Wells prefers operating by a small incision. When the pedicle is long he secures it by a clamp, and when it is short he either ties the vessels only (not the pedicle), or uses the *écraseur*, acupressure, or the wire compress of Mr. Dix of Hull.

During the course of last year also, Dr. T. Smith communicated to the Obstetrical Society some additional cases of ovariotomy performed by himself, and stated that he had operated, in all, upon 12 cases. Of these, 3 died and 9 recovered. One of the most remarkable features in these cases was, that in two of them the pedicle was tied with a silk ligature, and then both the pedicle and ligature were cut off as short as possible and dropped into the abdomen, without producing any bad result. Few, however, or perhaps none, have had so large an experience of ovariotomy as Dr. Clay, of Manchester, who, in a paper communicated to the Obstetrical Society, stated that he had operated in 104 cases. Of these, 72 recovered and 32 died. Dr. Clay prefers the large abdominal incision, and returns the pedicle with the ligature into the abdomen. Dr. Clay's statistics are certainly in favour of his method of operating; although by far the majority of authors now advocate the small incision.

Notwithstanding that ovariotomy is now generally received in England as a justifiable operation, it has had from time to time to encounter the uncompromising hostility of some eminent accoucheurs. Dr. Robert Lee, in a paper communicated to the Obstetrical Society, stated very fully and forcibly all that could be said against it, and the reading of his paper gave rise to a long and rather acrimonious discussion, which ended, as such discussions usually do, in both parties remaining of the same opinion as previously. At the time that this took place, the *Lancet* made some remarks on the question, which are so judicious that I cannot forbear quoting them. "Practitioners have long been divided with respect to the value of ovariotomy as a surgical proceeding. Is any further light thrown upon this subject by the discussion in question? We can scarcely think that there is. The tendency on the one side was to over-estimate its value; on the other, unjustly to depreciate it. What is really wanted, is a more clear description of those cases in which the operation may be safely practised. That we are deficient at the present time with regard to the diagnosis of these cases the impartial observer will admit. . . . One result, however, of the recent discussion will not be without benefit. It will show that whatever has hitherto been the success of ovariotomy in the hands of certain operators, the diagnosis of ovarian disease is by no means without its difficulties nor the 'simple' operation without its complications and dangers. The truth, as is usually the case in such questions, lies probably between the two extremes. Under favourable circumstances and in well-defined cases, ovariotomy is a valuable operation. That it may sustain its reputation, it is essential that its advocates should be less sanguine in expressing their opinions. It is a duty not less incumbent upon the opponents of the operation to examine with candour the evidence in its favour." Most of us, I think, will be ready to endorse these statements of the *Lancet*, and to allow that when due care is shown in the selection of cases, ovariotomy is a perfectly justifiable operation. This is proved by the more recent statistics of the operation, which show that at least two-thirds of the cases recover. It is no small argument in favour of the operation, that it is now becoming adopted in France, where novelties of British origin generally meet with anything but a ready acceptance, and it has been performed by Professor Nélaton and other distinguished French and Belgian surgeons.

The Progress of Obstetric Science.

If we review the progress of obstetric science during the present century, we must, I think, be struck with the fact that, in the treatment of labour and also of uterine diseases, the tide of opinion has shown a remarkable tendency to ebb and flow in a similar manner to what we have already noticed with respect to the treatment of disease in general. The practice of medicine, in the present day, has become, in a great measure, expectant; and is a decided contrast to the active, or "heroic" treatment, as it used to be called, of our fathers. On the contrary, the practice of midwifery has become much more active in our day, and we trust much less than our fathers did to the powers of nature. A similar change in the current of opinion, but in a contrary direction, was observed during the last century.

In the early part of the eighteenth century, when the doctrines of the iatro-mathematical school were so prevalent, and it was so much the fashion to resolve any physiological process into a mathematical problem, parturition came to be regarded too much as a mere mechanical process. The discovery of the forceps gave an impetus to these views, and the result was, that the progress of nature was often unduly interfered with, and instruments were resorted to with rash and culpable frequency. A reaction against these doctrines set in towards the end of the last century. This movement was due in a great measure to the influence of the illustrious Denman—a name which will ever be honoured in the annals of midwifery—as marking a new and improved era in its history. By his example and precept, accoucheurs were taught to place implicit confidence in the powers of nature, and never to resort to instruments except they had the most plain and palpable evidence that she was unequal to her task. These doctrines of non-interference were, however, pushed to their extreme point by Denman,

and may be said to have culminated in that rule, so fraught with danger, which he laid down with respect to the use of the forceps, viz., "that the head of the child shall have rested for *six hours* as low as the perineum, that is, in a situation which would allow of their application before the forceps are applied, although the pains should have altogether ceased during that time." On the whole, however, the influence of Denman and his contemporaries had a most salutary effect on the practice of midwifery, and it soon came to be received as an axiom that "meddlesome midwifery is bad." This influence has been felt more or less during the first half of the present century, but its power has been gradually lessening during the last twenty years, very much, I believe, in consequence of the opposing influence of another master-mind. I allude to the distinguished Professor of Midwifery at Edinburgh. Dr. Simpson's wonderful fertility of invention, his ingenuity in devising new and startling expedients, and his happy audacity, if I may use the term, in putting these into practice, as well as his unremitting efforts to shorten the duration and abolish the pains of parturition, have all no doubt greatly contributed to produce this result. For instance, chloroform is constantly given to allay the pains of labour, and in consequence ergot of rye is used more frequently than it otherwise would be, in order to remove the atony of the uterus, which occasionally follows. We often hear of the employment of the colpeurynter to dilate the os uteri in cases where the accoucheur would formerly have trusted with perfect confidence to time and the powers of nature. The more frequent employment of the forceps is strongly advocated by many accoucheurs; and papers have been read at various obstetrical societies to prove the superior results which follow from using this instrument once in every ten or twenty, instead of once in every two or three hundred cases, as formerly. Turning, also, is coming very much into use in cases of slight disproportion, which some twenty years ago would have been left to nature, with the possible alternative of the forceps. Many of these operative proceedings are without doubt improvements of the greatest value, when they are adopted by skilful practitioners; one of them, in particular, I am quite convinced, is so—I mean the more frequent use of the forceps. I am far from advocating that the forceps should be used so often as once in ten or twenty cases; but yet I believe that, when properly employed, it is far less dangerous to use this instrument, than to allow the child's head to remain immoveable for three or four hours in the cavity of the pelvis. Nevertheless, when we take into consideration the amount of skill which can reasonably be expected of the greater number of practitioners throughout the country, many of whom, perhaps, are young men just entering practice, and who have attended, probably, no more than twenty midwifery cases, I cannot avoid the belief that the old rule of practice, which condemns so unhesitatingly "meddlesome midwifery," is a safer one to go by, than some of the more modern doctrines which are so suggestive of interference with nature.

But the treatment of uterine diseases has furnished, perhaps, the best example in the present day of what may well be termed the "medicina perturbatrix." Within the last thirty or forty years improved means of diagnosis (I allude especially to the use of the speculum and uterine sound), have caused an immense advance in our knowledge of the pathology of these diseases. In consequence of this, a number of new and untried remedies came into use; and as is usually the case with new discoveries, at first were greatly over-rated and most indiscriminately employed. Hence arose the flagrant abuse of the speculum, which was so prevalent a few years since, and the host of experiments of the roughest kind to which the uterus has been of late years subjected. We often used to hear that for comparatively trivial ailments, this organ had been probed, incised, scraped out, burnt with the strongest caustics, nay, even seared with white-hot irons. The remedy, doubtless, in many of these complaints was much worse than the disease, but thanks to the writings of pains-taking and sober-minded observers such as Dr. West, the profession has, of late, come to estimate such remedies more at their proper value, to use them in a more legitimate manner, and in the majority of cases to substitute for them milder methods of cure. Although, in the treatment of labour, operations of various kinds are more frequently resorted to now than they were thirty years ago, there is one operation which happily is an exception to this rule, and it is one which ought to be most repugnant of all to the feelings of the operator, because it sacrifices, not a limb only, but a life.

Craniotomy is undoubtedly employed less frequently now than formerly. This result is, in a great measure, due to the earnest and conscientious appeals of modern accoucheurs, As an illustration, I may refer to a paper by Dr. Tyler Smith, on the "Abolition of Craniotomy when the Fœtus is Living and Viable"—a paper which was one of the first and most important communications laid before the London Obstetrical Society. This great and undoubted improvement in practice far outweighs any of the minor changes for the worse, which accoucheurs of the old school may fancy they observe in modern obstetrics. I cannot, therefore, agree with the *American Medical Times* in the gloomy view it takes of the present condition of midwifery, when it remarks that "the change in obstetrical practice which we have indicated as now in progress, must be witnessed with alarm by every believer in conservatism in medicine." The present era has in many respects been a remarkable one in the annals of midwifery. There has been a complete revolution in an established routine of practice that for nearly half a century had held undisputed sway. Old ideas and old methods of action have given place to new ones that have, for a time, been exalted into undue prominence; but these will ultimately take their legitimate place and find their proper level. In the meantime, we have the consolation of reflecting that although a desire to spare pain may have led in some instances to an injudicious interference with nature, the still more laudable desire to save life has undoubtedly tended to diminish the frequency of the most horrible of all operations, and thus to remove what has long been the opprobrium of British obstetric art.

Relation between Atomic Weight and Specific Gravity. We understand that a remarkable essay has been sent in to the Royal Society of Edinburgh to compete for a medal which that society has to award. It is designated "On Hydrogen in its Relations to the Organic Elements." Its characteristic is that the author (who gives his name only in a sealed envelope) proposes in it a new method of synthesis in chemistry, whose claims he bases on such facts as these, that the formulæ of all those substances which possess eminent properties in the economy of nature when constructed according to this method present in the structure of their molecules remarkable geometrical and physical properties. But what he specially claims for it as a criterion is this, that it gives such molecules for liquid and crystalline substances that simply their atomic weights when divided by a constant give their specific gravities, as found by the balance without any reference to atomic volume at all. It is a work of immense labour, extending to upwards of two hundred quarto pages, and is illustrated by a multitude of diagrams. (*Chemical News.*)

British Medical Journal.

SATURDAY, AUGUST 15TH, 1863.

THE BRISTOL MEETING.

THE Thirty-first Annual Meeting of the British Medical Association has been held; and the pleasures anticipated for many months by its visitors, and the anxieties of those who had the arrangement of its details, have become things of the past. Not altogether so, however; for we are sure that the pleasant reminiscences of the Bristol gathering will long survive in the minds of those whose good fortune it was to receive the hearty welcome and hospitable reception of their brethren; and that the local members, on whose shoulders lay the task of making the meeting what it was, will with good conscience congratulate themselves on the successful termination of their labours, and take in good faith the assertion made by some of their guests, and which we heartily endorse, that the Bristol meeting was second to none which have preceded it—nay, that it even surpassed the metropolitan meeting of last year in splendour and hospitality. The worthy President no doubt expressed the natural feeling of the Bristol members, when he alluded, in the opening sentences of his address, to the "trying circumstances" under which the meeting was held. But the Bristol men, worthily represented by their President and by their able and zealous Secretary, Dr. Marshall, have not only fully sustained the honour of their city, long famed for the energy and liberality of its inhabitants, but have set an example, to surpass which will be no light task.

Of the President especially, a few words must be said; not in the spirit of flattery, but in all sincerity. His eminence as a physician, the high esteem in which he is held both by his professional brethren in the locality and by his fellow-citizens, were last year alluded to as fitting him in an eminent degree to fill the office of President of the Association with dignity and grace. How fully the expectations then raised have been carried out, those who were present at the meeting know well. His excellent inaugural address, his firm and judicious, and at the same time courteous, management of the proceedings of the meeting, and the generous hospitality which he extended to the members, both at his table and in the splendid entertainment on the evening of the second day, place him in the foremost rank among those who have occupied the presidential chair in this, or, indeed, in any similar Association.

In the preparations made by the local members for the social enjoyments of their visitors, the meeting was a great success; nor was it less so in the quantity and quality of the intellectual food provided. The philosophical address of the President, which might with advantage have been listened to by a public as well as by a professional audience; the masterly exposition of the facts known with regard to variola ovina, brought forward by Dr. W. Budd; and the able addresses of Mr. Prichard in Surgery, of Dr. Herapath in Chemistry, and of Dr. Swayne in Midwifery, require no more than a passing word of praise in this place. They are placed in our pages before every member of the Association; and those who were absent will be able, each for himself, to ratify the opinion of these effusions expressed by those who were present.

Of papers promised both by London and by provincial practitioners, the supply was abundant and the quality excellent. Several essays, indeed, whose authors were prevented from attending the meeting, were, in fairness, postponed until an opportunity of reading had been afforded to all the authors who were present; and, when these had concluded, the limited time remaining no longer allowed the papers of the absentees to be brought forward. The associates, however, will in due time have the advantage of perusing them in the pages of the JOURNAL.

While the members accepted and enjoyed the social and intellectual feasts provided for them, they did not fail to take the opportunity afforded by the meeting of manifesting their interest in certain points having a bearing on the welfare of their brethren, absent as well as present.

On the first day of the meetings, Dr. Richardson brought forward a motion for the appointment of a Committee to examine into the possibility of establishing a Medical Provident Fund. The motion, seconded by Mr. Daniell, an old and earnest advocate of the principle that medical men should combine to provide for themselves when in misfortune, and for their widows and orphans, rather than depend on the charity of their fellows, received the unanimous support of the members present. We will only say here, that the movement thus inaugurated has our sincerest wishes for its success, and shall on all occasions receive such support as it may be in our power to give.

The treatment experienced by the medical officers of the army and navy received, as it has done heretofore, the attention of the Association. A paragraph specially referring to the grievances of this meritorious class of public servants was introduced into the Report of Council; and memorials to the War Secretary and to the First Lord of the Admiralty, briefly but ably introduced to the notice of the meeting by Mr. Husband, were unanimously adopted. It is to be trusted that these memorials, expressing as they do the desires of a body of men whose only wish is that right may be done, will be effective of

their object; and that our brethren in the army and navy will once more have to recognise the successful exertions of the Association in their favour.

Second in interest to none among the resolutions brought forward, was that which was so ably offered to the meeting on Friday by Dr. Radclyffe Hall, and seconded by Dr. Richardson. In accordance with the proposal alluded to—which was, indeed, before being put to the vote, honoured by the specially expressed approbation of the President—a full meeting of the members declared their unanimous sympathy with three of their brethren in the Association whose injuries are too well known to our readers, and their unbroken confidence in the moral and professional character of these gentlemen. If anything were wanting to assure Dr. E. Waters, Mr. Adams, and Dr. Philbrick, that their reputation has at least not suffered through the persecutions to which they have been subjected, the unanimous and sincere vote of the Association at the meeting in Bristol will supply the deficiency.

Of the progress of the Association itself, as described in the Report of Council, little need be said, except that it is satisfactory. The metropolitan meeting of last year was followed by the addition of a large number of names to the list; and, after deducting the members who have died or resigned, and those who have been erased in consequence of failing to pay their subscriptions, there remains a clear increase at the present time of about one hundred members over the numerical strength of the Association at the London meeting. The Branches continue to flourish and be useful; and although, in the words of the Council Report, no new Branch has been actually formed, the application of the Bengal Medical Association to be adopted as a Branch was received with cordiality, and compliance with it was only deferred on account of some technical difficulties, which further negotiation will probably remove.

The General Secretary, Dr. P. H. Williams, after having held office for eight years, intimated through the Council his desire to resign, on account of the increasing pressure of his professional engagements. A vote of thanks for the courtesy which he has always exhibited was unanimously accorded to him; and we are sure that those absent as well as those who were present will endorse the opinion there expressed of the gentlemanly bearing manifested by him towards all members of the Association with whom he has come into contact. His successor, Mr. Watkin Williams, has for several years been an active and zealous member of the Committee of Council, and has in his place there done good service to the Association; and there is every reason for believing that, in the increased field of duty now open to him, he will amply fulfil the expectations of those who have elected him to his office.

The attendance at the meeting was most satisfactory. The list published at another page contains the names of 195 gentlemen; but this does not represent the entire number, as the members, especially those residing in the locality, often fail to enter their names in the book provided in the reception-room. We learn, however, that the number present cannot have been short of 250; and that the large number of 214 were present at the dinner with which the proceedings were terminated.

The proceedings of the Bristol meeting have, we must repeat, though trying in their anticipation to some, been gratifying in their results to all. And who, after such gatherings as those of London and of Bristol, not to mention those which preceded them, can take such a narrow view of things as to ask concerning our Association—*Cui bono?* Is it nothing, that such meetings bring together members of our profession from all parts of the kingdom; that there old friendships are renewed, that new ones are formed; that asperities are worn down and obliterated; that an opportunity is afforded for the exercise of the social feelings of hospitality on one hand and of gratitude on the other; that such plans as that of a Provident Fund are devised; that those needing sympathy and encouragement receive it; that intellects are sharpened by friendly collision; and that the members return to their homes and their duties better men morally, socially, and professionally? Our readers can judge, from what they have heard and seen.

The Bristol meeting will not soon be forgotten; and not only will the frequenters of the Association meetings have for the next year the pleasure arising from the recollection of their visit to the western metropolis, but also the anticipation of, we trust, a no less delightful visit to one of our time-honoured seats of learning—the University of Cambridge. Oxford has already received the Association twice, with open arms and liberal hand; and Cambridge will, there is no doubt, notwithstanding the drawbacks so modestly set forth by Dr. Humphry when he proposed the place of meeting for next year, do her best endeavour that she shall be inferior to none among her predecessors in the grandeur and sincerity of her hospitality.

THE WEEK.

The office of Surgeon to Her Majesty's Household is vacant by the death, at an advanced age, of Mr. Charles Phillips, who has held the appointment for many years. He succeeded his father in the office.

A new medical journal has appeared at Cagliari, called *La Sardegna Medica.*

THIRTY-FIRST ANNUAL MEETING
OF THE
British Medical Association.

Held in Bristol, 5th, 6th, and 7th August, 1863.

WEDNESDAY.

THE Committee of Council met at One P.M.; and the General Council at half-past Two.

At Four o'clock P.M., the first General Meeting of members was held in the Victoria Rooms, Clifton, which had been placed at the disposal of the Association for the three days of its meeting. The following members and visitors entered their names as being present.

Ackland, W. H., M.D., Bideford
Alford, H. J., Esq., Taunton
Alford, S. S., Esq., London
Bailey, C., Esq., Chippenham
Ballard, T., M.D., London
Barker, J., Esq., Coleshill
Bartleet, E., Esq., Campden
Bartrum, J. S., Esq., Bath
Beddoe, J., M.D., Clifton
Bell, the Rev. D., M.D., Goole
Bleeck, A., Esq., Bristol
Bleeck, C. Esq., Warminster
Brittan, F., M.D., Clifton
Brown, I. B., Esq., London
Bryant, S., Esq., Bristol
Budd, G., M.D., London
Budd, S., M.D., Exeter
Budd, W., M.D., Clifton
Burder, G. F., M.D., Clifton
Burroughs, J. B., Esq., Clifton
Burrows, G., M.D., London
Burt, G. R., Esq., Ilminster
Bush, W., Esq., Bath
Callender, G. W., Esq., London
Cartwright, P., Esq., Oswestry
Cattell, T. W., Esq., Liverpool
Cave, C. D., Esq., Clifton
Clark, T. E., Esq., Clifton
Clarke, W. M., Esq., Clifton
Clayton, M. H., Esq., Birmingham
Cockey, E., Esq., Frome
Collins, C. H., Esq., Chew Magna
Collyns, C. P., Esq., Dulverton
Corbould, G. G., Esq., Bristol
Cormack, J. R., M.D., London
Cornwall, J., Esq., Glascott
Cowan, C., M.D., Reading
Crisp, N., Esq., Swallowfield
Cross, W., Esq., Clifton
Crossman, E., Esq., Hambrook
Daniell, E., Esq., Newport Pagnell
Davey, J. G., M.D., Northwoods
Davies, D., Esq., Bristol
Davies, W., M.D., Bath
Davis, W. G., Esq., Heytesbury
Day, H., M.D., Stafford
Day, W. E., Esq., Bristol
Dunn, R., Esq., London
Ellis, R. W., Esq., Bristol
Evans, J. J., Esq., St. Neots
Evanson, R. T., M.D., Torquay
Falconer, R. W., M.D., Bath
Fayrer, G., M.D., Henley-in-Arden
Fegan, W. B., Esq., H.M.S. *Dædalus*
Fletcher, T. S., Esq., Bromsgrove
Fleming, A., M.D., Birmingham
Flint, R., Esq., Stockport
Forsyth, J., Esq., London
Fowler, R. S., Esq., Bath
Fox, E. L., M.D., Clifton
Fox, F. K., M.D., Brislington
Freeman, G. D., Esq., Bath
Fuller, W., M.B., Oswestry
George, R. F., Esq., Bath
Gibb, G. D., M.D., London
Gilchrist, W., M.D., Torquay
Goodeve, H. H., M.D., Clifton
Goodridge, H. F. A., M.D., Bath
Gourlay, F., M.D., Weston-super-Mare
Grace, H., Esq., Bristol
Grant, A., Esq., London
Green, T., M.D., Bristol
Greig, C., Esq., Clifton
Guthrie, the Rev. Canon, Bristol
Hall, C. R., M.D., Torquay
Hall, W. H., M.D., Bath
Harper, C., Esq., Batheaston
Hart, E., Esq., London
Hastings, Sir C., M.D., Worcester
Haward, E., M.D., London
Hemming, J. H., Esq., Kimbolton
Henry, A., M.D., London
Herapath, W. B., M.D., Bristol
Hewitt, G., M.D., London
Hill, M. B., Esq., London
Hinton, J., Esq., Hinton
Holland, R. B., M.D., Bristol
Hore, H. A., Esq., Bristol
Humphry, G. M., M.D., Cambridge
Husband, W. D., Esq., York
Hutchins, W., Esq., Keynsham
James, J. H., Esq., Exeter
Jenks, G. S., M.D., Bath
Jennings, J. C. S., Esq., Malmesbury
Jotham, G. W., Esq., Kidderminster
Keddell, G., Esq., Bristol
Kelly, W. M., M.D., Taunton
Lancaster, J., M.D., Clifton
Lang, W., Esq., Bristol
Lansdown, F. P., Esq., Bristol
Lee, H., Esq., London
Leonard, C., Esq., Clifton
Lingen, C., M.D., Hereford
McIntyre, J., M.D., Odiham
Mackenzie, F., Esq., Tiverton
Mackenzie, M., M.D., London
Macrorie, D., M.D., Mount Vernon, Stroud
Markham, W. O. M.D., London
Marshall, H., M.D., Clifton
Martyn, R. W., Esq., Martock
Martyn, S., M.D., Clifton
Mason, F., Esq., Bath
May, G., Esq., Reading
May, G., jun., Esq., Reading
Mayor, E. S., Esq., Bristol
Mellor, T., Esq., Manchester
Moore, C. H., Esq., London
Moore, G., M.D., Hastings
Morgan, W. F., Esq., Bristol
Nankivell, C. B., M.D., Torquay
Napper, A., Esq., Cranley
Nevins, J. B., M.D., Liverpool
Nunneley, T., Esq., Leeds
Ogle, W., M.D., Derby
Paget, G. E., M.D., Cambridge
Paget, T., Esq., Leicester
Paine, W. H., Esq., Stroud
Parsons, J., Esq., Frome
Parsons, J., L.R.C.P.Ed., Bristol
Pout, H., Esq., Wateringbury
Prankerd, J., Esq., Langport
Prichard, A., Esq., Clifton
Pridham, C., Esq., Paignton
Probert, J., Esq., Merthyr Tydvil
Propert, J., Esq., London
Radcliffe, C. B., M.D., London
Richardson, B. W., M.D., London
Roberts, W., M.D., Manchester
Rooke, T. M., M.D., Cheltenham
Routh, C. H. F., M.D., London
Ruddock, R. B., Esq., Bristol
Rumsey, H. W., Esq., Cheltenham
Sankey, W., Esq., Dover
Saunders, G. S., M.D., Devon County Asylum
Sawer, T., Esq., Clifton
Scott, A. J., M.D., Tiverton
Seaton, J., M.D., Sunbury
Shapter, T., M.D., Exeter
Sheppard, W., Esq., Bristol
Skeate, G., Esq., Bath
Skinner, T., M.D., Liverpool
Sleeman, P. R., Esq., Clifton
Smerdon, C., Esq., Clifton
Smith, E., M.D., London
Smith, T., M.D., Cheltenham
Smith, W., Esq., Redditch
Soden, J., Esq., Bath
Southam, G., Esq., Manchester
Spender, J. K., Esq., Bath
Steel, S. H., Esq., Abergavenny
Steele, A. B., Esq., Liverpool
Steele, C., Esq., Clifton
Stewart, A. P., M.D., London
Stone, R. N., Esq., Bath
Stookes, A., M.D., Liverpool
Swayne, J. G., M.D., Clifton
Swayne, S. H., Esq., Clifton
Swete, E. H., Esq., Wrington
Swift, H., Esq., Liverpool
Thorne, G. L., Esq., Holcombe Rogus
Thurnam, J., M.D., Devizes
Tunstall, J., M.D., Bath
Underhill, T., Esq., Tipton
Vinen, E. H., M.D., London
Vose, J., M.D., Liverpool
Ware, J., Esq., Clifton
Waters, A. T. H., M.D., Liverpool
Waters, E., M.D., Chester
Webb, W., M.D., Wirksworth
Wedd, R., Esq., Westbury
Weir, A., M.D., Malvern
Wells, T. S., Esq., London
Westall, E., M.D., Caterham
Wilkinson, M. A. E., M.D., Manchester.
Willett, M., Esq., Bristol
Williams, E., M.D., Clifton
Williams, J., M.D., Malvern
Williams, P. H., M.D., Worcester
Williams, T. W., Esq., Birmingham
Wilson, E., Esq., London
Wilson, E. T., M.D., Cheltenham
Wilson, H., Esq., Bristol
Wilson, H., Esq., Runcorn
Wilson, J. G., M.D., Clifton
Wollaston, R., M.D., Stafford

INSTALLATION OF THE PRESIDENT.

Dr. BURROWS, the President for the past year, took the chair for the purpose of resigning his office and introducing his successor. He said that the happy reminiscences of the last meeting enabled him to resume for a short period the important duties in that chair with increased pleasure, and emboldened him before he retired from it to offer to them a few observations. He thought it was impossible for any of them to look back upon the events of the past year without finding some sources of satisfaction. The meeting of their Association in the metropolis for the first time was a great event. It marked an era in their annals. Those friends of the Association who were bold enough to propose that they should meet in the metropolis—those who conceived the idea and made the proposition—he knew that they considered it was to be regarded somewhat in the light of an experiment; and those upon whom it devolved to endeavour to carry out and to bring to a successful issue that experiment, entered upon their duties with considerable trepidation and apprehension, lest they might not bring that experiment to a successful issue. But he thought, if they considered what had taken place at that meeting, whether in a scientific, a professional, or a social point of view—he thought they, as members of the Association, had reason to congratulate themselves. [*Hear, hear, and cheers.*] Those who had the pleasure of hearing, and those who subsequently had the satisfaction of perusing, the eloquent and instructive discourses on medicine, surgery, and physiology, as well as the numerous interesting and original communications made by members of the association, whether with regard to one point or the other, had grounds, he thought, for satisfaction; and he trusted that, with respect to the scientific point of view, those addresses and communications had raised the character of the Association, and put it in a right position in relation to the learned and scientific bodies of the country [*hear, hear*]; and, looking at the meeting in a professional point of view, considering what a large assemblage of members took place in the metropolis—what an unusual number of gentlemen from the country were there assembled—he thought they must all rejoice that the College of Physicians and College of Surgeons took the wise steps they did on that occasion, and that they

received the members with so much courtesy and with a splendid hospitality. He thought their conduct upon that occasion was not only wise; but that it was attended with beneficial results, inasmuch as it tended to bring into more harmonious understanding the constituents of the governing bodies. [*Applause.*] And, last, but not least, they must not disregard the effects of that meeting in a social point of view. There was a time when the lines of demarcation between the metropolitan and provincial part of the profession were well-defined; but, happily, for some years past, those lines of demarcation had been gradually more and more obliterated. That obliteration had arisen from various causes—partly, perhaps, from the increased means of communication through different parts of the country by the railway; and, partly, perhaps, through rapid interchange of ideas taking place between them through the periodical medical press. The metropolitan meeting, then, he conceived, had a tendency to annihilate the distinction between the metropolitan and provincial members. The ex-President then thanked the Council for their courtesy towards him during his year of office; and also the honorary secretaries of the Metropolitan Branch for the services they had rendered; and the members of the Association present on the occasion of their last meeting for the indulgent reception of his imperfect services. He hoped he might retire from the office with the feeling that the dignity of the office had not suffered in his hands, and that the prosperity of the association had been promoted. In resigning his office, he could not refrain from expressing the gratification which he felt in surrendering the chair to his successor—one so distinguished, so accomplished, and so much respected as his friend Dr. Symonds. [*Applause.*]

Dr. Symonds, the new President, then took the Chair, and delivered an address, which was published at page 133 of last week's Journal.

REPORT OF COUNCIL.

Dr. Williams, the General Secretary, read the following report.

"It is with great pleasure that your Council meet the members of the British Medical Association in the important city of Bristol, for the purpose of celebrating the Thirty-first Anniversary of the Society.

"The Committee of Council appointed in London have held their quarterly meetings in Birmingham, and desire again to record their thanks to Sir Charles Hastings, who has regularly presided over them.

"Your Council have to announce that the General Secretary, Dr. Williams, has intimated that his increasing professional engagements render it impossible for him to carry out the pressing and arduous duties now attaching to the important office which he has held for the long period of eight years.

"Since the last Annual Meeting, 310 members have been added to the list; 37 have died; 120 have resigned; 56 have been erased. The total number on the books on December 31st, 1862, was 2190; the number now on the list is 2217.

"*District Branches.* The District Branches still continue to flourish. No new Branch has been formed during the past year, nor has any one previously existing been allowed to decline.

"A letter having been received from the Bengal Medical Association, requesting to be admitted as a Branch of the British Medical Association, your Council cordially recommend that they be recognised as such Branch, provided the laws framed for its regulation be in accordance with the rules of the Association.

"Your Council beg cordially to thank the Honorary Secretaries for their very valuable exertions.

"*The* Journal. Your Council can refer to the management of the Journal with sincere satisfaction; and they congratulate the Association, not only on the excellent way in which the editor, Dr. Markham, has conducted that important periodical, but also on the increased amount of materials placed at his disposal by the members generally.

"*Finances.* The following is the Financial Report for the year 1862, published in the Journal in accordance with Law 23, the accounts having been duly audited by Dr. Melson and Mr. Hadley of Birmingham.

"'It is peculiarly gratifying to your Committee, that on the present occasion they are enabled to present a report which in every respect is very encouraging; for not only is there a considerable balance of income over expenditure for the past year, but all the encumbrances which for years have pressed heavily on the resources of the Association are paid off, and we enter upon the present year with every prospect of the income of the society being equal to the expenditure. Instead of the Association being indebted, as was the case some years ago, to your Treasurer to a large amount, he now holds a balance of £221 in favour of the institution. This result has, we are glad to say, been achieved without cramping the energies of the Association by parsimony in the necessary outlay for carrying on its affairs; and it now may fairly be expected that, by paying a due regard to a wise economy, a favourable financial result may be annually expected.

"'Below is appended the annual statement of the income and expenditure for the past year, which has been examined by the auditors appointed at the last annual meeting, and found to be correct. It will be seen that the income is larger than that of any former year; and this increase is not confined to the subscriptions being augmented, but also extends to the amount derived from advertisements and sales. By those who have felt any anxiety for the financial position of the Association in former years, this result will be greeted with unfeigned satisfaction.

1862.—DISBURSEMENTS.	£	s.	d.
Journal Expenses:			
Mr. Richards (Printing)	1736	8	10
Mr. Honeyman (Sundries)	79	5	2
Davidson (Commission)	88	5	6
Mr. Orrin Smith and Mr. Westmeath (Engraving)	7	0	6
Mr. Richards (Publishing—for three years)	150	0	0
Salaries:—Dr. Markham and Dr. Henry	275	0	0
Contributors to Journal	241	8	6
Interest and Commission	3	14	0
Executive Expenses:			
Secretary and Clerk	117	0	0
Gurney and Son (Report of Meeting)	23	12	4
Secretary's Petty Cash	25	2	6
Sundries:—District Expenses; Post-Office Orders; and Collecting	25	13	0
	2772	10	4

1862.—RECEIPTS.			
Balance	107	5	2½
Subscriptions for 1862	1933	11	6
Ditto for previous years	202	5	0
Advertisements and Sales	750	10	6
	2993	12	2½
Disbursements for 1862	2772	10	4
Balance due from Treasurer	221	1	10½

"'Such being the statement of accounts for the past year, the Committee will conclude their report, as there now exists no debt to pay off, with a statement of the probable receipt and expenditure for the current year.

PROBABLE RECEIPTS FOR 1863.			
Balance due from Treasurer	221	1	10½
Subscriptions for the present year (taking the sum as last)	1933	11	6
For previous years	202	5	0
For Advertisements	750	10	6
	3107	8	10½

PROBABLE EXPENDITURE FOR 1863.

JOURNAL EXPENSES:			
Mr. Richards (Printing)	1750	0	0
Mr. Honeyman (Sundries)	92	18	0
Mr. Davidson (Commission)	98	0	0
Engravings	10	0	0
Richards' Publishing Account	66	16	0
Salaries for Journal	275	0	0
Contributors to Journal	250	0	0
Bankers' Commission	5	0	0
EXECUTIVE EXPENSES:			
Secretary and Clerk	117	0	0
Reporting	23	0	0
Secretary's Petty Cash	25	2	6
Sundries	25	13	0
	2738	9	6
Prize Essay	21	0	0
	2759	9	6

"'With the above figures before them, your Committee feel justified in pronouncing the finances of the Association to be in a sound and vigorous condition.

"'CHARLES HASTINGS,

"'*President of the Council, and Treasurer.*'

"*Medical Legislation.* This Council recommend that a memorial be addressed to the Council of the College of Surgeons of England, requesting them to take into consideration the propriety of altering their bye-laws, or, if necessary, obtaining the legal powers for enabling non-resident Fellows of the College to vote by proxy at the annual election of members of Council, in accordance with the principle which has already been advantageously adopted in the Universities of Oxford and Cambridge.

"*Medical Officers of the Army and Navy.* Your Council would direct the attention of the Association to the efforts now required of the medical officers of the army and navy to maintain their rank and privileges, and would recommend it to take the requisite steps to secure the integrity of the warrant of 1858.

"*Poor-Law Medical Reform.* A resolution passed by the West Somerset Branch was brought under the notice of the Committee of Council; and the Council invite the attention of the Association at the Annual Meeting to the subject.

"*Gratuitous Medical Services.* Your Council have received the following resolution adopted by the Metropolitan Counties Branch :—'That this Branch recommend to the General Council the desirability of carrying out the steps for the discouragement of Public Gratuitous Medical Services, which have been unanimously approved by this Branch.'

"*Benevolent Fund.* This most valuable Society has steadily maintained its usefulness. A report of its operations will be presented at the Annual Meeting.

"*The Hastings Medal Prize.* Your Council regret that the Hastings Prize Medal, for an essay on Practical Medicine, cannot be awarded this year; the report of the referees being to the effect that no essay of sufficient merit has been sent in in competition.

"*Addresses.* The Address in Medicine will be delivered by Dr. W. Budd.

"The Address in Surgery will be delivered by Augustin Prichard, Esq.

"The Address in Chemistry will be delivered by Dr. Herapath.

"The Address in Midwifery will be delivered by Dr. Swayne.

"*Proposed Changes in the Laws.* The following changes in the Laws of the Association will be proposed by Dr. Markham.

"'At each Annual Meeting of the Association, the Secretary shall lay before the first meeting of the Council a List of the Members of the Association, together with a separate List of all Members whose Subscriptions are in arrear, and the amount of Subscriptions due from each Member.

"'This List shall be at once referred to a Committee, consisting of four or more Members of the Council (three of whom shall form a quorum), together with the President and the Secretary. The Committee shall thereupon proceed to settle the List of Members for the ensuing year, retaining or erasing, as they may think fit, the names of any Members who are in arrear: provided always, that no person shall remain a Member of the Association who is more than two years in arrear. The List of Members thus corrected shall be presented to a subsequent Meeting of the Council, and shall, with their approval, be published immediately after the Annual Meeting.

"'The Secretary shall in each year, during the first week of June, supply the Editor of the JOURNAL with the names of all those Members of the Association whose Subscriptions have not been paid up to the 31st day of May in each year.'

"Notice of the following alteration has also been given by Dr. Markham.

"'In Law 15, for the words 'twelve months', to substitute the words 'five months'."

Dr. BURROWS (London) moved—

"That the report now read be received and adopted."

Dr. F. K. FOX (Brislington) seconded the motion.

Mr. STEELE (Liverpool) had no doubt that many members would feel with him happy that the Council had taken up the very important subject of gratuitous medical services—a subject which, he believed, was pregnant with most momentous consequences to the interests of the profession as well as to those of the public; for, however in former times, and even now, under proper restrictions, gratuitous medical services might be desirable and worthy of encouragement, there was no doubt that the system had grown up to be a very great abuse, and had become an incubus upon the profession. He therefore rejoiced to find that the Council had taken the subject up; but he regretted to find that they had taken up a comprehensive and important subject in a very partial, and, in his humble opinion, in a very imperfect manner. It seemed to him that, in attacking the system, they had assailed the evil in its most defensive point. He was not prepared to say that anything could justify the extent to which gratuitous services were given; but, if anything could justify it, it was when they gave those services to the public charities of the country. He deprecated the giving of private medical services gratuitously.

The motion for the adoption of the report, on being put to the vote, was carried.

APPOINTMENT OF AUDITORS.

Sir CHARLES HASTINGS moved, Dr. MARKHAM seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to Dr. Melson and Mr. Hadley, for auditing the accounts of the Association; and that they be requested to undertake the duties for the current year."

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Mr. HUSBAND (York) moved—

"That the cordial thanks of this meeting be given to Dr. Burrows, the retiring President; and that he be appointed a Vice-President of the Association."

Dr. FALCONER (Bath) seconded the resolution, which was carried unanimously.

VOTE OF THANKS TO THE COUNCIL.

Dr. WOLLASTON (Stafford) moved, Mr. RUMSEY (Cheltenham) seconded, and it was unanimously resolved—

"That the thanks of this meeting be given to the Councils of the Association for their valuable services during the past year."

APPOINTMENT OF SECRETARY.

Mr. SOUTHAM (Manchester) moved—

"That Mr. Watkin Williams, of Birmingham, be appointed Secretary of the Association."

The motion was seconded by Dr. TUNSTALL (Bath); and, after a few remarks in support of it by Mr. BARTLEET and Dr. STEWART, was carried.

VOTE OF THANKS TO THE LATE SECRETARY.

On the motion of Mr. NUNNELEY (Leeds), it was resolved—

"That the cordial thanks of this meeting be given to Dr. Williams for the very courteous manner in which he has uniformly acted as General Secretary of the Association."

MEDICAL PROVIDENT ASSOCIATION.

Dr. RICHARDSON (London) moved—

"That a Committee be formed to consider and report on the question, whether it is possible to establish, under the direction of the Association, a Relief Fund, which shall enable the widows of members, or the orphans of members, or members themselves during sickness, to receive pecuniary aid by annuity or otherwise, on the principle of mutual protection and right.

"That the Committee report to the next annual meeting of the Association.

"That the Committee consist of Sir Charles Hastings, M.D.; Edward Daniell, Esq. (Newport Pagnell); Henry Day, M.D. (Stafford); George Pound, Esq. (Odiham); J. M. Bryan, M.D. (Northampton); A. P. Stewart, M.D. (London); R. B. Carter, Esq. (Stroud); E. Bartleet, Esq. (Campden); and Henry Gramshaw, Esq. (Framlingham)."

His object, he said, was to secure a fund enabling medical men during sickness to claim a certain annuity, and also another fund by which their widows and children should receive assistance. If they took five years as a starting-point, and the members of the Association began now to subscribe each one guinea a year, it would in the time yield such an income that, if they assumed 3 per cent. as the proportion of their number likely to be invalided, those invalided could receive after the rate of £100 *per annum* for the first three months, £50 *per annum* for the next three months, and £20 *per annum* permanently; while if the subscription were doubled, making it two guineas annually, they could allow widows £25 a year, without any risk or great expense. He had found that the fund could be worked cheaply by one of the existing life-offices in London; and he commented on the independence which such a fund would give to every member of the Association, relieving them of a great deal of the extra toil which wears down the lives of the profession.

Mr. DANIELL (Newport Pagnell) seconded the motion with peculiar gratification. The best part of his life had been occupied in the endeavour to establish such a fund, as he considered that the members of the profession ought to be placed above the risk of falling into a condition of charity.

After some remarks by Mr. STEELE and other members, the resolutions were unanimously adopted; Dr. Richardson's name being added to the Commiitee.

CONVERSAZIONE AT THE PHILOSOPHICAL INSTITUTION.

At nine P.M., a very agreeable gathering took place at the Philosophical Institution, when the whole of the rooms were thrown open to a large company of gentlemen, for the most part members of the Association, likewise a fair sprinkling of others. The entertainment provided was of a scientific character. In the theatre, the use of the induction coil was shown by means of a series of experiments of an attractive character; and which were performed by Mr. Phillips of Weston-super-Mare, with much ability and success. The use of the induction coil in increasing the intensity of the voltaic current and converting dynamical into statical electricity was exemplified. Flashes of sparks of two or three inches in length, and a continuous series of sparks, were vividly produced, Next, the effect of putting a Leyden jar in the circuit of the electricity was shown, the length of the sparks being diminished, but its brilliancy increased in a tenfold ratio. So much, indeed, was the brilliancy augmented that the whole theatre appeared to be fully lit up by the sparks. The enormous rate at which electricity travels was demonstrated by means of a coloured disc, which, during the time that the experiment was being performed, appeared to stand quite still, although at the same time it really rotated at such a tremendous speed, that it was quite impossible to distinguish the various colours upon the disc. Two or three experiments were tried in order to show the persistence of vision; but these were outdone by Gassiot's cascade, which proved a great attraction. Under an exhausted receiver was placed a glass cup filled and flowing over with beautifully coloured fire, which incessantly fell in radiant streams, produced by the electricity spreading itself through the vacuum. Perhaps, the experiment of the evening was that in which the effect of magnetism upon the current of electricity was shown. In an exhausted receiver a spark of about six inches in length was produced by the induction-coil around an electro-magnet. Immediately the electro-magnet was connected with the battery, the spark which before remained stationary, commenced to revolve, and its direction was changed by altering the poles of the battery. An experiment with a fluorescent uranium glass tube was extremely beautiful. Through a long tube of glass a current from the coil was passed, and then the glass, which before appeared perfectly colourless, immediately glowed with a greenish yellow light. In addition to this experiment, there were several curious vacuum tubes experimented upon, many of them being phosphorescent. Mr. Phillips's second series of experiments in the theatre consisted of an exhibition of the electric light, with appropriate exemplifications. The electric lamp of Dubosq was used, in order to demonstrate effectually optical phenomena. The room having been illuminated with the electric lamp, which burned as steadily as an ordinary gas jet, the lamp was placed into a lantern and in the focus of a series of lenses, when the actual arc of light was projected upon a screen, and the audience were enabled to look without fatigue into the very centre of the brilliant arc of light and see what was going on when the transference of the particles from pole to pole took place. Refraction through gases and several displays of spectrum were likewise produced. By means of a lantern, a small silver globe, which had been suspended in a rather large chest, and at one end of which were perforated two holes, was illuminated by a ray of the oxyhydrogen lime light through one of the holes. A telescope was placed at a distance of fifteen feet from the chest, the tube being pointed towards the other perforation, and the spectator, on looking through the telescope, was enabled to perceive the ray of light struck off, as it were, from the other side of the globe. The apertures in the film of collodion through which the eye gazed were so beautifully contrived that the ray of light was dissected into its primary colours, which were beheld in the shape of concentric circles and other devices, some of a really magnificent character. The large room, in which the collection of specimens appertaining to the museums are collected, was lit with the lime-light, and very brilliant was its aspect. Some of the experiments with the light were of an extremely beautiful character; whilst in a few, the effect seemed really magical, so startling were the appearances. The interference and diffraction of light were displayed, indeed, to an advantage which—in the provinces, at least—has never been surpassed. An artificial halo was one very pretty experiment, lycopodium being sprinkled upon the glass, and

thus, by means of the application of the light, producing exquisite concentric halos. At one part of the evening, Mr. W. Sanders, who is well known as an ardent local geologist, gave a short account of the geological peculiarities of the district about Bristol, in the Museum, and a goodly concourse flocked thither to listen to his remarks, which were illustrated by diagrams. Perhaps, one of the most noticeable features of the whole *soirée* was the exhibition, in the Octagon, of the municipal plate of the city, which had been kindly lent for the occasion upon application to the Right Worshipful the Mayor. A large collection of microscopes was arranged in the committee-room under the superintendence of Dr. Martyn; and a number of microscopic preparations lent for the occasion by Dr. Lionel Beale attracted much attention. We should not omit to call attention to the polariscope, microscope, etc., of Dr. Herapath, in the committee-room. At eleven o'clock, the visitors partook of a sumptuous supper; and, at a little after twelve, this agreeable *réunion* was brought to an end.

THURSDAY.

COMMITTEE OF COUNCIL.

The General Council this morning elected the following ten members of their body as members of the Committee of Council for the next year: E. Bartleet, Esq. (Campden); P. Cartwright, Esq. (Oswestry); M. H. Clayton, Esq. (Birmingham); R. W. Falconer, M.D. (Bath); W. D. Husband, Esq. (York); B. W. Richardson, M.D. (London); G. Southam, Esq. (Manchester); A. T. H. Waters, M.D. (Liverpool); E. Westall, M.D. (Caterham); and M. A. E. Wilkinson, M.D. (Manchester).

PLACE OF MEETING FOR 1864: PRESIDENT-ELECT.

The President. The Council have come to a resolution to recommend that the next annual meeting shall be held at Cambridge. When the proposition is placed before you, as it will now be by Dr. Humphry, you will rejoice that such an opportunity is before the Association. Our history as a society will be incomplete till we have had our annual meetings in both the great Universities of our country. Two have already been held at Oxford; but we have not yet been to Cambridge. It is hoped, however, to do that next year.

Dr. Humphry. For many years there has been a wish that one of the annual meetings of the Association should be held in Cambridge. Hitherto, various circumstances have conspired to prevent the realisation of that wish. We hope, however, that now the opportunity has arrived; and I have come, in consequence of a meeting of the residents in Cambridge, to invite the members of the Association to hold the next annual meeting in Cambridge, and I trust that it will be agreeable to you to do so. If for no other reason, it is desirable that a meeting should be held in Cambridge, in order that the members of the profession may have an opportunity of assuring themselves of the interest that is taken by the University in medicine and the collateral sciences, and of the anxiety that is felt to conduct the teaching of those sciences in an efficient manner, and to render them a proper avenue to the high honours and the rich prizes which it is in the power of the University to bestow. At the same time, I must remind you, that at the time of the year when these meetings usually take place, the University is comparatively empty, the undergraduates, the fellows and heads of colleges are for the most part absent. It will, therefore, not be possible for the University to do that honour which it would wish to so influential and important a body as the British Medical Association, or for the colleges to extend to you that hospitality—almost as renowned as their learning—which they are wont to show on occasions of this sort. Still, though the spirit of the place will thus, in great measure, be absent, the place itself will be there with its numerous attractions, with its time-honoured walls entwined with the affections of so many generations, and hung about with so great a load of associations, associations of the past and of the present, associations connected so intimately with our educational history, and with so much that has contributed to improve the mind and shape the character of the people of England. I have no fear that these attractions combined with the efforts to welcome and entertain you, which will be made by the residents in the place, will ensure a full, an agreeable, and instructive meeting.

On such an occasion, we should naturally look to the Regius Professor of Physic to preside over us; and a few years ago when it was proposed that the Association should come to Cambridge, Dr. Bond assented to take the chair. I regret to say, that at the present time, recent and severe domestic afflictions compel him to decline. His good wishes will attend us; but he does not feel that he could undertake the office with that spirit and energy which are necessary to ensure the success of a scientific and social gathering. Much as we lament his decision, we have the satisfaction of feeling that we have in Dr. Paget one who, by character and ability, by University position, and by professional reputation, is highly qualified to fill the gap and to discharge the responsible and honourable duties of President of the Association. I will occupy no more of the time you are eager to devote to the Address in Medicine, and at once move—

"That Cambridge be the place of meeting of the Association in the year 1864; and that Dr. Paget be appointed President-elect."

Sir Charles Hastings. I hail with joy—and I am sure you all hail with joy—the prospect of meeting at Cambridge. Our hearts' desire has been for years that we might meet in that time-honoured and celebrated University. I therefore most cordially second the proposition, both as to the place of meeting, and as to the individual who shall be President. The name of Dr. Paget is a passport to the success of the meeting next year; and I trust that nothing will occur to mar the happiness which we anticipate in connection with the meeting, and the efforts which shall be made to spread the knowledge of medicine, and to promote social harmony amongst all the members of the profession [*Cheers*].

The proposition was unanimously assented to.

Dr. Paget (Cambridge). As I was not present at the meeting of the Council when this matter was discussed, I rise merely to express my thanks for the distinguished honour which the Association has been so good to confer on me, and to express also the great pleasure I shall have in doing what in me lies to make the occasion agreeable to the members. Dr. Humphry has well expressed, in the only part of his remarks which I shall advert to, what are the little drawbacks to the meeting; namely, that the members of the University will for the most part be absent. Cambridge is a small place, and the number of the medical men is also small in proportion to the wealth and the population of the place. Unfortunately, during the long vacation, few members of the University are resident in Cambridge; but of course there are many objects of interest there to persons of education and cultivated minds, so that one may hope that the meeting will be made agreeable; and I can assure you that the Association shall have a hearty welcome [*Cheers*].

ARMY AND NAVY MEDICAL OFFICERS.

Mr. Husband (York) proposed to the meeting the adoption of memorials to the Secretary of State for War and the First Lord of the Admiralty, relative to the grievances under which the army and navy suffer, through the warrants establishing their rank with their combatant brethren being virtually set at nought by the com-

manding officers. The memorials, which were unanimously adopted, were as follows :—

"*To the Right Hon. Earl De Grey and Ripon, Secretary of State for War.*

"We, the President and members of the British Medical Association, numbering more than two thousand of the principal medical practitioners of the metropolis and the provinces, feeling deeply the grievances of which our medical brethren of the army have to complain, approach your lordship to request that you will take the necessary steps to remove the grounds of such complaint, especially by securing to the army medical officer the precedence and advantages conferred upon him by the warrant of 1858. We feel that your lordship and your predecessors have been anxious to place the army medical officer in a position becoming the gentleman and the educated medical practitioner. Wearing the same uniform, sharing the same dangers, entitled by the different army warrants to relative rank according to the length of service, it is yet notorious that the tendency on the part of commanding officers in the army is to destroy the effect of the warrants, and to deprive the medical officer of the advantages and privileges due to him.

"We therefore earnestly entreat your lordship to inquire into the grievances of our army medical brethren, which are now preventing many of our profession from devoting themselves to the army medical service; and to take the necessary steps for enforcing the carrying out of the warrants issued for securing to the army medical officer his proper and legitimate position, and for extending the principle introduced by such warrants, so as to place him on a full equality with his combatant brethren."

"*To His Grace the Duke of Somerset, First Lord of the Admiralty, etc.*

"We, the President and members of the British Medical Association, numbering more than two thousand of the principal medical practitioners of the metropolis and the provinces, feeling deeply the grievances of which our naval medical brethren have to complain, earnestly request your Grace to cause an inquiry to be made into the causes of such complaint, and to secure to the medical officer a position becoming a gentleman and a member of a liberal profession. Sharing the same dangers, and wearing the same uniform, the naval medical officer, especially the assistant-surgeon, is yet virtually denied the position due to his relative rank in the service; and hence many most highly educated and intelligent members of the profession shrink from a service to which they would otherwise devote themselves with energy and success."

THE ADDRESS IN MEDICINE

Was read by William Budd, M.D. It was printed in full at p. 141 of last week's Journal.

Dr. Radclyffe Hall. About twenty-five years ago a prize was offered by this Associaton on the subject of Fever. The late Sir John Forbes was one of the adjudicators; and he remarked that it was a most able paper, but that the doctrines it contained were too startling to be safely followed. Therefore, the prize must be "content to dwell in decent platitudes for ever." Time, however, brings about its revenge. It is always competent for one to appeal from the evidence of the few to the estimation of the many. Such an appeal has been made to you this morning; for the same acuteness of perception, the same logical tone, the same clearness of thought, and the same consequent clearness of expression, which rendered that gloriously unsuccessful essay gloriously unsuccessful—because it is glorious to fail in being wise before one's generation—has been displayed in the magnificent address to which you have listened with such breathless attention. But to this appeal, thus a second time made to you after twenty-five years, will your *imprimatur* be the same? Will you withhold the high award of your esteem and just estimation of such an emanation of intellect as that to which you have just listened? It would be nothing short of an impertinence in me, who never mix in the society of my friend Dr. Budd without expecting to learn something from him—and that is always forthcoming—to say one word of commendation, however it might be appropriate from others older than myself. I will therefore content myself by proposing—

"That the warmest and the cordial thanks of the meeting be given to Dr. W. Budd, for his very able and interesting address."

Dr. Richardson. I have to second the proposition of Dr. Radclyffe Hall; and I do it with the supremest pleasure; and I would only make two remarks in reference to the address. The first is this: that while Dr. Budd has placed before us a figure so masterly, and explained it so simply, we should not forget that but for the artist who has drawn the picture we should not have seen it. Secondly, I would point out this fact as bearing on the vote of thanks; that it is through such efforts as those that Dr. Budd has referred to, that the connection between public sentiment and professional medical service and science can be achieved. Your address of yesterday, Mr. President, would in a few years be found to be a paradox, if these labours which Dr. Budd has taken up were continued, and if they were taken up by the profession as one man.

The resolution was carried by acclamation.

PAPERS.

The following papers were read:

On the Efficacy of a long Course of Nitric Acid in reducing the Enlargement of the Liver and Spleen which sometimes results from the Syphilitic Cachexia. By George Budd, M.D.

On the Abstraction of Blood as a Remedy. By B. W. Richardson, M.D.

On Vivisection. By W. O. Markham, M.D.

THE ADDRESS IN SURGERY

Was delivered by Augustin Prichard, Esq. It was published at p. 151 of last week's Journal.

Mr. Turner (Manchester) moved—

"That the cordial thanks of the meeting be given to Mr. Prichard for his very able and interesting address."

Mr. Spencer Wells seconded the resolution, which was carried unanimously.

PAPERS.

After Mr. Prichard's Address, papers were read:

On Excision of the Knee-joint. By W. M. Clarke, Esq.

On Vaccination, and the best means of extending it. By T. S. Fletcher, Esq.

On the Operation of Transfusion in Obstetric Practice. By Graily Hewitt, M.D.

On Illustrations of the Causes of Hoarseness and Loss of Voice. By G. D. Gibb, M.D.

Hoarseness and Loss of Voice treated by the Application of Galvanism to the Vocal Cords. By M. Mackenzie, M.D.

CONVERSAZIONE AT THE PRESIDENT'S HOUSE.

In the evening, Dr. Symonds entertained a large company of gentlemen, consisting mainly of the members of the Association, at his residence, Clifton Hill House. In addition to the usual features of a *conversazione*, there was a performance by the Artillery band upon the lawn, while in the drawing-room a party of glee-singers were stationed. Upon the flight of steps leading to the lawn, Mr. J. Phillips, of Weston-super-Mare, exhibited the lime-light, to the gratification of numbers who surrounded him; and as the intense rays fell upon the musicians below, and occasionally lit up the foliage of the

trees which bordered the entrance, the effect was truly striking. At eleven o'clock a sumptuous repast was served up, and soon afterwards the company separated.

FRIDAY.

ADDRESSES AT THE NEXT ANNUAL MEETING.

It was resolved—

"That the appointment of the readers of addresses at the next annual meeting be referred to the Committee of Council, after consulting the members of the profession residing in Cambridge."

THE MEDICAL BENEVOLENT FUND.

Dr. MARSHALL (Bristol) read the General and the Financial Report of the Medical Benevolent Fund.

Mr. BARTLEET moved—

"That the Report be received and adopted."

Sir CHARLES HASTINGS seconded the resolution with great pleasure, because it so happened that thirty years ago the society was set on foot in Clifton, and had for many years to encounter indifference of support; but he was glad to hear from the Report of the large increase which had taken place.

The resolution was carried unanimously.

REPORT OF THE THERAPEUTICAL COMMITTEE.

Dr. MARKHAM read the following Report from the Committee appointed by the Association for furthering Therapeutical Inquiries.

"Edinburgh, August 1st, 1863.

"As Chairman of the above named Committee, I have to report that, in accordance with the arrangement made last year in London, schedules for obtaining reports of the therapeutical action of remedies in various diseases have been published and circulated in the JOURNAL. For example—

1. The Effects of Antimony, Moderate Bleeding, Supporting Diet, or Stimulants, in Pneumonia. Reporter, Dr. Bennett of Edinburgh.

"2. On the Effect of the Oil of the Male Shield Fern, or of Kousso, in Tænia. Reporter, Dr. Fleming of Birmingham.

"3. That of Arsenic, moist weak Alkaline Applications, or Pitch Ointment, in Psoriasis. Reporter, Dr. Handfield Jones of London.

"4. That of Mercurials, Benzoic Acid, and Podophyllin, in Jaundice. Reporter, Dr. Harley of London.

"5. That of Chlorine Mixture, Carbonate of Ammonia, Quinine, and the Wet Sheet, in Scarlatina. Reporter, C. F. Hodson, Esq., of Bishop's Stortford.

"The proposed schedules for Atropia in Epilepsy, and for the Progress of Disease, by Mr. Crompton of Manchester, and by Dr. Farr of London, have not yet been published.

"Of the five schedules published and circulated, the return for that on Psoriasis was left open until the 1st of January, 1865. Of the other four, returns were requested on the 1st of July, 1863, in the hope that their analysis would furnish valuable communications for the present meeting in Bristol. I regret to say, however, that the returns are not sufficiently numerous in any one of them to render a special report of value. This will appear from the following statement.

"Dr. Bennett has received fifteen schedules, containing fifty-five cases, twenty of which were furnished by one member. Dr. Fleming has received eighteen schedules. Dr. Harley has received seven schedules. Mr. Hodson has received six schedules.

"Under these circumstances, I have to propose that the time allowed for all these reports be prolonged until the 1st of May, 1864; and that the members of the Association generally, and hospital physicians in particular, be requested through the JOURNAL, as well as by private solicitations, to take more interest in these inquiries, and to return as many cases as possible to the various reporters on the day specified.

"J. HUGHES BENNETT, M.D., *Chairman.*"

Dr. FLEMING (Birmingham). I do not quite agree with Dr. Bennett in relation to returns already made. With respect to my own question, I think the returns are sufficient to make a satisfactory report on the subject of inquiry. With a view to continuing the labours of the Committee, I think it will be better to leave it open to the Committee to continue the old questions and suggest new ones. He moved—

"That the Committee (for furthering therapeutical inquiries) be reappointed; and that it be authorised to take such steps as may appear to it best calculated to promote the objects for which it was formed."

Dr. STEWART seconded the motion. He thought that at the last year the subject was gone into too hastily, and probably from that circumstance arose the fact that so little result had followed. He would make this one suggestion: that it would be important for the Committee to communicate with the Branches in large towns where there are hospitals, these institutions being the only places where such inquiries could be made.

THE ADDRESS IN CHEMISTRY

Was then read by Dr. HERAPATH.

Dr. STEWART (London) proposed—

"That the cordial thanks of the meeting be given to Dr. Herapath for his very able and interesting address."

He said: This gigantic science, which during the prospect of the present century has grown from infancy to manhood, and with which are bound up many brilliant prospects for the future, is a most proper and interesting subject to bring before this Association; one which, by its improved, and every year improving, modes of investigation, is laying open so many of the arcana of the mineral and the animal world, and is beginning to throw such brilliant light on some of the darkest processes of the human economy—that little world which it is our special purpose to study, with a view to the alleviation of human suffering. This glorious science has been set before us this day in a manner which all who know Dr. Herapath were perfectly convinced would give great pleasure and delight to this Association. He has shown all his well-known ability and wit in bringing this important subject before us. We shall go away with many suggestive thoughts which, in turning over in our own minds, we may be able to turn to good account in the furtherance of medical science. But, sir, while I am sorry I should have a single word that is not of eulogy upon this very able and interesting address, I think that, while we should bow to Dr. Herapath, with his well-known and extensive knowledge in his own department, we must claim liberty to judge for ourselves on matters of the very highest moment, which have been alluded to, I shall venture to say, in a manner which some here, perhaps all, think scarcely befitting the sacredness of the subject. I think it would have been well if certain allusions to subjects on which, it is well known, men differ largely in these days, had been left to that process of time which I, for one, am perfectly sure will only show that that glorious Revelation on which all our hopes of the future are based is in itself entirely, strictly, and verbally true; and if he had treated us only to the facts of chemistry, instead of speculations in chemical theology. With this single drawback, I have the greatest possible pleasure in moving this vote of thanks to Dr. Herapath.

Dr. EVANSON (Torquay). I feel equally great satisfaction in rising to second the vote of thanks just proposed to Dr. Herapath. There is no individual in this room, but must have highly valued and largely profited by hearing his learned, eloquent, and able discourse—a discourse on a subject both instructive to us medical men, and coming most directly into contact with the

parties by whom we make our livelihood and hold our position in society. It is by the administration of medicine in the time of disease, and by alleviating disease in the administration of medicine, that we fulfil our duties, and hold the position to which the public look; for to what class of men have the public so much reason, or right, or necessity, to look as to the medical man, in whose hands their happiness is so directly placed? For in the hands of the medical man is placed their health; and without health there is no happiness. The more need, then, is there that the medical man and the public understand each other; have mutual confidence in each other; be drawn together by a right and a true tie. And it is not satisfactory to think that those ties are not so secure as they ought to be. The public faith has been shaken in medicine; and we ought to ask ourselves, Have we not given reasons for it? Till we are agreed among ourselves, we cannot expect the public to place confidence in us; and the way to do that is, to investigate medical truths for the purpose of finding out their existence in fact, and not for the purpose of supporting any particular theory, or carrying out any peculiar views. I do not think there is a just foundation for the apparent differences of opinion which exist among medical men. If the treatment of disease is looked at in a broad point of view, there are many reasons why men should agree where at present they appear to differ. It is not the mere administration of medicine for the cure of a complaint that the medical man should be occupied with, but the treatment of disease in the consequent influence of one medicine on another. And, accordingly, instead of disputing whether we should bleed or not, or whether that course has been rightly adopted or not, we should rather try and ascertain, as accurately as we can, the conditions, the times, and the occasions when such a remedy should be used. It is not in itself a cure, but a preparation for what is to come after. I could not help being struck by those papers which gave us information on the subject of bloodletting—how much it appeared to be the feeling of medical men that it was a useful remedy, by the applause which was accorded to them; and at the same time by the fact that it is very little employed. The great object should be, as much as possible, to unite together, each man conceding as much as he could in favour of another, that we may come before the public as a united body. When I see such a body of men as I do before me, I cannot think that any amount of absurdity, prejudice, or injustice, whether from fanciful ladies, from Saturday "revilists", or mistaken editors of the press, can for a moment succeed in putting down the truths of science or the power of medical men; for I believe we have come to the modest conclusion that there is science in medicine and truth in medical men. [*Cheers.*]

The motion was carried unanimously.

LEGAL PROSECUTIONS OF MEDICAL MEN.

Dr. Radclyffe Hall remarked that, during the past year, three members of this Association had been subjected to legal prosecutions under circumstances which rendered them legal persecutions. That medical men were peculiarly open to unjust aspersions on the part of the base and the designing, required no showing; and when any of them unfortunately became victims of unjust accusation, the least we could do, as fellow-members of this great Association, was to offer to them the meed of our sympathy and the solace of our moral support. At the same time, he could not refrain from expressing his opinion that, when members of the profession were called upon as witnesses against a brother practitioner, they should remember that a court of justice was not a fitting arena on which they might give their hobbies an airing, or distinguish themselves by propounding singular opinions in which they differed from the profession at large; and that a medical witness in such a case was bound to consider the effect upon the person arraigned of what he was about to say, and then to do as he would be done by. He concluded by moving—

"That this Association has observed with extreme pain the legal persecutions to which Dr. Waters of Chester, Mr. Adams of London, and Dr. Philbrick of Leamington—all members of this Association—have been so unjustly subjected during the past year; that this meeting offers to each of these gentlemen its profoundest sympathy, and tenders to each of them the expression of its entire conviction that their moral and professional character and position stand unimpeached.

"This meeting also takes the opportunity of deprecating the conduct of any members of the medical profession who render assistance in the legal persecution of their brethren on mere suspicion, or on grounds which have not even the semblance of being substantial."

Dr. Richardson. I heartily second Dr. R. Hall's motion. It comes in a most appropriate manner, and I trust that the effect will be lasting on the members of the Association. I am not acquainted with Dr. Waters of Chester; but it has been my fortune during the past few months to stand by one of the gentlemen referred to—Mr. Adams; and, speaking of him as a man, I can say that he is of a most genial disposition. If the members of this Association had stood by him, as I have, and witnessed how he has been drawn from his ordinary avocations, and subjected to all kinds of insult on no pretence whatever; if they could have seen the mental suffering he has been called upon to undergo,—they all would understand me when I say that, if such a position were before me now, and I were asked, "Will you accept all this calumny, suffering, and abuse; or will you die?" I would rather say, "Take at once my life, and drag me from my wife and children, rather than subject me to such mental agony." I do think that, with regard to all these gentlemen—for I can say the same of Dr. Philbrick—if there is anything which they can leave to their children as a protestation of their innocence, if there is one thing which can bring them into the world again, it is the resolution on the part of this Association that we give them our entire sympathy and our entire confidence. [*Cheers.*]

Mr. Nunneley (Leeds). As a member of this Association residing in a distant part of the kingdom, I think it right to say that I think that throughout the whole of the land we are unanimous on the subject of this resolution. I hold in my hand a letter which I have received, asking that such a resolution should be brought forward; and I should have done so, if Dr. Radclyffe Hall had not. I am sure that the expression of sympathy contained in the resolution will not only tell as a solace to those gentlemen who have been so grossly subjected to legal proceedings, but that it will have a great tendency towards preventing any of ourselves being placed in the same difficult and unfortunate position; for it is utterly impossible for any member of the profession to avoid being at times placed in circumstances which might lead to such unpleasant proceedings as these gentlemen have been subjected to. An expression of sympathy with these gentlemen is a combination for self-defence.

The President. I rejoice that this resolution has been brought forward; and that it has been so ably moved, seconded, and supported. I need only read it to you, and you will pass it by acclamation. [*Cheers.*]

The resolution was passed by acclamation.

Dr. Waters (Chester). By the merest accident I have come into this room at the very moment when Dr. Radclyffe Hall rose to propose the resolution. I was entirely unprepared for anything of the kind. I am the only one of the three gentlemen embraced in it who is present; and I feel, however I may be occupying the time

of the meeting with a personal matter, that, having been distinctly named and referred to, it is my duty, as it is my pleasure, to return thanks to the proposer and seconder of the resolution, and to the Association generally, for the enthusiastic as well as unanimous manner in which it has been passed. I am personally unknown to the great majority of those now present, and I may as well name myself as Dr. Waters of Chester; and I believe that, in the annals of medical jurisprudence, no man has had to submit to so baseless and infamous a charge as has been my lot to contend against. The matters are well known in the city in which I reside. Fortunately, my position was such, that neither before the trial, nor since, can I say I have been in the slightest degree affected by the proceedings, otherwise than that I have gained sympathy from many residents with whom I was previously unacquainted. That the charge against me was false, and had not the slightest ground on which to rest, was known before the trial; and I am stating here what I stated to one of the Canons of Chester, a dignitary most esteemed and most valued in the Church. When he suggested to me that I should not go to trial —when he asked me whether, if the actions were dropped, I would forego my action—I replied that I would not; that they had brought the charge against me, and attempt to prove that charge they should; for that I would bring it before the public, if they did not. I will honestly confess that, when I gave him that answer, I told him that the parties who were persecuting me knew the charge to be false; and when I gave him that answer, I had the hope—knowing the evidence which had been obtained with regard to the character of the woman—that there would be a more complete exposition of all the circumstances of the case than has transpired. Owing, however, to the way in which legal evidence is trammeled, the true history of the case has not yet been brought before the public. That woman who was the basis of the charge is notorious throughout Chester for her improper conduct, not recently, but for years; and it is further known that she had not herself the means of carrying the matter into court, and that she has not paid the expenses of the trial. There was a combination of persons who quietly hatched and matured that charge against me in secret, which I determined to resist openly. The facts are not so thoroughly well known in other places as they are at Chester and Liverpool. It is well known that I was happily able to prove a negative as regarded the facts which were imputed to me at a time long precedent. I again thank you, Mr. President and brethren, for your kindness in passing this resolution. I believe the trials will do this good; that we shall not in a hurry have anything of the kind again, and that we shall not have one medical man coming forward as evidence against another on a mere shadow of suspicion. We have it on Dr. Ramsbotham's own statement, that he tried to persuade the parties from going on with the charge against me, because they would fail; and that the reply was, not that the charge was true, but that they had gone too far, and were obliged to go on. That occurred two or three months before the trial, and that alone ought to have been one strong reason why Dr. Ramsbotham ought not to have lent his name to it. [*Cheers.*]

A PAPER

On the Use of Belladonna in Intestinal Obstruction, was read by A. P. Stewart, M.D.

Dr. FLEMING. I hope, sir, that Dr. Stewart's paper will lead the members to direct their attention to the leading virtues of belladonna. There are many distinct points in its action upon intestinal obstruction which arise—the question of its mode of action and cure. Into those I shall not enter, but will make one observation in relation to the mode of administration—a matter of great importance, should any member think of trying the preparation as recommended by myself, and referred to by Dr. Stewart. There is no question that, in using atropy, we have a remedy of perfect certainty, because we know its strength, and we can dose it with the greatest certainty, and secure great efficiency in its action. But as to the time of the administration, if the atropy, or any preparation containing belladonna, is given in connexion with food, on a full stomach, it has little or no action; whereas if given on an empty stomach, it will quickly begin to operate. I have known doses given on a full stomach productive of no effect, and the same dose given on an empty stomach induce symptoms which carry the operation of the drug into the range of poisonous action.

THE CALABAR BEAN.

An able communication on this subject was made by Thomas Nunneley, Esq., of Leeds. A paper on the same subject, accompanied by drawings and preparations, had also been received from Dr. Harley of London; but was not read, in consequence of the absence of the author and of want of time. Dr. Henry stated that Dr. Harley had placed at his disposal some of the Calabar bean papers prepared by Messrs. Bell, for distribution among those members who might desire to have them.

A PAPER

Containing Practical Hints on the Treatment of Patients suffering from Nervous Pain and Neuralgia, was read by C. B. Radcliffe, M.D., London.

THE ADDRESS IN MIDWIFERY

Was read by J. G. Swayne, M.D.

Mr. PROPERT (London) moved—

"That the cordial thanks of this meeting be given to Dr. Swayne for his very able and interesting address."

He spoke of the importance of the paper, and the admirable and eloquent manner in which the writer had brought it forth. He had never admired a paper more in his life, and he thought the Association much indebted to Dr. Swayne.

Dr. ROUTH. I have great pleasure in seconding the vote of thanks. It is by such addresses as these that the character of this Association will be raised, not only in this country, but throughout Europe. We learn thereby what great minds there are amongst ourselves, who can put forth truth so clearly, so pleasantly, and so convincingly. There was one point particularly which struck me; it is this, that Dr. Swayne has stood up in a very manly way—in a way in which persons at public meetings are not always inclined to do—in favour of British practice. The great thing which gives power to those men abroad—in France, and Germany, and elsewhere—is, that they are so fond of praising themselves, and ignoring everything that is British. Now, if there is one point more clear than another, it is that our profession has made advances in no part of the world more than in these realms; and that midwifery stands preeminent amongst those who practise it, both here and abroad. We have, therefore, the gratification of knowing, not only that we have learned a great deal; but we have the conviction in our minds that we have learned from those who are not only able to teach us, but who are able to teach those abroad, who are sometimes inclined to look down superciliously upon us. [*Cheers.*]

The motion was unanimously affirmed.

PAPERS.

The following papers were then read.

The Climate of Clifton. By G. F. Burder, M.D.

The Dermal Pathology of Celsus. By E. Wilson, Esq., F.R.S.

On account of the absence of the authors, and the complete occupation of the time of the meeting, the following papers, most of which had been forwarded, were unavoidably omitted; they will, however, be published in the JOURNAL.

Statistics of the Treatment of Rheumatic Fever. By T. K. Chambers, M.D.

The Social Aspects of Syphilis. By R. W. Coe, Esq.

The Calabar Bean. By G. Harley, M.D.

On the Deficiency of Vital Power in Disease, and on Support. By L. S. Beale, M.D., F.R.S.

The Treatment of Pneumonia. By S. J. Goodfellow, M.D.

Three Cases of Artificial Urethra. By I. B. Brown, Esq.

Chloroform taken internally in the Fluid Form. By C. Kidd, M.D.

VOTE OF THANKS TO THE PRESIDENT.

Sir CHARLES HASTINGS. You will excuse me, sir, if I do not address you on this occasion. My dear friends and fellow-members, I am sure you will anticipate what I am about to say to you, when I rise to address you at the close of this auspicious session, which, among the many that have occurred during the existence of the Association, will, I am sure, stand unrivalled. Will you allow me for a moment to call your attention to the fact, that, for the eminent success of this meeting, we are indebted to the indefatigable, the zealous, and the able cooperation and exertions of our most esteemed and worthy President? [*Cheers.*] We shall none of us leave this city, and the magnificent scenery of the country round, without acknowledging that nothing can exceed our admiration of the manner in which our President has occupied the chair. [*Cheers.*] His presence will evidently prevent my enlarging in any way on his merits; but what I have said he eminently deserves, and I am sure you will feel that we ought not to separate without expressing the deepest gratitude for his labours and the highest estimation of his talents. [*Cheers.*] I, therefore, move—

"That the cordial thanks of the meeting be given to the President, Dr. Symonds, for the very able manner in which he has conducted the meetings of the Association."

Mr. TURNER. I never rose with more pleasure than I do at the present moment; and I am quite sure that neither eloquence nor language, except that of the heart, is necessary in order to confirm the view which you, Sir Charles Hastings, have taken, and the language in which you have expressed your esteem, of our excellent President. I look upon it that, however instructive the different papers have been as delivered in this room, there is no feeling which can pervade our minds more strongly and more to the point than the social matters connected with our Association. [*Cheers.*] It is all very well to speak of what we have heard; but I am sure that the state of our feelings has depended very much upon the hospitality of our President. I do most sincerely second the vote of thanks to him for the kind manner in which he has discharged his duties at this meeting. Not to detain you longer, I will only add, that I sincerely thank him for his exertions, assured that what I have said, and the resolution now proposed, will be responded to with heart and voice.

The resolution was carried by acclamation.

The PRESIDENT. I have felt it to be a matter of great pride that I should have been thought worthy to occupy such a position as that of the President of the British Medical Association. It has been a feeling of pride during the whole of the year I have been President-elect; it has been accompanied also with a counterbalancing feeling of exceeding distrust of my capability of fulfilling the duties of my office as I should desire, and as the character of the Association would require of its President. I feel that I have come very far short [*No, no*] of what I wished to have done as President; but the feeling of satisfaction is very strong in my breast, produced by such commendations as I have received from men so eminent, and whose opinion is so well worth having as that of Sir Charles Hastings and Mr. Turner. As to the success of the meeting, I cannot take to myself much of the credit of it. I have endeavoured to do my duty; but I should have been quite unable to bring about the results which I think have been brought, had it not been for the assistance I have derived from the Local Council, and especially from the able and indefatigable exertions of my friend Dr. Marshall. [*Cheers.*] The help he has given me I cannot speak of in terms too strong. I have so often, in the course of this meeting, laid restrictions on others as to the occupation of time, that I should not shrink from the same restriction myself; although, were I to endeavour to express fully the gratitude I feel, first for the appointment, in the second place for the numbers in which you have come to our city, and lastly, for the extremely kind and cordial manner with which you have received me, and which I shall never forget, I should detain you still longer. I beg to thank you for your kindness.

LUNCHEON.

Through the hospitality of the local members, a most elegant and abundant luncheon was provided each day, from 2 to 3.30 P.M., in an adjoining room, for the use of the gentlemen attending the meeting.

THE DINNER.

At 7 p.m. the President and a large number of members dined together in the smaller saloon at the Victoria Rooms. The gallery was occupied with a large number of ladies. During the dinner the band of the Bristol Artillery Corps played a good selection of music. The post-prandial proceedings were enlivened by some vocal music. The gentlemen at the dinner included Dr. Symonds (in the chair), supported by Sir Charles Hastings, Mr. Commissioner Hill, the Mayor (Mr. S. V. Hare), the High Sheriff (Mr. Cave), the Rev. Canon Guthrie, the Rev. Dr. Bell, and Dr. Fox. The total number present was 214.

The vocal performers having sung "Non nobis Domine",

The PRESIDENT said: I have to propose as the first toast "Her Gracious Majesty," as the secular chief of the constitution, as the image and reflection of the greatness of the nation. But we drink her health, too, with all our hearts, as an example and type of those virtues which we as medical practitioners, familiar with the domestic life of England, know so well how to appreciate.

The PRESIDENT next proposed "The Prince and Princess of Wales, and the other members of the Royal Family." He said: I need not remind you that this is the first time that we have had the honour of drinking the health of one of those illustrious personages. The Princess of Wales has vanquished all hearts, and we all fervently hope that her conquests may be as lasting as their acquisition has been rapid. We hope that the Prince and Princess may be happy in each other, happy in the happiness and prosperity of that nation from whose destinies their own are inseparable.

The PRESIDENT. The next toast is "The Army and Navy." We all feel grateful to those gallant defenders of our country, and of all we hold dear, who are in the regular service. We also feel extremely grateful to those who, in the time of great anxiety, came forward to relieve the anxiety of the nation. Now we, as medical practitioners, are always proud of the success of our efforts in averting disease—what we technically call prophylactic treatment; and I am sure we must as a nation be proud of the success of those efforts in averting danger which have resulted in the bold prophylactic treatment which our volunteers have exemplified. With this toast I beg to couple the name of a gentleman who represents both the regular service and the volunteer service, Dr. Goodeve of Her Majesty's Indian army, who is now also Captain Goodeve of the Bristol Rifles, on be-

half of the army and volunteers; and Mr. Fegan, of Her Majesty's Ship *Dædalus*, on behalf of the navy.

Dr. Goodeve and Mr. Fegan acknowledged the toast.

The President. I have now to propose a toast which we shall receive with great respect, "The Bishop and Clergy of the Diocese, and the Ministers of other Denominations." There is an old Latin epigram which distinguishes the respective functions of the clerical and the medical professions,

> "Utilis ille labor per quem vixere tot ægri;
> Utilia per quem tot didicere mori."

Now, although we shall allow, I am quite sure, the point of this epigram, yet at the same time, in our medical capacity, we rather look on our clerical brethren as our auxiliaries in the work of keeping our fellow-creatures alive; and I am sure that we gratefully acknowledge the aid which we receive from them in promoting sanitary improvement. We must thank them for so often diffusing useful information among their flocks as to the best means of preserving health and averting disease; and not only that, but I venture to say that we also recognise the value of their services in the sick room, when by the judicious use of words of hope and sympathy and consolation, they bring about a cheerful and tranquil state of the patient's mind, highly conducive to his recovery, very supporting to the efforts of his friends, very helpful to the efforts of his medical advisers [*Cheers*]. With this toast, I have the pleasure of associating the name of the Rev. Canon Guthrie [*Cheers*], a gentleman who by his abilities, his learning, his benevolence, his conduct and bearing as a high-bred English gentleman, reflects honour on one of our great national institutions, the Church of England. But he has a special claim on us, because of the warm and active interest which he has ever taken in our medical institutions. There is one institution in this city which owes a great debt to him and to those who are dear to him; and I cannot forbear mentioning the name of his admirable lady [*Loud Cheers*] who, it is well known in this district, might be termed the Florence Nightingale of the West [*Cheers*]. I will not particularise the benefits conferred upon our institutions by Canon Guthrie and his intimate relations. I know that if I were to do so it would pain him to have his good deeds recounted in his presence, I therefore call upon you to drink his health; and with his also, I beg to associate the name of a gentleman who has long been a faithful friend of this Association, the Rev. Dr. Bell, who has exercised both the functions which were described in the Latin epigram which I quoted to you; for he commenced his life in the service of medicine. But, although he has passed from medicine to theology, I believe he casts a longing, lingering look to medicine, for he has never failed to attend the meetings of the Association from its formation [*Cheers*].

The Rev. Canon Guthrie. It is with very sincere thankfulness that, as far as voice will permit me, I rise to return thanks, first of all, for the compliment which you have paid me, and also, and of course still more, for that very flattering reception with which the name of one so dear to me has been received. For myself, I have really no claim, no merit. I have always said, as a member of the cathedral of Bristol, that I consider its members as neither more nor less than curates for the city of Bristol, and that you have a fair claim to every service which we are enabled to render you. I feel it to be a great privilege to meet a body so learned and so highly esteemed as the medical profession. There is no body of men for whom I feel a greater respect. There are among them those whom I have the pleasure of numbering as some of my most intimate friends, of whom human nature may positively be proud. We are, in allusion to what the President has said, two kindred professions, each having indeed very much the same walk, and the same sphere of labour; and not only that, but the same object in view. I believe our one great object is to alleviate, as far as we can, human suffering and human sorrow; and I trust that both professions will always feel the greatest confidence and friendship, for there can be no better judges of the other than each of them themselves; and I may say that there is no reason why the one should at any time clash or interfere with the other. At the same time, it must also be very clear—at least it is clear to me—that there may be a little difference in our principles in this way; yours is, of necessity, a society of progress; your progress is your motto; you go from one experiment to the other, one discovery to the other; and we can say to you, God speed you in your investigations after truth. But ours is, from necessity, what I may call the conservative principle. Just in the same manner as in the State it is a most admirable invention—if one may so say—that there is a party of progress, and a party conservative of that which is already established; so it may be that we are somewhat of a conservative nature. I should be very sorry to think that the interests of religion were in any way mixed up with non-progress, or should offer any opposition to the progress of science. I cannot conceive any position more fatal to the best interests of society or of truth itself, than to show that there can be any real opposition between religion truly so-called, and philosophy so-called, because I am convinced that no one truth can ever contradict another known truth [*Cheers*]. I therefore say, that, conservative as we all are by profession, while we say, Go on, investigate, follow up your discoveries, trace those links which bind body to mind, all those mysterious processes which bind life and disease; let us also say, Do not be in too great a hurry to theorise, to dogmatise, to found your theories on insufficient data; but do not ask us, if you please, conservative as we are, to part with any acknowledged truth which has borne the test of our experience and of age, and to give up that, till you show us you have something better to put in its place [*Cheers*]. So long as the investigation of truth, and the discovery of truth is conducted in a reverential spirit, in a spirit of prayer, with a sincere love of the inductive process; so long as this is followed out in that spirit, in that same spirit which marked the discoveries of Bacon and Newton and other great men, you need have no fear of failure. Go on, and prosper. *Magna est veritas, et prævalebit* [*Cheers*].

Rev. Dr. Bell. I feel almost ashamed to stand up, lest I spoil that speech which has been just delivered. I cannot possibly improve it, and therefore I fear to injure it. But I feel proud—if such an expression may come from a minister of the Gospel—I feel proud this evening, in standing before this assembly of my former professional brethren. Nay, I return to the observation of your President, and say that I do still cast behind a longing, lingering look to that profession. For, after I was ordained a minister of the Gospel, I went to the meeting at Oxford, and I took the place of the son of Sir Charles Hastings, who was the secretary of the Reform Committee; and I took his place, and advocated reform, and I felt my way gradually in this manner. I was in doubt whether my former professional brethren would look on me as a renegade brother, or as one who has adopted the other profession in sincerity and in truth. When I stated at Oxford that I had left one sacred profession (for I hold that medicine is a sacred profession) for another still more sacred, I received the cheers and the approval of my former professional brethren. That gave me courage. From that moment I resolved, having their approval as well as the approval of my own heart, to support legitimate medicine as long as I lived [*Cheers*]. I stand before you this evening, not so much to return thanks as a minister of that church which has been so nobly proposed, and responded to by the Rev. Canon; I stand not so much in that light, as I come before you to convince you, if possible, if any language which I can bring before you can do it, that I am thoroughly in

earnest in support of legitimate medicine. I never fail in any way to cast into the shade everything in the shape of homœopathy, hydropathy, or any other pathy, because I think they are all diseased productions [*Cheers*]. And I hope and trust that with my clerical brethren I have been useful in showing the folly of these pathists. Let me remark that the clergy support homœopathy for this reason; not from any desire to injure the medical profession, but from a desire to do good, and they think it is an easy way of doing it. But they are mistaken, and I never lose a single opportunity of pointing out to them how dreadfully they are mistaken. I have never failed to attend your meetings, because I had the approval of my medical brethren. I have many reasons for adhering to this Association. I adhere to it, in the first instance, because I wish to maintain legitimate medicine, and to encourage the profession in every way I can. In the second place, I am anxious that this Association shall prosper, because I believe that by association many of those disagreeable occurrences which occasionally take place will be done away with, if medical men will meet together. In the third place, I am anxious to be present at these meetings to support him with whom they originated. I have the greatest respect for Sir Charles Hastings, and I will take every opportunity in my power of showing my fidelity to him and to the whole profession. I return you my best thanks for this kind reception [*Cheers*].

The President. I have great pleasure in proposing "The Health of the Mayor of Bristol" [*Cheers*]. The office of Chief Magistrate of this ancient and important city—a city containing such an immense population, is a post of high consideration; and I can appeal to all the gentlemen who belong to this district to the truth of what I say, that it is the unanimous opinion in the district, that the gentleman who at present holds that high office richly deserves all the honour the office can give. And I say more than this; that that gentleman enhances the dignity of the office by the manner in which he discharges its duties, by his exhibition of those qualities which should distinguish a governor—quiet dignity, courtesy, and munificence [*Cheers*].

The Mayor (S. V. Hare, Esq.) I rise to return my warmest thanks for the toast which you have just heard and received; and my acknowledgments are specially due to you, sir, for the very kind manner in which you have introduced it to this distinguished assembly. It is one of the most gratifying events connected with my year of office, the meeting of this important Association in Bristol, presided over by a member of the profession so eminent and so accomplished as Dr. Symonds [*Cheers*]. Thirty years, I believe, have passed, since Bristol had the pleasure of welcoming the British Medical Association, and it came upon me quite by surprise when I heard that we should have a similar privilege this year. It would ill become me in your presence to dilate upon the great advantages that must accrue to science by holding these annual meetings; but I may be permitted to express my high opinion of the inestimable blessings which are conferred upon mankind by the medical profession. It is beyond all question, that health is the greatest blessing. Many there are, alas! who, until they have lost it, do not fully appreciate its worth; but when the means used for its recovery have been blessed by a Beneficent Providence, and health is once more restored, how deeply grateful ought we to feel to the skilful hand which prescribed and dispensed the remedies. And we cannot be too thankful to you, for the kind manner in which you attend our hospitals and dispensaries, and there find your sole reward in carrying out one of the attributes of our Divine Master, conferring the most inestimable blessings upon those who cannot afford to have treatment at their own homes. I hope your visit to Bristol has been a pleasant one [*Cheers*]. It is a city rich in antiquity, and its neighbourhood abounds with the most beautiful scenery. Here the lover of nature and of art may enjoy himself to his soul's content; and I hope you have been so pleased that you will extend your visit over the present week.

Mr. Commissioner Hill. We are honoured by the attendance of two great officers of this most important municipal corporation. You have paid the honour which is due to every Chief Magistrate, but to this gentleman in particular, who has so well filled the office of Mayor. The next in command, if I may so speak, is the High Sheriff of this city [*Cheers*]—a gentleman whose family has been settled in a neighbouring county and in the city of Bristol, for a greater number of years than I am able to specify—a family which is well known, but not better known than respected. The specific duties of High Sheriff, though of great dignity, are not very onerous. I trust he will never be called upon to perform the only awful one connected with the office. Nevertheless, it is highly desirable, that the position should be filled by the most competent person; and when I tell you that Mr. Cave is most sedulous in his attention to the public institutions of the city, and that he is as exemplary in the performance of the duties incident to his office as in the performance of all private duties, you will receive his name with respect. But when I tell you that he has the advantage of being most nearly allied in marriage to our excellent President, his name will be received with cordiality [*Cheers*].

The High Sheriff (C. D. Cave, Esq.) This is not the first time I have had to respond to this toast during the last few months; but I do so this evening under no ordinary circumstances. I have hitherto been in the habit of addressing inhabitants of Bristol; this evening I address strangers. I feel it to be a great honour to hold the office of High Sheriff of Bristol. This ancient city boasts of many peculiar privileges. I may mention the post which I now fill. I may mention the fact, that Bristol is a city and county in herself; that we have a Mayor's chapel; that we have a Mayor who, as we are informed, is, at any rate for part of the year, a Lord Mayor, though his lordship does not press his claim. I may remind you of an article which I read in the *Times* a few days ago, in reference to the fact that a Prince of the blood-royal, Commander-in-Chief of Her Majesty's Forces, had been made a Fishmonger. That article went on to say, that though apparently to step from a Prince to a Fishmonger, was from the sublime to the ridiculous, yet as our ports increased, and our commerce rose in importance, so to hold an office in connection with commerce was a dignity which gentlemen may well fill [*Cheers*]. My close connection with our President prevents my saying much with regard to him; but I was a very grateful listener to his opening address; and as a son may follow in the footsteps of his father, so I may be allowed to defend the public, and to say that he read us too severe a lecture. We all honour the medical profession. We look up to its members with reverence; and when we are most in need of sympathy and help, we come to them for assistance. I return you my most sincere thanks for the honour in which you have received my health, and to Mr. Commissioner Hill for the kind manner in which he proposed it [*Cheers*].

The President. I have now the pleasant and yet somewhat onerous duty of proposing to you what we must, with due deference to all the toasts which have gone before, consider the toast of the evening. I have the honour of proposing to you "Prosperity to the British Medical Association" [*Cheers*]. This Association was designed to give unity, and that strength which comes with unity, to the medical profession. It was designed to gather up, and unite together, the loose faculties and energies of the profession, which, unless bound together, were likely to run to waste. It was designed so to marshal the wills and minds of individuals in the profession that they might as an organised mass

operate for the good of mankind. It was designed to suggest, to insinuate, to encourage, and to direct great scientific inquiries. It was intended to be a power whereby the profession should communicate with the legislature and the public on topics important to the interests of the profession, and vital to the well being of the community at large. And furthermore, it was intended to bring together the members of the medical profession on terms of amity and good fellowship [*Cheers*]. How it has succeeded in all those intentions I need not tell you; I appeal to the history of the last thirty years. We have always delighted—and we should be extremely ungrateful if we did not delight—to associate this toast with the name of our distinguished, and venerated, and, I may venture to say, dear friend and founder, Sir Charles Hastings [*Loud Cheers*]. It is a great thing to have conceived the idea of forming such a noble Association; and it was a still greater thing, by talent of no ordinary description, by concentrated energy, by indefatigable industry, to succeed in setting it on its legs, and overcoming the difficulties connected with the earlier history of its existence. I remember at the meeting in Bath, in 1838, a conversation I had with a gentleman who was one of the early colleagues of Sir Charles Hastings—a gentleman well known to some few of my brother veterans in the profession. I remember, when we were talking of this Association, that he, who knew all the circumstances under which it had originated, all the difficulties it had to contend with in its early days, evidently believed that there was no single person in the profession at that time who could have overcome those difficulties, but one who combined in so remarkable a degree a certain order of talent, tact, industry, and energy, such as that which was possessed by Dr. Hastings (for at that time all Sir Charles's honours had not come upon him). I am sure that we all congratulate our Founder on the success of his undertaking [*Cheers*]. We all rejoice in the vigour which he manifests amongst us at this time, and we all fervently hope that for many years he will be able to watch over the prosperity of his creature. And we all fervently hope that he will long live to grace with his presence the meetings of the body with whose name his name and fame will be imperishably united. [*Cheers*].

Sir Charles Hastings. I am sure it is not in human nature to be otherwise than deeply moved by the manner in which my name has been brought before this great Association. I should, indeed, vainly endeavour to give any expression to those feelings which are struggling in my bosom, and I therefore merely say, I thank you, I deeply thank you, for all you have done, and for all the glowing cheers you have given, in honour of my name on this gratifying occasion. It is true that three decades have passed away since we last assembled in this great city. Then this Association was struggling in its birth, and its members and its friends here nursed it in its infancy, and enabled it to struggle through the difficulties which awaited its first ushering into the world. It was in this city that the broad and deep foundation of all that has been said and done in this Association was so well laid. There is not one of the things which we have accomplished, but was mentioned and brought forward here by the great luminaries who then shone in this firmament. I will not mention names; because to go back and call to recollection dear friends, now no longer moving amongst us, would indeed be painful. I can only say that, on that occasion, although fully seeing the difficulties we were to meet with, we went shoulder to shoulder, and declared that no opposition should arrest our progress. In the last thirty years, you are well aware, many circumstances have arisen which have favoured mutual progress; and that distance which was supposed to be an obstacle that would greatly retard our progress, has proved by events to be no impediment at all. The penny postage, the railway system, and the electric telegraph, have been sent by Divine Providence to assist us; and I will venture to say that, but for those three great inventions, this Association could never have risen to its high position. When at our meeting at the metropolis it was proposed that Bristol should be our place of gathering this year, I ventured to prognosticate that, great as was the success of our metropolitan meeting, it would be equalled if not exceeded by the meeting this year [*Cheers*]. Whether my prognostication has been verified I leave you to judge [*Cheers*]. *Si monumentum quæris, circumspice.* I will venture to say that the remembrance of the success of this Association in the city of Bristol will be long cherished by its members. Although we have visited London, Oxford, and the great marts of commerce, on no occasion has our success exceeded that of the present meeting. As I have already said, we here laid broad and deep the foundation of this Association. In every part of the country the Association is everywhere known and esteemed; and not only so, but our colonial empire is about also to experience its benefits, for a branch is about to be planted on the banks of the Ganges. Thus not only in our own great country, but in our colonial possessions, will the benefits which we are enjoying be extended to the human race. The age of man is three-score years and ten, and I am fast reaching the limit of that period. I therefore feel that the day of my activity will soon close. But the Association is flourishing. I see a vast unbounded prospect placed before us, and neither shadows, clouds, nor darkness rest upon it. *Floreat semper.* Gentlemen, I thank you.

Dr. Richardson. The great advantage of these gatherings is this:—that we meet as friends and part as brothers. But whoever may be introduced to our brotherhood, there is one to whom he first looks, and on whom every eye is focussed—the President of the occasion. I cannot say—seeing that I have been a lecturer on dietetics, that I know nothing about the effect of an excellent dinner, and what it will do to assist a speaker; but I feel a very happy man that on this occasion it is my province to propose the toast of the evening—"The President of the British Medical Association" [*Cheers*]. I cast my eyes back on the history of the Medicine of to-day; and I ask, who is there here who has more effectively applied his exertions to the forward movements of our science? who more distinctly, more deliberately, more firmly, has contributed to its interests, than he by whom the *Library of Medicine* was so enriched? than he who four years ago wore the red robe in the College of Physicians with such distinction and honour? I turn from these professional traits to the local history of our President; and, I ask, who among local men can be considered more thoroughly beloved, than he who at this present time is the first man of our meeting and of our Association? It has ever been the object of our Presidents to do something distinguished in their year of office, and to introduce us, their guests, into lands of reality and beauty. Well! the President of this year has done all this; but, I ask you, did he not last night do more? Did he not lead us into fairy land itself? [*Cheers.*] My own mind wandered, I confess, from the scene to which he introduced us to another sphere of thought, to the *Midsummer Night's Dream* of our greatest dreamer, and to the melodies of that great Jewish musician who has rivalled even the master from whose words his own art borrowed its immortal inspiration [*Cheers*]. Once more, we separate the present of our President, and look at him in the past. We see him as a mere student, rushing from the benches of the lecture-room into the wide world, having in his heart if not on his lips the words of one of our modern poets:

> "I will go forth 'mong men, not mailed in scorn,
> But in the armour of a pure intent;
> Great duties are before me and great songs,
> And, whether crowned or crownless when I fall,
> It matters not, so that God's work is done."

And from that beginning until now, we see him rising to pre-eminence, until at last he sits at our head, in the proudest and the highest position that any man can occupy in that profession in which God's work is, as I believe, ever best done [*Cheers*]. Gentlemen, let us leave him there, nor say another word, except to express the hearty and the honest hope that, till the last vital spark shall cease to animate him, he may continue to receive the love and the admiration of his friends, as the natural reward for the usefulness which he has achieved, and as the reflex of that happiness which he has cast upon all with whom he has been brought into contact. I propose "The President."

The PRESIDENT. I am now approaching the pleasantest, the most agreeable, but the most difficult task I have yet had to perform as your President. For many of the duties of my office I have felt my incompetence but too strongly. Your kindness has supported and enabled me to get through it somewhat better than I expected; but on this occasion I feel my incompetency more than ever. I cannot tell you how I feel thankful, in the first instance, for your placing me in this office, of which any man might be proud; how I thank you for the manner in which you have gathered round me on this occasion; for the courtesy and the cordiality with which you have greeted me, and received any attention which I have shown you to make this visit a pleasant one. For all this it is impossible to tell you how grateful I feel. I hope that, as I shall treasure up in my memory the recollection of the last three days, and especially of your kindness to me, that I shall also have a deep lesson impressed on me—a lesson which was brought before my mind in those eloquent words which fell from my friend (for so I will venture to call him, though I have but recently known him), Dr. Richardson. There was one word in his speech which touched me very deeply. He never rises to speak without moving his audience; but when he alluded to the good one might do, the high motives under which one should act, I confess I felt deeply moved. I have had many pleasures, and I hope you have had some. Of some you have partaken—they are common to us all. I have had the great delight of renewing many old friendships—what we used to call the *redintegratio amoris*. I have also had the satisfaction of forming the beginning of many new friendships, which I trust favourable circumstances will ripen. And after all this enjoyment, I hope there will remain deeply impressed on my mind the feeling of the high vocation, the lofty aims, of that profession in which we practise; and I trust I may say that I hope that this feeling will be partaken of by all my friends on this occasion. I trust that we may all have in these meetings impressed on our minds that we must not only fulfil the immediate duty of our daily lives, but endeavour so to pursue it that we may lighten the labours of those who come after us. It would be a great thing if we could every one of us, before we die, say, "I have taken my part in crushing, in destroying, in treading under foot, some source of common misery, that shall never again bring sorrow or suffering." But though so glorious a result may not perhaps be reached, we may all of us hope and strive so to improve our art, that much of evil may be reduced, that much suffering may be shortened, and made more tolerable. It is no dream that much of the misery of the world may be abolished and extinguished. Much has been already destroyed. It is no dream that the world may be made better; this has been realised over and over again, unless all history is a tissue of fables. In the present day, in particular, there is a good work beginning. And I believe that posterity will look on what is now transpiring in the world as the beginning of good; and I believe that the great work of the amelioration of the human race may be advanced by all, if we will only believe and lay it to our hearts that it is indeed possible that we may leave the world better than we found it. For we have unquestionable proofs of the beginning of good in these times, ever since the beginning of this Association. Look only at the great subject of education. Thirty years have passed since this Association began, and yet I remember it is not more than twenty years since I was stopped in the street by a friend—a man of some consideration then, but now passed away—John Sterling; and he said, with a face radiant with triumph, that last night the thin edge of the wedge was got into the House of Commons, that they had actually passed a grant of £30,000 for public education. Now we have our Chancellor of the Exchequer looking somewhat blank when that sum amounts to a million, or something like it. Before that time, sanitary reform had but just began. It was but shortly before the commencement of this Association, that my friend Dr. Kay Shuttleworth had brought out a pamphlet respecting Stockport, which was the beginning of the great sanitary movement of the last thirty years. Since then, how much has been done on this great question? The repression of crime, the reformation of offenders, and I know not how many other matters, to say nothing of the great discoveries in science, and the great inventions in art, and, I would also say, the unfolding of great natural laws, the increasing harmony of the sciences—I believe these all tend to the abolition of evil, and the increase of good, and the enlargement of happiness. I cannot but believe that, as sciences converge, as we have heard to-day how mechanics and chemistry are intimately connected with physiology, and how physiology is recognised as connected with the science of mind and the science of morals, and how every day it is recognised that these sciences are, and must be, connected with the science of political economy, that all these sciences have a bearing on political matters—I cannot but believe that in the harmony of the sciences we have the dawning of great good to the human race. It cannot be otherwise. All knowledge comes from this divine source, and I believe that we might, in this harmony of the sciences, find what one of the great poets of our land—Campbell—says of the harmony of the heavenly bodies:

> "For in your harmony sublime,
> I read the date of distant time,
> That man's degenerate soul from crime shall yet be drawn,
> And reason in this mortal clime immortal dawn."

Dr. FALCONER. The University of Cambridge has now opened her arms to receive us; and we cannot but hope that we shall meet with a warm embrace. It may be regretted that we shall not be able to have the Regius Professor of Medicine as our president next year, from the circumstance that he is visited with affliction in his family, which we all regret, and deeply sympathise with: but, in default of his presidency, we have a distinguished member of the Council and Senate of that university, who has kindly consented to accept the office of President on that occasion. I propose the health of "Dr. Paget, the President-Elect." [*Cheers.*]

Dr. PAGET returned thanks.

Mr. DANIELL, in an eloquent speech, proposed "the Readers of the Addresses." He specially characterised the address of Dr. Budd as being magnificent to a degree; that of Mr. Prichard was of such a character that, when it was calmly read by the members, they would not say that it fell below the standard which it ought to possess; while in Dr. Herapath's address there was enough food for a twelvemonth. He had not heard the address of Dr. Swayne; but he could not do otherwise than include him in the toast.

Dr. BUDD, in reply, for his colleagues and himself, said that they deeply appreciated the honour placed upon them; but it was an honour which had brought with it a sense of great responsibility. They had felt that they had to sustain the reputation of their city, rich in great traditions of all kinds, and able to reckon up a goodly number of illustrious men in the medical profession.

Their difficulties had been greatly added to by the circumstance, that they so closely followed the great Metropolitan meeting. The admirable addresses then delivered had running through them all that consciousness of a great purpose and of high motive which characterises the feelings and sentiments of the profession in these times; as well as a precision and a severity in the manner in which the subjects were dealt with, that rendered it a very anxious thing to succeed those who delivered them. Dr. Budd concluded by assuring the members that himself and his colleagues had done their best; and thanked them for the manner in which the toast had been received.

Mr. PRICHARD, Dr. HERAPATH, and Dr. SWAYNE, also returned thanks.

The PRESIDENT proposed "The Health of Mr. Nassau Senior, once Professor of Political Economy at Oxford, and Mr. Commissioner Hill," who were present as visitors.

Mr. NASSAU SENIOR and Mr. Commissioner HILL returned thanks.

Dr. STEWART. For the last three days, in this western metropolis of England, this great emporium of commerce, the more renowned on account of its natural beauty, we have been enjoying unbounded hospitality—not only the feast of reason, but the flow of soul; and for all this we have been indebted, not to yourself alone, sir, but to others who for months past have taken upon them the burden and heat of the day, seeking to provide for us as handsome, courteous, and hearty a reception as any persons could expect within the limits of England. We have heard much of the London meeting. I had something to do with it; and therefore it is, I suppose, that I am privileged to propose this toast; but I can honestly say that not only here in Bristol have you equalled, but you have far surpassed, all our efforts in the great metropolis. The labour which is required to be expended in arranging such meetings is incomprehensible to those who have not taken part in it; and upon one or two pairs of shoulders generally rests all the burden; and Dr. Marshall has had the burden on his own shoulders. [*Cheers.*] I have a very particular interest in my friend here. I knew him when he was a child; and I was greatly rejoiced, after a long separation, to see in London the excellent son of my much esteemed friends the Rev. Mr. and Mrs. Marshall. I give you "The Health of Dr. Marshall".

Dr. MARSHALL acknowledged the toast.

"The Health of Dr. Charles Fox, the President of the Bath and Bristol Branch," was then drank and duly acknowledged; and the President left the chair.

THALLIUM IN A MINERAL WATER. We hear that Professor Mulder, of Utrecht, has just found this metal in a water from Java, which is said to be used by the natives, and praised for its medicinal virtue. (*Chem. News.*)

SUICIDE OF ALLEGED CRIMINALS. Readers of our city papers must have noticed the frequent instances of attempts at suicide by persons detained in confinement. These occurrences would not be worthy of remark if they were limited to prisoners awaiting the execution of the death-penalty, or even condemned to a long period of imprisonment. We should then have an adequate cause for the attempted self-destruction, for in all periods of history, criminals have been guilty of this crime. But in this instance the crime is more frequently attempted by quite another class of prisoners; they are those persons who are awaiting their trial, and who have been charged with grave crimes. In nearly every case the victim of self-destruction has left behind him an explanation of his last criminal act. The exciting cause, if it may be so designated, is confinement in the dreary, noisome cells of a city prison. (*American Medical Times.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

THE length of the Report of the Annual Meeting of the Association unavoidably compels us to postpone the publication of numerous articles which were in type.

MEDICAL ETIQUETTE.—SIR: Your answer to my question of medical etiquette is hardly satisfactory to either of the parties concerned, inasmuch as it appears to be founded upon the supposition of what did not occur; viz., that C. D., after his interview with A. B., saw the patients again, without A. B.'s consent.

C. D. acknowledges, and would be the first to affirm, that *if* he had visited the patients further, having discovered that they were under A. B.'s charge, he would have been guilty of unprofessional and of ungentlemanly conduct. C. D. did *not do* so. He called, immediately he found A. B. was in attendance, upon A. B.; and if A. B. had thought proper to decline an appointment, C. D. would have visited the patients *no more*.

I am glad that you think, as I do, the question sufficiently interesting to bring it prominently before our brethren of the Association. There are several points in this comparatively new kind of practice which will well bear ventilating in the JOURNAL.

May I take the opportunity which this note to you gives me of asking your attention also to another point, which, to me and to many of my friends, has been productive, I will not say of misunderstanding, but of discussion? I allude to the proper plan to be pursued when a "club" patient consults a physician. This opens up a large amount of discussion, and I will not enter upon it now; but at some future time, I shall be glad to offer some suggestions, which a pretty large experience, and very many conversations with my medical friends on this subject, have proposed to me. I am, etc., X. Y. Z.

[The course pursued by C. D., as detailed in this note, was perfectly proper. In X. Y. Z.'s former note, he said that C. D., after having discovered that A. B. was in attendance, "made a cursory examination; said he would not interfere with the treatment," etc Our objection had reference to this "cursory examination," etc.· and this was what we meant by "visiting the patient further."—; EDITOR.]

COMMUNICATIONS have been received from:—Dr. WILLIAM B. HERAPATH; Mr. W. GIMSON; X. Y. Z.; Mr. T. MARTIN; Mr. W. M. CLARKE; Dr. T. K. CHAMBERS; Dr. HUMPHRY; Dr. GRAILY HEWITT; Dr. C. R. HALL; Mr. E. WILSON; Mr. I. B. BROWN; Dr. KIDD; Dr. J. G. SWAYNE; Mr. R. O'CONOR; Dr. W. H. RANKING; Dr. HARLEY; Dr. HITCHMAN; Dr. FLETCHER; Dr. LIONEL BEALE; Mr. MOORE; Dr. STRUTHERS; Mr. J. AMESBURY; Mr. WALKER; Dr. W. MOORE; Mr. H. APPLETON; and Mr. SPENDER.

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Clinical Records.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO ST. GEORGE'S HOSPITAL.

IX.—Lithotomy.

George Evans, a very stout man, 35 years of age, was admitted into St. George's Hospital on May 27th, 1863. He complained of an ill-defined uneasy sensation about the scrotum and perinæum, which recurred at uncertain intervals. He had no pain in pasing his urine. There was no blood in his urine, nor had he passed any mucus. The urine had never stopped suddenly as he was passing it. His family had suffered from gravel; and he himself had formerly passed some pieces resembling "Cayenne pepper crystals". During the last eight months, however, nothing of the kind had taken place.

Six years ago, he was sounded at Guy's Hospital; but nothing was at that time detected.

On May 28th, a sound shaped like a lithotrite was introduced, and a stone was immediately felt; and on the 30th a small lithotrite was used with the same result. The passage of the instrument on each occasion gave him considerable pain; and on the 31st there was a considerable quantity of blood and mucus in the urine.

The urethra was in this patient evidently smaller than usual; and the irritation which the passage of instruments caused induced him to request that some other mode might be adopted for getting rid of the stone. The urine was acid; and fifteen grains of carbonate of potash were given three times a day.

On the 4th of June, the operation of lithotomy was performed. Chloroform having been administered, a free incision was made on the left side midway between the tuberosity of the ischium and the rectum, extending from two inches in front of the anus to two inches behind it. The groove of the staff was then found between the bulb of the urethra and the erector penis, and the knife carried along it to the prostatic portion of the urethra. The perinæum was found to be very deep, so that the finger introduced as far as possible into the wound only reached the anterior part of the prostate gland. The forceps passed along the opening, on the withdrawal of the finger, came immediately into contact with the stone. The blades, being now widely separated, failed to grasp the stone, and could be felt gliding over its upper surface. The direction of the forceps was therefore changed, the blades being held in a vertical instead of a horizontal position in relation to each other. The stone was now at once seized in its smallest diameter, and, by means of traction in various directions, was, after some little difficulty, removed.

The stone was of a tolerably large size, and remarkably flat. This peculiarity of shape may have accounted for the absence of the usual symptoms of calculus previously to the patient's admission into the hospital. A comparatively large and flat surface must have always been in contact with the coats of the bladder, and consequently very little pressure could have fallen upon any one point; hence, probably, the absence of blood, of mucus, or of pain in passing urine. The same peculiarity of form would account for the slight difficulty experienced in seizing the stone by the forceps. The calculus lay flat against the back part of the bladder; and the blades of the forceps, when separated, moved over its upper surface without being separated sufficiently far to seize it; but when the instrument was held in a different position, the stone at once came within its grasp.

The day after the operation (June 5th), the urine passed freely through the wound, and some passed through the urethra. Tongue furred; bowels open; pulse 68. He had no pain, and had slept well. His appetite was good.

He remained very comfortable, without any unfavourable symptom, until the 12th, when, feeling wet, he called the nurse's attention to the circumstance. A large clot of blood, amounting to about fourteen ounces, was found in the bed. The wound was also filled with a clot of blood, and some fluid blood passed by its side and along the urethra. Some red lotion was introduced upon a piece of lint into the wound, and tannic acid was given internally. The face was now pale; the tongue furred and œdematous; pulse 116.

On June 13th, there was no return of the hæmorrhage. He had passed his urine freely. Tongue moist and furred; pulse full and strong, 84. He was ordered nitro-muriatic acid with bark.

June 14th. Urine passed both through the penis and through the wound.

June 19th. He could hold his urine for six hours; and it then passed nearly all through the urethra.

June 21st. No urine passed through the wound, which was cicatrising. He was convalescent.

July 10th. He left the hospital well.

X.—Unhealthy Ulceration after Vaccination.

Several severe cases of unhealthy ulceration, arising from vaccination, having presented themselves at St. George's Hospital, I undertook, some weeks ago, a microscopic examination of the lymph of the vaccine vesicle. Various specimens of lymph were furnished me by Mr. Smith, the obstetric physician's assistant at the hospital; and we were careful to examine in the first instance the lymph as it exuded from a simple puncture of a vesicle upon the eighth day. In all the specimens so examined, where no admixture of other matters had taken place, the lymph was found to be perfectly transparent; no globules nor cells of any kind were to be perceived. When care was not taken in collecting the lymph, blood-globules and portions of epithelial *débris* were occasionally found in the specimens; but no pus-globules could be detected in lymph taken from healthy vesicles which had run their natural course.

Dr. Marston, of the Royal Artillery, has been good enough to repeat the observations. He found, in a case that he had an opportunity of watching carefully, that from the seventh to the eighth day no cells of any kind could be detected in the lymph of the vaccine vesicle. On the ninth day, a few round granular or pus-cells were found; and, on pressing the glass upon the vesicle, some of the deeper fluid was obtained. This showed a

larger number of cells. At this period, the skin surrounding the vesicle had begun to redden; and the vesicle was no longer transparent, but opaline. On the tenth day, the redness of the skin around the vesicle had increased. The vesicle itself was full of a milky fluid: this, upon examination, appeared to contain numerous pus-cells.

Dr. Marston found, however, that if a vaccine vesicle be irritated, the surrounding skin will become red on the eighth day. The contents of the vesicle will at the same time become opaline or yellowish; and, if examined microscopically at this period, will contain cells having the appearance of pus.

These observations have now been sufficiently multiplied to warrant the following conclusions:—

1. The ordinary vaccine vesicle yields a fluid, from the fifth to the eighth day, free from any cells allied to pus-cells. The only evidence of any organised products at all in the fluid, at these dates, is the occasional appearance of a few granules, nuclei, or cell-like particles; although, as a rule, even these are entirely absent.

2. Upon the ninth and tenth days, cells may generally be detected; few in number upon the former, but very numerous upon the last named day. These cells possess the characters of pus-cells.

3. When the vaccinated spot, however, has been or is attended with the phenomena of inflammation—heat, redness, and pain—such as it frequently is if the part have been irritated, then pus-cells can be discovered in the vaccine fluid at earlier dates than the ninth day.

Now there is much evidence for believing that the purulent character of a fluid may impart to it other and more active properties than it otherwise possesses. Pus obtained from various sources, and not only what is called specific pus, has been found to be capable of initiating inflammation in mucous membranes to which it has been applied.*

The practice of our ophthalmic hospitals has proved this in the case of the human conjunctiva. A film of pure mucus might be retained in contact with that membrane without risk; but not so a purulent secretion.

In the case of specific pus, these properties are still more marked. A gonorrhœal pus (if that may be termed specific) will induce a violent purulent conjunctivitis on its application to the eye; and it is now well known that, although the secretions afforded by an ordinary indurated chancre will not be inoculable upon the same individual, if such chancre be first made to yield pus, by artificial irritation, it is capable of inducing some result upon inoculation of the patient's skin.

It is difficult to lay down rules so positive as to be invariable in their application, as to the best period for taking lymph from a vaccine vesicle, because the disease is subject to some irregularities and modifications in its course in different individuals. The lymph yielded by a vesicle from the sixth and prior to the end of the eighth day, when the vesicle is umbilicated and shows a faint trace of peripheral redness, is generally quite pure and void of cell-growths. But by the aid of the microscope we may very readily determine the quality of the vaccine fluid in this respect; and I would venture to suggest that the detection of pus-cells should decide us against using it for the purposes of vaccination.

* See Dr. Piringer's Observations upon the Artificial Production of Ophthalmia by Pus-inoculation, quoted in Simon's Essay on Inflammation, in Vol. I of Holmes's *System of Surgery*.

Original Communications.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page* 86.]

Paralysis from Tabes Dorsalis.

A more tractable form of paralysis is not unfrequently seen in youth and early manhood, which may be traced to the vicious and enervating habit of masturbation. The exhausting practice is far more common than is generally supposed; but it is only when carried to an extreme degree that it entails a wasting of the spinal cord and all the accompanying misery which have long been known under the designation of tabes dorsalis. The terrible delineations made by Tissot, in his treatise on onanism, are doubtless exaggerated for the purpose of deterring the unwary; and it is a pity they are so; for some imaginative minds are apt to be lured away by the romance of an erotic martyrdom, whilst a more faithful picture might inspire a protecting intimidation.

M. Lallemand, in the course of fourteen years, collected upwards of a hundred and fifty cases, in which all forms of specific diseases—of the brain, the heart, the lungs, the stomach, and of every other organ—presented themselves, every one of which was occasioned by diurnal pollutions. (*Des Pertes Séminales Involuntaires.*)

This propensity has been known to exist in early childhood, long before the testes and vesiculæ seminales had acquired their functional activity, or the moral attributes their restraining influence. But in such cases the habit has been engendered by some local irritation of the sexual organs, such as ascarides in the rectum, incontinence of urine, accumulation of sebaceous matter between the glans penis and the prepuce, etc.

The restoration of the intellect requires far more time than is necessary for the apparent renewal of bodily vigour; and it is when the mental faculties should be most rapidly expanding, that they are most apt to be blighted by the pernicious influence in question. From the age of twelve or fourteen to eighteen or twenty, youths are not unfrequently exposed to a focus of contagion in schools and colleges which masters and tutors, under the illusion of the innocence of their pupils, may repudiate, but which nevertheless exists; and the evidence to the fact is the painful avowal which is readily made by the victims to the temptation. We have, moreover, the testimony of M. Lallemand that "nothing is more common than timid yet educated individuals who complain of debility and seek advice for the acquisition of strength, who, when questioned, admit that they have been guilty of masturbation at an early age."

The habit to which the occurrence of tabes dorsalis has been imputed is not peculiar to the male sex; it is sometimes, though much less frequently, practised by the female also, in whom the brain yields more rapidly to its influence. I have seen but one unequivocal case, and in that I was led to think that that peculiar morbid state of the spinal cord which engenders a host of affections, united under the common name of spinal irritation, was the exciting cause; for, on pressure being

made over the lumbar vertebræ, a sensation of intense throbbing and itching was aroused, which provoked the necessity of friction.

The observation of M. Deslandes (*Dictionnaire de Médecine*; Art. "Masturbation"), that out of every twenty cases of leucorrhœa in young females, from fifteen to eighteen result from masturbation, will not, I am sure, be endorsed by medical practitioners in this country.*

Two cases are recorded by Lallemand (vol. iii, p. 65), in which there was a change of anæsthesia from one hand to the other almost daily; and this kind of transference of symptoms from one part to another is not unusual in tabes.

Tabes dorsalis has been known to produce affections of every organ of the body; consequently the disease is remarkable for the diversity of its symptoms, which vary according to the constitution of the patient; and, although its early influence may engender functional disturbance only, the permanent irritation reflected from the spinal cord to the sympathetic system of nerves is adequate to the establishment of structural lesion in any part of the viscera.

On the other hand, it should be borne in mind that there is not an organ in the body which may not be the source of a reflex palsy; so that it becomes a matter of great importance to determine correctly the order of antecedence, lest we render ourselves obnoxious to the rebuke which is implied in Lallemand's averment that he has seen many cases of tabes treated for spinal irritation, by leeches, cauteries, and blisters, with more harm than good. The pallid face, the eye encircled by a livid areola, the furtive glance, the muscular debility and emaciated frame, form collectively a reason for suspecting the existence of onanism; and when paralysis supervenes, in nineteen cases out of twenty, the patient will readily admit the truth of the conjecture.

The *prognosis* in these cases must obviously vary according to the indications of the extent of atrophy of the spinal cord. If the paralysis be not occasioned by absolute degeneration of the cord, muscular motion may be restored, debility may sooner or later disappear, and the wasted muscles may regain their healthy volume. Such was the happy result of three cases I have referred to; but I suspect the generative power is never thoroughly developed in those individuals who have practised masturbation to a great extent in their youth, or restored to a vigorous condition after it has been lost, from that cause, in manhood, even when the wasting of the spinal marrow has not proceeded to any considerable extent. But when the lumbar portion of the cord is reduced, as it sometimes is, to less than half its natural size, and its structure is considerably indurated, the paralysis is incurable; for the amount of diminution is not an expression of the precise quantity of nervous matter absorbed, seeing that there is in tabes dorsalis, as in induration from chronic myelitis, a deposit of adventitious fibroid connective tissue, which compresses and still further atrophies the contracted nerve-cells and nerve-fibres.

The *treatment* of tabescent palsy should be influenced by the cause from which it originates. If any local irritant exist, it should be removed; and, in the administration of tonics, it is advisable to refrain from such as have the property of stimulating the generative organs. Accordingly, when the rectum is fretted by the presence of ascarides, an excellent tonic anthelmintic, proposed by Dr. A. T. Thomson, is a solution of chloride of sodium in a strong sulphureous water. A drachm of common salt in half a pint of Harrogate water, taken early every morning, and an enema of the same administered every night, will effectually expel the worms in conjunction with the superabundant mucus.

If irritating sebaceous mucus be the cause of irritation, and the prepuce be long, Lallemand has found circumcision to be the best remedy; and Mr. Athol Johnson endorses the recommendation, by the record of a case in which onanism was practised to a very injurious extent by a boy of six years old. The sense of hearing was considerably impaired; and Mr. Johnson, after trying many remedies in vain, removed a portion of the prepuce with benefit. (*Lancet*, April 7th, 1860.) So also in the female, should the pernicious habit be carried to the extent of endangering the intellect, the most promising remedy is excision of the clitoris.

In no bodily disturbance is the value of pain more manifest than in these cases of sclerosis of the spinal cord; but it is rendered conspicuous by its absence. In all other inflammatory conditions of the organ, local pain and muscular contractions are inestimable indications of treatment; and in tabes they would be a warning for the administration of the ergot of rye, iodide of potassium, and belladonna, at the precise period of time when irritation, congestion, and infiltration might possibly be arrested. It would appear that, in many baneful and morbific practices, a sense of shame is the only homage which vice pays to self-control; and that it precludes its victim from the seasonable benefit of that counsel which is the best protection against the retribution of a licentious assuetude.

The patient is fortunate who seeks and follows the physician's advice in time to be rescued from the consequences of absolute disorganisation of the spinal marrow; and in such a case the main indication of treatment is to restore muscular tone, and to subdue nervous susceptibility. This object is best attained by a mild unstimulating nourishment, by gentle tonics, and by protecting the patient as far as it is possible from salacious thoughts and feelings.

In many instances, the mere relinquishment of the enervating habit allows the natural elasticity of the constitution to regain bodily tone; but, when the sapped nervous centres and flagging muscles require the assistance of medicine, the unstimulating preparations of iron, combined, if necessary, with camphor or conium, are the best that can be given. The daily or occasional use of the bath, either tepid or cold, and in such a form as is found to promote the greatest amount of comfort and reaction, is a valuable remedy. The French give considerable faith to the sulphureous waters of Cauterets, Bagnères de Luchon, and Aix in Savoy.

Galvanism, by means of a weak continuous current, may be employed with advantage in restoring activity to the paralysed muscles. If the attempt be made through the influence of the sensitive branches of the spinal nerves, the current should be directed from the part moved by the palsied muscles to the spinal cord; but if the muscles are to be stimulated by the direct action of the galvanic current, it should be made centrifugally from the spinal cord to the muscles themselves. Both plans may be adopted; and Pulvermacher's galvanic band is, perhaps, the most convenient instrument to use.

After restoring to the several organs which may be implicated in the disorder their harmonious action, if debility of the genital organs be found to remain, such aphrodisiacs as the chlorate of potash, dilute phosphoric acid, and brucia, may be given; but it should be carefully borne in mind that temporary stimulants are worse than useless; and, in the category of this class of medicines, cantharides stand prominently forth as the active principle in the so-called Italian lozenges and Venetian pastilles, as well as in those nostrums which are daily advertised in our public journals.

[*To be continued.*]

* On the continent, and especially in the southern portions of it, sexual abuses are undoubtedly carried on to a frightful extent; and there M. Deslandes' statement may be founded on facts.

THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

By Thomas James Walker, M.D.(Lond.), etc., Surgeon to the Peterborough Infirmary and Dispensary.

III.—Appearance of the Normal Larynx, etc., as seen in the Laryngoscope.

Having described at length the instruments which we require in order to obtain a view of the larynx, and to treat its morbid conditions, I think it well, before giving directions for their practical application, to call to the remembrance of our associates, the different parts of the larynx and pharynx, and to indicate the appearance which these present when viewed in their normal condition by aid of the laryngoscope. In doing this, I do not think it necessary to give a minute account of each fold or fossa observed, nor to discuss the physiological bearing of the various structures; but simply to give such a description as may enable the observer at once to recognise what he sees and to distinguish what is healthy from what is morbid.

The parts of which the larynx-speculum affords us a view are, the back of the tongue, the whole interior of the pharynx, the larynx with all its constituent parts, a part of the interior of the trachea, and a part of the nasal cavities.

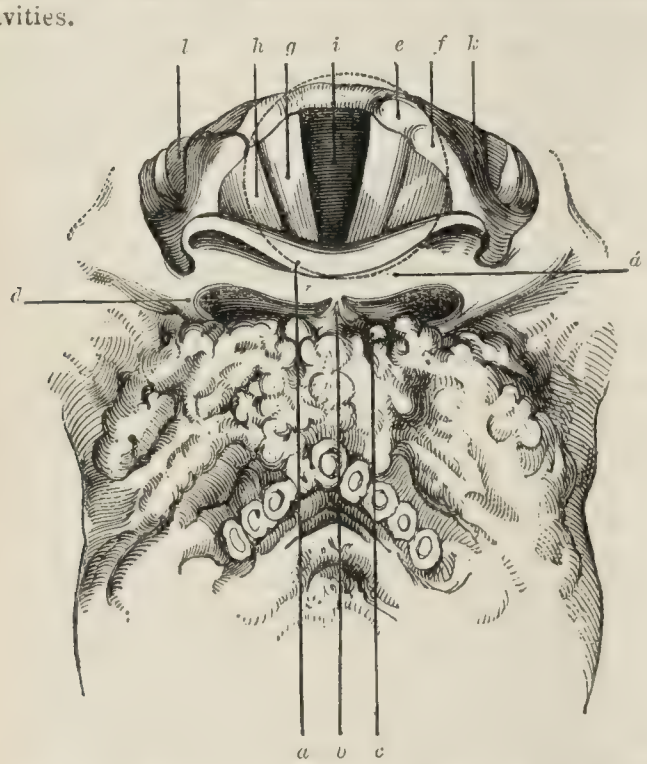


Fig. 6.—The base of the tongue and the larynx, etc. The dotted circle includes as much of the parts as is seen at one time in a moderately sized mirror. The engraving, with the exception of this ring, is taken from Türck.

On first introducing the instrument into the fauces, we meet with the image of the back of the tongue; and so little are we accustomed, when unaided by the laryngoscope, to examine this part of the body, that the V-shaped group of large circumvallate papillæ, and the generally irregular, almost warty, appearance of the surface of the base of the tongue, might be regarded as abnormal by the observer using the speculum for the first time. Even when the rest of the tongue is much furred, the elevations and irregularities at this part of the organ are free from fur, and they then show more distinctly against the surrounding surface. The mirror being advanced a little further towards the back of the pharynx, the epiglottis (*a*) is brought into view; when the tongue is drawn forward at the same time that the epiglottis remains in its usual position, we see that, stretching across the angle formed between the front of the epiglottis and the surface of the tongue, is the glosso-epiglottic ligament (*b*), which, passing from the centre of the base of the tongue back to the middle line of the front of the epiglottis, leaves on each side of it a deep fossa (*c*), named the vallecula; this groove is separated laterally from that in which the tonsil lies, by a band, more or less marked, passing from the base of the tongue, backwards and outwards, towards the hyoid bone. When the tongue lies quietly at the base of the mouth, its surface at the base and the anterior surface of the epiglottis are in contact, so that the valleculæ, etc., are not seen.

Immediately behind these parts, and always constituting a prominent object in the mirror, is the epiglottis (*aá*). This portion of the larynx differs much in appearance in different subjects; it is at once recognised standing up from the root of the tongue, of a more or less decided yellowish tinge; the yellow colour being more marked at the border, which presents a curved outline, the convexity of the curve being directed forward at the centre, while at the sides it is in the opposite direction. It is in the greater or less degree of these curves, in the more or less pointed character of the centre of its border, in the extent to which it stands up from the tongue, and in the intensity of the yellow tinge, that the epiglottis differs in different individuals. Thus, without being abnormal, the free part of the epiglottis may present the appearance of a thin, yellow, sinuously curved lamina, stretching from side to side of the fauces; or of a pink, thick, almost conical process, standing up at the centre of the back of the tongue. These differences in form appear to be independent of the character of the voice.

The position of the tongue and of the larynx, as well as the action of the muscular fibres connected with the epiglottis, regulates the amount of the surface, anterior or posterior, of the epiglottis which we see. It is most difficult to get a view of the posterior surface; and almost always, in our first examinations of the larynx, it is the anterior surface (*á*), with the frænulum or glosso-epiglottic ligament, which we catch sight of in the mirror; but by asking the patient to utter a high falsetto note, and in some cases without this, we may get a view of the posterior surface. This surface of the epiglottis is smooth; and may be described in general terms as convex from above down, concave from side to side; although Dr. Czermak has called attention to the fact alluded to in the minute descriptions of some of the old anatomists, that the curve from above downwards varies slightly in its course from the base to the summit of the epiglottis. Dr. Czermak has also pointed out the existence of a small prominence in the middle line, at the base of this surface; and whether this nodule have the physiological importance which he ascribes to it or not, it is as well that those inspecting the interior of a larynx should be aware that this nodule, when seen more or less developed, indicates nothing pathological.

The epiglottis (*a*) forms the anterior boundary of that part of the laryngeal wall which stands up free in the pharynx; the arytenoid cartilages (*c*), with the arytenoepiglottidean folds containing the cartilages of Wrisberg (*f*), constituting the remainder of this portion. This part of the larynx lies within the expanded alæ of the thyroid cartilage and the greater cornua of the hyoid bone, which are concealed in the pharyngeal wall; and it is supported on the cricoid cartilage, which lies imbedded in the surrounding tissues, so that only its inner surface can be seen without dissection.

The mucous membrane is reflected off the edge of the epiglottis towards the wall of the pharynx, expanding over the inner surface of the hyoid bone, thyroid cartilage, and pharyngeal muscles; while another fold, pass-

ing at a lower level backwards towards the arytenoid cartilages, and containing between its layers the fibres of the aryteno-epiglottideus muscle and the cartilages of Wrisberg, constitutes the aryteno-epiglottidean ligament.

Now, of these parts, that which next to the epiglottis usually constitutes the most prominent object in the laryngeal image, is the summit of the arytenoid cartilage surmounted by the cartilages of Santorini (*e*).

Even where the epiglottis is but imperfectly raised, these prominences may be seen on either side of the middle line, behind its upper edge; and they will probably be illuminated, even though an unaccustomed operator may not hold the mirror so as to throw into the interior of the larynx sufficient light for the display of the vocal cords.

It is hardly necessary to remind my readers that the arytenoid cartilages have the form of irregular three-sided pyramids, and are placed with their bases on the cricoid cartilages, while on their apices are situated the little cartilages of Santorini. As seen covered by the mucous membrane, these apices and the supplementary cartilages present the appearance of two rounded nodules, situated at the back part of the upper boundary, and constituting the apex of the somewhat triangular upper opening of the larynx. These nodules are in contact or slightly separated, according to the active or passive state of the vocal cords; the mucous membrane covering the prominences is smooth and pink; the cartilage, however, in some cases, shining through, gives it a yellow tinge, and the peculiar form of the conical apex curving backwards and outwards, clearly shows itself. The position of the mirror being shifted a little, or the epiglottis being carried more forward, the rounded, smooth, pink, aryteno-epiglottidean folds, are seen stretching outwards and forwards (upwards in the image) to the margin of the epiglottis, and forming the two sides of the triangular opening of the larynx. The cartilages of Wrisberg (*f*), lying in the edge of these folds, immediately in front of the arytenoid cartilages, constitute, in some individuals, prominences no less distinct than those formed by the latter, while in others they are scarcely observable.

Although the parts situated external to this upper boundary are to be noticed and require description, it is to those situated deep within the space it includes, to the true and false vocal cords and the laryngeal pouches that our attention is usually directed. Of these objects, the most prominent and the most important are the true vocal cords (*g*). They are seen as two tense white bands, about a line in width, stretching from before backwards, seldom seen at first in their whole length; the anterior angle, formed where they meet at their insertion into the lower part of the angle of the thyroid cartilage, being demonstrable only when the conditions are most favourable for the examination of the larynx.

If the patient be breathing quietly when the vocal cords come into view, they are seen to diverge, as they pass backwards to their insertion into the base of the arytenoid cartilages, so as to be separated posteriorly by an interval of half an inch or so. If the larynx be half closed, the vocal cord is seen to terminate in the prominent angle at the base of the arytenoid cartilage called the vocal process; and these vocal processes, in this state of the larynx, converging backwards, give to the rima glottidis the form of an elongated irregular lozenge. Our attention is, however, usually arrested by the vocal cords, when they are made to approach one another by the patient's uttering a vowel sound. Being thus made tense, they are thrown well out into the middle line, where there is, when the mirror is rightly held, the most brilliant light. Under these circumstances, they appear very distinct, of a bright white colour, and separated from one another by a narrow chink. If our patient is able to utter a prolonged high falsetto note, he can, by so doing, display his vocal cords very clearly in their whole length, parallel, and separated only by a scarcely perceptible fissure at their posterior part.

The mucous membrane covering the vocal cords is reflected from their under surface on to the cricoid cartilage and trachea; and, of course, neither the under surface of the cords, nor the part of the cricoid immediately below them, can be seen in the mirror held in the pharynx as I have described; from the upper surface of the cords, the mucous membrane is reflected on to the laryngeal wall, and about a line above them it forms a fold on either side called the false vocal cords (*h*); these projecting from the wall of the larynx but a short distance, still catch the light so as to be prominent objects in the laryngoscope; the mucous membrane is of the same pink hue at these folds as over the rest of the larynx, the small proportion of fibrous tissue contained between their layers not showing through; the sulcus existing between the true and false vocal cords, called the laryngeal sinus or ventricle, remains dark and in shadow in the laryngoscopic image, and is thus recognised between the bright fold of the false vocal cord above, and the glistening, tense, almost white band, the true vocal cord, below.

In most cases where we get a good view of the larynx, we may, by a little dexterous management of the mirror, shoot a ray of light down through the rima glottidis (*i*) into the trachea, so as to render the mucous membrane lining it visible, with the cricoid cartilage and the tracheal rings showing white and prominent through the translucent membrane. Very rarely the whole length of the trachea is thus illuminated, and the openings of the bronchial tubes into which it divides may be seen. By shifting the mirror, different parts of the tracheal wall may be seen, and ulcers, or other pathological affections, may be discovered.

The great freedom and rapidity of motion possessed by the chordæ vocales, cannot fail to strike the observer on his first obtaining a view of the interior of the larynx; the mobility is best seen when the person subjected to examination forces a laugh or cough, or utters a succession of vowel-sounds.

The false vocal cords do not possess any amount of independent action, but they approximate and diverge slightly, according as the general shape of the larynx is altered. Thus, in uttering a high falsetto note, the whole larynx is compressed from side to side, elongated from before backwards, and, of course, the false cords are approximated; so also, in the act of retching, the base of the tongue being depressed, the epiglottis stands very prominently up, and the sides of the larynx appear to approximate; in swallowing, it is probable that the false cords are also approximated, while, according to Czermak, the small fissure left between them is closed by the little nodule described as existing at the back of the epiglottis. These papers being, however, meant merely as a guide to the practical application of the larynx, physiological questions are avoided, except when they bear directly on the use of the speculum.

I have already stated that the walls of the larynx, within which are situated the parts just described, stand up free in the pharynx. On either side of these, therefore, is a sulcus bounded internally by the outer surface of the arytenoid cartilages and aryteno-epiglottidean ligaments (*k*), externally by the wall of the pharynx (*l*); in the outer wall of this groove, shining through the mucous membrane, and forming a more or less decided whitish prominence, may be seen the greater cornu of the hyoid bone; this fossa is not unfrequently the site in which foreign bodies, as small pieces of bone, etc., lodge and cause much annoyance.

At the back of the arytenoid cartilages, the mucous membrane is continuous with that of the pharynx; and here is situated the opening of the œsophagus; but of this opening nothing is seen, it being, in the normal state, so firmly closed that the mucous membrane

appears to be reflected from the base of the arytenoid cartilage on to the posterior wall of the pharynx.

There still remains to be described the appearance which the part of the pharynx situated above the level of the soft palate presents when, the face of the mirror being turned upwards, the posterior nares, orifices of the Eustachian tubes, etc., are seen reflected in it.

The practice of rhinoscopy, as the examination of these parts has been termed, is attended with many more difficulties than the examination of the larynx; and, in an ordinary case, it is hardly possible to get so full a display of the parts as that given in the accompanying engraving, which is an accurate representation of the appearance which they presented in a case where, the soft palate being completely divided, special facilities for their observation existed. I have, however, drawn the palate as though undivided and raised by a spatula; since, the bright end of the palate-spatula (*f*) being one of the first of the objects reflected in the mirror which catches the eye of the observer, a clear conception of its relation to the surrounding parts will assist him in adjusting the mirror so as to bring these into view.

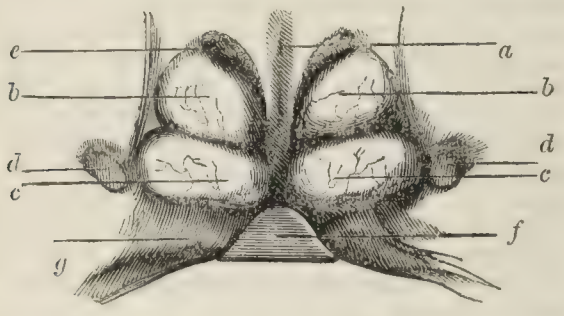


Fig. 7.—View of the posterior nares, the eustachian tubes, etc., as seen during life in the laryngoscope.

It is quite the upper part of the pharynx, with the expanded portion of the septum (*a*) formed by the base of the vomer, the two middle spongy bones (*bb*), and the nasal cavity between them, which, when the mirror is held in the middle of the pharynx, are first and most readily seen. It is more difficult to get a good view of the lower spongy bones (*cc*), and of the lower portion of the vomer, which parts are in shade from the prominence of the soft palate. The openings of the Eustachian tubes (*dd*) can be seen by sloping the mirror to one or other side.

The idea which we should form of the appearance of these parts from an examination in the recent state after death, or still more the idea formed from a knowledge of the skeleton in this region, is found to be very inadequate when we examine the nares during life.

The posterior edge of the septum narium (*a*) is seen now as a brightly illuminated pink column gradually tapering from the roof of the nostril to the floor, the lower portion receding between the prominent expansions of mucous membrane over the lower turbinated bones. At its upper and widest part, the septum is slightly grooved in the middle line; and here the mucous membrane appears whitish, from the vomer showing through. On either side of the septum are seen the rounded prominences of mucous membrane (*bb*) which project from the middle turbinated bones; they have a smooth shining surface, with a bluish tinge; and minute vessels are seen ramifying over them. The two are not absolutely symmetrical in size or form; they almost completely fill the upper part of the nares, and project back to a level with the border of the septum. Situated below these, and so close upon them that no view of the interior of the middle meatus is obtained, are the corresponding expansions over the lower spongy bones (*cc*); they are more flattened from above downwards, elongated laterally; they present a similar smooth rounded surface, with a slightly blue tinge, to that already described on the middle bones; they project further back into the pharynx than these. Situated more deeply in the superior meatus may be sometimes seen the small fold of mucous membrane corresponding to the superior ethmoidal spongy bone (*e*). These parts occupy almost completely the space of the posterior nares; but between them and the septum and floor of the nose are seen the dark spaces into which they divide the nasal cavity. The direction in which the light is thrown and the position of the mirror prevent our having a direct view into these, and cause the meatuses to appear in the engraving rather smaller than they actually are.

Situated in the lateral wall of the pharynx, immediately below and to the outer side of the attached edge of the lower turbinated processes, is, on either side, the orifice of the Eustachian tube (*dd*); these are irregular oval orifices, looking downwards and inwards, measuring, in their longest diameter, from two to three lines; the upper and posterior edge of the trumpet shaped opening of the Eustachian canal being bevelled off, we see the inner surface of the anterior lip, buried in the pharyngeal wall, apparently of a lighter colour than the surrounding mucous membrane, and having a yellow tinge communicated by the cartilage beneath it. In its course backwards and inwards to the ear, the tube causes a rounded prominence of the mucous membrane, as represented in the drawing. From the side of the pharynx at this point, the mucous membrane is reflected on to the soft palate; and a prominent fold exists at the lower edge of the orifice of the Eustachian tube, beneath which lie the fibres of the levator palati muscle. Of the objects I have mentioned, not only those situated at the uppermost part of the pharynx, but also the orifices of the Eustachian tubes, may be easily illuminated in any case where we find a palate capable of tolerating the spatula necessary to raise it; the mirror having its face directed laterally, to throw the light on to the parts situated out of the middle line. The lower part of the vomer and lower turbinated bone are, however, thrown into shadow by the soft palate (*g*) and the end of the spatula (*f*) with which we raise the uvula and draw the velum forward.

Of course, by using a small mirror and turning it to one side or the other, we may get a view of any part of the pharyngeal wall, and thus detect ulcers, morbid growths, and other abnormal conditions; but there is nothing more seen in the normal state of the parts which requires description.

[*To be continued.*]

The Cervix Uteri in Pregnancy. Dr. Matthews Duncan exhibited, at the Edinburgh Medico-Chirurgical Society, a dissection of the cervix uteri of a woman who died in the eighth month of pregnancy. She came into the Royal Infirmary labouring under typhus fever, and was under the care of Dr. Warburton Begbie. The length of the cervix was about an inch. Its external extremity, marked by an irregular row of Nabothean follicles, could be easily seen; and its internal extremity, continuous with the rapidly expanding smooth internal surface of the body of the uterus, was also distinct. The whole cervix was hypertrophied and softened; and this remark applied also to the arbor vitæ, of which the anterior and posterior columns were strongly projected. Dr. H. S. Wilson had, at his request, examined the internal surface of the body of the uterus microscopically, after detaching the chorion from it; and he had found no denudation of the muscular fibres, but the surface formed of a layer, detachable in an early stage of putridity, composed of decidual structures, especially of fusiform nucleated cells, which seemed to be less fusiform in shape and rounder the nearer they were to the chorion. (*Edin. Med. Journal.*)

Transactions of Branches.

EAST ANGLIAN BRANCH.

CASE OF ENCEPHALOID CANCER OF THE BLADDER: WITH REMARKS ON THE SEMEIOTIC VALUE AND TREATMENT OF HÆMATURIA.

By W. H. Ranking, M.D.Cantab., F.R.C.P.L., Physician to the Norfolk and Norwich Hospital.

[*Read at Yarmouth, June 26th, 1863.*]

The subject of the following case, which has recently proved fatal in the Norfolk and Norwich Hospital, first came under my notice as a private patient in consultation with Mr. Allen of Norwich. He was at that time 58 years of age, and lived in an ill-ventilated and low part of the city. He did not, however, appear to suffer from the unfavourable hygienic conditions by which he was surrounded; but with the exception of occasional rheumatic attacks, he had never had any serious illness, until the commencement of the formidable symptoms, which eventually proved fatal. Of these he was suddenly made aware, by finding that on attempting to empty his bladder, he passed a large quantity of blood. On this, he immediately placed himself under medical care, and it was after the failure of a judicious line of treatment by Mr. Allen, that I was requested to see him.

On visiting him, I inquired minutely into his antecedents, more especially with the view of ascertaining the source of the hæmorrhage, whether it was from the kidneys or from the bladder. To elucidate this important point, careful inquiries were made as to the prior existence of lumbar pain, and as to the fact of gravel or larger concretions having or not having been passed. I also inspected the urine as to the blood being intimately mixed with it, or whether the blood was passing either *per se* or in large quantities accompanying the discharge of urine rather than mixed with it. The discovery that the blood was passed under the latter conditions led me to the diagnosis, which was verified after death, of malignant disease of the bladder.

At this stage of the disease, as no suspension of the hæmorrhage took place, the man was made an in-patient in the Norfolk and Norwich Hospital, in October 1862. On admission, he was almost in a state of collapse, blanched to the greatest degree, and passing large quantities of dark blood, partly fluid, partly in clots, the passage of which caused much painful straining. On some occasions the entire discharge was fluid blood, by which the bladder had become so distended as to call for its evacuation. On this occasion also, as well as his fainting condition would allow, I obtained from him a confirmation of his former history, and when reaction permitted, requested Mr. Williams to explore the bladder. The result of this operation was, that there was no stone, but simply a thickened and pulpy feel of the coats of the bladder as imparted by the instrument. This was, of course, another link in the chain of evidence as to the real nature of the disease, and a microscopic examination of the blood was the only further step necessary. This was also obligingly done by Mr. Williams, with the result of finding cancer-cells, and thus settling the question definitively.

Any prospect of curing or even materially alleviating the symptoms of the patient being now regarded as distant, it still became a matter of urgency to arrest the bleeding, which was rapidly exhausting his vital powers; but as hitherto, all the medicines usually relied upon in such cases, as gallic acid, matico, turpentine, and acetate of lead, etc., had failed, this was a result not very easy to be accomplished. I had, however, several times and in serious hæmorrhages from other sources, as the lungs, bowels, and uterus, seen the good effects of a secret remedy known as Ruspini's styptic, and therefore determined upon its employment. Its effect in moderating the hæmorrhage was beyond expectation, three or four doses sufficing to make a marked change in the appearance of the urine, so that in three or four days all sanguineous colouration had disappeared. This might be thought by some to be a sequence, not a result; but further experience of the case proved cause and effect much more clearly than we are often able to establish with other medicines. In fact, from the ridiculously extravagant price of this remedy, it became expedient in a charitable institution to dispense with its use as speedily as possible, and it was accordingly suspended. But no sooner was this done, and gallic acid resumed, than copious hæmorrhage again appeared, and the styptic was a second time resorted to. This unlucky coincidence occurred again and again, till the persistence of the medicine was determined on, and with such good results in the mere absence of the sanguineous drain, that the patient gained so great an amount of strength as to induce him to return home.

After this period, he made several appearances at the hospital on the out-patients' days, but each time exhibiting a further increase of the exhaustion and cachectic pallor of the skin. As a matter of charity, therefore, he was readmitted on April 4th, in a state of great debility, but with the additional symptom of severe pubic pain, extending to the left testis and down the inner part of the left thigh. His bladder was now very irritable, acting painfully every hour; his urine containing much albumen and an abundance of lithates, but no blood. The pubic region was so tender at this time that he could scarcely bear the slightest pressure, but it was easy to discover the presence of a rounded tumour extending nearly to the umbilicus, and perfectly immoveable. This tumour gradually enlarged, and after a few days of increased suffering, he appeared to sink from exhaustion, and died twenty-four days after readmission; a suspension of the urinary secretion apparently having preceded the fatal termination.

The autopsy revealed an emaciated frame, with a manifest prominence of the lower abdominal region. The lungs and heart were healthy; the liver was of normal size, and on its diaphragmatic surface exhibited a large mass of encephaloid cancer, white and concave; the rest of the organ was apparently healthy. Both kidneys were large and deeply congested, and the left had its pelvis and ureter largely dilated and distended with urine. The lower part of the abdomen was occupied by a large tumour of the size of a child's head, evidently the bladder converted into a solid mass, by the occupation of its left wall by encephaloid cancer, which had so much developed itself internally as nearly to obliterate the vesical cavity. The iliac glands were also cancerous, and the vesiculæ seminales and adjacent parts were agglutinated together into a large supplementary tumour. The whole mass weighed three pounds, and was made up of soft medullary cancer, much of it in a broken down condition. The explanation of the enormously dilated ureter was found in the obstruction of its vesical orifice in the immense cancerous mass which had specially invaded that part of the organ. Under the microscope were seen the compound cells of malignant disease with abundant cancer-cell nuclei, but no fibres.

This completes the description of a case which represents one of the most painful diseases which medical experience presents to us. But the lesson offered by it is a poor one, if our attention be satisfied by the bare history of the poor patient's inevitable fate, and the ocular evidence of what had baffled all medical efforts at cure, and well nigh at relief also. Feeling this, if I have not already too long occupied your time, I would beg your attention to a few remarks on the diagnostic value of the main symptom, urinary hæmorrhage, and on the best mode of arresting that symptom.

When the case was first seen, it was naturally enough diagnosed roughly as *hæmaturia*; this term, however, is only descriptive of one objective symptom, not of the lesion from which the bleeding arises. In all these cases, therefore, it is necessary to turn over in our minds all the sources of bleeding from the urinary passages, not so much perhaps with reference to the treatment of the particular symptom, hæmorrhage, but for the purpose of arriving at data for a correct prognosis, on which a medical reputation may depend in fatal cases, as much as on successful treatment in curable ones. In following up this inquiry, it is practically perhaps most convenient to put questions first, having reference to the possible origin of the hæmorrhage in the kidney. We must ascertain, for instance, whether the patient have ever had gout, or whether his urine have been habitually highly coloured and charged with deposit, or more particularly if he have passed calculous concretions. If we elicit any affirmative evidence of this kind, associated with old standing lumbar pain, or with the history of an attack of nephritic colic, we may with some propriety regard the kidneys as the seat of the hæmorrhage, and this view will be confirmed, if the blood be intimately mixed with the urine instead of being passed *per se*, or in clots.

If, however, on the other hand, there be no precise history of lumbar pain, but only complaints of pain or uneasiness confined to the pelvic region; if the blood be passed pure and sometimes unmixed with urine, and more particularly attended with straining for the passage of clots, we shall be justified in suspecting the bladder rather than any other portion of the urinary tract.

But, having thus ascertained that the blood comes from the bladder, we have still the further inquiry to make, On what condition of the bladder does it depend? Is it caused mechanically by the wounding of the coats of the bladder by some foreign body, as a rough oxalate stone, for instance, or does it arise from some malignant disease of the bladder itself? This is an important question, for upon its solution depends not only our prognosis, but our treatment. In the case of a calculus, relief is obtainable by surgical measures; but, in the case of malignant disease of the bladder, surgical explorations are injurious, and death may be looked upon as ultimately inevitable. To make this diagnosis we have two sources of information to rely upon; that afforded by the general symptoms, and that of tactile evidence. For instance, in hæmorrhage from calculus, the bleeding is seldom copious, is only an occasional phenomenon, following perhaps upon some accidental cause, as riding on horseback, or a sudden jolt or fall. The hæmorrhage on the contrary, when arising from fungoid or cancerous disease is copious, passed pure as blood, and is accompanied by coagula; and if checked, as in the present case, will return at close intervals. As in this case also, the peculiarly cachectic aspect of the patient will suggest the true nature of the disease.

Respecting the treatment of hæmaturia, I shall not detain you long. I need only say that where the loss of blood is slight, and apparently caused by congestion of the kidneys only, as after scarlatina, it is to be met by such means as are likely to remove the congestion, as warm baths, medicinal sudorifics, and in some cases by cupping over the loins; but where the loss of blood by the urinary passages is in itself a formidable symptom, irrespective of its proximate cause, we shall find ourselves called upon to restrain it, at the urgent solicitation of the patient, if not at the indication of strict medical science. The drugs usually prescribed for this purpose are gallic acid in ten to twenty-grain doses, matico, and turpentine in from five to twenty drops. Each and all of these may succeed in individual cases of medium severity; but it will sometimes be found, where the loss of blood is more profuse, that the hæmorrhage, whether from the lungs, from the stomach, or kidneys, or still more so from a bleeding cancer of an internal organ as in our case, none of these remedies can be depended upon; and yet this profuse bleeding will be occasionally under the command of a medicine before mentioned, Ruspini's styptic.

No friend to quackery in any shape, as you know, and indisposed as I am to the use of any medicine which is not openly made known to the profession, I confess I have thought it my duty, where life was in the scale, to exhibit this preparation in various alarming hæmorrhages. Such has been the case with the subject of this paper, who has repeatedly had all traces of blood vanish from the urine after a few doses of it, to see the symptom as surely return when it was left off. I think you will allow this to be a sufficient justification for its exhibition.

A few more words with regard to this poor patient's end. As I have said, he left the hospital to all appearance with the complete subsidence of the hæmorrhage, the symptom which had most threatened his life. But the truce was fallacious; the malignant disease no longer bled, but it developed itself in the walls of the bladder with rapidity, until a tumour which reached the umbilicus was formed in the course of a few weeks, blocking up the ureters, and causing him to die much in the mode which is seen in fatal retention of urine.

TWO CASES OF EXCISION OF THE KNEE-JOINT IN CHILDREN.

By T. W. Crosse, Esq., F.R.C.S., Norwich.

[*Read at Yarmouth, June 26th*, 1863.]

In submitting the following cases to the notice of this meeting, I have no intention of entering upon the various disputed points which are involved in the subject of excision of the knee-joint. I do not propose to discuss the merits of "incisions," "saws," or "splints." My object is simply to record what has recently come under my own notice; to give you the history of my patients; to exhibit to you the parts that have been removed; and to tell you the results of my doings, as far as they go.

I may remind you that a few years since this proceedure, as far as regards children, was looked upon with some suspicion, from a fear that the patient would derive but little ultimate benefit, through want of parity in the subsequent development of the two limbs; and in 1859, my friend Mr. Oliver Pemberton, of Birmingham, called the attention of the profession to this point, and detailed, amongst others, two cases, in both of which there was shortening to the extent of five inches, six years after the operation. On reflection, however, the fact became more and more evident, that whatever the disproportion ultimately existing between the two limbs might be, yet that resection left the patient in a less mutilated condition, and certainly ensured upon recovery far greater comfort and facility in progression, than amputation. Writing to me on this point, Mr. Fergusson says, "In amputation you have mutilation to the extent of the leg and half the thigh. In excision you retain both leg and thigh, with the abstraction of a couple of inches of bone. Supposing the operation done within the first six years of life, and allowing for as much arrest of development as any theorist could name, allowing that the wound had healed and that the sole of the foot was on a level with the knee of the opposite limb, or even higher, the leg would still be better than a stump left after amputation."

With a belief in the force and truth of these observations, I had recourse to the operation in the two cases which I will now relate to you.

Case I. *Anchylosis of the Right Knee-Joint: Forcible Extension twice made, with Division of the Ham-String Tendons: Excision: Recovery.* M. F., aged 8, was admitted into the Norfolk and Norwich Hospital on July

17th, 1858. Two years previously, when sliding, she fell upon the right knee, and had been lame ever since. The joint was somewhat enlarged but not tender, and there was partial movement in it; the leg was considerably bent upon the thigh, and any attempt to straighten it gave great pain. The patella appeared to be anchylosed to the external condyle. She was a strumous looking child, but had generally enjoyed good health.

On July 21st, I forcibly extended the joint under chloroform, and brought it into a much straighter position. There did not appear to be very many, nor any very firm adhesions broken through by the force which was used. The head of the tibia, however, appeared much displaced, and drawn backwards. The ham-string tendons were not divided. The limb was firmly bandaged to a splint placed at the back of the leg; no disturbance of the joint or system ensued, and whilst she remained in the hospital the limb seemed gradually to become straighter. She was made an out-patient in the following November, when she was able to walk a little better, though still very lame; and the knee was very tender to the touch.

On February 12th, 1859, she was readmitted. The knee was enlarged and very tender, and the relative positions of the patella, tibia, and condyles of femur remained the same. The limb had again become flexed and firmly fixed in the same position (nearly at right angles) as it was on the former occasion. Forcible extension was again resorted to, and division of the ham-string tendons effected. After this she improved considerably, and in January 1861, I find the following note in my case-book: "I see this patient from time to time; she is able to get her heel down upon the ground and to walk about, although very lame. The knee-joint remains stiff."

In May 1862, she was again readmitted, having within the last two months become much more lame. There was no history of any injury or accident to account for the accession of pain and lameness; her general health appeared to be pretty good. The leg was bent at right angles to the thigh, and could neither be flexed nor extended. The knee-joint was not swollen nor very tender on pressure. She could only walk on crutches.

On June 13th, I resected the joint, making a single straight incision across the front of it, just below the patella; and when I had sufficiently cleared away the soft structures from the front of the femur and the head of the tibia, I sawed out a wedge-shaped portion of bone, cutting first through the femur and then through the tibia; a second slice having been removed from the latter, the surfaces were adjusted and came well into apposition. Only two or three vessels required ligature at the time, but a few hours afterwards I had to secure no less than ten bleeding points. The wound was closed with sutures, and the limb placed in a McIntyre's splint, well padded, with an additional long, wooden, interrupted splint along the outer side, from the hip to the heel.

On examining and measuring the parts removed, it appeared that about an inch and a half of the lower end of the femur and an inch of the head of the tibia had been taken away. You will see by the macerated and dried specimen on the table, that the entire epiphysis has been included in that portion which belongs to the femur; and also that there is firm bony anchylosis between the patella and external condyle, and between the head of the tibia and the condyles of the femur, the former being in a line quite at right angles to the latter: there does not appear to be any displacement of the tibia backwards as was thought, and the cancellous texture generally appears to be firm and healthy. There was no trace of synovial disease.

Perfect rest was carefully ensured for three weeks, at the expiration of which time the splint was changed. Consolidation took place very slowly, but the patient's health did not appear in any way to suffer by the confinement, although she was a feeble and delicate child; and after a while, with cod-liver oil and good diet, she greatly improved and gained flesh.

She left the hospital on November 15th, able to walk without stick or crutch, and placing the sole of the foot firmly and flat upon the ground. At the time of her discharge, there was a small fistulous opening on the outer side of the leg near the wound.

I last saw her about six weeks since, when her condition had still further improved, and the union of the bones was firm and solid. The photographs on the table admirably illustrate her condition before and after the operation.

Case II. *Disease of the Knee-Joint, with Incomplete Anchylosis: Excision.* W. G., aged 7, came under my care at the Jenny Lind Infirmary, in April 1861, with an affection of the left knee-joint. A month previously he had received an injury, and on admission, the joint was swollen and tender; its movements were impaired and painful; and there was also slight contraction of the leg.

Under appropriate treatment he improved, and the limb became straighter. He was readmitted several times, always getting worse when out of the hospital, and improving very much when an inmate of it. About two months since an abscess formed in the ham, which slowly healed; for this he was brought to me, and, deeming it a favourable case for excision of the joint, I took him into the Norfolk and Norwich Hospital last April. The following was then the condition of the limb.

The knee was fixed, or nearly so, at an obtuse angle, and the patella was firmly anchylosed to the external condyle of the femur. There was some motion in the joint, which was not enlarged nor tender on pressure; but he suffered very acute pain at night. In standing, he rested on the ends of the metatarsal bones, and his heel was two inches from the ground. The head of the tibia was somewhat displaced backwards, giving the limb a twisted appearance. He generally walked with a crutch, without which his method of progression was extremely limited and awkward. The cast now presented to you, illustrates the condition just detailed.

On June 12th, I made a straight incision across the front of the joint, and removed a wedge-shaped portion of bone, which comprised two inches of the lower end of the femur, and about an inch and a half of the tibia. Only two vessels required a ligature, and the parts came very well into apposition when adjusted and fixed in a well padded McIntyre's splint. As you will see by the specimen, there is very little disease of any sort about the joint; the cartilages appear very nearly absorbed, and there is a small carious cavity in the head of the tibia. There were firm fibrous adhesions existing, but most of these were broken down at the time of the operation, when the limb was unintentionally flexed rather forcibly by an assistant. The external articulating surface of the head of the tibia is quite worn away, and bevelled off, and the space between it and the external condyle filled up by a mass of fibrous and fatty textures, most of which I have since cut away. The cancellous structure mostly appears firm and hard, and the patella is firmly adherent to the external condyle.

Up to the present time, this case has progressed satisfactorily. No great constitutional disturbance has taken place; the limb lies easy and straight in its splint, and the parts appear to be consolidating, whilst the external wound is slowly healing by granulation.

At some future time, when this Branch honours the city of Norwich by holding its annual meeting there, I hope to introduce both these patients again, personally, to the members.

P.S. Aug. 3rd. This patient has made a good recovery, and now gets about on crutches. A starch splint has been applied to the limb. The heel comes down well to the ground; and he can bear some weight upon it.

British Medical Journal.

SATURDAY, AUGUST 22ND, 1863.

THE PUFF PROFESSIONAL.

We some weeks ago referred to the injury done to the public and to the profession through the unreasonable laudation or untimely puff given to a supposed remedy for small-pox. An honourable member of the profession, contrary to all medical logic and sane medical observation, drew violent conclusions from antecedents which in no kind of way justified them, and then rushed into the public prints, exciting and inflating the anticipations of the public, and causing thereby serious annoyance to the profession, as well as eventual grievous disappointment to the expectant public. Surely we, as professional men, may ask: If the remedy were really worth a farthing, why need it have been puffed in the public journals? Why was it not enough that its praises should be sung and its real uses regularly developed in the professional journals, so that its value might be tested by the gauge of time and a more extended experience? We refer to this case, because those who need it, and they are not a few, may learn a valuable lesson from the tale. This very remedy, this sarracenia, the dead-shot cure of small-pox, "of which every country gentleman ought to keep a supply", as we were told *per* the *Times*, tried and tested in a calm and philosophical way in the Small-pox Hospital by Mr. Marson, is pronounced to be utterly valueless.

Here, then, we have, on the one hand, a gentleman blowing the trumpet of sarracenia in the *Times* on manifestly (by his own showing) the most defective data; and then, again, we have Mr. Marson, one of our best authorities on small-pox, after careful and manifestly fitting investigation, telling us that the sarracenia is as valuable in its effects as a decoction of dried cabbage-leaves; and, more than this, we have the *Lancet* actually copying into its pages, from the columns of the *Times*, the puff on sarracenia.

Well, and now comes another strange and incongruous production—

"Desinit in piscem, mulier formosa superne";

and it is called *The New Treatment of Epilepsy*. A printed pamphlet of eight pages lies before us, marked "private"; and it announces "a new curative system". For whose benefit it was so printed our readers must themselves guess. But, as so great a boon should not be hid under a bushel, we suppose we may fairly tell our readers all about it. The pamphlet is signed by John Chapman, M.D.; and to it is appended a note from Dr. Druitt. Dr. Chapman pretends to a great discovery in the treatment of epilepsy. Well, if he have made a real discovery, why need he publish a pamphlet marked "private" on the subject? And why, again we ask, need a letter be appended from a friend, in the form of a certificate of the truth of the discovery? Surely, if Dr. Chapman's facts be true, the announcement needs not the certificate of a friend. We are satisfied that Dr. Druitt never for a moment contemplated that such a note as is his on the subject would have been thus put in print by Dr. Chapman. It appears to us, indeed, very much like the kind of note which one gives to a troublesome friend to get rid of him. "Dr. Druitt", Dr. Chapman writes, "has been kind enough to express himself concerning the results which he has seen of the practice, based on the discovery above mentioned, as follows:—

"Dear Dr. Chapman,—I must confess that I was agreeably surprised at the results of your treatment of paralysed and epileptic patients. . . . . I carefully interrogated the five patients whom you allowed me to see on the 17th inst., after you had read me their histories, and explained the treatment you had adopted. In each case I was satisfied from the testimony of the patient, or from that of the wife or nurse who accompanied him, that your report of the previous history was quite correct; and there was no mistaking the testimony of the patients, that the results of treatment had been most beneficial. I learned from all the patients that the treatment had made them 'more comfortable'. . . . . The results which I saw were partial restoration of power in a case of progressive wasting palsy, and diminution of the number and severity of epileptic fits, so much as almost to warrant the hope of a cure; and the removal of some distressing symptoms, such as inability to hold the water; which last result is a most important and beneficial one, even if it stands alone. "Believe me, etc.,

"R. Druitt."

We need not stop to remark upon the value of this note. As we have said, we are sure that a scientific observer like Dr. Druitt does not really settle questions of high physiological and pathological importance in such a slipshod fashion as this. Dr. Druitt knows better than to bring such important things as these before the profession on the mere *vivâ voce* testimony of five patients whom he sees once on a given day; and, besides, Dr. Druitt has in his own experience, no doubt (like all the rest of the world), met with cases of epilepsy in which the number and severity of the fits have been diminished by treatment, long before he heard of, or passed judgment on, this new (as it is called) practice of Dr. Chapman. Clearly, this letter was never meant for publication; so we will say no more about it. But we must confess a degree of surprise to see this "new treatment of epilepsy" paraded in one of our medical journals, and in a way which has naturally led to its glories being translated thence into the daily press; though, curiously enough, the editor of the medical journal, who heads it "New Treatment," etc., actually calls it—viz., the alternating application of heat and cold—"an old remedy in itself; but

the author may claim it as a new one in the intention, and method, and results."

Now, we ask the profession, is this the way in which great discoveries should be introduced to the world? Have we any right or sense in going to Parliament, and in asking for some method of regulating physic and its practice by Act of Parliament, so long as we carry on our scientific business in this way? A new method of cure of a hitherto admittedly incurable disease, announced in a pamphlet published for private circulation; a note from a friend of the discoverer, certifying to the efficacy of the wonderful remedy, the certificate being founded upon evidence of the very weakest character, in a scientific point of view not worth a second thought; and then, finally, a notice in a medical journal of "a new treatment of epilepsy", which finds its way, in due course of time, into the public prints, and (which, of course, was the last thing intended by the writers) comes in this way to the ears of the nervous and epileptic portions of humanity, who will, inflated with hope, only too greedily accept as positively true what is so far a simple announcement to the profession.

ST. THOMAS'S RESTING-PLACE.

The governors of St. Thomas's Hospital have at last fixed on a site for the elevation of their new hospital, as will be seen from the following extract from the report of the Metropolitan Board of Works:

"The report of the Thames Embankment Committee was then brought up, and stated that Mr. Baggallay, the treasurer of St. Thomas's Hospital, proposed to form a suitable site for the new hospital on the ground of the southern embankment, nearly opposite the Houses of Parliament. The committee had entered into an agreement with the authorities of St. Thomas's Hospital, subject to the approval of the Board. The terms were that the land required, amounting to about eight acres and a half, should be sold to the hospital for the sum of £95,000, the Board of Works to make the embankment and level the ground by the 31st of December, 1865. After a long discussion, the report was adopted, and the chairman was authorised to communicate to Mr. Baggallay that his offer was accepted."

This is the bargain which we recently communicated to our readers. As the affair is concluded, it is useless further to speculate upon its advantages or disadvantages. It is impossible, however, not to express a regret, that Bethlehem was not the site. Of course, the governors of St. Thomas's have nothing to do with the welfare of the lunatics in Bethlehem; but as philanthropy is an universal sentiment, the public in general will (we have no doubt) lament over the glorious opportunity lost of doing two blessed deeds at one throw—of sending Bethlehem into the country, and fixing St. Thomas's on Bethlehem's present site. It is hard to suggest one valid objection to the excellence of the Bethlehem site; and easy, if the voice of general humanity were alone heard in the work of charity, to suggest a score of powerful ones in favour of it.

However, if this Stangate site is to be the one, we must now content ourselves with asking, When will the new hospital rise to life and action? Will it be in five, ten, or twenty years? Will any of the present medical officers live to exercise their functions within its walls? We sincerely hope that they all may. But hope often makes the heart sick; and here we have, indeed, a long deferred hope to practise. The very ground on which to lay the foundation-stone of Stangate has yet to be made. The Board of Works, it is true, promise to have the embankment ready and the ground level by the end of next December two years! If they keep their promise, therefore, the present or future governors of St. Thomas's may lay their foundation-stone in 1866. In the meantime, during the next two years and a half, there will be a grand opportunity for architects and sanitarians to exercise their inventive faculties in the discovery of the most perfect plan for the construction of an elegant and modernised hospital—a plan which shall not disgrace, but rather set off, the building, on the other side of the Thames, and be perfect in its sanitary arrangements. We must add, however, that one great functionary may yet intervene in the bargain; viz., the Lord Chancellor. He is a court of appeal; and can put his veto on the bargain, if he consider cause sufficient be shown against this Stangate scheme.

A daily paper makes a few restrictive remarks worthy of note; they certainly read somewhat like the invention of the enemy. But, nevertheless, it is sometimes a good word that our enemies tell us. "*Fas est et ab hoste doceri.*"

"If all goes well—if our main drainage scheme is a complete success—if none of the sewage discharged into the Thames at Barking Creek is ever brought back to Westminster by the action of the tide—if the land is thoroughly reclaimed—if the embankment fully answers its purpose—and if the constantly increasing number of offensive manufactories does not prejudicially affect the sanitary condition of the neighbourhood—then Stangate will answer fairly enough for the purposes of St. Thomas's. But that hospital, for centuries the special benefit of all South London, will be widely changed in character; and, from participation in its advantages, an immense population will be comparatively shut out. It is only fair to state that the medical staff have reported very favourably upon the new locality, and we need not say that, wherever the charity may be situated, these gentlemen will do their duty with all the zeal and ability they have hitherto displayed. The settlement, however, is one which settles nothing. What is to become of Bethlehem? Sixty of the governors of Bethlehem are also governors of St. Thomas's; and the time will come when negotiations conducted with a suspicious secresy will be brought plainly into the light of day. Meanwhile, it is impossible that Bethlehem, in the face of the strong censures passed upon it by the Commissioners of Lunacy, can remain where it is. Two difficulties might have been solved at once in a manner that would have benefited, not perhaps the governors, but at any rate the patients of both hospitals. The opportunity

was a magnificent one; and heavy is the responsibility of those who have neglected it. Only a brief period can elapse before the examination into the management of our charitable institutions, which was foreshadowed in Mr. Gladstone's memorable speech, will actually commence. The governors of St. Thomas's best know in what estimation they will be held by the public when that inquiry shall have concluded."

MEDICAL SUPERINTENDENTS OF RAILWAY COMPANIES.

The position in which a medical superintendent of a railway company is placed is a mixed one. He has to attend to the interests of the company which he serves, as well as to the performance of the more proper and immediate duties of his profession—the cure of the sick and wounded. This compound position, in which he is often called to act, naturally sometimes renders the performance of his duties somewhat difficult and delicate. A letter published in a late number of the Journal is an illustration of this fact. As the matter is one of rather wide importance, we think it well to make a few general remarks on the subject.

The appointment by railway companies of medical superintendents, to attend to those unfortunates who may be injured by railway accidents, is a laudable and a humane practice. But it must be remembered, in saying this, that the companies, in doing the humane thing, have also their own interests very particularly in view; and we blame them not for it. One of the duties of the medical superintendent, besides that of ministering to the injured individual, is to protect the company against possible and probable imposition which may be attempted on the part of the injured. The medical officer, therefore, in this respect, certainly represents the interests of the company, as against the interests of the patient.

We willingly admit that, as a rule, railway companies are, in the matter of compensation to injured passengers, more sinned against than sinning, and are inclined to be liberal and generous; but still the fact remains—viz., that the medical officer, in visiting the injured party, comes to take care of the interests of his company, and not simply and purely, as a ministering angel, to heal the injured. Under such circumstances, it seems to us evident that the strictest professional etiquette should be observed by the medical officer so employed in all the relations into which he may be thrown with reference to the ordinary medical attendant of the injured party, or to any medical attendant who may be carrying out the cure.

Railway companies, it must be of course admitted, have a perfect right to keep their own medical officer for the purpose of attending upon any person injured on their lines; but they clearly have no power to enforce on any injured person the attendance of their medical man. The injured party has a right to select his own medical adviser. Moreover, no medical officer of a railway company can claim as a right the power of visiting a party so injured, in order to learn the extent of his injuries, or for any other purpose. If he gain admission to the sick bed of the railway-smashed patient, he clearly does so solely by permission of the patient himself. Such being the facts of the case, as we understand them, it seems to us that the medical officer of a railway company is bound to follow most strictly the rules which guide other members of the profession under such circumstances. His being officer of the company in no way relieves him from obedience to the accepted rules of medical etiquette. Now medical etiquette clearly dictates that one medical man cannot properly visit the patient of another medical man—except temporarily in his absence, or in cases of urgency—without the knowledge or consent of the medical man already in attendance, and especially if uninvited to do so, or without the permission of the patient or his friends. At the moment of an accident, the company's officer of course, when present, gives his aid and advice without question. But this is a very different affair from visiting the injured parties whom he has never seen, after the accident, and when they are already under the care of some other medical practitioner. When the injured parties are under the care of their own selected medical man, it is, in our view of the case, clearly the duty of the company's officer to visit them only in consultation with, or with the consent of, the medical man in attendance, as well as under permission from the injured party. It will not do to say that in such case the medical officer does not visit the injured individual simply in his quality of practitioner of medicine, or that he attends upon him in some other "ministering" function; and for an obvious reason. The injured party, it is evident, admits him to his presence solely in his medical capacity, because he thinks, in fact, that he will have the benefit of his medical experience, or that the company's doctor is the bearer of some comforts to him. Certainly the sick man does not regard the doctor in the light of an agent come to make the best bargain he can for the company he serves; and we trust he never may. We think we may truly say, indeed, that it is under the guise of a practitioner of medicine that the company's doctor gains admission to the sick-room. If he claimed admission solely as an agent of the company come to assess the amount of damage done, it is clear that his claim would be rejected.

The reputation of the whole profession, it must also be remembered, is involved in a proper management of this very delicate business of medical superintendent. Our readers will, no doubt, be able to

recollect the very strong language in which judges have reprobated in courts of justice the abuse of the influence exercised by medical men in this character. We believe, as a rule, that medical superintendents exercise their office with great honesty and discretion; but we must nevertheless remark, that the position is one which especially demands most minute attention to the preservation of all the rules of medical etiquette.

We take it, therefore, as a fact, that no medical superintendent of a railway company does or can in reality enter the sick-chamber of a party injured on the railway, except in his capacity of medical practitioner—of curer of disease; and we follow out the logical conclusion, which is, that he must most punctiliously carry out all the ordinary and accepted rules of etiquette which regulate the intercourse of members of our honourable profession under such circumstances.

BDELLATOMY.

The snipping off the tail of a leech engaged in sucking human blood, in order to let the blood run out of him, and so increase his powers of drawing blood, is an old and well known operation; but it has two objections, and has never found its way into common every-day practice. It is only of partial utility, and destroys the leech. Dr. Julius Beer of Berlin has recently taken up the subject in a more scientific manner, and now proposes, as an excellent and useful practice, what he calls bdellatomy—*Anglicè*, leech-cutting. The leech is to be cut into scientifically at the lower part of the abdomen, in a somewhat transverse direction. In this way is opened the most posterior of the blind appendices of the intestinal canal, of which the leech has ten or twelve; and a free passage is made for the escape of the blood which the leech is sucking. In this way, one leech (bdellatomised) may be made to serve the purpose of several leeches used in the ordinary way. Dr. Beer especially calls attention to the advantage in the case of children, in diseases of the uterus and of the eye. He lays especial force on the advantages of the method in the latter case; and *bdellatomia ophthalmo-therapeutica* he calls the treatment. The operation does not appear to interfere with the due performance of his medical duties by the leech; and Dr. Beer says that one such leech generally does all that is wanted. When such a leech is removed from the place where he is sucking, he will take hold at another place; and so on again and again. Dr. Beer says that he has had leeches, thus prepared, who for six days running performed their duties in this way, passing off the blood either through the original wound or through a freshly made one. He measures the quantity of blood obtained by letting the tail end of the leech hang in a glass containing distilled water. Three objects are gained by this method, he tells us: 1. Humanity suffers less; 2. Economy is promoted; and 3. Precision is introduced into the art of local blood-letting.

VIVISECTIONS IN FRANCE.

We are very glad to find that the French medical journals are entering protests against the cruel abuse which is made of vivisection in France. *L'Abeille Médicale* says:

"I am quite of your opinion as to the enormous abuses practised at the present day in the matter of vivisections. Exaggeration compromises the cause which it would defend; and in this way let us take care that vivisection is not condemned through the saturnalia which are performed in its name. The practice of vivisection should be confined within wise limits. In the laboratories of the College of France, in the Jardin des Plantes, in the Ecole de Médecine, eminent professors, placed at the head of instruction, are forced to the painful sacrifice of destroying animals in order to widen the field of science. In doing so, they act legitimately; and suffering humanity demands it of them. Those experiments are performed in the silence of the private study; and the results obtained are then explained to the pupils or treated of in publications. Whether useful or not in a practical sense, these results are accepted with that consideration which the position of their authors naturally commands. But to repeat the experiments before the public, to descend from the professional chair in order to practise the part of a butcher or of an executioner, is painful to the feelings and disgusting to the sentiments of the student. Charles Bell, Magendie, Flourens, Cl. Bernard, have made many experiments; but these experiments are not repeated at the College de France. Such public exhibitions are ignoble, and of a kind which pervert the generous sentiments of youth. An end should be put to them. Ought we to allow the *élite* of our French youths to feed their eyes with the sight of the flowing blood of living animals, and to have their ears stunned with their groans, at this time of day, when society is calling out for the doing away with public executions? Let no one tell us that vivisections are necessary for a knowledge of physiology. Bérard taught that science for many years, but never did he practise needless and painful experiments before his hearers. If the present ways, habits, and customs are continued, the future physician will become marked by his cold and implacable insensibility. Let there be no mistake about it: the man who habituates himself to the shedding of blood, and who is insensible to the sufferings of animals, is led on into the path of baseness."

So writes *L'Abeille Médicale*. But here *L'Union Médicale* takes up and comments on the tale:

"This is all excellently said; but we must correct a few errors. Magendie, alas! performed experiments in public, and sadly too often at the College de France. I remember once, amongst other instances, the case of a poor dog the roots of whose spinal nerves he was about to expose. Twice did the dog, all bloody and mutilated, escape from his implacable knife; and twice did I see him put his fore legs around Magendie's neck and lick his face. I confess—laugh, Messieurs les Vivisecteurs, if you please—that I could not bear the sight. And again, helas! M. Cl. Bernard performs vivisections in public in his course of physiology. It is, indeed, true that Ph. Bérard, professor of physiology, never performed a single vivisection in his lectures, which were brilliant, elegant, and animated. But Bérard was an example of a singular psychological phenomenon. To-

wards the close of his life, so painful to him was the sight of blood and the exhibition of pain, that he gave up the practice of surgery, and would never allow his students to witness a vivisection. But Berard was attacked by cerebral hæmorrhage, and the whole tone of his character was thereby afterwards changed. The benevolent man became aggressive; the tolerant man, irritable; the hesitating and doubtful man, resolute and positive. Moreover, he became an experimenter, and passed whole days in practising vivisections, taking pleasure in the cries, the blood, and the tortures of poor animals. Let us use, but not abuse, the practice. But where does the use end and the abuse commence? This problem, we are assured, is clearly laid down in the late Professor Moquin-Tandon's report, which we hope will be soon given to the profession."

THE WEEK.

The *Gazette* of Tuesday week contains the announcement that the Queen has been pleased to confer, by letters patent, the dignity of knighthood on "James Coxe, of Kinellan, in the county of Edinburgh, Doctor of Medicine, one of the Commissioners of the General Board of Lunacy in Scotland." The honour is worthily bestowed. It is mainly to Dr.—or rather, we must now say, Sir James—Coxe, that the improvement in the treatment of pauper lunatics in Scotland, which has been effected within the last few years, is due. He was the author of the *Report of the Royal Commission of Inquiry* into the state of lunacy in Scotland, which six years ago excited so much amazement, and led to the formation of the Scottish Lunacy Board, of which Sir James Coxe and Dr. Browne are the principal members.

Another of those trials has been reported in the journals which often bring no great credit to our profession; we mean an action against a railway company, involving injury to the plaintiff. The usual array of medical authorities were brought to bear one against the other, and to a great extent in the way of flat contradiction. For the plaintiff we have Mr. Williams of Neath, who "believed that the plaintiff had sustained an injury in the shoulder, and that he would never entirely recover the use of it." Mr. Hall of Swansea gave similar evidence, and said that "it would be difficult to say when he would recover." Mr. Erichsen opined that he had received "a severe contusion of the shoulder, possibly a rupture of some muscle; but thought that he might recover in time." Mr. Partridge gave similar evidence. Mr. Jones, "a surgeon of long practice in London, stated that he considered the injury much more serious than had been described by the previous witnesses. He knew a very similar case which had ended in apoplexy." To set off against this evidence for the plaintiff, the company produced the following medical evidence.

"Mr. Anderson of Leicester, who had examined the plaintiff at once, stated that he saw no marks of a serious blow; and he should think that a severe injury to an interior muscle could scarcely take place without some bruise, or discoloration, or swelling.

"Dr. Bolton, who had seen the plaintiff just after the accident, stated that there was no bruise, discoloration, or swelling, nor any drooping of the arm, or any difficulty in raising it that he could discern. He thought the plaintiff was shamming to some extent.

"Mr. Lankester of Leicester, who had seen the plaintiff daily for a fortnight, gave similar evidence, and said he thought the plaintiff was shamming.

"Mr. Paget of Leicester stated that there was a contusion; but he said he had never seen any serious injury from such a cause, and told the plaintiff he would be well in six weeks.

"Mr. Jones of Neath believed that he to a great extent exaggerated the injury, and simulated pain and difficulty in moving his arm.

"The next witness was the illustrious and venerable surgeon, Mr. Lawrence, whose evidence was listened to with the utmost attention and interest by every one, especially the many medical men present. He stated that he had examined the plaintiff carefully, and heard his account of the accident and the effects. There was stiffness in the shoulder-joint, but no impediment to motion of the arm or hand. The patient resisted the attempts he made to move the shoulder-joint, and it appeared to him that he resisted voluntarily. Drawing off his attention, he found he could move the arm more readily; and he also found that the patient showed power in his hands when he said he had none. He had observed the plaintiff, even in the witness-box, using only his left hand; whereas he knew he could use his right. His own opinion was that there was merely a bruised shoulder; and that, had the man come to him, he should have treated it as such; but complete inaction had increased the stiffness. It appeared that the plaintiff had kept his arm bandaged up for five months, and he supposed it was worse now than it had been at first. The witness said he thought there was nothing serious the matter with the plaintiff, and believed he was shamming in a great degree. There was genuine stiffness now, but caused by the five months inaction of the arm."

The jury, as usual, gave a verdict against the railway company.

We are glad to find, that the action of Morgan *v.* Lingen, which, as our readers may remember, was postponed from the last assizes at Hereford to the present, has gone completely in favour of Dr. Lingen. The action was brought "for speaking and writing and publishing slanderous and libellous words of the plaintiff, to the effect that she was suffering under delusions, by reason of which the plaintiff was injured in her profession of a governess." Baron Martin, in summing up, said:

"The law now left it to the jury to say what was or was not a libel; but he would give them his opinion to assist them. It was that a statement in writing that a lady's mind is affected, and that seriously, is without explanation *primâ facie* a libel; and, therefore, the letter to Mrs. Williams of September 5th was *primâ facie* a libel. Then came the question, whether it was a privileged communication, or what constituted such a malicious publication of statements injurious to the character of another as to enable an action to lie. Such a publication is malicious unless made by a person in discharge of a public or private duty arising out of a matter in which he is concerned, and made without malice; but if fairly warranted by any reasonable exigency, and

honestly made, it would be privileged. The question, therefore, for the jury, would be whether the letter of September 5th was fairly warranted by a reasonable occasion or duty, and honestly made—that is, with a *bonâ fide* belief in its truth—and they would judge of this by the knowledge the defendant possessed at the time he wrote that letter. The letters to the brother and to Mrs. Jones (his lordship said), in his opinion, were not libels. As to the slander, he thought there was no evidence of any special damage. Then they must consider whether the defendant ever intended to use the expressions he did with reference to the plaintiff's profession of governess."

The jury retired, and subsequently found a verdict for the defendant.

The report on the subject of vivisections, drawn up by the late Dr. Moquin-Tandon, has been presented to the Academy of Medicine. The following are the general conclusions arrived at by the commission appointed to investigate the subject.

"1. Vivisections are indispensable to physiology, and operations on living animals are necessary for learning the manœuvres of operative medicine in the veterinary art. 2. They should be undertaken with reserve, and the greatest care should be taken not to give them a character of apparent cruelty. 3. The experimenter should always have in view a real progress in science. 4. Students should not perform experiments except in the great centres of study, under the direction of the professors. 5. Every means at the disposal of science for the diminution of pain should be put into requisition by the experimenter."

M. Debout says that sugar is an excellent destroyer of worms. He once accidently put sugar instead of salt on a leech which he wished to detach from the skin, and was surprised at the spasms produced by it. He therefore tried sugar on earthworms, and found it had a similar powerful effect; and has since used it in solution with success as an injection in children.

The French medical press thus talks of the late College of Surgeons election. "This annual election of Councillors has been a great triumph for *individual initiative*. Heretofore the election has been a mere form, the members going on being re-elected. But abuses increasing in the bosom of the learned assembly, and ameliorations and reforms being negatived, the *Fellows*, members of the College, determined to use their power of election to make an example, and put an end to such a state of things! To combat the Council and its influence, the voters in great number voted as one man (*sic*) in favour of MM. Lane, Busk, and Hancock. A lesson this to conservatives, to teach them how to yield reforms in time, in order to avoid revolutions!"

The *Morgenblad*, a Christiania journal, tells us as follows: "At the request of Professor Boeck, Drs. Steffens, Egeberd, and Voss formed a commission to investigate the experiments made in the treatment of syphilis by syphilisation. These messieurs have fulfilled their mission from the year 1846 up to the year 1859, having regularly visited the hospital where the experiments were made. The last number of the *Norsk Magazin för Lægevidenskaben* (June 1863) publishes their report. The following are the conclusions given in it. "From what we have seen, we consider that syphilisation is a curative method superior to derivation; and, although we cannot say that syphilis is always cured by this method, we unanimously declare that we know of no treatment which produces more or even an equal effect with syphilisation in cases of secondary syphilis in which the patients have not been treated with mercury."

The Calabar bean, says *L'Union Médicale*, has been imported into England through the isolated and persevering efforts of individuals. "Yes! it is in this simple and disinterested way that proud Albion has bestowed a grand discovery on the art of medicine, and on the world a great benefit. Great is the force of individual initiative! Great the blessings of the press!"

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

EXHIBITIONS OF PHOTOGRAPHS AND MODELS.

[Notice of the following communications was omitted in our report of the meeting last week.]

At the meeting on Friday, some photographs were exhibited, displaying the present state of a patient from whose orbit a large cancerous growth had been removed by Mr. C. H. Moore. The patient herself was presented last year at the meeting in London; and the account of her case was published in the British Medical Journal of August 23rd, 1862. The photographs were by Mr. Heisch, Lecturer on Chemistry at the Middlesex Hospital. They showed the large cavity fifteen months after the operation, completely healed, altered, and contracted to an oval shape, and without any trace of the former disease. The nasal and other bones, including the entire circumference of the front of the orbit, which had been removed by sloughing after the action of the chloride of zinc, were likewise exhibited. The patient remained in the Cancer Establishment of the Middlesex Hospital, perfectly well in health; and wore a mask which had been ingeniously made and fitted for her by Mr. Turner, dentist, of Margaret Street, Cavendish Square. She was a little apt to sneeze; and somewhat frequently had slight catarrh. In that event, the Schneiderian membrane became quickly and much swollen, but the swelling soon subsided again. The skin of the cheek, malar region, and forehead, adjoining the scar, remained benumbed in consequence of the destruction of portions of the fifth nerve.

Dr. Thomas Ballard exhibited several models illustrating the deformities of the jaws and teeth, which, according to him, result from the habit of sucking the fingers, the thumb, or the tongue, during childhood; the subjects of the deformities always being, in some degree, weak and delicate.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 23RD, 1863.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

CASE OF STRANGULATION OF THE STOMACH IN AN UMBILICAL RUPTURE: DEATH DURING ITS REDUCTION UNDER CHLOROFORM. BY CHAS. H. MOORE, F.R.C.S.

A corpulent woman, aged 60, was admitted into the Middlesex Hospital, under the care of Mr. MOORE, with a strangulated umbilical hernia fourteen inches in diameter. She had been operated on for strangulation ten years before, by Mr. Wormald. She was greatly exhausted, having been vomiting six days and constipated three days, and having taken calomel and been leeched and blistered. She had vomited two gallons of fluid in the previous forty-eight hours. The pulse was 120.

A drachm of chloroform and four successive portions of forty minims each were inhaled during eleven minutes. The taxis was employed, and was twice interrupted —once by her coughing, once by vomiting. It was continued four or five minutes after the inhalation of chloroform was discontinued, and until about one-third of the hernia had been reduced. She was then so feeble that all but restorative measures were stopped; in four minutes more she was dead. The pulse and respiration continued uniformly and failed proportionally until both ceased.

The cardiac and pyloric ends of the stomach were in the abdomen; the intermediate portion was fixed and constricted in the hernial ring. The cardiac portion was flaccid and empty, but was of enormous capacity. Many parts of its mucous membrane were gangrenous and black, and some were lacerated. These lacerations bore a definite relation to the œsophageal opening. The peritoneal coat near the spleen was also ruptured, and the back of the cardiac pouch was in one spot completely perforated. About a gallon and a half of black liquid, similar to that which had been vomited, lay in the peritoneum. This membrane was not inflamed, but the aperture through the stomach was partly black and pulpy, partly inflamed, partly infiltrated with the contents of the stomach, and a little ecchymosed.

The writer commented, 1. On the unique character of the case—a complete strangulution of the stomach itself. None of the black fluid had passed into the small intestines, which contained air and a little yellow bile. 2. On the dilatation of the cardiac portion, to the inordinate distension of which he attributed the gangrene. 3. On the rupture of the stomach. The lacerations might have been traced to the taxis, had there been any mark of violence in the portions of the stomach within reach during that operation; but these seemed proved, by their radiated disposition with regard to the œsophagus and by the pathological changes in the principal rupture, to be due to vomiting. The perforation of the stomach might have been almost entirely produced by the vomiting, but might have been completed by the taxis. 4. On the cause of death. The importance of the case in respect to the toxical effects of chloroform and to the supposed sudden fatality of ruptures of the stomach was considered, and reasons were offered for assigning the result to neither separately, but to both, in common with the previous and great exhaustion of the patient. 5. Finally, it was suggested that the stomach-pump might have relieved such a case with less danger than was involved in the use of chloroform and the taxis, though actual recovery was in the highest degree unlikely.

CASE OF TRANSPOSITION OF THE GREAT VESSELS OF THE HEART. BY JOHN COCKLE, M.D.

The subject of the case was a boy, who lived to the age of two years and eight months. He was born at the full period, perfectly healthy, and remained so until the end of the third month. He now became cyanosed, and suffered from cough and dyspnœa. His lower limbs were always weak; he was also very sensitive to cold. Under emotion the cyanotic tint darkened, and the dyspnœa and habitually increased impulse of the heart would be still further increased. No convulsions, however, occurred. The child was remarkable for unusual intelligence. Eventually he lost flesh, and became dropsical and covered with petechiæ, and died apparently from exhaustion.

The heart was found dilated and hypertrophied. The aorta arose from the right ventricle, and divided into its ordinary branches. The pulmonary artery, with its valves very large, arose from the left ventricle, and normally divided. The ductus arteriosus was perfectly closed. The foramen ovale was largely patent; the interventricular septum perfect. The various orifices and valves were healthy. The mitral valve, however, was, as it were, tricuspid. The left lung was in part unexpanded.

The number of cases of transposition recorded amounts to about thirty-two. Only three cases, however, are on record in which the foramen ovale was alone patent, the arterial duct being closed, and the ventricular septum entire. In such cases, were it not that some interchange of blood occurred through the foramen ovale, two perfectly distinct circulating systems would have existed. No other vessels certainly compensated in this case.

INQUIRIES INTO THE ACCESS OF AIR AND WATER TO THE TYMPANUM, THE MEMBRANA TYMPANI BEING IMPERFORATE. BY WILLIAM KRAMER, M.D.

The view that there is free access of air and water to the tympanum, the membrana tympani being imperforate, has been hitherto generally adopted. The author was very lately induced to put this view to the test by experiments on physical instruments and on dead bodies. He described the instruments he used for this purpose —viz., a little glass apparatus, representing the Eustachian tubes, the tympanum, and the membrana tympani, a set of silver ear-catheters increasing in calibre, and an India-rubber ear-catheter.

The following are the deductions he arrived at from four experiments:—

1. There is no free access of air or water to the tympanum if blown in or syringed through a silver ear-catheter, the Eustachian tube being completely pervious.

2. There is free access of air or water to the tympanum, if blown in or syringed through an India-rubber ear-catheter pushed forward to the osseous part of the Eustachian tube.

3. The perception of sonorous sounds of the air blown into the Eustachian tube through the author's smallest-sized silver ear-catheter, proves the Eustachian tube to be completely pervious.

4. The perception of dull, faint, or no sound at all of the air blown through silver ear-catheters of any size, proves the Eustachian tube to be incompletely or not at all pervious.

Certain peculiarities in the perception of these sounds in living men render it most likely that air, blown into a narrowed Eustachian tube through silver ear-catheters of a gradually increasing size, enters the tympanum, the membrana tympani being imperforate.

CASE OF POPLITEAL ANEURISM CURED BY DIGITAL COMPRESSION. BY GEO. SOUTHAM, F.R.C.S.

The patient was in his thirty-third year, an iron-moulder by trade. From the man's account, the disease

did not appear to have been of more than nine or ten weeks duration. He was admitted into the Manchester Hospital on December 29th, 1862. The right popliteal space was distended by a pulsatile swelling, accompanied by severe pain and general œdema of the leg. The pulsation of the tumour was very perceptible, but feeble, and the skin over it slightly discoloured. His countenance bore indications of severe suffering. Pulse 120, small and quick; appetite bad. So urgent did the case appear that clamps were immediately applied over the femoral artery. The limb was enveloped in flannel bandages, and elevated on pillows; bottles of hot water were placed near, to raise the temperature of the foot and leg to the natural standard. The following day the clamps were removed, as they had produced redness and vesication of the skin. Iodide of potassium was now prescribed, and regularly taken until January 20th, with no apparent improvement. Digital compression was then resorted to, twelve students of the institution having volunteered their services. During the first twenty hours this system of pressure was frequently interrupted, and therefore at the end of this period the pulsation had apparently undergone no change. Consequently, two students were directed to be continually with the patient, one to compress the artery, the other to apply his hand over the aneurism to detect any insufficiency of the pressure. This plan was adopted for twenty-four hours; a very slight pulsation only could then be felt in the tumour, and six hours later it had entirely subsided. Moderate pressure was, however, kept up for another day, and then discontinued, as there were no signs of any further pulsation. From this time the case proceeded very satisfactorily, the man leaving the hospital at the end of three months, with scarcely any remaining trace of the disease.

Mr. Southam considered that pressure must now be regarded as the established system of treating aneurismal tumours whenever practicable; but the best mode of applying it is still a subject for discussion. In the present case the vitality of the limb was evidently too much impaired to admit of the application of instrumental pressure; indeed the unusual size of the tumour, the unsatisfactory condition of the surrounding parts, as well as the patient's general health, formed in themselves serious obstacles to any kind of operative interference. Many are the advantages of digital over instrumental compression. Not only does it seem to effect a cure in a shorter period of time, but with much less pain, and is not so likely to lead to sloughing of the structures under pressure, which with the greatest precaution is liable to occur in some cases. The flow of blood through the aneurism may not be so effectually prevented by this means, and indeed this is not to be desired, as fibrillation of the blood is more likely to occur, and to be more permanent, if allowed to pass through the sac in small quantity and in a slow continuous stream; for digital compression is not liable to those sudden alternations in force and volume which under instrumental pressure are apt to take place in consequence of the tendency of the artery to escape from under the clamps on any slight movement of the limb. But pressure alone must not be entirely relied on in the treatment of aneurism; for, as success depends on the consolidation and subsequent absorption of the blood in the tumour, other agents of similar properties, to combine with, must be sought for. The difficulty in arriving at correct views of the medical treatment of aneurism is probably owing to our imperfect knowledge of the changes which contribute to the solidification of the aneurismal contents.

The process is usually regarded as similar to the coagulation of the blood out of the body; but it is questionable if this be exactly so where the solidified material is partially absorbed or converted into structure. Ordinary coagulation of the blood is one consequence of its diminished vitality, and therefore would more likely be followed by its removal from the body by ulceration and suppuration than by absorption. It seems, therefore, highly probable that the solidification of the blood within the body, previous to its absorption or conversion into tissue, differs somewhat at least from that of ordinary coagulation. This may explain how low diet, which by depressing the vital properties of the blood should promote its coagulation, has not led to those salutary results expected by its advocates in the treatment of aneurism.

THREE CASES OF ICHTHYOSIS SPURIA VEL SEBACEA.

BY J. W. OGLE, M.D.

After certain preliminary observations regarding the differences between the true ichthyosis (so called) and the spurious, the latter of which owes its characteristics to an accumulation of secreted material from the sebaceous follicles of the skin, which become indurated and adherent to the surface, Dr. Ogle proceeded to describe the cases of two sisters who were afflicted with the ichthyosis sebacea. These patients were respectively of ten and fourteen years of age, living in the neighbourhood of London. They had both been vaccinated about five years before they came under treatment, and shortly after vaccination had become the subjects of a scattered pustular eruption, which assumed the form of open sores, and were succeeded by a roughness and dryness of various parts of the skin—viz., about the knees, down the legs, about the elbows and axillæ. This condition gradually increased until the parts became covered by large patches of dark-brown and almost black incrustations, which were broken up into scales or small tubular or lozenge-shaped portions, divided by deep lines according to the natural creasings of the skin. Owing to these concretions, the surface was harsh and dry, and in many parts the surface had much the appearance of the sole of the fowl's foot. Dr. Ogle showed a water-colour drawing, executed by Dr. Westmacott, of the surface of the foot of one of the patients, and also a quantity of the dry concretions which fell off, under treatment, from the skin.

The treatment consisted in the warm bath daily, and the subsequent rubbing in of lard, along with the liquor galii aparine, followed by the use of an alkaline lotion in the place of the lard infriction. In about five weeks the patients were discharged quite free from any traces of the affection.

The patients remained free from the disease for nearly four months, when they both again became affected in a like way as before, and one returned to St. George's Hospital. She was treated by Dr. Fuller, and again left the hospital free from any of the sebaceous accumulations, but with the skin red and glazed, and disposed to crack.

Dr. Ogle gave the chemical analysis of the sebaceous incrustations as determined for him by Dr. Harvey, and also made reference to the only recent case of a similar kind which he had met with—one by Dr. Biefel, quoted in the *Annalen der Charité-Krankenhaus*. From this, and from the tendency which in the case of one of the girls before described the skin showed to assume an unhealthy state, Dr. Ogle thought that such a condition of the skin might lead to actual disease of its texture.

Antidote for Hydrofluoric Acid. In case of burns from this liquid, M. Kessler recommends the application of lint wetted with acetate of ammonia, and the injection of the same solution into the blisters, if any have formed. If, however, the acid has got into places difficult to moisten, under the nails, for instance, he recommends caustic ammonia to be used instead of the acetate, and remarks that the patient should not trouble himself about the pain, sometimes very acute but transient, which follows the application. (*Répertoire de Chimie Appliquée*, June 1863, and *Chemical News.*)

Correspondence.

DERBY INFIRMARY.

LETTER FROM JOHN HITCHMAN, M.D.

SIR,—Fearing that the remarks of my esteemed neighbour, Dr. Ogle, in your JOURNAL of Saturday last, may mislead physicians residing at a distance from Derby into the belief that there is a paucity of physicians in this town, I subscribe, in the order of seniority, an accurate list of gentlemen *now* practising in the town; which list is as follows:—

Heygate, James, M.D. Edinburgh; Fellow of the Royal Society; and *Consulting Physician to the Derby Infirmary.*

Watson, Henry Waldron, M.D. St. Andrew's; Member of the Royal College of Physicians, London; and late *Physician to the Derby Infirmary.* [Dr. Watson was the immediate predecessor of Dr. Ogle at the Derby Infirmary.]

Ogle, William, M.D.Cantab.; Member of the Royal College of Physicians, London; and Physician to the Derby Infirmary.

In addition to the above, there are three general practitioners of transcendent ability and great experience; two of whom have a large consultation practice in medical cases. There are nearly, or quite, twenty-five practitioners in the whole; some of whom are doctors of medicine, and one, indeed, was educated at Cambridge, like unto Dr. Ogle, and preceded him in the office of physician to the Infirmary. As an impartial looker-on, I feel persuaded that Derby has, in point of numbers, as many physicians and surgeons residing in it as are needed; for almost every good-sized village in its suburbs is favoured by the presence of a medical man. The supply already exceeds the demand; and several have to depend on their private resources, rather than on their professional income, for a subsistence.

I am, etc., JOHN HITCHMAN,
Member of the Royal College of Physicians, London.

Mickleover, near Derby.

THE TREATMENT OF RHEUMATIC FEVER.

LETTER FROM J. R. O'BRYEN, M.D.

SIR,—I have read with great pleasure the communication from my friend, Dr. Nevins of Liverpool, in the JOURNAL for August 1. Permit me to make a few general observations on the treatment he proposes for rheumatism. I shall avoid all detail. I could supply a long list of cases treated in private since 1837, and at St. Peter's Hospital, Bristol, from 1843, after a somewhat analogous plan, and with a success not to be equalled by any other mode proposed. I need scarcely say that I have tried all known methods.

Be it observed, I was equally successful without the assistance of either quinine or iodide of potassium. Hence, it will appear that the successful result may clearly be attributed to the alternate action of heat and cold, and the reaction in the capillary circulation which followed.

I had frequently occasion to observe the influence which the capillary circulation of the skin exercises in the general health and progress of disease.

See how quickly death follows *an extensive*, though very superficial, scald of the skin. Check the capillary circulation of the skin by a draught of cold air; and catarrh of the mucous membrane of the air-passages, or some other ill that flesh is heir to, follows. Envelope the human frame in a closely fitting Mackintosh dress, and, after a short time, a feeling of oppression and suffocation supervenes. During the reaction after a cold sea-bath, who has not experienced the *bien aise*, the increased vigour of body and facility of taking a much deeper inspiration than usual, with other pleasurable sensations? Hence the acknowledged benefit of sea-bathing where *reaction takes place.* If not, sea-bathing is said *not* to agree, because a blue, cold skin, a sense of heaviness, and disposition to sleep, with lassitude and pain in the head, succeed. All are the effects of congestion, caused by the want of reaction.

Then, again, in acute and chronic disease, observe the feeling of oppression that accompanies the dry, hot skin of fever; and in eruptive diseases, the immediate relief when the eruption has appeared. Observe, again, in chronic disease, the cold, pallid skin; at one moment dry, then covered with a cold moisture; the feeling of debility; the profuse perspiration on slight exertion, followed by exhaustion. Abstract the caloric in the first case, and charge the system with it in the latter, and as quickly abstract it, and observe the relief that follows. Expand by caloric, and red blood enters the capillary circulation; contract it again by its sudden abstraction; reaction follows, and you give activity to so many vital changes before at rest or in abeyance.

In some cases, I used dry heat from the spirit-lamp, either in the bed, with a cradle to raise the bed-clothing, if the patient were unable to be placed in the chair which I had constructed for the purpose, with a Mackintosh dress; or I placed a lump or two of lime in a wet flannel on a disc, if I wanted moist heat.

The first case where I used this successfully was in a case of cholera in 1837. The stage of collapse had just commenced. The man recovered.

I have also had red-hot bricks placed in the hot water beneath the chair, which was so constructed that the hot air or steam could escape and act upon the naked skin without danger of scalding, being retained by a dress of hospital sheeting. On a second dry, hot brick, as occasion required, I placed either sulphur or mercury, to act in combination with the steam.

The usual duration, under this treatment, of ordinary cases of acute articular rheumatism was about seven or eight days. The longest rarely exceeded fourteen days. Convalescence was rapid, and a relapse very rare. Heart complications were seldom met with, save in very young subjects; and then were easily got rid of. My entire treatment consisted of moderately good diet, an occasional purgative—say one or two at the commencement of the attack; with colchicum and an anodyne. If the pain were severe and the nights restless, I preferred Dover's powder or powdered opium.

The hot air bath suited those who were thin and aged; whilst the steam, with or without the addition of sulphur mixed with the vapour, suited those that were young and plump. In every case, the extra heat was extracted, either by a cold sponging or rubbing down with a towel wrung out of cold water, with addition, in certain cases, of either salt or vinegar; or, when the patient could bear it, cold water thrown over him and his person rapidly dried by friction; or he was placed in a small quantity of cold water and washed over. In more chronic cases, the heat was abstracted by the shower- or douche-bath.

I frequently ordered in private a soda-bath with bran at a temperature of 106° to 110° for five or eight minutes, immediately followed by the shower or douche where the skin was harsh, scaly, and dry. I soon found that daily exercise in the open air gradually increased, so as to unbuild the whole man, and throw the *materies morbi* into circulation for elimination, aided greatly the good effects of the baths; and when this was impossible, it *was replaced by friction, the patient assisting.* Attention to diet, and, where needed, stimulants, with little or no medicine, enabled me to combat successfully a long list of otherwise obstinate and intractable forms of disease.

I cannot help giving one illustration. One day, on making my visit to St. Peter's Hospital, Bristol, my attention was called to a new patient, a cabman, about 35 years of age. He stated that he had been ill nine months, and had tried everything; that he had remained his entire time out, taking hot baths at the Bath Hospital (I believe about three months); that he then entered the Bristol Infirmary, where he remained as long as allowed—about the same time. But being no better—in fact, rather worse—he was removed to the St. Peter's, which was the refuge for the destitute. He stated he had been nine months ill with acute rheumatism; he was sometimes better, but never free. He was much emaciated; pulse weak, and 90; skin pallid, and covered with cold moisture. He lay on his back, with his arms and legs stretched out and immovable. Every joint was swollen, painful, and hot. The muscles of his neck and back were stiff. The heart, lungs, and head were free. He lay like a statue, unable to move any part of his body, save his eyes and neck a little. His only medicine consisted of an anodyne at night and a gentle aperient when necessary, generous diet, a daily vapour-bath, with *cold sponging* afterwards, followed by *friction*. In ten days, he took his baths out of bed. In six weeks, he went out quite well, though still weak. I saw him afterwards for two years, and he never had a return of the rheumatism. We cannot attribute any part of the benefit to the heat of the hot water baths, as he took them daily for three months at Bath, and often at the Infirmary. To my mind, the action of the caloric, *its sudden abstraction*, and the reaction that followed, were the remedial agents *par excellence*.

It affords me much pleasure thus to be able to give independent testimony to the success of the treatment pursued by Dr. Nevins—a treatment introduced by me in 1837, and in which the experience of every year strengthens my confidence; not as applied to rheumatism alone, but to a long list of other affections, dyspepsia and its consequences being in the first rank.

I am, etc., JOHN R. O'BRYEN,
Late Physician to St. Peter's Hospital, Bristol.

11, Thistle Grove, West Brompton, London, S.W., Aug. 1863.

POOR-LAW MIDWIFERY FEES.

LETTER FROM LINNINGTON ASH, L.R.C.P.ED.

SIR,—I beg the insertion in your JOURNAL of the accompanying correspondence, because I do not remember to have ever seen the point at issue so clearly defined or so conclusively determined as in this instance. The decision of the Poor-law Board, although adverse to myself, and in my opinion a wrong one, I am bound to consider final; but the publication of the following letters possibly may induce such remarks from our professional brethren as may ventilate the subject and lead to a better result for us in future.

I am, etc., LINNINGTON ASH.

Holsworthy, Devon, July 29th, 1863.

I. *Dr. Ash to the Poor-law Board.*

Holsworthy, July 16th, 1863.

MY LORDS AND GENTLEMEN,—The Guardians of this Union have disallowed two items in my bill of extras for medical attendance on two cases of premature labour, on the ground of doubt whether they come under the intention of the 182nd Art. of the Consolidated Order which relates to the payments of medical officers on cases of "childbirth"; and it has been mutually determined to submit to the decision of your Board, which shall be final. As I am quite satisfied with the way in which the case has been proposed to you by Mr. Braund, I will not recapitulate the facts, and merely wish to suggest that the Order attempts no distinction between cases premature or mature, viable or not viable, live or still-born; and, moreover, it is well known that cases of premature labour are often more difficult of treatment, more serious to the patient, and of greater responsibility, delay, and trouble to the medical man, than ordinary cases of labour. I have only to add, that I have on a previous occasion been paid by our Board for a similar case; and consequently, that I am jealous of a departure from such a precedent, and can submit to it only when it can be clearly shown to be irregular or illegal.

I have the honour to remain, my Lords and Gentlemen,
Your obedient servant,

Poor-law Board, London. LINNINGNON ASH.

II. *The Clerk of the Holsworthy Board of Guardians to the Poor-law Board.*

Holsworthy, July 16th, 1863.

MY LORDS AND GENTLEMEN,—I am directed by the Board of Guardians of this Union to report that Dr. Ash, the medical officer of the fifth district in this Union, claims to be paid under Art. 182 of the Consolidated Order dated July 26th, 1847, for his attendance on Mary Hancock and Ann Croker, two women prematurely confined, a fee of 10*s.* in each case. It appears that neither woman was more than five months advanced in pregnancy. Under these circumstances, the Board will feel obliged to be informed whether in these cases, as well as in all cases of premature birth, a medical officer is entitled to be paid the above fee, the same as if he attended "any woman in or immediately after childbirth." I am, etc., GEO. BRAUND, *Clerk.*

Poor-law Board, London.

III. *The Secretary of the Poor-law Board to Dr. Ash.*

Poor-law Board, Whitehall, S.W., 21st July, 1863.

SIR,—I am directed by the Poor-law Board to transmit for your information the accompanying copy of a letter which the Board have addressed this day to the Guardians of the Holsworthy Union, respecting your claim, as medical officer of the fifth district, to midwifery fees in the cases of two poor women named Mary Hancock and Ann Croker.

I am, sir, your obedient servant,
H. FLEMING, *Secretary.*

T. L. Ash, Esq., M.D., Medical Officer, Holsworthy.

IV. *The Secretary of the Poor-law Board to the Clerk of the Holsworthy Union.*

Poor-law Board, Whitehall, S.W., 21st July, 1863.

SIR,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 16th instant, in reference to the claim which has been made by Dr. Ash, the medical officer for the fifth district of the Holsworthy Union, to the midwifery fees prescribed by Article 182 of the Consolidated Order, for his attendance on the cases of Mary Hancock and Ann Croker.

I am directed to state *generally* [the italics are ours], that the midwifery fee prescribed by the Regulations is for the delivery of a woman in *childbirth;* and that the Board consider that the term *childbirth* only applies to a case in which the child was or might have been born alive. I am, sir, your obedient servant,
H. FLEMING, *Secretary.*

Geo. Braund, Esq., Clerk to the Guardians of the Holsworthy Union, Holsworthy.

PREPARATION OF PURE CYANIDE OF POTASSIUM. The cyanide of potassium prepared according to Liebig's method, by fusing the prussiate and carbonate of potash, is not pure, but contains carbonate and cyanate of potash. It may be purified by digesting the raw cyanide with sulphide of carbon. The latter, when poured off from the sediment, may be recovered by distillation. As the sulphide of carbon is now very cheap, this method of purifying cyanide of potassium may be recommended. (*Breslauer Gewerbeblatt*, 1863.)

Medical News.

UNIVERSITY OF LONDON. The following are lists of candidates who passed the respective examinations indicated:—Bachelor of Medicine. Preliminary Scientific Examination. Entire.

First Division.

Adams, Arthur Bayley, London Hospital
Ball, John Augustus, Guy's Hospital
Brown, James Campbell, University of Aberdeen
Buckell, Francis John, University College
Bushell, Stephen Wootton, Guy's Hospital
Dyer, William Turner Thiselton, King's College
Gowing, Benjamin Chastor, Guy's Hospital
Heathcote, Rowland, Royal Manchester
Hulme, Samuel James, Royal Manchester
Kelly, Charles, King's College
M'Dougall, Arthur, Owen's College
Maybury, Augustus Constable, St. Thomas's Hospital
Pooley, Thomas Alexander (private study)
Rogers, George Arthur, London Hospital
Smith, Charles James Hardy, University College
Spencer, George Owthwaite, University College
Thomas, John Davis, University College
Whitwell, John Maude, University College

Second Division.

Aveling, Charles Taylor, St. Thomas's Hospital
Barrett, Howard, St. George's Hospital
Bateman, Francis, St. Bartholomew's Hospital
Birtwell, Henry Hargreaves, St. Thomas's Hospital
Bradshawe, Paris, King's College
Buck, Thomas Alpheus (private study)
Carter, Richard, Charing Cross Hospital
Cole, Thomas, St. Bartholomew's Hospital
Eager, Reginald, Guy's Hospital
Lethbridge, Charles Frederick, University College
Madeley, George Sherwin, Royal Manchester
Murphy, Thomas Charles, University College
Poore, George Vivian, University College
Sanders, Richard Careless (private study)
Sawyer, James, Queen's College, Birmingham
Smith, John Ablewhite, Middlesex Hospital
Smith, Robert Shingleton, King's College
Tindall, Alexander M'Ivor, St. Bartholomew's Hospital
Welch, John Burgess, King's College

Chemistry and Botany only.

First Division.

Berry, Other Windsor, Charing Cross Hospital
Cluff, James Stanton (B.A.Dublin), University College
Edwards, Thomas Marsden, Andersonian Institution
Fry, Augustin Barber, Guy's Hospital
Gooding, Ralph (B.A.), King's College
Graves, Boydell, University College
Grimes, John, King's College
Howse, Henry Greenway, Guy's Hospital
Hughes, John Pearson, University College
Melson, John Waller, Queen's College, Birmingham
Orton, George Hunt, St. Bartholomew's Hospital
Owen, David Charles Lloyd, Sydenham College, Birmingham
Stuckey, John, University College
Summerhayes, Henry (B.A.), St. Thomas's Hospital
Wagstaffe, William Warwick (B.A.), St. Thomas's Hospital

Second Division.

Lees, Joseph, St. Thomas's Hospital
Metcalfe, Fenwick, King's College
Provis, William Alexander, King's College
Smith, Samuel Hignett, King's College

First M.B. Examination. Entire.

First Division.

Allen, Bryan Holme, University College
Deas, Peter Maury, University and Surgeons' Hall, Edinburgh
Duke, Olliver Thomas, Guy's Hospital
Green, Thomas Henry, University College
Mason, Philip Brookes, University College
Powles, Revett Coleridge Powles, King's College
Richards, Frederick William, St. Bartholomew's Hospital
Savage, George Henry, Guy's Hospital
Smith, Charles, Guy's Hospital
Snow, William Vicary, University College
Tayler, Francis Thomas, Guy's Hospital

Second Division.

Birt, Joseph, Sydenham College, Birmingham
Bond, Thomas, King's College
Edwards, Thomas Marsden, Andersonian Institution, Glasgow
Greaves, Charles Augustus, St. Thomas's Hospital
Lush, William George Vawdrey, St. Bartholomew's Hospital
Mackey, Edward, Queen's College, Birmingham
Murray, Thomas, St. George's Hospital
Powell, Richard Douglas, University College
Squarey, Charles Edward, University College
Trimen, Henry, King's College

Excluding Physiology.

First Division.

Hilliard, Henry Charles, Guy's Hospital
Turner, Ebenezer Fulham, Guy's Hospital

Second Division.

Glynn, Thomas Robinson, St. Bartholomew's Hospital
Harvey, Walter Austice, St. Bartholomew's Hospital
Norton, Arthur Trehern, St. Mary's Hospital
Read, Charles, University College

Physiology only.

First Division.

Best, Palemon, University College
Edis, Arthur Wellesley, Westminster Hospital
Phillips, John Jones, Guy's Hospital
Rivington, Walter (B.A.), London Hospital
Roberts, Frederick Thomas, B.Sc., University College
Smith, William John, University College
Spender, John Kent, King's College

Second Division.

Beddard, James, Guy's Hospital
Cooke, John, University College
De Negri, Athenodore, University College
Gale, Henry Stanley, King's College
Jakins, William Vosper, University College
Lanchester, Henry Thomas, St. Bartholomew's Hospital
Langton, John, St. Bartholomew's Hospital
Miller, Richard May, University College
Simms, Frederick, King's College

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 30th:—

Betts, John, Norwich
Buckle, William Henry Fleetwood, M.D.St.And., L.R.C.P.Lond., Royal Mint
Cooke, James, Stretford, near Manchester
Eaton, Frederick Bond, Lansdown Road, Notting Hill
Edwards, John Henry, Llangefin, Anglesea
Fentem, Philip Sheldon, Eyham, near Sheffield
Hogan, Francis Vincent, Dartford
Hyde, Edward, Witney, Oxon
Loane, John, Dock Street, Whitechapel
Moorhead, Joseph, Clones, co. Monaghan
Morton, Samuel, Sheffield
Oliver, George, Stockton-on-Tees
Parks, Charles Holman, St. Columb, Cornwall
Pollock, Edward James, Halton, Hounslow
Reid, James Gerhard, Cape of Good Hope
Robinson, John Craven, Scarborough
Snewin, Alfred George, Thornhill Square
Taylor, Frederick Stubbings, Greenwich
Taylor, Hugh, Norwich
Taylor, Shephard Thomas, L.R.C.P.Lond., Dilsham, Norfolk
Thomas, William Hopkin, Maesteg, Glamorganshire
Trible, John, Torrington, Devon
Weir, Christopher John, M.B., Trinity College, Dublin
Wicksteed, Francis William Slow, L.S.A., Maidstone
Woodhams, John Amos, Lamberhurst, Kent
Yarrow, George Eugene, L.S.A., Central Street, Old Street

Admitted on July 31st:—

Best, Frederick Arthur, Bilston
Bridgman, Isaac Thomas, Berkeley, Gloucestershire
Bush, Henry John Ryder, Devonport
Caudle, Charles Edward, L.S.A., Henfield, Sussex
Coombs, Carey Pearce, L.S.A., Frome, Somerset
Harris, James Smith, St. John's Wood
Hobson, William Henry, L.S.A., Long Sutton
Holden, John, Manchester
Johnson, Thomas Mason, M.D.St.And., L.S.A., Manchester
Kendal, Cuthbert Robert, Gateshead
Kettle, Henry, Tipton
Moore, Miller Montgomery, Buckstone
Puzey, Chauncy, Surrey Square, Old Kent Road
Reynolds, Edward Robert Bradley, Islington
Richmond, Sylvester, Hornsey
Rigg, John, Southport
Ruddock, Edward Harris, Woolwich
Searle, Francis Furlong, Exeter
Staff, George Thomas Albert, Barnes
Steell, Frederick, M.D.Edin., Edinburgh
Werry, Augustus, Smyrna
Wynne, John Kendrick, Oswestry

Admitted on August 1st:—

Aspray, Charles Owen, M.D.St.And., L.S.A., Newton Road, W.
Brown, Edward, Reading
Carter, Richard, Newbury
Day, William Henry, Wakefield
Gervis, Frederick Heudebourck, Tiverton
Hanna, James, New Zealand
Henderson, Hector Grahame, London

Jardine, Arthur David, Chatham
Orr, Gawin, Belfast
Phillips, George Richard Turner, Bayswater
Roberts, Edwin, St. John's Wood
Sharp, George Wyatt, L.S.A., Great Cumberland Street
Sturton, Hubert Wilson South, Greenwich
Thomas, Edward Steven, Birmingham

NAVAL SURGEONS. The following gentlemen have lately passed their examinations for full Surgeons in the Royal Navy:—

Cann, Thomas, M.D., of H.M.S. *Recruit*, Chatham; diploma of membership dated April 11, 1859
Grose, Saml., of H.M.S. *Dauntless*, Southampton; April 11, 1859
Lawrenson, Richard Charles Pasley, of the Royal Naval Hospital, Plymouth; December 12, 1856
Richardson, Francis Hunt, M.D., of H.M.S. *Majestic*, Liverpool; April 13, 1857

APOTHECARIES' HALL. On August 6th, the following Licentiates were admitted:—

Bird, William, Tarporley, Cheshire
Durrant, William, Manchester Street, Argyle Square
Groves, Joseph, King's College
Jones, John James, Queen's Road, Peckham
Larkin, Charles Robert, Bishop's Castle, Salop
Prince, Charles Edward, Balsham, Cambridgeshire

At the same Court, the following passed the first examination:—

Bennett, Francis Graham, St. Bartholomew's Hospital
Blick, Thomas Edward, St. Mary's Hospital
Hawthorn, Frederick John, London Hospital
Owen, David Charles Lloyd, Sydenham College, Birmingham
Taylor, Arthur, Guy's Hospital

APPOINTMENTS.

BURTON, Thomas C., M.D., appointed Medical Superintendent of the Waterford Lunatic Asylum.
COOPER, Horace, Esq., appointed House-Surgeon to the Reading Dispensary.
EVANS, George, Esq., appointed Surgeon to the St. Marylebone General Dispensary.
GRUBB, Richard T., Esq., appointed House-Surgeon to the Metropolitan Free Hospital.
HARVEY, Robert, M.D., appointed Resident Surgeon-Accoucheur to the Birmingham General Dispensary.
MOON, Robert C., Esq., appointed House-Surgeon to the Surrey Ophthalmic Hospital.
MOORE, William, M.D., elected Physician in Ordinary to Sir Patrick Dun's Hospital, Dublin.
*MUSHET, William B., M.B., appointed Physician to the Royal General Dispensary.
ROBERTS, John, Esq., appointed Resident Medical Officer to the Bath General Hospital.
ROBERTSON, John C. G., L.R.C.P.Ed., appointed Assistant Medical Officer of the Female Department of the Middlesex County Asylum, Hanwell.
SIMPSON, John H., Esq., appointed Second Assistant Medical Officer to the Kent County Asylum.
STRUTHERS, John, M.D., appointed Professor of Anatomy in the University of Aberdeen, in the room of A. Lizars, M.D., resigned.
THOMSON, David P., M.D., appointed Justice of the Peace and *ex officio* Coroner for the colony of British Guiana.
THOROWGOOD, John C., M.D., appointed Assistant-Physician to the City of London Hospital for Diseases of the Chest.
YELLOWLEES, David, M.D., appointed Medical Superintendent to the Glamorganshire County Lunatic Asylum.

POOR-LAW MEDICAL SERVICE.

BRICKWELL, Henry, Esq., to the Warboys District of the St. Ives Union, Huntingdonshire.
BURKE, Thomas, M.D., to the Scariff Union Workhouse, co. Clare.
CAMPBELL, Andrew, Esq., to the United Parishes of Kilchrenan and Dalavich, Argyleshire.
HAIR, James, M.D., to District No. 5 of the Sudbury Union.
MACINTOSH, Daniel, M.D., to District No. 3 of the Ely Union.
MARR, James, L.R.C.P.Ed., to the Thornley District of the Easington Union, Durham.
MORGAN, John, Esq., to the Northern Division of the Wellington Union, Salop.
MOURITZ, John, M.D., to the Crossroads District of the Dunfanaghy Union, co. Donegal.
RUSSELL, John, Esq., to the Scrooby District of the East Retford Union.
SAMPSON, Francis C., Esq., to the Mountshannon District of the Scariff Union.

ARMY.

ANNESLEY, Surgeon-Major F. C., Royal Engineers, to be Deputy Inspector-General of Hospitals, *vice* S. M. Hadaway.
FITZGIBBON, Staff-Surgeon R. E., to be Surgeon 60th Foot, *vice* G. W. P. Sparrow.
FOX, Staff-Surgeon T. W., M.B., to be Surgeon Royal Engineers, *vice* Surgeon-Major F. C. Annesley.
HADAWAY, Deputy Inspector-General S. M., to be Inspector-General of Hospitals, *vice* J. R. Taylor, C.B.
MILLER, Staff-Surgeon C. M. M., M.D., half-pay, to be Staff-Surgeon, *vice* T. W. Fox, M.B.
MONTGOMERY, Staff-Surgeon A. G., half-pay, to be Staff-Surgeon, *vice* R. E. FitzGibbon.
STANLEY, Staff-Assistant-Surgeon St. John, to be Assistant-Surgeon 3rd Dragoon Guards, *vice* R. T. G. Galton.

ROYAL NAVY.

CLARKE, Robert W., Esq., Staff-Surgeon, to the *Saturn*.
DICK, James N., Esq., Surgeon, to the *Medina*.
MCDERMOTT, W. E., Esq., Acting Assistant-Surgeon, to the *Forte*.
MACLEOD, William, Esq., Surgeon, to the *Russell*.
O'TOOLE, Richard B., Esq., Assistant-Surgeon, to the *Egmont*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

COCKEY, E., Esq., to be Assistant-Surgeon 13th Somerset R.V.

To be Honorary Assistant-Surgeons:—

HAYNES, J. C., Esq., 8th Devonshire A.V.
PYCROFT, G., Esq., 1st Devonshire A.V.

DEATHS.

*AYTON, George, Esq., at Kenilworth, aged 41, on August 8.
BAGSTER, William, Esq., Surgeon, at Kentish Town, aged 83, on August 3.
CUMMING. On August 5th, at Chester, aged 77, Lucy Margaret, wife of *George Cumming, M.D.
GRIFFIN, D., M.D., at Limerick, on August 1.
GRIFFITH, W. T., Esq., Surgeon, of Ely Place, at Bangor, aged 28, on July 26.
HUGHES, Thomas H., M.D., at Chester, on August 3.
LOVELL. On August 7th, at Tottenham, aged 86, Mary Ann, wife of Charles H. Lovell, M.D.
NORRIS, Thomas, M.D., at Weybridge, aged 74, on July 29.
PHILLIPS, Charles H., Esq., Surgeon to Her Majesty's Household, at Chelsea, aged 75, on August 8.
ROWLEY. On August 5th, at Titchfield Terrace, Elizabeth, widow of R. Rowley, M.D.
SOUTHAM. On July 30th, at Buckingham, Ann, widow of Edward Southam, M.D.
SPENCER. On August 5, at Eynsham, Oxon, aged 9 months, Ethel, only child of Henry B. Spencer, M.D.
WHITE, Charles W., Esq., Staff-Surgeon R.N., at Southsea, aged 56, on July 31.
WHITE, Edward, Esq., Surgeon, of Lamb's Conduit Street, aged 73, on August 9.
WORKMAN. Octavius, Esq., Surgeon, at Basingstoke, aged 63, on August 2.

THE PRINCE OF WALES has given £100 to the Cornwall Hospital.

NEW HOSPITAL. The erection of a new hospital is contemplated at Coventry.

NEW SOCIETY AT BRADFORD. A society has been formed at Bradford, under the name of the Bradford Medico-Chirurgical Society, to discuss and read papers.

UNIVERSITY COLLEGE HOSPITAL. An unknown lady has forwarded the munificent donation of £500 towards the funds of this institution.

THE ARSENICAL WATER OF WHITBECK. This water, which our readers will remember was described in our columns by Professor Church three years ago, has just been brought into notice again by Dr. John Davy. Its utilisation as a medicine has been suggested.

PRINCE ALFRED'S MEDICAL ATTENDANT. The Queen has directed that a photograph of Prince Alfred should be sent to the relatives of Mr. Kelly, R.N., in Kintyre. A letter from Colonel Phipps was sent with the photograph. Mr. Kelly attended the Prince when suffering from fever at Malta.

PHARMACEUTICAL CONFERENCE. We observe that it is proposed to hold a Pharmaceutical Conference at Newcastle during the meeting of the British Association. If the object be merely the discussion of pharmaceutical politics, it is scarcely fair to make use of the British Association for getting to Newcastle and back at a cheap rate. If the Conference have a scientific object, it would be well to consult the executive of the Association, and form a pharmaceutical sub-section of Section B. (*Chem. News.*)

Surrey County Hospital. Surrey, with its 830,000 inhabitants, has, up to the present time, had no hospital. On July 31st, however, the ceremony of laying the foundation-stone of a county hospital at Guildford was performed. The hospital is dedicated to the memory of the late Prince Consort; and is intended to afford accommodation for fifty-eight in-patients.

University of London. Dr. Carpenter says, that he is directed by the Senate of the University of London "to announce to candidates for the ensuing M.B. Examination, that the examination for honours in surgery will *this* year be carried on as heretofore; the pass examination alone being modified by the omission of the practical examination in surgery."

An Ambitious Verdict. In a late inquest, the coroner having summed up, the jury returned the following verdict, "That the deceased, Edward King, was found dead in the river Scheldt, in the kingdom of Belgium, and that he lost his life from the mortal effects of suffocation caused by drowning, and that he came by his death accidentally and by misfortune."

Petroleum. Notwithstanding the report of Dr. Prench, the medical officer of health for the borough of Liverpool, to the effect that there is no evidence to prove that petroleum is injurious to health, the inhabitants of Bootle and its neighbourhood are making strong remonstrances on the subject, and some medical men have given it as their opinion, from personal visitation, that a good deal of suffering and sickness have actually been caused by petroleum.

A New Tuber. Among the exotics recently introduced into France is a new tuber, brought from Peru by M. Cochet, who has resided twenty years in South America. This new plant has been cultivated for two years in the Jardin d'Acclimatation of the Bois de Boulogne, and has passed two winters without requiring more attention than the potato. Besides its nutritive and medicinal properties, it is very rich in sugar, of a quality superior to that of beet-root. The yield of this plant per hectare will average 150,000 *kilogrammes*. (Sixty tons per English acre.) In honour of its introducer this valuable root is called *Poire de terre Cochet*.

Calcutta Medical Board. The Commander-in-Chief has issued most useful rules for the health and conservancy of military cantonments. In every station of the Bengal army there is to be a Board of Health, composed of the senior military, medical, and engineer officers, with the station staff officer, as secretary and executive officer. This Board will receive weekly reports from all the authorities who are responsible for graveyards, drainage, bazars, slaughterhouses, barracks, and hospitals, and will make a monthly report to the divisional commander. Sir Hugh Rose has thus at once, as is his custom, taken a hint from, and stolen march upon, the government of India, which has published a bill to be passed next session.

The Employment of Women. The Society for Promoting the Employment of Women has issued a statement and report, with the view of bringing its objects more immediately under the notice of the public. The applications from distressed females which have been laid before the committee show the necessity for new fields of industry being opened up to women. They strongly urge parents to bring up their daughters in some useful business, and with a view to facilitating this, they recommend the perusal of several books and papers relating to the education and employment of women, published by the society. Amongst the occupations suggested as suitable to women are book-keeping, law copying, photography, pattern-staining on furniture, wood engraving, lithographic tracing, music copying, plant preserving, heraldic painting, modelling, watch engraving, etc.

Rather a Hard Prosecution. Martha Ryan was indicted for having feloniously killed and slain Martha Stack. The prisoner, a poor old woman, was called in on the evening of July 7th last by a Mrs. Stack to act as midwife for her. Mrs. Stack was delivered of a female child, which died about five hours and a half afterwards. It seemed that the prisoner cut the umbilical cord, but tied it with a worsted and not a silken ligature; and, according to the evidence of the surgeon, the death of the child resulted from hæmorrhage, caused by the ligature becoming untied. After the child was placed by the side of its mother in bed, it was taken up again by a sister-in law of Mrs. Stack; and it was just possible, that had not the child been moved the ligature would not have slipped. His lordship directed the jury that if they believed the prisoner had been criminally negligent they should find her guilty of manslaughter. The jury acquitted the prisoner; but thought that she was deserving of censure.

The Weather in Paris. The heat in Paris has been of so exceptional a nature as to receive considerable attention from scientific observers. It is very long, according to the observations of one of these gentlemen, since such a day as the 9th inst. has been known in this capital. Between 1 and 3 P.M. the heat was so excessive that the pavement burnt the soles of the feet, and the asphalt yielded to the shoes that pressed it. M. Barral writes that, near the Observatory, the centigrade thermometer, placed in the shade and away from any wall, marked 39 deg. on Sunday, at half-past 2 in the afternoon (102 deg. of Fahrenheit); and at 4 o'clock 36 deg. "It is very rare for the thermometer to rise above 36 deg. cent. in Paris. Since the beginning of the century it only once attained 37.2 deg., on the 18th of August, 1842. The highest temperatures we find on record are 38.4 deg., July 8th, 1793; 39 deg., August 19th, 1763; 39.4 deg., August 14th, 1773; and 40 deg., August 26th, 1765. It is to be observed that, when the thermometer marks 39 deg. in the shade, it is 65 deg. in the sun, according to the observations of Mersier. Thermometrical observations of Paris do not go back beyond 1705. Thus, during the last 158 years, it has probably only once been warmer than it was on Sunday last."

Medical Evidence. The following is reported in the daily journals:—The surgeon stated that he found the woman's face very much bruised, and there was a wound on her temple and one running back to her ear. This was, he said, rather a lacerated wound. Next day he made the *post mortem* examination, and found that the cause of death was extravasation of blood between the membranes of the brain. They were such injuries as were, in his opinion, caused by blows and falls conjointly. As to the lacerated wound, it might have been caused by falling against an iron edge of something like the corner of a fender. Cross-examined. The witness said falls alone would hardly account for all the appearances he observed. Being pressed as to this, he said he did not think that falls would account for them, though they might account for a great deal of them. Pressed still further, he said possibly they might account for all of them. The learned Judge: Consider the question. Looking at all the appearances on the body, can you say that they could all be accounted for by the falls? The witness said he thought that they could not be. The learned Judge observed that it would be well if the witness would attend to the questions before he answered. The witness was further pressed upon this by the prisoner's counsel. He repeated more positively that he believed all the appearances could not be accounted for by falls. Mr. Ribton pressed the witness whether, if he had heard nothing of blows and had heard only of falls, he could have found any appearances inconsistent with falls? The witness said distinctly that he should. Other organs of the body he found healthy, except a slight trace of disease in the

brain; but he should say that the woman was of "slightly intemperate" character. Mr. Ribton: Habitual intemperance, though of a slight character? Witness: Yes. By the learned Judge: Habitually intemperate, but in a slight degree.

The British Association. The thirty-third annual meeting of the British Association for the Advancement of Science will commence in Newcastle-on-Tyne on Wednesday, the 26th inst., when Sir W. G. Armstrong will deliver an address as president. The following gentlemen have been chosen presidents of sections:—Mathematical and Physical Science, Mr. W. J. M. Rankine, C.E., LL.D., F.R.S.; Chemical Science, Alexander W. Williamson, Ph.D., F.R.S.; Geology, Mr. W. W. Smyth, M.A., F.R.S.; Zoology and Botany, including Physiology, J. Hutton Balfour, M.D.; Geography and Ethnology, Sir R. I. Murchison, K.C.B.; Economic Science and Statistics, Mr. W. Tite, M.P., F.R.S.; Mechanical Science, Professor Willis, of Cambridge. Papers will be read descriptive of the great branches of industry in this district, such as coal mining, the glass and iron trades, iron ship-building, etc., and the excursions, which will be to the iron district of Cleveland, where the party will be entertained with magnificent hospitality by the iron masters of Middlesborough; to the lead mines of Mr. W. B. Beaumont, M.P., at Allanheads; to the Northumberland lakes, and the Roman Wall; to South Shields, Sunderland, and to Seaton Delaval, and other large collieries in the district. There will be an extensive exhibition of works of art and science held in the Central Exchange Newsroom, the Mayor of Newcastle will give a grand concert, and there will be several balls and other gaieties during the week of the Association's meeting. Sir William Armstrong will also make several great gun experiments upon Whitley Sands on one of the days of the meeting.

Action for Slander. Low *v.* Elliot. In this case, which was lately tried, the plaintiff, Mr. Low, was a dentist in Carlisle. The defendant was a physician, also residing in Carlisle, and living next door neighbour to the plaintiff. It appeared that, being neighbours, they had a quarrel and a lawsuit about a party wall, which action was going on in June last year. During that month the plaintiff had a friend staying at his house, who died of heart-disease, and on June 3rd, his remains were removed to the railway station at Carlisle to go to Penrith. A day or two before this the defendant had had a conversation with a lady, who stated that she had heard that a young lady had died at Mr. Low's, while under chloroform. The defendant had replied that it was very extraordinary if so, as he had heard nothing about it, living next door neighbour. On June 3rd, after this conversation, Dr. Elliot saw a hearse come to the plaintiff's door and have a coffin placed in it. He immediately came to the conclusion that this coffin contained the body of the young lady. He thereupon, being a magistrate and deputy-mayor of the borough, followed the hearse to the railway station, where he saw the coffin on the platform, and then placed in a horse-box. He thereupon told the story he had heard to the guard of the train, and wished to see the plate upon it, and read (as one of the witnesses said), in an "oracular" manner aloud to the crowd, which was then gathering round him on the platform, "John Thomas Lloyd Richards, aged 24," and wondered if the coffin contained a young lady. He further said, that "he was afraid it was a bad case." Mr. Hall stated to the railway officials what the case really was. The defendant, however, still seemed to have talked of the case. A few days after he was written to by the plaintiff's attorney demanding a retractation of his slander and an apology, to which he replied that he was not aware that he had anything to apologise for. The present action was then commenced. The plaintiff proved that in consequence of the circulation of this story his chloroform patients had fallen off from about fifty a year to six or seven, and that his general business as a dentist had fallen off £1,000 a year. His practice had formerly been worth £2,300 a year, and it was less now by £1,000 a year. The defence urged that the defendant had acted *bonâ fide* and without malice. The jury found a verdict for the plaintiff. Damages, £100.

The Torquay Climate. It will be seen by our meteorological journal that the highest temperature registered in Torquay during the present summer has been 75°. In Nottinghamshire, Mr. Lowe, in writing to the *Times*, quotes the maxmium as 87·2, and at Greenwich it was 83·5. The temperature of the Thames, at Greenwich, as given in the Registrar-General's report last week, was as high as 68°; in Torbay the sea-water off the Baths, was only 62°. This is the cause both of the cool summers, in Torquay, and the mild winters. An insular, or, in this instance, a peninsular climate, is always more equable than inland. This portion of the coast has, moreover, the great advantage of a south and east aspect, so that all the hot and sultry winds elsewhere, are sea breezes, Torbay and the open sea encircling the little peninsula upon which Torquay is built, on all points of the compass between north-east and west. The influence of the sea, although rather paradoxically, prevents any excess of humidity on this coast. If the dew-point of the air rises above the temperature of the sea (62°), its whole surface acts as a condenser. The maximum difference between the wet and dry bulb self-registering thermometer has been 10°, or nearly 20° above saturation. Not only on the hills, but around the harbour, there is always a breeze; and with the ample shade on this richly-wooded coast, our summer climate is always cool and bracing. We confidently appeal to our readers whether this is not correct. The old prejudice, that because Torquay is mild in the winter it must be hot in summer, is as unsound in fact as in theory. (*Torquay Directory*, July 22nd, 1863.)

Army Medical School. The following questions were proposed in the examinations at the end of the summer session, 1863, at the Army Medical School, Netley. *A. Written Examination* (three hours allowed for each paper). I. *Military Surgery.* 1. What are the series of symptoms which may be expected to occur when a lung has been penetrated by a rifle-ball? Mention the chief circumstances which may lead to an error in diagnosis as to such an injury having taken place. 2. Name the various kinds of defective vision, independent of those consequent on injury or diseased action, which incapacitate soldiers for the proper use of the rifle. Explain the nature of these defective conditions; show how they are to be distinguished from each other; and state the means of establishing their existence in cases of alleged disability in consequenee of them. 3. Describe the systematic inspection of a recruit, and the purpose of each step of the examination. II. *Military Medicine.* 1. Name the endemic diseases of India which chiefly injure the health or destroy the life of the soldiers, giving their classes and orders according to the official system of classification, and a summary of the causes supposed to be most active in their production and propagation. 2. What are the chief diseases of the circulatory system observed by you among soldiers? to what causes do you attribute them? and how far do you deem such causes remediable? 3. In a case of supposed acute hepatitis, give the diagnostic value (*a*) of pain; (*b*) of jaundice; (*c*) of cough, increased respiration, etc.; (*d*) of enlargement of the liver. III. *Pathology.* Define the nomenclature necessary to be attended to in description of venereal sores. 2. Describe the modes by which elimination of the material in Peyer's patches occurs in cases of typhoid fever. 3. State the main points in the phenomena of typhoid fever which distinguish a case of this disease from a case of typhus. 4. Enumerate the forms of degenera-

tion which occur in the tissues or organs, and state how the existence of such degenerations may be recognised. IV. *Military Hygiene.* 1. What are the general principles to be attended to in the choice and preparation of sites for barracks? 2. What diseases are supposed to be communicated through the agency of water? How would you examine for organic matter in water? 3. How would you determine the amount and direction of movement of air in a room, and the sufficiency of ventilation? 4. What measures would you adopt if cases of yellow fever were to appear in a barracks in the West Indies? *B. Practical Examination.* I and II. *Military Surgery and Medicine.* Examination and concise statement of the history, diagnosis, prognosis, effects of treatment, and influence of the disease (or injury), on the fitness for military service, of a case in the surgical, and one in the medical division. (Twenty minutes allowed for the examination, and thirty for the written description.) III. *Pathology* (three hours). 1. Mention the lesions shown in the preparations numbered 1, 2, 3. Describe (*a*) their nature; (*b*) how they have originated; (*c*) their probable progress; (*d*) their probable results. 2. Name the parasites contained in the bottles *a*, *b*, *c*, *d*, *e*. 3. Describe the lesions shown in the preparations on the two trays before you. 4. Determine the magnifying power of the combination of lenses of the two microscopes on the table. IV. *Hygiene* (three hours). 1 and 2. Chemical examination of water and beer. 3. Microscopical examination of adulterated flour.

The Black Doctor Again. The Tribunal of Correctional Police lately tried the Black Doctor, J. H. Vriès, on charges of usurping the title of doctor, and of illegally practising medicine. A doctor named Ebra, who sometimes assisted Vriès in his consultations, was charged, at the same time, with illegally vending medicines to their patients. Among the papers found in the possession of Vriès, and put in as evidence, was the prospectus of a work entitled "Clef de la Nouvelle Alliance," presented to mankind as "the revelation of a new era which shall for ever close the abyss of revolutions, and put an end to all the sufferings, wars, and catastrophes afflicting nations." In answer to questions from the president, Vriès declared that he was merely the assistant of Dr. Ebra, whom he aided with advice, while the latter signed all the prescriptions; he denied having ever sold medicines since his first condemnation, although he still had the drugs in his possession, which were returned to him after his first trial. The evidence, however, clearly proved that, although Dr. Ebra lived in the same house, he was not always present at the consultations, and the fact of supplying patients with medicine was established against both the defendants. One witness proved that Vriès alone had attended a person named Piffetot, and had received from him 2,000 francs, with securities for the payment of 4,000 francs more. After hearing counsel for the defence, the tribunal condemned Vriès to 2,000 francs fine, with six months imprisonment, for illegally practising medicine, and to 500 francs fine for selling medicaments; Ebra was also fined 500 francs for the last named offence, and condemned to pay one-fourth of the expenses of prosecution, the other three-fourths to to be paid by Vriès. (*Galignani.*)

Vivisections in France. At the veterinary college of Alfort a wretched horse is periodically given up to a group of students to experimentalise upon. They tie him down and torture him for hours, the operations being graduated in such a manner (this is given on the authority of Dr. Guardia, of the Academy of Medicine) that sixty, and even more, may be performed before death ensues. The same authority declares these tortures perfectly useless, and that the experiments might just as well be made on dead horses. It appears, however, that since Dr. Guardia, with honest indignation, denounced those atrocities, some change for the better has taken place. Dr. Blatin, the vice-president of the French Society for the Protection of Animals, says that the directors of the veterinary schools have limited the experimental studies of their pupils. "At Lyons, to cite one example, the removal of the hoof, which causes frightful suffering, is practised upon the living horse only once by each pupil; on the day when he passes his examination." This is certainly an astonishing stretch of humanity, and it must be admitted that Dr. Blatin is not difficult to mollify. He omits, however, to inform us of the benefit derived from this frightful act of torture. It is well known that in veterinary practice very few serious operations are ever attempted, and that in cases of fractures, bad wounds, and really dangerous affections horses are much more usually shot than operated upon.

Glorious War! I have just returned from Gettysburg. The estimated number of wounded there was, on Monday, July 7, 20,000 Union and rebel soldiers. They have diminished daily from 1,000 to 1,200 in number by sending the "walking cases" (men slightly wounded, or only in the upper extremities and with flesh wounds) to Baltimore and Washington. About half are under canvass in the various corps hospitals, the rest in churches, barns, and private houses in and around Gettysburg. The speed of General Meade's movements had made a provision against the consequences of so terrible a battle impossible. Medical stores, and even food, were not and could not be at hand. The neighbouring country had been stripped bare, first by the rebel army and then by our own. Moreover, the splendid victory of our troops made every available soldier necessary in the pursuit of the flying, but not routed or demoralised, and still dangerous foe. Only one-third of the surgeons, ambulances, and wagons could be left from each corps in care of our wounded, and no detail of well men to nurse them; add 6,000 rebel wounded, deserted by all but five of their own surgeons, and one can see the inevitable misery of the situation. There were most inadequate supplies of coarse food, and none of suitable and delicate food within the reach of the hospitals. Beef and hard tack were the only things in tolerable abundance. Transportation for the wounded from worse to better quarters, and of supplies, was necessarily very scarce, and was a chief source of distress. The roads were thronged with wounded men, here on canes and there on crutches, not seldom with amputated arms and heads still bleeding, making their way on foot from the corps hospitals, two, three, and four miles, to the depôt. At the hospitals themselves, at first, the spectacle was intensely wretched. Men with both legs shot off, shot in the eye, the mouth, both hands gone, or one arm lost, were lying in rows that seemed pitiably long, and in wonderful patience, fortitude, and patriotic pride facing their sufferings. The rebels, as was just, had to wait their turn for having their wounds dressed or their limbs amputated till the Union men had been cared for; then they were treated with equal kindness and attention. Many after six days were looking forward, as to an unspeakable blessing, for the amputation of their shattered limbs. The terrible destitution of many of the rebels will not bear description. It was too horrible for recital. (*New York paper*)

An Ossiferous Cavern in Argyleshire. A cavern, containing osseous remains of men and of lower animals, has lately been discovered on the property of John Malcolm, Esq., of Poltalloch. The cavern has been fully explored, and its contents carefully collected by the Rev. Messrs. Mapleton and Macbride. These contents consist of the remains of men, of other animals, and shells of edible shellfish. The only article of manufacture found in it was a small celt, a flint flake; and the only domestic utensil was a scallop shell, or *pecten maximus* —the shell used by the ancient Celts as a drinking vessel. The cavern was evidently used as a place of resi-

dence, for beneath the cave, stuff, or *débris*, were found ashes, bits of charred wood, and bones, a flint pebble for striking fire, and stones which, from their form and position, seem to have served for seats. When first discovered, the human remains were supposed to have been those of persons who had fled there for shelter, when the adjacent country was laid waste by fire and sword during the ruthless raid of Alister M'Coll Citto. The absence, however, of metal weapons and culinary vessels—both which were of universal use in the days of this scourge of Argyleshire, and which undoubtedly would have been conveyed by the refugees to their place of concealment—and the presence of celts and scallop shells, seem to disprove this opinion, and to point to a much higher antiquity for its inhabitants. What seems to confirm this opinion is the fact that many of the bones, teeth, and shells were as firmly embedded in a calcareous matrix as are the fossil remains in the lias and carboniferous limestones. Mr. Macbride is engaged in examining the contents, and preparing a report on the subject. (*Glasgow Herald.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—AUGUST 15, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys .. 979 / Girls .. 930 }	1909	1320
Average of corresponding weeks 1853-62	1806	1256

Barometer:
Highest (Sun.) 29.967; lowest (Sat.) 29.677; mean, 29.851.

Thermometer:
Highest in sun—extremes (Mon.) 117.7 degs.; (Fri.) 109.5 degs.
In shade—highest (Sun.) 84.9 degs.; lowest (Wed.) 50.1 degs.
Mean—65.1 degrees; difference from mean of 43 yrs. +3.5 degs.
Range—during week, 34.8 degrees; mean daily, 24.3 degrees.

Mean humidity of air (*saturation*=100), 70.

Mean direction of wind, S.W.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

A CORRESPONDENT asks why, in the advertising appeal made to the public in the daily journals on behalf of the Cancer Hospital, the name and address of the surgical doctor to it should appear immediately over the name of the bankers, as follows:—

"*Cancer Hospital.*—The Committee urgently appeal to the public for support, to enable them to meet the weekly expenses incurred by supplying generous diet, expensive medicines, etc.

"Principal Surgeon—Wm. Marsden, Esq., M.D., 65, Lincoln's Inn Fields.

"Bankers—Messrs. Coutts and Co., Strand."

We suppose Surgeon Marsden, M.D., allows his name to go in the advertisement on principles of the purest philanthropy. He is a great Cancer Doctor, and therefore gives the Hospital the advantage and prestige which are to be had from the use of his name.

F. K.—The death of Sir Cresswell Cresswell may perhaps recall to the mind of some of your readers the death of Dr. Pereira. Dr. Pereira (in excellent health, we believe, at the time) slipped, and ruptured the tendo Achillis; and, whilst undergoing the rest necessary for his cure, suddenly fainted, and died, when turning over in bed. Sir C. Cresswell ruptured his patella, and also suddenly fainted, and died, after some slight exertion.

MEDICAL STATISTICS.—SIR: As bearing on the question of medical statistics, and an old observer of the late Dr. Todd's practice in fever and pneumonia, will you permit me to remind Dr. Mayo, that the "large statistics" which he says are wanted, have been already published, though somewhat to the discredit of Dr. Todd's practice, from what appears to be a faulty mode of interpretation, comparing equals to unequals. Let us remember also that a well known weekly editor boasts that he largely bleeds in typhus.

Nearly all our confusion in the kindred subject of anæsthetics or chloroform deaths, arises from erroneous induction as to cardiac syncope, or taking a *post hoc* for a *propter hoc;* and so at present stands this all-important question of these "large statistics", as is obvious from the writings of Dr. Murchison and Dr. Beale. Patients, in fact, get well *malgré* our brandy or bleeding. If anything appears clear to an observant man after a dozen years going from one hospital to another, especially in surgical wards, it is this, and the small effect produced (especially in weak and nervous patients) by these twenty-four ounces of brandy in twenty-four hours. "The real physician is the one who cures", says Brossais; "the observations which do not teach how to cure, are those of a naturalist." The brandy-doctors certainly cure their patients of pneumonia or typhus. The admirers of Andral and of the men who bleed largely in typhus, are better naturalists and admirers of pathological bottles and great guns at pathological societies. We do not want "large statistics" so much as a proper examination and fair coordination of those already published; when it will be seen how potent is the *vis medicatrix naturæ*, and not so potent (at any rate, for mischief) the twenty-four ounces of brandy.

I am, etc., CHARLES KIDD, M.D.

Sackville Street, July 27th, 1863.

P.S.—One of the leading surgeons at St. Bartholomew's has, over a series of years, used brandy quite as much, if not more, than the late Dr. Todd. Seven pipes of wine is his quota now for his ward, where it used to be half a pipe. Brandy is also prescribed in immense quantities. I have watched the effect with much interest. Brandy, chloroform, ether, all enter the blood, and may be re-distilled from it; but what shall we say of medical guides who say for party purposes that they do not enter the blood?

DR. E. CRISP requests us to insert the following correspondence:—

To the President and General Council of Medical Education.

Gentlemen: I have forwarded to each of you a pamphlet respecting the Carmichael and Harley prizes, believing, as I have stated in my printed letter, that one of your functions is to regulate matters connected with education and the progress of medical science. The particulars relating to these prizes are fully given in the pamphlet. In the one instance, three gentlemen (one of them a colleague) awarded a prize to Dr. Harley, who had not complied with any of the injunctions required by the Council of the College of Surgeons; and in the other, the Council of the Dublin College of Surgeons deputed three of their members to decide a matter, that Mr. Carmichael directed by his will should be left to the decision of all the Councillors. The Council of this College, moreover, advertised that prizes of £200 and £100 would be given to the best and second best essays on Medical Reform (without reservation), as directed by Mr. Carmichael; and, although there were several candidates, the award was illegally withheld. I shall take the liberty hereafter of placing before you other matters relating to corporate illegalities, which, I believe, specially come within your province. In the meantime, I respectfully beg of you to investigate the grievances of which I complain, trusting that you will believe that my motive in making this appeal is neither a vindictive nor a pecuniary one.

I am, gentlemen, your obedient servant,

EDWARDS CRISP.

June 15, 1863.

Sir: I beg to inform you that your memorial, and the pamphlet which accompanied it, have been submitted to the General Council during their recent session. But the Council found themselves obliged to pass the following resolution:—"That the Council is of opinion that the memorial presented by Dr. Edwards Crisp, respecting the Carmichael prizes, is not within the powers of the Council, as limited by the Medical Act; and the Council, therefore, decline to enter on its consideration."

I am, sir, your obedient servant,

Dr. Crisp. FRAS. HAWKINS.

COMMUNICATIONS have been received from:—Dr. THOMAS SKINNER; Dr. T. J. WALKER; Dr. M. MACKENZIE; Dr. LORY MARSH; Dr. O'BRYEN; Mr. CAPES; Mr. T. J. DYKE; RUSTICUS EXPECTANS; Mr. T. M. STONE; Mr. G. E. FORMAN; Dr. HYDE SALTER; Dr. GOOLDEN; Mr. PAGET; Dr. SYMONDS; Mr. JOHN RUSSELL; Dr. SANKEY; Mr. HAYNES WALTON; Mr. JAMES ROSS; and A MEMBER.

CHLORODYNE

"INVENTED AND DISCOVERED IN 1844 BY RICHARD FREEMAN."

(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S.Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. & L. M. etc., etc., Albert Terrace, London Road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and in all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating, that after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, etc., etc.

"Having been in the habit of using Mr. Freeman's Chlorodyne for some time past, I have much pleasure in stating *that it has never failed to have the desired effect* in whatever case it has been administered."

Manufactured by RICHARD FREEMAN Pharmaceutist, Kennington Road, London, S.;
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz, 10s. each.

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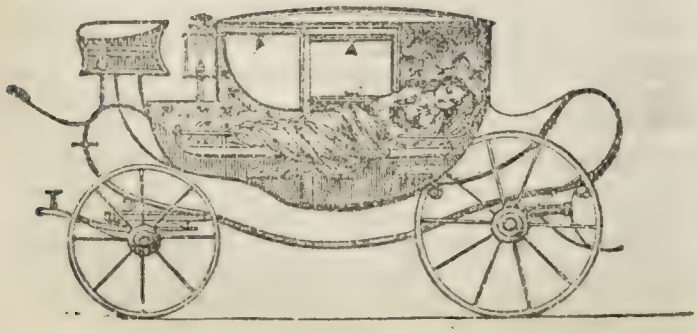
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Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VIII.—On the Diagnosis of Dropsies.

Importance of the Separate Study of Symptoms. Dropsy a Symptom. Parenchymatous and Cavitary Dropsy. Accumulation not essential to Dropsy. Dropsical Fluxes. Scheme of the Varieties of Dropsy. 1. *General Mechanical Dropsy.* 2. *Local Mechanical Dropsy.* 3. *Portal Dropsy.* 4. *Dropsy of Cutaneous Asphyxial Congestion.* 5. *Dropsy of Chronic Inflammatory Hyperæmia.* 6. *Dropsy of Watery Blood.*

Gentlemen,—There are several cases of dropsy at the present time in the hospital—two of renal dropsy, two of ascites, one of dropsy of the lower extremities from lung-disease, one of similar dropsy from heart-disease, and one of dropsy of the lower extremities in which neither lung- nor heart-disease exists; and I am anxious to take this opportunity of bringing the subject of dropsy before you in its general bearings.

I think the plan of eliminating some symptom, which several cases, or diseases, possess in common, and considering it by itself apart, has these two advantages—that, in the first place, it brings strikingly before us the points of difference and contrast which the common symptom presents, according as it occurs in one disease or another, and so quickens our perception of the diagnostic value of the different phases and varieties of the common symptom; and secondly, it enables us to "abstract" the essential condition of the symptom, and thus to recognise the presence of the essential condition wherever we find the symptom.

Thus, the comparison of the different forms of dropsy, such as we see it in cardiac, renal, liver, or other disease, reveals to us certain individual peculiarities in each form, and thus imparts to the dropsy itself a diagnostic value in any case in which it may occur. We know that the dropsy of such a disease has such and such characters; when, therefore, we see a dropsy with those characters we know it is the dropsy of that disease. Again, the study of dropsy, in the abstract, enables us to see that the one essential condition on which it depends, whatever may be the disease that gives rise to it, is a state of hypertension of the smaller blood-vessels. It, therefore, acquires this special indicativeness, and whenever we see it we know that this one essential condition exists, and we judge of our patient's state accordingly.

I therefore strongly recommend this method of the study of symptoms to you, and am convinced that unless you study them in this way you will fail to get all the information out of symptoms that they are capable of yielding.

Dropsy, or hydropsy, as it used more correctly to be called, is, as you know, not a disease, but a symptom merely—a symptom of diseases differing most widely from each other. But in former times it was considered a substantive disease, and people used to be said to be sick of the dropsy, and to die of the dropsy, and a most fatal disease it was considered, (the true reason of which we shall see presently, when we come to consider its immediate mechanism). But dropsy is one of those morbid states that the progress of medicine has transferred from the category of diseases to that of symptoms, and those who a hundred years ago died of dropsy now die of heart-disease, or kidney-disease, or liver-disease.

You know that dropsy is an anatomical condition, and that it essentially consists in the accumulation of serum in certain tissues or cavities in which it ought not so to accumulate. When I say "tissues or cavities", I use language not critically correct, and speak of an apparent and not real difference; for dropsy can never accumulate except in cavities; and the difference between that which manifestly accumulates in a cavity, and that which apparently accumulates in a tissue, is, that in the one case the cavity is large, and in the other the cavities are small; no tissue that does not possess cavities or interspaces is capable of being the seat of dropsy. Thus, in dropsy of the subcutaneous areolar tissue, the seat of the serous accumulation is in the communicating areolæ or microscopical chambers of that tissue; and in dropsy of the lungs (*œdema pulmonum*) the serum occupies the cavities of the interlobular areolar tissue and the air-cells. Still, the division of dropsies into "parenchymatous" and "cavitary" is not a bad one; it is useful and convenient; and, if we bear in mind what I have just said, is not open to the objection of implying anything erroneous.

There is one fact that I am anxious to impress upon you,—that the conditions of dropsy may be present, and the process that forms dropsies actually going on, and yet no dropsy may result, because, from the anatomical peculiarities of the part, no accumulation can take place—because the anatomical arrangements are such that as soon as the serum is poured out from the vessels it is discharged on a free or *quasi*-free surface. For example, we often see, in cases in which the circulation to, or through, the liver is obstructed, and in which, as a result of this, ascites has been developed, that there occur occasional, and sometimes almost periodic, serous defluxions from the bowels. The explanation of this phenomenon is this: the obstruction at the portal circulation produces a state of hypertension at all points behind it; that is, throughout the venous portion of the circulation of all the abdominal viscera, as far back as the capillaries. The result of this hypertension is that serous transudation takes place in all the smaller vessels—minute veins and capillaries—which relieve themselves in the first instance, and often only, on the side where there is least resistance, namely into the free cavity of the peritoneum. Sometimes, however, in addition to this, they relieve themselves through the mucous membrane of the alimentary tube, and the serum thus poured into the bowel is discharged by stool. But such a serous discharge is not a whit the less a dropsical effusion because it is poured out on a free surface; it is exactly of the same significance, due

to the same cause, and points to the same state of the abdominal circulation, as the accumulation in the peritoneum. Just in the same way, albuminuria in heart-disease is simply dropsy occurring at the kidney; it is the exact correlative phenomenon of the œdema of the lower extremities. In the legs, the effused serum finds itself in a network of chambers, shut in by the skin, from which it cannot escape, and in which it, therefore, accumulates; while, in the kidney, the serum finds itself in a system of tubes terminating by open mouths in the calyces, and down these tubes, mingling with the water and other elements of the urine, it trickles, and so into the calyces, pelvis of the kidney, ureter, bladder: the urine is voided; we examine it, and by the ordinary re-agents render visible the albumen of the serum, and we call it albuminuria. But it no more points to the kidneys than the œdema points to the legs; still less does it imply anything amiss with the urine. It simply says that all the vessels tributary to the inferior cava feel the obstruction at the heart. That the serum is voided with an excretion instead of shut up in a tissue is a mere accident of anatomy; the essential condition is dropsy at the kidney.

In such an example as the one I have just cited there naturally exists the same state of things as exists in an œdematous leg after acupuncture has been performed on it. In such a leg, the swelling goes down, and as long as the acupuncture wounds are open, does not re-appear; but the condition of the circulation is just what it was before—there is the same vascular tension and the same dropsy-forming transudation, as is shown by the constant drain from the orifices; and, as far as the diagnostic and prognostic indications of dropsy go, the state of things is just the same as if the legs were the seat of any amount of œdema.

Remember then that such serous discharges as I have spoken of possess the significance of dropsy, and nothing more.

The best arrangement of the varieties of dropsy that I have been able to devise, is what you see in this table. It does not perfectly satisfy my mind; for I have been obliged to make, in one point, a sacrifice of systematic exactness for the sake of clearness and utility, as I shall presently explain; still it is the best I have to offer you. It is on the correct recognition of the characteristics of these varieties that the diagnosis of dropsy depends, and, therefore, such a table as this may be said to represent the whole subject of the diagnosis of dropsy.

	Varieties of dropsy.	Symptoms.	Diseases in which they occur.
Mechanical.	1. General....	Subcutaneous œdema, beginning at the feet, and becoming more and more universal. Dropsy of cavities at last. *Dyspnœa.*	Chronic bronchitis. Valvular disease of the heart.
Mechanical.	2. Local.....	Partial subcutaneous dropsy of upper extremities, or lower. *Other parts perfectly free.* Dyspnœa *not* necessarily present.	Abdominal tumrs. Pressure of aneurism on sup. cava. Phlegmasia dolens.
	3. Portal dropsy ..	Ascites. No dyspnœa. No other dropsy. Symptoms of liver disease generally present.	Cirrhosis.
	4. Dropsy of cutaneous asphyxial congestion	Universal subcutaneous œdema, *beginning very often at the face.* No dyspnœa necessarily present(?). Albuminuria.	Bright's disease. Acute dropsy from cold, and after scarlatina.
	5. Dropsy of chronic inflammatory hyperæmia	The insidious accumulation of fluid in a serous cavity, without notable pain.	Hydrothorax. Strumous ascites of children. Hydrocele, etc.
	6. Dropsy of watery blood	Pallor; breathlessness on exertion; faintness; palpitation; vertigo; Amenorrhœa; face and upper extremities puffy; lower extremities œdematous.	Chlorosis. Flooding, etc.

The first two varieties of dropsy, you see, I call "mechanical"; the rest, not. I do this in obedience to general custom. But it is a distinction that does not represent an essential difference. Some forms of the so-called mechanical dropsies are not more mechanical, in the way in which they are produced, than others that are not so named. The dropsy of heart-disease and chronic bronchitis are both called mechanical dropsies, and depend, one on an impediment established at the heart, the other on an impediment established at the lungs; which impediment, in each case, retrogrades upon the systemic venous system, and, ultimately reaching the peripheral vessels, gives rise to transudation and dropsy. But the universal anasarca of acute dropsy from exposure to cold is just as mechanical in its cause, and just as dependent on an impediment established at a certain part of the circulation, as the dropsy of chronic bronchitis. The one is due to stasis at the capillaries of the lungs, the other to stasis at the capillaries of the skin: in the one, the impediment retrogrades a long way before it reaches the point where it produces the dropsy; in the other, the dropsical transudation takes place immediately behind, one might almost say at, the point of arrest. But both are equally mechanical; both are dependent on an asphyxial capillary stasis—the one of the lungs, the other of the skin.

A far better, or rather a far more exact, arrangement would be to divide dropsies into those that are produced by an obstruction placed on some main vessel, and those that are due to peripheral or capillary impediment. Of the first class would be the dropsy from heart-disease, that from the pressure of aneurismal or other tumour on the superior or inferior cava, the ascites from pressure on the *vena portæ*, the œdema of a leg from plugging of its main vein, etc. Of the second class would be the dropsy of chronic bronchitis, the ascites of cirrhosis, the anasarca of acute dropsy, the serous collections resulting from hyperæmias of an inflammatory type, as hydrothorax, chronic hydrocephalus, the ascites of struma. But, though this would be the more exact, I think the arrangement I have adopted is the more practically useful, because it is based, not on etiology, but on a natural grouping of well-marked clinical phenomena, and is therefore a diagnostic arrangement. Let me now give you a short running commentary on my table.

The first variety—"*General Mechanical*"—is the commonest of all forms of dropsy, and is that which attends the closing scene of so many cases of heart and lung disease. It is always chronic, has always been preceded by the well-marked symptoms of thoracic disease, especially is dyspnœa sure to have been present, and generally urgent; if due to heart-disease, the dyspnœa may have been much less marked than if due to lung-disease. But it is impossible for either heart or lung disease to generate dropsy without the intervention of dyspnœa; *ergo*, any case of dropsy in which all trace of dyspnœa is,

and has been, clearly absent, is not dropsy of this kind—is not dependent on heart or lung disease. This form of dropsy is, in its distribution, more affected by gravitation than any other; it always begins at the feet, and change of position for a single night will throw it from one arm and hand to the other; it attains a development more enormous than any other form, and in its last stages is frequently complicated with local purpurous hæmorrhage.

The second variety—"*Local Mechanical*"—is characterised by its partial distribution, and by that distribution corresponding with some separate segment of the venous system, and not being affected by gravitation; all other parts of the body being perfectly free from any tendency to dropsy. We see examples of it in œdema of the legs from pressure of an abdominal tumour on the inferior cava, of one leg from that of a pelvic tumour on one of the iliacs, in the swollen face and arms from pressure of an aneurismal or other tumour on the superior cava, in local œdema from venous plugging, etc. Dyspnœa may be present, or it may not. The great characteristic of this dropsy is its partialness and immobility, and the perfect freedom of all other parts from any trace of dropsical tendency.

Variety the third—"*Portal Dropsy*"—is no doubt the weak point of my scheme, for it includes dropsies that might correctly fall under other heads, and it unites those that are essentially distinct. For example, ascites from pressure of a tumour on the portal vein as it enters the liver is "local mechanical dropsy", and should come under variety the second; and such dropsy has no more alliance with ascites dependent on cirrhosis than dropsy from an intrathoracic tumour has with dropsy from chronic bronchitis;—the one is dropsy from pressure on a main vessel, the other from multitudinous capillary arrest. Still, the one characteristic and essential symptom—ascites, unattended with other dropsy—is so striking a clinical phenomenon, and having such certain and precise diagnostic indications, that I have thought it well to erect this form of dropsy into a separate variety. Its characteristic signs are the well known physical signs of ascites—general abdominal distension with a material freely obeying the laws of gravitation, dull at the most dependent parts, resonant at the top, and imparting the characteristic thrill and wave on percussion. If such a condition is present, and all other dropsical symptoms are absent, we may be sure, whether there are signs of liver-disease or not, that the one thing pointed to is portal impediment of some kind or other.

The fourth variety—dropsy from what I call "*Cutaneous Asphyxial Congestion*"—characterises a perfectly natural group of cases. It is generally sudden in its appearance, often the first warning of illness, is universal in its distribution, is affected but very slightly by gravitation, often appears first in the face, is frequently quite unaccompanied by dyspnœa or cough, is always attended with albuminuria, sometimes with hæmaturia, and has generally been preceded by some cause of suppression, or morbid condition, of the function of the skin. We see examples of such dropsy in the dropsy after scarlatina, in the different forms of Bright's disease, and in simple acute dropsy from exposure to cold. With regard to the theory of this dropsy, I will at present say no more than that I believe it depends on a state of the capillaries of the skin similar to that of the capillaries of the lungs in asphyxia—a state of congestion or stasis from the blood not being depurated of that of which it ought to be freed in that particular capillary system, and therefore not in a state to leave that capillary system.

I have my doubts as to the legitimacy of calling the dropsies of the fifth variety true dropsies; they doubtless pass by imperceptible degrees into cases of genuine serous inflammation—cases of true pleurisy, peritonitis, etc. Still they are often so free from all symptoms of inflammation, and are so closely allied to non-inflammatory dropsies, that it would be difficult to draw the line between them. Hydrocele may be taken as a good example of this kind of dropsy, and that peculiar insidious form of hydrothorax in which the first thing that makes the patient aware that anything ails him is the discovery that he has a pleura full of fluid. The distinctive features of dropsy of this kind are—that it is always cavitary (necessarily), affecting some single serous sac; that it occurs apparently spontaneously; and that there is a clear absence of all those conditions to which secondary or symptomatic dropsy is attributable.

The sixth variety is the *Dropsy of Extreme Anæmia*. We sometimes see it in chlorosis, and we especially see it after profuse hæmorrhages. I think I have seen it the most marked in women who have flooded. It is a form of dropsy vastly commoner in women than in men—indeed, it is very rare to see it in men; but I *have* seen it in two or three cases in men who have lost a great deal of blood from hæmorrhoids. It was conspicuously marked in the case of Thos. Spurritt, who is now lying in bed No. 5 of the Clinical Ward, and who, you know, has lost an incalculable quantity of blood from chronic ulceration of the lower bowel. His face was so puffy when he came into the hospital, that one could not resist the impression that he was suffering from renal dropsy. We found, however, that such was not the case. He has had no bleeding for five weeks, and the puffing of the face is almost gone. As anæmia, to induce this dropsy, must be extreme, the signs of anæmia are so strongly marked as to enable one to identify it at once. Moreover, except when it arises from chlorosis, there is almost always the antecedent circumstance of the hæmorrhage to guide one; and there is also, as in the preceding variety, the absence of all the ordinary causes of dropsy—there is no heart-disease, no lung-disease, no liver-disease, no kidney-disease. This dropsy is never cavitary.

Let us now proceed to the analysis of the cases of dropsy at present in the hospital, and see how we shall be able to diagnose each case on the strength of the peculiar features of the dropsy that characterises it.

[*To be concluded.*]

Vacancies. The following appointments are vacant; Assistant-physician at King's College Hospital; acting-physician and acting-surgeon to the Birmingham and Midland Free Hospital for Sick Children; two surgeons to the Islington Dispensary; medical officer and general superintendent to the Dundee Royal Infirmary; resident medical officer to the Leeds Fever Hospital; house-surgeon to the West Norfolk and Lynn Hospital; house-surgeon to the Chester General Infirmary; assistant-surgeon to University College Hospital; and physician's assistant and junior house-surgeon to the Manchester Royal Infirmary and Dispensary.

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ON THE OPERATION OF TRANSFUSION IN OBSTETRIC PRACTICE:

WITH DESCRIPTION OF A MORE CONVENIENT TRANSFUSION-APPARATUS.

By Graily Hewitt, M.D., M.R.C.P.; Physician to the British Lying-in Hospital; Lecturer on Midwifery and Diseases of Women and Children at St. Mary's Hospital Medical School.

The application of the operation of transfusion in the treatment of the hæmorrhages incident to pregnancy and the puerperal state appears to require a closer attention than it has yet received by the profession at large; for, notwithstanding the fact that much has been said and written on the subject by Dr. Blundell, Dr. Waller, Dr. Routh, Mr. Soden, and others, the operation is very rarely practised or attempted.

Observation and reflection have convinced me that the subject is one deserving an earnest and careful consideration, and that good results are to be anticipated therefrom; and, impressed with this conviction, I venture to invite the criticism of those whom I have the honour of addressing on the remarks now to be offered.

From data furnished by the Reports of the Registrar-General, it appears that, in England and Wales, the deaths from accidents during childbirth amount to about nine a day, taking the average of several years; and it further appears that, of these nine women who perish from this cause, one dies from the effects of flooding attendant on delivery. This will give a sufficiently correct idea of the frequency with which treatment of the best kind is urgently required to avert impending death from uterine hæmorrhage. Transfusion is not the only remedy in these dangerous cases of flooding; and it is probable that the number of instances in which the patient is brought to a state of imminent danger from profuse loss of blood during or after parturition will, with advancing knowledge, be progressively diminished. But, even under the most favourable circumstances, cases must from time to time occur in which women will fall into this perilous condition, and in which all remedies short of transfusion will fail. In a few cases, danger from flooding seems inevitable under the best treatment. In a few, the danger occurs from absence of good medical treatment: the patient passing in a very few minutes, and before assistance can be obtained, from a state of apparent safety to one of the extremest danger. In short, cases must and will occur in which, from one cause or other, the only hope for the patient is the application of extraordinary remedies, such as transfusion of blood.

In the face of these facts, and allowing due weight to the consideration that all cases of flooding are not cases for transfusion, it is matter for surprise that the operation is not more frequently had recourse to.

The circumstances which lie in the way of a more general adoption of transfusion are the following:—

1. A disbelief in the efficacy of the operation; and the feeling which prevails with some, that the transfusion may fail to do good.

2. Admitting the utility of the operation, the difficulty of deciding in particular cases as to the time for its performance; in other words, the indications for the operation.

3. The difficulty of performing the operation, which is dependent on—

a. Want of means speedily and immediately accessible for performing the operation with the necessary degree of nicety.

b. Want of previous study of the steps and details of the operation.

1. *The Disbelief or Distrust in the Efficacy of the Operation.* It is undoubtedly the fact that by many practitioners the operation of transfusion is looked upon with a feeling which, if not one of absolute aversion, is one of indifference, and by whom the operation is never attempted; it being considered that, if the patient cannot be saved by other means, transfusion is not likely to do much good. In other quarters, the argument to be encountered is this,—that in cases where the operation has been followed by the restoration of the patient, the restoration might or would have been effected by other means. Instances may be cited, it is true, pretty numerously, to show that patients in whom the vital powers have been reduced to the very lowest ebb, and who have been expected every moment to cease to exist, have nevertheless been saved by the more ordinary restorative measures. But if it be argued, on the one hand, that many cases recover from an apparently eminently dangerous state without transfusion, it can be answered, that many cases do not so recover; and further, that very many patients have been restored by transfusion, who have presented symptoms of the very worst possible kind at the time the operation was undertaken. Lastly, it can be shown that there has been a perfect identity between the symptoms of many untransfused patients just prior to actual dissolution, and those of the patients who, having been thus operated on, have afterwards recovered.

For reasons which I need hardly allude to, it is exceedingly difficult to institute a just comparison between the two classes of cases: danger to the patient is not always indicated in the same way, nor is extreme danger produced by the same amount of loss of blood in all patients; and it is not, therefore, a thing capable of absolute demonstration, that the cases which have recovered after transfusion could not have been restored by other measures. It is, however, as certain as in such a matter it can well be, that in many of the transfusion recovery cases, recovery would not have taken place without recourse to the procedure in question. I believe that it is admitted, even by those who look the most coldly on the operation, that it has saved some patients.

The most recent collection of cases of transfusion in obstetric practice is that by Professor Martin of Berlin, published in 1859 (*Ueber die Transfusion bei Blutungen Neuentbundener*, Berlin). Of 57 cases of transfusion tabulated by this writer, 43 were successful. In 7 of the 14 unsuccessful cases, however, death took place either some days later from return of hæmorrhage, or from phlebitis or other causes; and there are only 7 of the 14 unsuccessful cases which can be fairly termed unsuccessful so far as the transfusion was concerned. Thus, out of 50 cases, we get 43 cures—a proportion of 86 per cent. The valuable observations of Dr. Blundell, made several years ago; the cases of Dr. Waller; the collection of cases and important remarks on transfusion by Mr. Soden of Bath; the experiments more recently made by Dr. Brown-Séquard (*Journ. de Phys.*, tom. i, p. 666) on the effects of transfusion of blood in revivifying temporarily animals already dead from diseases such as peritonitis,—these facts and observations contain a mass of evidence directly and indirectly proving the efficacy and the reliability of transfusion, as a remedy in cases of threatened death from loss of blood,

which it is impossible to withstand. It appears, indeed, to be a therapeutic means of the very highest value; and the cases most suited for it, and which are most likely to be benefited by it, are precisely those cases of profuse hæmorrhage which occasionally come under the notice of obstetric practitioners, where the patient is dying simply and purely from want of sufficient blood to carry on the vital actions.

It is not to be expected that transfusion will benefit all the cases in which it is nevertheless legitimately applied. The vital powers may be too prostrated to allow of recovery; and in a few cases disappointment must, therefore, be expected. But the facts on record, and which I have but just quoted, lead us to expect that eight out of every ten cases, otherwise hopeless, may be expected to be saved by timely and successful performance of the operation.

2. The next circumstance to be considered is a very important one; viz., *the Difficulty of deciding what is the Proper Time for the Operation.* It is probable that the performance of the operation would become much more frequent if this difficulty could be removed or lessened. It appears, therefore, very desirable that some definite rules should be laid down respecting the *indications* for the operation.

A rule which is a good one, and to which there are only one or two exceptions, is, that the operation is not applicable unless the hæmorrhage and the liability to hæmorrhage shall have ceased. The exceptions are cases like that of Dr. Waller's, which has been frequently quoted. In this case, there was placenta prævia; so much blood had been lost, that death was imminent; and the patient so exhausted, that it was evident that the attempt to deliver her would be fatal. Transfusion was here performed really in order to enable the patient to bear a further manipulation and possible loss of blood. The case, as is well known, ended successfully.

There is one remark which occurs to me as desirable to make in this place, in reference to the management of certain cases of flooding. A few cases of *post partum* hæmorrhage have been placed on record, in which the flow of blood could not be arrested, and in which the uterus continued to pour out blood, spite of all that could be done. In cases of this exceptional kind, transfusion is useless until the bleeding can be stopped. It appears to me that, in these very obstinate cases, the method of treatment adopted by Dr. Hamilton of Edinburgh merits a more general attention; viz., that of grasping the uterus from above by one hand, and placing the other hand in the vagina. The uterus is compressed between the two hands, and the compression kept up for half an hour or more. I have lately made use of this plan in a case where a continuous oozing of blood, unchecked by more ordinary means, was going on; and I found it a most satisfactory and practicable method of arresting uterine hæmorrhage.

The cases which have been just alluded to are quite exceptional; and in the majority of cases, when transfusion is called for, the hæmorrhage has quite ceased, and the effects of the previous loss of blood only have to be surmounted. To this class of cases, therefore, the following rules as to the indication for transfusion apply.

Absence of power to swallow. It may, I believe, be laid down as a rule, that transfusion is not required in cases where the patient is able to swallow freely: in the large majority of such cases, recovery is found to take place if the supply of brandy or other stimulant be adequate. There are reasons for believing that, in some of the cases of flooding in which a fatal result has occurred, the quantity of stimulant given has been too small. The quantity required and borne by the patient is often enormous. In one case which occurred in my own practice, the patient, the wife of a poor shoemaker, took in the course of two hours upwards of thirty ounces of brandy, together with beef-tea and stimulant remedies of other kinds. She recovered without transfusion, although the symptoms were of a very alarming nature. In another case, that of an Irish milk-woman, the quantity of brandy given in the course of an hour was nearly as great, with a result equally fortunate. The quantity of stimulant required is to be estimated by the effect produced, and not by ounces. Unless, therefore, other symptoms, presently to be mentioned, be very alarming from their intensity, the fact that the patient has still the power of swallowing is indicative that more ordinary measures may prove successful.

A deadly pallor and coldness of the body and extremities; absence of pulsation, or extreme feebleness of pulsation, at the wrist; and laborious respiration, whether very slow or very quick,—the presence of these symptoms combined is one calling for the performance of transfusion; that is to say, when the symptoms in question persist for a few minutes, unrelieved by administration of other remedies. This combination of symptoms is more alarming when the patient has gradually (within the space of an hour, for instance) fallen into this condition, than when the symptoms in question have come on quite suddenly. Absence of power of swallowing may or may not be added to the symptoms above mentioned; and, so added, it renders the indication for transfusion the stronger. Absence of pulsation at the wrist appears to be, taken alone, one of the most positive indications for the operation; but it does not follow that, because such pulsation is felt, the operation is not required; and extreme feebleness, together with extreme quickness of pulsation, is in some cases as strongly indicative of the necessity for the operation as its complete absence in other instances.

The presence of *jactitation*—a condition of extreme restlessness—is a symptom not in itself an indication for the operation, but one of a very alarming nature; and when this symptom is present, it must be considered as suggestive of the possibility of the operation being shortly required. There are few cases of fatal flooding in which jactitation is not observed.

Another symptom, also of alarming nature, is *loss of consciousness;* but, unless of some duration, and associated with want of pulsation, or with great weakness and quickness of pulsation at the wrist, this symptom is not an indication for the operation. A very feeble pulse and loss of consciousness, when occurring together and persistent, indicate the operation. The patient sometimes falls into a state of complete and persistent unconsciousness, from which she cannot be roused; and there are some cases of this kind in which, although the pulse is still to be felt, it will become necessary to perform transfusion. Other cases, again, in which there are observed, alternately, deadly faintings and partial restorations therefrom, may, when this condition of things is persistent and unaffected by other remedies, require transfusion.

The presence of *obstinate vomiting, in combination with collapse from loss of blood*, is an indication for the operation under certain circumstances. In some cases, everything taken is immediately vomited; and, although a tolerable quantity of stimulant may be given by the rectum, it is less efficacious than when given by the mouth; absorption from the rectum not taking place so rapidly as from the stomach, as Mr. Savory's recent experiments have rendered evident. Vomiting is sometimes a favourable sign, where it occurs in consequence of the stomach having been overloaded with stimuli; and its occurrence under these circumstances may be absolutely indicative of improvement in the condition of the patient; but it may be, on the other hand, a sign of the worst possible augury, being sometimes observed just prior to the arrival of the fatal termination of the case.

The presence of *convulsions*, when these supervene

after prolonged collapse from loss of blood, is of the worst possible augury, and an indication for the operation. With reference to convulsion, however, there is this remark to be made, that occurrence of a convulsion may indicate, as it did in Mr. Soden's celebrated case, that the patient is better. In the instance in question, a convulsion occurred during the performance of the operation of transfusion; and this was the prelude to returning consciousness.

By testing *the effect of light on the pupil*, important information may be obtained. A dilated immobile pupil is indicative of extreme danger; so also absence of contractility of the orbicularis palpebrarum when the eyeball is touched by the finger. A patient brought to this condition by loss of blood would seem to be a fit subject for transfusion, if other remedies do not speedily effect manifest improvement.

There are many other symptoms observable in cases of flooding, which are indicative of danger in varying degrees, but which have not the same importance in relation to the present inquiry as those which have been already mentioned. The presence of blindness; singing in the ears, or deafness; yawning; a shrunken, lustreless appearance of the eyes; weight at the cardiac region, or a feeling as if a cord were drawn tightly round the chest; an expression on the countenance of extreme alarm; a loss of ability to recognise friends; incoherence of ideas,—these are symptoms which all who have had experience in obstetric practice are familiar with as accompaniments of severe uterine hæmorrhage; but there is not any one combination of them which can be regarded as indicating, taken by itself, that transfusion is necessary. They are sufficiently alarming, but not in a degree calling necessarily for the operation.

The cases in which transfusion is likely to be called for in obstetric practice are those in which hæmorrhage occurs, whether after abortion, or attendant on delivery at full term. The most urgent cases are those in which the patient has had repeated losses of blood from placenta prævia. There are a few cases in which transfusion is required, and in which the hæmorrhage is not considerable; as where the patient is suffering from the effects of shock, rather than from the effects of loss of blood. Of this class of cases, the one recorded by Mr. Soden (*Med.-Chir. Transact.*, vol. xxxv) is the most remarkable. This was a case of acute inversion of the uterus: the hæmorrhage was not considerable; but the collapse was extreme, and the patient was on the point of dying. The power of swallowing had ceased; the pulse at the wrist was gone, and the breathing stertorous; but the introduction of a small quantity of blood had the effect suddenly, and as it were miraculously, of bringing her back to life.

The foregoing rules and indications for transfusion are, I have reason to think, trustworthy. A few months ago only, I saw on two successive days two cases of flooding, which may be here mentioned by way of illustration. In the first case, the patient was in imminent danger for upwards of an hour and a half after all hæmorrhage had ceased; but, although the collapse was extreme, and the attendant symptoms distressing to witness, yet the pulse at the wrist was all the while to be felt, and the patient remained able to swallow. In this case, I was prepared to perform transfusion, had the patient become worse; but after a space of nearly two hours, occupied in the very liberal administration of brandy and other stimulants by the mouth, and brandy and turpentine by the rectum, the symptoms improved, and the danger was over.

On the following day, I was hurriedly sent for by a medical practitioner to a case of flooding. There had been severe hæmorrhage before as well as after the birth of the child. The hæmorrhage had ceased; but the patient was in an alarming condition, partly unconscious, but able to swallow, and the pulse at the wrist extremely feeble. The child had been born an hour and a half; and brandy had been given, but not in any great quantity. After my arrival, more brandy was given as rapidly as possible. The patient was able to swallow for about ten minutes longer; but, at the end of this time, the power was lost, she became quite unconscious, and the pulse at the wrist was no longer to be felt. An injection of turpentine and brandy was about to be employed, when it became evident that the patient was rapidly dying, and that the only resource was transfusion. Death took place within half an hour from the time of my entering the room, and before the apparatus with which I was then provided, and which was one I had some time previously procured from Berlin, could be brought into action. I still attempted the operation, respiration having ceased about five minutes; but, after a small quantity of blood had been injected, the apparatus got out of order, and no further attempt was practicable or useful.

The facts of the two cases above related corroborate what has been stated as to the value of certain signs as indications for transfusion. It seems probable that, in the second case, if the operation could have been practised before the patient had actually ceased to breathe, life might have been saved. The progress of the symptoms was too rapid to allow of this; but the experience thus obtained has convinced me both of the necessity of attempting deliberately to lay down more precise rules as to the indications for the performance of the operation, and of the necessity for being always supplied with means for easily and rapidly carrying the operation into effect. As far as can be judged, the event of the two cases just related is confirmatory of the correctness of the indications for transfusion which have been laid down.

It may not be out of place here to observe that, in almost all cases where transfusion is employed, other measures are also required. Thus, in cases where the breathing stops, artificial respiration should be employed; and, after blood has been transfused, stimuli are to be given by the mouth or otherwise. No case would seem so bad but that transfusion alone, or in combination with other measures, may not succeed; but, in the hitherto recorded successful cases, respiration has, I believe, been going on in each instance at the time the operation was performed. In the last successful case of transfusion with which I am acquainted —that recorded by Mr. Thorne (*Lancet*, vol. i, 1863, p. 266) of St. Bartholomew's Hospital—artificial respiration was twice successful in temporarily restoring the patient; and very shortly afterwards the transfusion was carried into effect.

3. The great and the chief obstacle to the extension of the operation is next to be considered. It is *the difficulty connected with the Performance of the Operation itself*. This difficulty arises from—*a*. Want of means speedily and immediately accessible for performing the operation with the necessary degree of nicety; and *b*. From want of previous study of the steps of the operation.

A careful consideration of the nature of the emergencies in which the operation is likely to be called for, together with a due estimation of the practical difficulties surrounding it, necessitates the conclusion that, if the operation is to be performed under advantageous circumstances, we must always be prepared to undertake it at a few minutes notice; and this necessitates the being provided with an apparatus portable, simple, and easily cleaned. Two years ago, I procured the apparatus of Professor Martin of Berlin, consisting of a small glass syringe, a cannula, and trocar. In the case above related, I used this instrument; but the nozzle of the glass syringe broke in the cannula, and it became useless. The simplicity of the apparatus commended it to my notice, but it does not fulfil the requirements of

the case. The various forms of apparatus sold in this country are open to the objection that they are too unwieldy to be carried about, and are, therefore, not likely to be within reach at the time they are wanted. Dr. Hamilton of Edinburgh lately proposed a very simple and portable apparatus, consisting of a small funnel with an elastic tube and a cannula, the blood being thrown in by the force of gravitation alone. This apparatus is objectionable, however, for the following reasons. The blood is kept exposed to the air for too long a time; its use necessitates the close juxtaposition of the individual supplying the blood and the patient; choking of the tube, which is a long elastic one, with coagula, is likely to happen; and, from what has been stated as to the amount of force which was in one case of transfusion necessary to propel the blood inwards, it appears that a break down might be expected with the instrument in question.

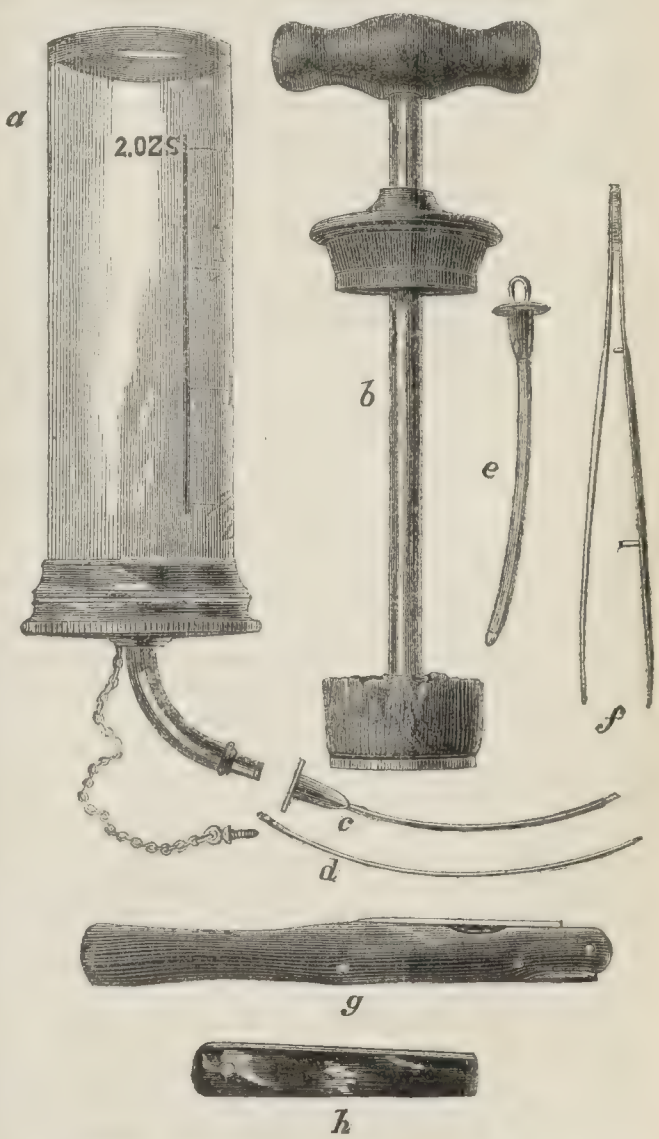
Before describing the apparatus which I have devised, and which is now submitted for the inspection of the meeting, it will be advisable to consider for a moment what are the principles which should guide us in the performance of the operation.

First, as to the blood to be used. Should pure blood or whipped blood be used? To this question, as it appears to me, there can be but one answer; viz., that pure blood should be used. The use of whipped blood has only this in its favour, that the injection of the fluid is not liable to interruption from coagulation. But the objections to it are numerous and weighty: first, the delay involved in the preparation; secondly, the probability that blood deprived of fibrine is less likely to act beneficially as a restorative. The blood remaining in the body after a severe hæmorrhage has been found by analysis to contain a greatly reduced quantity of crassamentum; and it is reasonable to infer, therefore, that a supply of what the blood is chiefly deficient in—viz., fibrine and blood-corpuscles—is most essential. Thirdly, it has been found by Dr. Brown-Séquard, that the introduction of defibrinated blood has, in animals experimented on, induced sudden coagulation of the blood and death. Lastly, it is to be recollected that, in all the successful cases of transfusion in obstetric practice, pure blood has been always used. It being decided that pure blood should be used, the next question to be determined is how best to prevent the occurrence of coagulation while the operation is in progress. This has been a great difficulty; and many attempts to transfuse blood have been frustrated by this coagulation, and by its interference with the operation.

The experiments and observations of Scudamore, Hewson, Carpenter, and Babington, confirmed by the more recent inquiries of Dr. Richardson, go to show that, while differences in the rapidity of coagulation are observed in different cases, yet coagulation is delayed by non-exposure of the blood to the contact of air; and that cooling of the blood a few degrees below the normal temperature does not facilitate coagulation, as it was formerly supposed to do. It is affirmed by Nasse, that woman's blood coagulates two minutes sooner than man's blood. The inferences to be drawn from these and other physiological considerations are—1. That, in the operation of transfusion, the blood of a man is better than the blood of a woman, while it has the further advantage of containing a larger proportion of those constituents of which the patient requires most; 2. That the use of warm water, and of a complicated apparatus to preserve the blood warm during the operation, is unnecessary; and 3. That a fundamental requisite for the operation is a means of preventing, as far as possible, exposure of the blood to the air. 4. Seeing that the time during which the blood remains fluid after being drawn does not, under such tolerably favourable circumstances as may be expected in operating, exceed three or four minutes, while it may be less, it is evident that the various steps of the operation should be performed rapidly and without delay.

The apparatus now exhibited was constructed for me by Messrs. Savigny and Co.; and I have had placed together, in a compact and portable case, the whole of the appliances required for the operation. The blood is to be received into the barrel of the syringe, which is of glass, and holds two ounces; and when full, the piston is inserted, and the blood is ready for injection. This plan of having the piston removable from the syringe, and of receiving the blood into the syringe direct, is, I am convinced, the best; and the adaptation of this principle in the instrument now exhibited appears to me to be a convenient and useful one.

With reference to the steps of the actual operation, and the precautions necessary to be observed, they are sufficiently indicated in the following list of directions. These directions have been drawn up after a very careful study of the operation, and the rules laid down are devised to obviate in the best manner practical difficulties which have to be encountered in the performance of the operation. It is absolutely necessary that every part of the operation should be weighed and considered, and each step of it made to succeed the other accurately and quickly; and, although there is no great difficulty in the operation, it is undoubtedly one of some nicety.



The contents of the "Transfusion Case" (made by Savigny and Co.) are here represented half the actual size. The syringe (*a*) holds two ounces; (*b*) the piston; (*c*) cannula, and (*d*) its plug; (*e*) reserve cannula: (*f*) pair of forceps; (*g*) scalpel; (*h*) lancet.

The transfusion-apparatus now exhibited is so constructed that every part of it is easily cleaned and put

together. Its bulk is small; it is extremely portable; and by its aid the operation of transfusion may, I believe, be performed rapidly, easily, and satisfactorily.

DIRECTIONS FOR THE PERFORMANCE OF THE OPERATION OF TRANSFUSION.

Requirements for the Operation. 1. An individual to supply the blood. 2. An assistant to hold the arm of the recipient steady. Also a second assistant, to manage the arm of the individual supplying the blood. The second assistant may possibly in some cases be dispensed with. 3. The transfusion-case, containing a syringe, two cannulas, with plugs, scalpel, forceps, and lancet. There will be also required a basin, warm water, and a handkerchief to bind the arm in the operation of venesection.

Directions for the Performance of the Operation. 1. Arrange all the steps of the operation from first to last. The operation should not be commenced until every detail has been thoroughly considered, and provision made for the different steps to succeed each other rapidly.

2. See that all parts of the apparatus are in order. The syringe to be worked with a little warm water. The piston then to be taken out; and the whole apparatus, together with the cannulas, placed in a basin of clean warm water, ready for use.

3. Select a vein in the arm of the patient, either the median basilic, the median cephalic, or the cephalic vein; make an incision one inch and a half long, which will freely expose one inch of the vein. For a more limited space—*e. g.*, a quarter of an inch—the whole circumference of the vein should be exposed; so that, if considered necessary, a probe or a piece of thread may be passed beneath it.

4. Make a puncture with the scalpel at the middle of the exposed part of the vein, large enough to allow the cannula to be inserted. Insert one cannula, and withdraw the plug, taking care that the cannula is actually in the vein. (This first cannula is not to be used for the passage of the blood.)

5. The arm so operated upon is next to be given into the charge of an assistant, with instructions to prevent the escape of the cannula from the vein.

6. The next step is to obtain the supply of blood. Before doing so, however, instructions to be given to the second assistant as to what is to be done *after* the first supply is obtained; otherwise time will be lost in a subsequent stage of the operation. The vein to be opened by a large incision, so that a full stream of blood may be obtained. The glass syringe (without the piston, and with the small stopper of the escape-pipe removed) is to be held close against the arm, *horizontally;* the opening of the escape-pipe directed upwards to prevent blood flowing away. When about five-sixths full, the stopper of the escape-pipe to be inserted, the syringe to be held vertically, and the piston inserted.

7. Without a moment's delay, take the reserve cannula from the basin of warm water, and insert it in the vein of the patient, in the place of the first cannula. This substitution must be effected rapidly. Then remove the plug from the escape-pipe; and connect the syringe, ready filled with blood, with the cannula in the vein.

8. Inject the blood, keeping the syringe in a nearly perpendicular position. The injection should be made slowly; quite a minute should be employed in throwing in the contents of the syringe. If the cannula become blocked, withdraw it, and insert the other, freshly dipped in warm water and cleaned.

9. If more blood be required, leave the cannula in the vein while the same process is gone over again. (See Direction No. 1.)

10. It is very essential to take precautions for preventing *delay* in the different steps of the operation. Delays usually involve loss of blood, the blood becoming coagulated and unfit for injection. The fainting of the individual giving the blood has frequently prevented a second supply from being obtained; and the loss of the first supply is, therefore, by all means to be avoided, if possible. Not more than one minute, at the most, should elapse between the filling of the syringe and the commencement of the actual injection. The water used to be about 95° or 100° Fahr.

It may be asked, *What is the quantity of blood necessary to be injected?* In half of the successful cases of transfusion, the quantity required has not exceeded four ounces (in the last successful case, only two ounces were required); although occasionally the quantity required is much greater—viz., eight, ten, twelve, and as much as twenty-four ounces. The difficulty of obtaining a second or a third supply of blood from the same source necessitates occasionally the recourse to a second or even a third individual. It is necessary also to remark, that care is required in holding the arm, to prevent the cannula from slipping out; for this involves delay, and possibly consequent spoiling of the contents of the syringe. Like care is necessary with the arm of the individual supplying the blood, to avoid unnecessary loss of blood—a loss which might prove subsequently irreparable.

The present position of the operation of transfusion, as a remedy for the effects of flooding in obstetric practice, appears to be this: that, while the operation has proved successful in many instances, this fact is only now beginning to become known and disseminated amongst the profession. The next step which appears necessary to be taken is to utilise the operation, and afford facilities for its more general and more frequent performance. I am not without the hope that the observations I have made will have the effect both of directing more general attention to the subject of transfusion in obstetric practice, and of facilitating the application of the operation itself. I have remarked on the necessity for careful study of the operation, and of its various steps; and to this I cannot but attach the greatest importance. The time during which life remains after transfusion has become applicable is generally so short that, if the operation be not undertaken at once, it cannot be undertaken at all. Previous to the arrival of this stage of the case, time and attention are occupied incessantly in applying other measures—in making the patient swallow stimulants, or in arresting the hæmorrhage; and, surrounded as we are by the distracted friends, who are momentarily expecting to see the patient draw her last breath, we are certainly not in the best circumstances for planning and carrying into effect an operation requiring care, nicety, and deliberate calculation to render it successful.

In order that the operation may be really useful, and as applicable as any other therapeutic means, it must be made easy; and this can only be done by previously studying and reflecting on the operation in its minutest detail, and by providing means for rapidly and easily performing it. Whether the particular plan I have recommended for performing the operation be considered the best, is a matter on which diversity of opinion may naturally be expected; and I shall be glad to avail myself of any suggestions which the reading of this paper may call forth, in order to perfect both the apparatus and the operation.

A fear has been expressed by some authorities, that "if transfusion becomes a common practice, it will often be employed unnecessarily." The possible abuse of an operation is not, however, to be urged with any show of reason against its use; such an argument can only apply on the supposition that those who practise medicine are helplessly ignorant and destitute of discrimination. It is very certain that an earnest direction of attention to the peculiarities and necessities of cases of severe flooding, and a proper recognition of the place which should be occupied by transfusion as a remedy,

will result in giving such a degree of precision to practice in such emergencies as to prevent unnecessary performance of the operation. To use the words of Mr. Soden, "the stronger his confidence in the power of transfusion, with so much the greater patience and confidence would the medical attendant first avail himself of the more simple resources his experience suggested." (*Med.-Chir. Trans.*, vol. xxxv, p. 432.)

STATISTICS OF THE TREATMENT OF RHEUMATIC FEVER.

By Thomas K. Chambers, M.D., Physician to St. Mary's Hospital, London.

Statistics, like many other excellent things and people, are apt to prolong themselves into bores. It will be my aim to keep these as short as I can.

Since May 1851, I have had under my care at St. Mary's Hospital 243 cases of rheumatic fever. Of these,

26 were treated with ℥j of nitrate of potash three times a day;

174 with bicarbonate of potash; viz.,
- 141 with ℈j or more every two hours;
- 33 with less quantities or less often;

32 (during the first year) in various other indeterminate ways;

To the last 11—that is, to all since May last—no special drugs have been given, only a little opium when the pain was very bad.

No selection of cases was made.

1. *Results on the Duration of the Illness.*

Of those treated with nitrate of potash, the mean stay in hospital was . . .	40.0 days
Of those treated with ℈j bihoral doses of bicarbonate of potash	34.3 days
Of those treated with less quantity of the same	40.0 days
Of those treated without drugs. . .	30.0 days

If we exclude the last class, the number of which (11) is too small for statistical deductions, it would seem that, though smaller doses have no effect, yet that full doses of the bicarbonate of potash have some influence in shortening the duration of the illness, from the time of commencing it to that of the patient being sufficiently convalescent to leave the house with safety.

I may remark here that any other measure of the duration of the disease is quite untrustworthy for statistical purposes. The different degrees of susceptibility to pain exhibited by different patients, the desire of some to extenuate, of others to exaggerate their sufferings, renders it impossible to register truly even the exact day when the pain ceases: whereas, in such a short period as they last after the commencement of treatment (viz., two or three days), the exact hour would require to be noted. It is equally impossible to decide when, or even whether, the swelling or redness is all gone. Those who have set clinical clerks to observe these facts, know how little the case books are to be relied upon.

2. *Results on the Consequences of the Illness.*

In respect of their several preservative powers against the consequences of rheumatic fever, I find that—

Of the 26 *treated with nitrate of potash*, there were attacked with inflammation of the heart while under treatment (carefully excluding all those admitted with it already existing) five, or 19·2 per cent.; four having pericarditis, and one endocarditis only. Four have died; two of inflammation of the heart, and two of sloughing back.

Of the 174 *treated with bicarbonate of potash*, there were attacked with inflammation of the heart nine, or only 5·3 per cent.; and none have died.

It would seem from this, at first sight, as if bicarbonate of potash had some preservative force. But the fact is, that nearly all of those treated by the alkaline method have been subjected also to what both rational physiology and the subjoined statistics seem to show has a much more powerful influence than any drug in keeping the heart from inflammation. I refer to blanketing the patients.

Up to May 1855, no difference was made in the bedding of my patients with rheumatic fever from that of others in the ward: but after that date they were ordered to be enveloped in blankets, and no linen was allowed to touch the skin. In nearly every case the orders were strictly obeyed.

Of 63, *either bedded in sheets, or who had wilfully thrown off their blankets*, six contracted newly pericarditis at least, if not endocarditis as well; three had a relapse of pericarditis on old cardiac disease; one had endocarditis alone; nearly 16 per cent. had inflammation of the heart; and four died.

Of 180 *in blankets*, none contracted pericarditis; none died; one had a relapse of pericarditis on old cardiac disease; five had endocarditis alone (in one of these cases of endocarditis it was brought on during convalescence by the patient being dowsed with cold water for an accidental hysteric fit); one a relapse of endocarditis on old cardiac disease.

Not 4 per cent. have had inflammation of the heart. When it came, it was of a milder character, and was generally to be accounted for by some imprudent exposure. That is to say, *that bedding in blankets reduces from sixteen to four, or by a good three-quarters, the risk run by patients in rheumatic fever.*

Effects of Tobacco on the Mental Faculties. In reference to the question of the influence of smoking on the mental faculties, Dr. Richardson, in the *Social Science Review*, says tobacco, like all agents of its class, has the property of checking the oxidation of the body, and thus of diminishing waste. If mental labour is commenced when the system is well sustained, and the supply in excess of the waste, indulgence in smoking does produce in most persons a heavy, dull condition, which is difficult to throw off, because it stops the processes of assimilation and destruction. But if mental labour be continued until the wasting of the corporeal power is greater than the supply, then the resort to tobacco gives a feeling of relief; it checks the rapid waste that is going on, and enables the mind to bear up longer in the performance of its task. Many men who commence a day of physical or mental work on a good breakfast and tobacco, find that they go through their labours with much less alacrity than other men who are not smokers; while the majority of smokers feel that after a day's labour the resort to a pipe, if the practice is moderately carried out, produces temporary relief from exhaustion. He also adduces the well-known fact that many persons of great energy and industry cannot sleep owing to the actual severity of mental or bodily effort to which they have subjected themselves. In this condition there can be no doubt that tobacco produces a soothing effect, causing mental rest. Dr. Richardson does not advocate the necessity of tobacco as a requirement of the natural life. He believes that in this day we are not living naturally; we have run into the extreme of industry; have carried our exertions to the borders of insanity; and so it is to be admitted that to the natural man such adventitious aids as tobacco are unnecessary. He condemns the use of tobacco until the body is fully developed; and states that the indulgence in it by our children and youths is degrading the national intellect, and establishing a race which will transmit its own degradation to future generations.

Reviews and Notices.

LECTURES ON SURGICAL PATHOLOGY, delivered at the Royal College of Surgeons of England. By JAMES PAGET, F.R.S., Surgeon Extraordinary to Her Majesty the Queen, etc. Revised and Edited by WILLIAM TURNER, M.B.Lond., F.R.C.S.E., F.R.S.E., Senior Demonstrator of Anatomy in the University of Edinburgh. Pp. 848. London: 1863.

MR. PAGET'S *Lectures on Surgical Pathology*, from the time of their first publication in 1853, have maintained a high reputation among works having for their aim the exposition of discoveries in medical science and their application to practice. The time having arrived for preparing a second edition, Mr. Paget found that, although he had industriously accumulated a mass of "facts, and probabilities, and guesses at truth which had been added to pathology", the duties of active practice, which had increased on him during the last nine years, prevented him from subjecting the lectures to that careful revision which he would, as a conscientious man, wish them to undergo. He has, therefore, associated with him in his labour his friend and former pupil, Mr. TURNER of Edinburgh, a gentleman well fitted to be the fellow-labourer of so accomplished a pathologist as the author himself.

What is *Surgical* Pathology? The definition which Mr. Paget would attach to the term may be gathered from the titles of the thirty-six lectures of which the book is composed. These are: 1. Nutrition; 2. Conditions necessary to Healthy Nutrition; 3. The Formative Process—Growth; 4. Hypertrophy; 5. Atrophy—Degeneration; 6. Atrophy; 7. Repair and Reproduction of Injured and Lost Parts; 8. The Materials for the Repair of Injuries; 9 and 10. The Processes of Repair of Wounds; 11. The Repair of Fractures; 12. Healing of Injuries in Various Tissues; 13. Phenomena of Inflammation; 14. Products of Inflammation; 15. Development of Lymph; 16. Degeneration of Lymph; 17. Changes produced by Inflammation in the Tissues of the Affected Part; 18. Nature and Causes of Inflammation; 19. Modification; 20. Specific Diseases; 21. Classification of Tumours; 22. Simple or Barren Cysts; 23. Compound or Proliferous Cysts; 24. Fatty and Fibro-cellular Tumours: Painful Subcutaneous Tumours; 25. Fibrous Tumours; 26. Cartilaginous Tumours; 27. Myeloid Tumours: Osseous Tumours; 28. Glandular Tumours: Vascular or Erectile Tumours; 29. Recurrent Tumours; 30. Scirrhous or Hard Cancer; 31. Medullary Cancer; 32. Epithelial Cancer; 33. Melanoid, Hæmatoid, Osteoid, Villous, Colloid, and Fibrous Cancers; 34 and 35. General Pathology of Cancer; 36. Tubercle.

Thus the student of pathology is led gradually from the consideration of the physiological process of nutrition to its conditions of excess and defect—hypertrophy and atrophy; thence to the means adopted by nature for the repair of injuries; then to inflammation and its results; and finally to the study of various abnormal phenomena of nutrition, under which products foreign to the tissues of the healthy body are generated.

How these matters are treated of, those who have already read the first edition of Mr. Paget's *Lectures* do not require to be told. To those who have not had this good fortune, and who would raise their knowledge of surgical pathology to the level of the present day in the most pleasant as well as efficient manner short of actual research, we say—Read this edition of Mr. Paget's *Lectures*. They are the work of a man who is master of his subject, and who, to habits of observation and industry, happily unites the power of writing in a style that renders the perusal of his works an agreeable task. On the present occasion, he has been well seconded by Mr. Turner in his endeavours to bring up the work to the existing level of pathological doctrines, ever advancing as it is, so as to render the work an admirable exposition, not only of the author's special views, but of the present state of science in regard to those matters which form the titles of its several chapters.

ANATOMICAL AND PHYSIOLOGICAL OBSERVATIONS. By JOHN STRUTHERS, M.D. Edinburgh: 1863.

DR. STRUTHERS does well to supply the profession with a reprint of the very able papers on physiological and other subjects which have been written by him in different journals. The present contribution contains four papers, making altogether twenty-three from his pen. The first is the Description of a Case of Double Uterus; the second, on the Solid-hoofed Pig; the third, on the Relative Weight of the Viscera on the two Sides of the Body; and the fourth, on Variation in the Number of Fingers and Toes and Phalanges in Man. These papers were originally printed in the *Edinburgh Monthly Journal*, and in the *Edinburgh New Philosophical Journal*. They fully sustain the high reputation of Dr. Struthers as an anatomist and a physiologist.

INFANT FEEDING, AND ITS INFLUENCES ON LIFE: or the Causes and Prevention of Infant Mortality. By C. H. F. ROUTH, M.D., M.R.C.P.E., M.R.C.S., etc. Second Edition. Pp. 462. London: 1863.

WHEN the first edition of Dr. ROUTH'S book appeared, we had pleasure, after a perusal of its contents, in speaking favourably of it. The verdict which we then pronounced, we would repeat and confirm with respect to this second edition.

The author has subjected his book to a most careful revision; and, while he has not seen reason to change any of the doctrines which he enunciated in the first edition, he has, by a judicious pruning away of matter capable of being omitted, made room for the introduction of some new and valuable matter. He has, too, arranged his materials in a more orderly form than that which they formerly possessed. The book now consists of four parts; viz.: 1. Mortality and Viability of Infants; 2. Lactation; 3. Some General Deductions in Reference to Alimentation, made from the Composition of Milk and its Substitutes; 4. Defective Assimilation.

Dr. Routh's aim in publishing the work has been to show a way towards lessening the excessive mortality among infants which so notoriously prevails among us. His patient investigation both of the statistics of infant mortality, and of the nature and applicability of the various articles administered as food to children, and the honest desire which he evi-

dently feels to make his knowledge subservient to the preservation of infant life, are deserving of the highest praise; and we join heartily with him in the hope that not merely the profession, but the public, will see the necessity of attention to scientific principles in the dietary of infants.

Progress of Medical Science.

On the best Methods of Applying the Calabar Bean in Ophthalmic Medicine. Mr. Daniel Hanbury states that certain difficulties occur in forming a preparation of the Calabar bean which can be conveniently applied to the eye. These difficulties arise from the fact that the alcoholic extract which contains the whole of the poisonous principle of the bean can only be imperfectly dissolved in water, and that its alcoholic solution is inadmissible. There is also another difficulty which occurs with all liquids that are required to be dropped into the eye; and that is, that the flow of tears which instantly follows such an application greatly reduces the amount placed in contact with the membrane, or at any rate renders it very uncertain. These considerations have suggested other expedients for applying the remedy, one of which is to use the extract by itself; another is to employ it diffused through paper, after the manner recommended by Mr. J. F. Streatfeild for the application of atropine; and a third is to use a solution of the extract in glycerine. Each of these methods has certain advantages. The extract, which is prepared by exhausting the finely powdered bean with alcohol, sp. gr. ·838, and evaporating the solution, is not a homogeneous body, but contains a small amount of greenish fatty oil, which separates as the solution is concentrated. Its action upon the eye is rapid and powerful. The best means of using it is to moisten a camel's-hair pencil with water, and then with its tip to rub off a minute quantity of extract and apply it to the palpebral conjunctiva of the lower lid; so applied its specific action ensues in the course of a few minutes. This method of the direct application of the extract would probably be hardly advisable in any other than professional hands.

The method of applying *atropine* to the eye by soaking a piece of thin bibulous paper of definite size in a known quantity of solution of atropine and then allowing it to dry, has been recommended in this country by Mr. Streatfeild, and in France by M. Leperdriel. Such paper should be cut into small pieces from one-fifth to one-eighth of an inch square, the proportion of atropine being so regulated that a single square shall represent a drop of the ordinary solution of two grains to the ounce. Paper prepared on this principle with a solution of Calabar bean answers extremely well, and promises to afford the most definite method of regulating the quantity of the remedy to be applied. The following is the process which Mr. Hanbury has adopted:—One ounce Troy of the bean, reduced to fine powder, is to be thoroughly exhausted by hot rectified spirit (·838); the solution so obtained is to be filtered and evaporated until extract begins to deposit on the bottom of the dish, which will occur when the solution has been reduced to about ten fluid drachms. When cold this solution is to be passed through a small filter, and is then ready for the paper. This may be thin writing paper, the size contained in which has been removed by boiling; it should be immersed in the solution four times, and be allowed to drain and dry between each immersion. Of paper thus prepared, a piece measuring one eighth of an inch square placed within the lower eyelid commences to act in about twenty minutes, and continues to produce its effect during several hours. Its presence in the eye occasions no uneasiness beyond that which is attributable to the drug. A solution of the extract of Calabar bean in glycerine, made in the proportion of two and a half grains of extract in one hundred minims of pure glycerine, has also been tried and found to answer well, the glycerine in no way interfering with the action of the extract. (*Pharm. Journal.*)

The Detection of Arsenic in Copper. Dr. W. Odling observes that, as even in the most satisfactory performance of Reinsch's test for arsenic there is always some, although but an extremely small quantity of the copper wire, foil, or gauze dissolved, and, as commercial copper is rarely quite free from arsenic, and sometimes contains a very notable proportion thereof, it is important that the copper to be used in medico-legal researches as a precipitant for arsenic should be specially tested as to its purity. But, as in the ordinary mode of experimenting by Reinsch's process, the amount of metal dissolved is scarcely appreciable, it is quite unnecessary to submit any considerable quantity of it to examination. If a solution of four or five grains of the copper does not yield any evidence of arsenic, it is quite pure enough for the purpose, even though a little arsenic should be recognised in the solution of a larger quantity. As a means of detecting traces of arsenic in copper, the author believes that the following process is superior to any hitherto proposed in conjoint delicacy and rapidity of operation. A few grains of the copper cut into fine pieces are placed in a small tube-retort, with an excess of hydrochloric acid, and so much ferric hydrate or chloride as contains a quantity of iron about double the weight of the copper to be acted upon. The mixture is then distilled to dryness, some care being taken at the last to prevent spurting. The whole of the copper is in this way quickly dissolved, and any arsenic originally contained in it carried over in the form of chloride of arsenic, which may be condensed in a little water with the excess of aqueous hydrochloric acid. The resulting distillate is then tested for the presence of arsenic, by treating it with sulphuretted hydrogen, or, preferably by boiling in it a fresh piece of clean copper foil or gauze. In some cases the residue left in the retort may be treated with a little fresh hydrochloric acid, again distilled to dryness, and the distillate collected and tested along with that first produced. Most oxygenants other than ferric chloride are objectionable, as by their reaction with hydrochloric acid they give rise to free chlorine, which passes over with the distillate, and renders it unfit for being immediately tested either with sulphuretted hydrogen or fresh copper. Cupric oxide or chloride, on the other hand, is scarcely active enough for the purpose; while the dissolution of copper in hydrochloric acid brought about by mere exposure to the air is extremely tedious. Ferric chloride is rendered quite free from arsenic by evaporating it once or twice to dryness with excess of hydrochloric acid. (*Journal of Chemical Society.*)

The Use of the Thermometer in the Diagnosis of Typhoid Fever. As a curious and ingenious means of diagnosis in typhoid fever, may be mentioned the thermometer, as proposed by Professor Wunderlich. Starting with the proposition that this disease has two perfectly distinct stages, in the first of which infiltration and exudation occur, and in the second retrogressive metamorphosis, elimination of morbid matter and healing of diseased parts, he believes the thermometer will indicate not the stage alone, but the intensity of the disease, its progress and its probable result. Thus, "within the first week the thermometer is often able to render the diagnosis certain, when other symptoms cannot do so, as the temperature of the skin rises in the following characteristic manner:—In the first half of the first week it augments from morning to evening 2·25 degrees Fahrenheit; and from evening until the following morning it falls 1° 1′

Fahrenheit. In the second half of the first week the evening temperature remains 103° 3′ to 104° and higher, while the morning temperature in 1° 1″ lower. There is no typhoid fever when the temperature rises to 104° Fahrenheit on the first or second day of the disease, etc. On the other hand, when the temperature increases every evening—though the symptoms seem light—we may safely assume the existence of typhoid fever. In the second week, whenever the temperature is below 103° in the evenings, there is no typhoid fever." But we hardly think a safe diagnosis or prognosis could be based on such a test alone. It is a refinement which will never come into general use, though it may be very useful sometimes to assist in the diagnosis. After all, patient examination and study of all the objective and subjective symptoms presented, with conservative practice, such as the thinking portion of the profession now generally follows, will guide pretty safely both in diagnosis and treatment, in this as in all other diseases. (*American Med. Monthly.*)

Poisoning by Copper. Besançon, in France, is a great watch manufacturing town. There are upwards of three hundred workshops, with over three thousand persons employed therein engaged in the making of watches. The polisher, the replacer, the finisher, the engraver, all continually manipulate metal, either gold or copper, of which particles are absorbed into the system either by the lungs or through the skin. This absorbed copper causes certain gastric symptoms (to which Dr. Perron called the attention of the Medical Society of Besançon). They constitute complete poisoning of the system by copper, and th econtinued exposure of the workmen injuriously affects their health, and strongly predisposes them to tubercular phthisis. Hence all mechanical manipulation of copper should be interdicted to those persons having a tendency—either hereditary or accidental—to such diseases. "They should have much out-door exercise, and employ frequent evacuants and sudorifics. To guard against the effects of working in these shops, they should be daily well ventilated, while the *employés* should strictly observe cleanliness, bathe frequently, use succulent aliments and tonic drinks, and wear moustaches." The aggregation of many individuals in a confined space is, under all circumstances, prejudicial to health; if now we add the inhalation of metallic particles, the condition of affairs is certainly not improved thereby, particularly where the organs of respiration are subject to suspicion. Whether, however, the absorption of the cuprous particles more than those of any other metal is injurious, and tends to excite phthisis pulmonalis, is open to question. All influences that destroy the powers of digestion, or depress the general system for a length of time, must be considered as tending to develope lung disease, particularly where these organs have some hereditary taint. (*Amer. Med. Monthly.*)

Digestion. M. Brücke, of Vienna, (*Canstatt's J. de Pharmacie*) has communicated to the Austrian Academy of Science an interesting paper on the influence of acids and pepsin in digestion, and on the question whether the latter is formed during that process; and also, in what manner the secretion of the digestive fluid takes place. By pepsin, Brücke understands the nondescript substance emanating from the glands of the stomach, and which, in an acid solution, has the power of dissolving all albuminous matter on the stomach as well as without it. He found by a number of careful experiments that this power is strongest in a solution of seven-eighths of a *gramme* of dry hydrochloric acid in a litre of water, decreasing when the amount of acid rose above one and a third, or fell below the nine-twentieths of a *gramme*. Contrary to the generally accepted views of Mulder, that part of the albuminous matter may pass into pepsin, Brücke's experiments go to show that such is not the case. He concludes that the stomach in an empty condition contains no acid fluid, which is only secreted by the action of the nervous system when food is introduced. Dr. Ebstein (*ibid.*) communicates a series of experiments on the action of saliva upon starch. Like Leuchs, Frerichs, and others, he found that starch, in contact with saliva, even in the presence of some acid, to a certain extent is converted into dextrin and sugar, and that the secretions of the stomach, though of an acid reaction, do not prevent this change. Dr. Ebstein remarks, that while secreting the saliva necessary for his experiments, he found it advisable to abstain from smoking, which, we suppose, he otherwise considers a legitimate occupation during physiological experiments; he does not, however, suggest the same caution in regard to chewing. (*Chemical News.*)

Action of Tartarised Antimony on the Heart. Professor Ackermann of Rostock, in a memoir on this subject, observed that, by means of tartarised antimony, we are enabled to induce different degrees of collapse by varying doses of the drug. Slight appearances of collapse accompany the first excitement of nausea, and they increase as the nausea increases. The frequency of the pulse also increases until immediately before vomiting, while its force progressively diminishes. The temperature of the peripheral parts falls in proportion as the nausea and frequency of the pulse increase. After the act of vomiting, or, when this does not ensue, after the termination of the feeling of nausea, appearances of reaction begin. Injections of tartarised antimony into the blood-vessels in dogs produce results similar to those observed in man. Professor Ackermann always observed, after injection of tartarised antimony, a diminution of the force of the blood in the aorta; and this took place whether the frequency of the pulse increased or diminished, but was greater with a slow pulse, and was greatest immediately before death. As the drug diminishes the arterial tension and the force of the heart's movements, it retards the circulation of the blood, and hence induces a decrease of animal heat, which becomes lower in proportion to its longer and more powerful operation. This lowering of the temperature appears to be occasionally interrupted by its elevation, and the latter seems to be dependent on the contemporaneous acceleration of the breath-movements. Professor Ackermann does not deny that the vomiting and purging may also hasten the cooling of the body; but he considers that these circumstances are not necessary conditions. The irritability of the heart is perceptibly weakened by the use of tartarised antimony. In dogs killed by the injection of this salt into an artery, the irritability of the heart, examined immediately after death, was remarkably diminished, and sometimes altogether extinguished. The hearts of frogs placed in a solution of tartarised antimony lost their irritability much sooner than in pure water. The diminution of muscular power was also very remarkable. The breath-movements were sometimes calm, sometimes hurried, but for the most part very slow, with hasty, forced inspiration, and very long expiration—appearances which Professor Ackermann attributes partly to the congestion of the venous system and the deficient combustion, and partly to a directly debilitating effect of the tartarised antimony on the organs of expiration. The short and spasmodic inspirations which for the most part precede the long expirations appear to be determined by a similar spasmodic contraction of the diaphragm to that which is seen before the act of vomiting. The examination of animals poisoned by tartarised antimony showed a general congestion of the whole venous system, the venæ cavæ and the portal vein being especially filled with dark blood; the liver, spleen, and kidneys excessively congested with blood, sometimes with extravasation; the lungs not, as Magendie maintains, changed in structure and partly hepatised, but for the most part normal, or at most showing some emphysema of the

margins and small ecchymoses. The large intestine was regularly contracted both in length and breadth, and there were some ecchymoses on the folds of the mucous membrane. (*Virchow's Archiv*, and *Brit. and Foreign Med.-Chir. Rev.*)

Bromine in Hospital Gangrene. Dr. Stanford, a surgeon in the United States Army, speaks highly of bromine as a remedy in hospital gangrene. The pure bromine, he says, should always be used in preference to any solution which can be made. The wound should be properly prepared for its application, and then the remedy should be properly applied. Every part of the pulpy mass and detached *débris* should be removed from the wound, as far as possible, without injuring sound portions of tissue in the wound. To this end, the undetached pulp should be dissected away with forceps and scissors. The wound should then be thoroughly washed with warm water, after which it should be dried with a sponge, and then with the rounded end of a spatula scrape away any remaining portions of the lifeless tissues which may be still adherent, yet capable of being removed without too much injury to the adjacent sound parts. This done, wash and dry the wound as before directed, and then apply pure bromine to every part of the diseased surfaces, taking special care not to be deceived as to the certainty of having reached with the remedy every gangrenous point, some of which may lie beyond the common surfaces, the virus having travelled out of sight in and along the cellular tissue. To make the application certain, and beyond the possibility of deception, a small round end of a glass test-tube should be used, or some other instrument answering the same purpose, with which the bromine should be pushed into the cellular texture, and thoroughly stirred in every part of the wound. If these directions be strictly followed, it will rarely be necessary to make more than one application of pure bromine. The second application should not be made within the four first days after the first application. If the odour peculiar to the disease is entirely removed by the first, the second application should not be made; but if, at the end of the fourth day, there is any remaining odour, the surface which was charred by the remedy may be removed, and it will then be easy to discover what points in the wound have not been reached by the former application: these alone should be touched with the remedy. After the patients have received an application of the remedy, the gangrenous surface may be covered with a yeast or cinchona poultice; or, if the surgeon chooses, he may dress it with lint or simple cerate. (*Amer. Med. Times.*)

Senile Dementia and General Paralysis. The following results have been arrived at by Dr. L. V. Marce, of the Bicêtre. 1. Senile dementia does not constitute a distinct morbid entity. It is in reality an aggregate of symptoms pertaining to different organic affections of the brain, and notably to apoplexy and softening. 2. It is made up of two series of symptoms: those, on the one hand, of motility, which become more or less affected; those, on the other hand, of intelligence, chiefly a progressive enfeeblement, to which is superadded maniacal or melancholic delirium. 3. The disturbances of motility are always explained by organic lesions in the course or at the origin of the motor fibres. To enfeeblement of intelligence there correspond atrophy of the convolutions, fatty infiltration, and more or less complete obliteration of the capillaries of the cortical layer, and atheromatous degeneration of the cells and nerve-tubes. 4. Senile dementia may be distinguished from general paralysis in most cases by the signs above alluded to. In an anatomico-pathological point of view, these two diseases have atrophy and fatty degeneration of the tubes and cells as a common terminal result. But in general paralysis this atrophy is consecutive to a plastic exudation, which, arising around the wall of the capillaries, gives rise to adhesions between the pia mater and the cortical layer, diminishes the calibre of the vessel which it compresses, and obstructs the circulation of the blood. In senile dementia, on the contrary, the obliteration is consecutive to atheromatous deposits, which arise spontaneously in the capillaries, in consequence of advance of age and diminution of assimilative force. (*L'Union Médicale*, and *British and Foreign Medico-Chirurgical Review.*)

Perchloride of Iron in Diphtheria. M. Courty employs perchloride of iron in diphtheria, in two forms: 1. Internally, in the dose of twenty-five to thirty drops in a glass of water in twenty-four hours, given in teaspoonfuls, and each dose followed by a mouthful of milk to remove the styptic after-taste. He continues the medicine, even after the cure, for a sufficiently long time to restore the strength and to shorten the convalescence. 2. He employs it locally, if not to the exclusion of every other topical application, still with a marked preference; and the reason of the preference is, that the solution has at once a caustic, hæmostatic, and tonic action, by virtue of which it very favourably modifies the surface after the removal of the false membrane, and spares the neighbouring parts, which are not denuded of epithelium; and besides, if it is impossible to remove the diphtheritic patch, the perchloride of iron possesses the valuable property of acting upon it and penetrating it, of infiltrating itself under its edges, and thus going on to reach and modify the subjacent tissues. (*Brit. and For. Med.-Chir. Review.*)

Effects of Temperature on the Secretion of Urea. In a paper read before the Royal Society, and written by Dr. Emil Becher, the author endeavours to establish a remarkable relation between the air-temperature and daily amount of urea and chloride of sodium voided. His experiments were performed by estimating the urea and chloride of sodium volumetrically —as constant a mode of living as possible being observed in the subject experimented upon. The observations were made by the writer upon himself during a voyage to China (round the Cape of Good Hope). "The results show a most remarkable relation between air-temperature and daily quantity of urea and chloride of sodium; viz., a constant increase with the rising of the temperature from 50°—70°, and an equally constant falling off with the further rise of temperature from 70° —90°. The physiological limit of the tropical zone, as marked by the sudden decrease in the quantity of urinary water, is constantly fixed at 76°." (*Dublin Med. Press.*)

Crystallised Sulphate of Atropine. M. Laneu obtains sulphate of atropine in crystals by dissolving the alkaloid in alcohol, and then exactly saturating it with sulphuric acid diluted with alcohol. The solution is left to evaporate spontaneously. Parts of the deposits which appear amorphous to the naked eye are seen under the microscope to be crystalline. (*Répertoire de Pharmacie*, t. xix, and *Chemical News.*)

Fat *versus* Strychnine. I lately saw noticed as a discovery the antidotal properties of oily and fatty matters in strychnia poisoning. *Nihil novum sub sole!* This is so old and well-known a fact that here in the interior of Brazil, when the municipal officers poison the dogs found in the streets with strychnine, the owners save them from dying when they immediately run home by making them swallow large quantities of olive oil. Some time back cyanuret of potassium was tried here as a dog poison, but failed, the animals uniformly vomiting it. (*Dr. Daunt, in Dublin Med. Press.*)

British Medical Journal.

SATURDAY, AUGUST 29TH, 1863.

THE REPORT ON VIVISECTIONS.

THE report of M. Moquin-Tandon on vivisection has been presented to the Academy of Medicine. Our readers may remember that the Society for the Protection of Animals in London addressed a memorial to the French Emperor, pointing out the "atrocities" committed by French experimenters on animals. This memorial was forwarded to the Academy of Medicine. We need hardly say that its language was very intemperate, and contained many serious accusations against the Frenchman. This intemperance of language naturally excited much anger, and has, we understand, retarded the production of the report. "The cause of the abuse of vivisection", we read, "would have been utterly lost through the violent and fantastic language of the London Society, had it not fallen into the hands of an Academic Commission composed of serious, just, and compassionate minds." The report is written in a tolerably calm and moderate tone. It maintains what it considers to be the use, and condemns the abuse, of vivisection. It determines the limits of the scientific use, and points out where the abuse of the thing—cruelty—commences. The conclusions of the report were given in the last number of the JOURNAL.

It is expected that the discussion in the Academy of Medicine of this report of M. Moquin-Tandon on vivisection will be a very warm one. It is reported that M. Dubois, the *Sécrétaire Perpetuel*, will do the Academy the rare and striking honour of leading off the debate with a long and eloquent oration. If he do lead off, he will (according to the custom of first speaker) combat the report's conclusions; that is, he will be opposed to vivisections as recommended in the report, at least. M. Parchappe, it is understood, will show forth the utility and the morality of vivisections. M. J. Béclard, and the veterinary, M. Bouley, will also enlighten the world on the subject with their opinions. Unfortunately, at this time of the year, many of the learned academicians are away on their travels, etc.

The report tells us that at all times there have been sensitive minds who have objected to vivisections; but never have we met with such violent and unmeasured language as that contained in the article from *Bell's Life* and in the memorial from the Society for the Protection of Animals, which were forwarded through the Emperor to the Academy of Medicine. They are unworthy of the honour of a reply. The report then enters into the question. Experiments on animals always excite a painful sentiment; operators themselves partake of this sentiment. In all cases, every attempt is made as far as possible to lessen the sufferings of the animal. The operator has no interest in causing their sufferings; he never operates from mere pleasure. What surprises us is, that men who condemn vivisections give their unreserved approbation to bull-fights, to sports of all kinds, cock-fights, and so forth. But, in the school, every wound of the knife is made for the sake of science; whilst the wounds, the agony, and the death of animals in the circus are all for amusement. Any one with a ready pen and a little sensibility may make all the operations performed by our best surgeons appear as monstrous. In truth, a member of the Peace Society might just as well exclaim against the destruction of the soldier in the field of battle as being cruel and monstrous. The report then goes on to point out the service rendered to medicine by physiological experiments, and how conservative surgery has gained by vivisections. It tells us that the idea of the results obtained from animals not being of service, as applied to man, is a complete error; and that wrong also is the opinion that the results cannot be safely trusted, as being obtained from suffering animals. It also shows that toxicology, therapeutics, and hygiene would not exist except through experiments, unless we resolved to perform on man himself the experiments practised with poisons and their antidotes. And, referring to the grand prize offered by Louis Napoleon, it asks of *L'Authorité:* If experiments are not to be performed, who can compete for the prizes on the question of regeneration of bone, and of antidotes to poisons, offered by the greatest authority in the land? The Committee recommend that experiments should be restricted; and that experiments on questions already settled should be rarely repeated. Experiments should be not considered as matters of necessity in lectures. It is dangerous also to perform them in public before persons who cannot understand the object of the mutilations practised. In veterinary surgery, operations on the living animal are useful; but it is not necessary to perform all the operations on one horse.

WHAT IS A RECOGNISED MEDICAL PRACTITIONER?

ONE Thomas Airey has been summoned before the magistrate at Merthyr for taking the title of M.D., "thereby implying that he was a medical practitioner recognised by law." And the magistrate, with the best will in the world to convict the man, is forced, as he thinks, after a careful study of the Medical Act, to give a verdict in his favour. The case is one of much interest; we, therefore, give a summary of his worship's (Mr. Fowler's) decision.

"The purpose of the Act is that persons requiring medical aid may be enabled to distinguish qualified from unqualified practitioners. The defendant is not registered; and the question is whether, being shut out from the privileges conferred by registration, he is also made liable, by Section 40, to a penalty of £20, for adding M.D. to his name. I now come to consider whether the addition of M.D., under the circumstances that accompany it, does imply that the signer is (in the terms of the information) a medical practitioner recognised by law. With this view, I must try to discover what is the meaning of 'recognised by law.' I have most critically examined them; and I confess that I do not think it is possible to construe them with positive certainty. If it were not for the light afforded by Section 34, I should conclude that 'recognised by law' has no special legal meaning. But Section 34 enacts that any words importing a person recognised by law as a medical practitioner when used in any Act of Parliament shall be construed to mean a person registered under the Medical Act. It seems to me that this is the best explanation that can be found, and that it is reasonable to adopt this interpretation of 'recognised by law,' not only for Acts of Parliament, but for any legal purpose such as the present. If this be so, it follows that when the summons charges the defendant with wilfully and falsely using an addition implying that he is a practitioner recognised by law, it does, in substance, charge him with using such addition implying that he is registered; registered and recognised by law being really the same thing. The question here arises, whether the letters M.D., as used by the defendant, and the words he used, bring him within this charge. Now, these letters are the mark of a very large class of medical men all over the world. I see nothing in their use which indicates that the person using them is registered under the Act. The statement that he was a doctor implies nothing more than the letters. Still less am I satisfied that he can be convicted of wilfully and falsely taking an addition implying that he is recognised or registered by law, when I remember that he hung out a foreign diploma in his window, which negatived the idea of a pretension to be an English physician. If he had signed himself physician or surgeon when he was neither—or added the word 'registered' to M.D. when he was not so—or, perhaps, if he had added letters indicating any of the qualifications for registration as stated in the schedule—he might be convicted. But these are acts very different from that of a foreigner, designating himself as that which he says he is, and gives *primâ facie* proof he is, in his own country. The cases which have been decided upon the statute confirm me in this view of the case. In Pedgrift's case, who had the word surgeon on his door plate after his name, and was not registered, Lord Chief Justice Erle said, 'The facts in the case show that he called himself a surgeon and was not registered. That, in my opinion, is not enough.' In the case of Kelly (1 Cox, 226), the defendant had a brass plate on his door, and was called, and called himself, Dr. Kelly. He had a diploma from Erlangen, was registered as a surgeon, but not as a doctor of medicine. The summons, which was drawn upon the same section as the present one, was dismissed; and the Court of Exchequer held that the Justices were right. The Lord Chief Baron said, 'Having a diploma, which authorised him to call himself 'doctor' out of England, why not here? He is most certainly not within the terms of the 40th Section as being a person who falsely and wilfully pretends to the title.' It does not appear to me that the exclusive right to practise has been created by this Act in favour of registered practitioners. If such right is expedient, as it probably is, the statute must be amended by the introduction of more definite words. I think, however, that the intention was to enable patients to ascertain easily what sort of claim to confidence, on the score of education, is possessed by the doctors they consult. I must add that I am constrained by the reasoning I have pursued, and by the opinions of the judges, to dismiss the summons, greatly against my own feelings in the matter."

The decision given in this and former cases clearly shows, that any ingenious or unscrupulous individual may readily evade that clause of the Medical Act which forbids the improper assumption of medical titles. Let Abraham Linking, for example, hang out a ragged bit of parchment from a window in Seven Dials, stating that he is a Doctor of Medicine of the University of Niagara, in Alabama county, and, as nothing appears to contradict this public exposition of his right to the title of Dr., he may, it seems, legally call himself Doctor of Medicine, even though he be in reality merely a fifth-rate Jew herbalist who had graduated at Shoreditch.

The *Medical Register* is, according to this, simply a medical register, and an imperfect one; and the Medical Act is no protection whatever against the assumption of medical titles by charlatans and impostors. Ordinary common sense would dictate, that if the law really intended to make a distinction, by aid of this *Register*, between qualified medical men and irregular imposters, it would insist that no man shall designate himself as being qualified to practise medicine, unless he can prove to the satisfaction of the Registrar, that he really possesses the title which he assumes. Surely, there is no great hardship in throwing the burden of the proof on the shoulders of the claimant. As the law now stands, a practitioner—a *docteur noir*—from Timbuctoo or Dahomey, may plant himself amongst us, and successfully display his doctorate-parchment from the University of Nigritia. It is for the prosecutor here, it seems, to prove that no such University exists. So says the law, if Mr. Fowler has rightly interpreted it. Surely there is some reforming work here cut out for the Medical Council, which talks so much and does so little. Their Medical Act manifestly wants a good deal of tinkering. Its service to the profession seems daily diminishing, as we become better (or worse) acquainted with its powers.

THE MURDER OF INNOCENTS.

Lord Shaftesbury has called attention to the infamous abuses to which children are still subjected in manufactories. He has called upon the Government, if it would retain the name of Christian, to put an end to these outrages upon humanity. We reproduce some of the details which he gave while introducing the subject to the House of Lords. His desire is that, at an early period of next session, the Legislature should take the subject in hand. We are sure that the profession will give every assistance in their power to the furtherance of so excellent an end.

Lord Shaftesbury, in 1840, moved for a Commis-

sion; and good came out of it, but not all that must come. The Commissioners, in their first report, refer, among others, to the following works in which children are employed:—potteries, lucifer-match manufactories, percussion-cap manufactories, paper-staining works, fustian-cutting works, and lace and hosiery manufactories; and also to the violation of the act relating to climbing boys. The number of children between the ages of 6 and 18 employed in pottery work in Staffordshire is 11,000. Their hours of work are from half-past six o'clock in the morning until half-past six o'clock in the evening. One of the reporters states that the places in which they work are perfectly intolerable on account of the dust and the total absence of all ventilation. Many children of tender years are constantly employed in the stoves, which the inspector who visited them says are rooms, or rather ovens, twelve feet square and from eight feet to twelve feet high. He tried the heat of three of these rooms, and found that in one the thermometer stood at 126°, in another at 130°, and in another at 148°. Here children work from half-past six in the morning till eight or nine o'clock at night.

Vice and gross ignorance is the natural result. The physical effect upon these children is described by medical men resident on the spot. They say:—

"The potters are, as a rule, stunted, ill-shaped, and frequently ill-formed in the chest. They become prematurely old; are short-lived; are especially prone to chest-disease, pneumonia, phthisis, and asthma. Scrofula is a disease of two-thirds or more." "Each generation" (says Dr. Greenhow) "becomes more dwarfed and less robust; and but for their occasional intermarriage with strangers, this deterioration would proceed more rapidly."

Lucifer-match making is an employment which began about 1833. About 1845, a surgeon at Vienna discovered that it was one of the most dangerous and unwholesome of industrial pursuits. He found that it produced a peculiar disorder affecting the jaw, which ended in what is called necrosis. The number of children and young persons between 6 and 18 years of age employed in this trade is 1800; and the general statement with regard to it is that the hours of work are frequently prolonged deep into the night. Of forty-eight of the places in which the work is carried on, and visited by Dr. White, only fourteen were found to be tolerably safe.

"The mental state of the children" (the report says) "and young persons calls for an effort to remove a dark blot from this portion of society. It would be difficult to find an average state of intelligence so low as that exhibited by the answers to the questions addressed to these children. A very small proportion can be said to have been taught. The ignorance of a great many, indeed, considering their age, and that they live in the midst of a society keenly alive to social and political duties, cannot be contemplated without pain and sorrow."

Of the physical effects produced by the occupation, the report says they suffer from

"The usual and various results of intense labour and bad air; but the peculiar disease is the phosphorous disease, or necrosis of the jaw."

Dr. Letheby, speaking of this disease, says:—

"The pain is followed by inflammation of the jaw, abscesses about the gums, and finally necrosis. It is in many cases followed by death; in others by the removal of the jaw by surgical operation."

Mr. Pegge says:—

"The sufferings of a patient in the earlier stages of the disease, until the jaw be quite dead and exposed, are intolerable."

This evidence is confirmed by several other eminent surgeons; among them being the late Mr. Stanley.

About one hundred and fifty children and young persons are employed in the percussion-cap manufacture. The condition of these children may be summed up in the words of Mr. White, the inspector—

"The manufacture is very limited in extent. It is carried on mainly by female labour, including that of many young girls, and is, perhaps, the most dangerous of all general manufactures. An explosion occurred in Birmingham three days after the visit of the inspector, which caused the death of nine persons, and wounded upwards of forty, many of whom were young girls."

The next trade adverted to by Lord Shaftesbury was the paper-staining, in which the total number of children and young persons engaged is 1150. The effects of the work are thus described:—

"The labour itself" (says Mr. Lord) "is not injurious, but it is made so by the length of overtime."

Next comes fustian-cutting, in which the numbers under the age of 18 employed is 1563, the hours of work being fourteen hours daily, but oftentimes, "to bring up arrears," eighteen or twenty hours.

Then there is a very important branch of industry, which is the machine lace finishing, which employs no less than 10,000 children and young persons in various factories. The state of the work-places is spoken of by Mr. White as being—

"Generally injurious to health, hot and ill-ventilated. He has noticed crowded places, in which the space gave only 100, 92, 90, and even 67 cubic feet for each person, it being considered necessary to give a soldier in barracks from 500 to 600, and patients in hospitals 1200 each."

In the pillow-lace making, children of five years and younger are engaged. They

"Suffer considerably in health, from closeness of confinement and bad air, as well as in their eyesight from the mode of working."

In the country, it appears that the number of climbing-boys is on the increase, while in London, with a population of 3,000,000, there are but one or two to be found. The number of these climbing-boys is 2000; and they begin to work about eight years of age—some as young even as five. In the smaller towns, the hours of work vary from eight and nine hours a day; in the larger towns, from twelve to sixteen. These boys are (the report tells us), in the first place, subject to a most frightful disorder

called the chimney-sweeper's cancer. Mr. Ruff of Nottingham, who was himself a master sweep, gives the following testimony on this point :—

"No one knows the cruelty which a boy has to undergo in learning. The flesh must be hardened. This is done by rubbing it chiefly on the elbows and knees with the strongest brine, close by a hot fire. You must stand over them with a cane, or coax them with the promise of a halfpenny, etc., if they will stand a few more rubs. At first they will come back from their work with their arms and knees streaming with blood; then they must be rubbed with brine again."

Another master sweep, Mr. Stansfield, says :—

"In learning a child, you must use violence that I shudder to think of."

"These poor children are bought, sold, and leased by their parents and guardians."

"They are as completely slaves" (says Mr. Ellis, a magistrate of Leicester, "as any negro children in South Carolina."

Another master chimney-sweep says :—

"I have hired a lad for £1 a-year; and I have bought lads myself, giving the parents so much a year further."

Great efforts have been made in Scotland to suppress this system, and have been successful. Such is a portion of the work which, as Lord Shaftesbury says, is cut out for the next Parliament.

TAKING THE BENEFIT OF THE MEDICAL ACT.

At another page will be found the summary of an action, in which Dr. Snow Beck figures as the plaintiff. Of the claim made by him for professional services rendered, Judge Bramwell said, "a more outrageous one had never been brought into a court of justice." Dr. Snow Beck has gained no professional credit, and, we are glad to say, no pecuniary profit, by bringing such an action. A daily paper thus remarks upon the proceeding :—

"The jury found at once for the defendant; and the learned practitioner—who has introduced the plan of kidnapping people into liabilities for heavy bills by maintaining with them the relations of friends and guests—has been taught that such scandalous practices are not sanctioned by English law, nor encouraged by English judges and juries."

Our professional brethren seem to be taking the benefit of the Medical Act extensively. Another case of claim for services has this week to be recorded—a *post mortem* claim made by Freund *v.* Boldermann.

"It was an action by a German physician against the administrator of a clerk, who died in December 1862, to recover a sum of above £130 for medical and surgical attendances upon him for four years preceding his death. The physician lived at Finsbury; the patient at Pimlico; and the alleged attendances were at the residence of the plaintiff, he never having, as he stated, known his patient's address, and never having delivered any account during his patient's lifetime. He admitted that he had been paid for the first four or five attendances, and he alleged that the deceased had excused himself from further payments on various grounds. He stated, however, that he spoke to him repeatedly about payment, and he assigned this as the reason why he had not sent his account in during his patient's lifetime. Upon his death he claimed £125, and, on payment being refused, brought this action, in which he claimed £131. The sum of £25 had been paid into court. The defence was that the rest of the claim was false and fraudulent, though there had been a basis of truth for it to the extent of the sum paid into court.

"The learned Judge told the jury that, to find for the plaintiff, they must come to the conclusion that he had rendered professional services to the deceased not satisfied by the sum paid into court. No doubt there was his positive oath, and his evidence was to a great degree corroborated by the servants. There was further corroboration by the evidence of the chemist, and the confirmation was strong. But, on the other hand, there was the very striking and remarkable fact that there had been no written claim or account during the life of the patient; and the absence of all this was not accounted for satisfactorily; for even though a man were not in a position to pay, that was no reason why accounts should not be sent in. Still less was it accounted for why there should have been no books and entries of the attendances. No sooner, however, was the breath out of the man's body than this claim was made, to so serious an amount. There were singular circumstances in the case, and it had its difficulties; and prescriptions were not produced on either side. It was one entirely for the jury to determine. The jury, after a brief consideration, desired to retire, and, after being absent some time, found a verdict for the plaintiff for £25 additional."

How far claims of this kind will exalt our profession in the eyes of the public, we leave our readers to guess.

THE WEEK.

The executors of the late Lord Henry Seymour have announced to the London Hospitals, that it is now the time for them to put in their claims to a share of the colossal sum—it may be £400,000 or half a million of money—left to the *Hospices de Paris et Londres*, under the will of the above named nobleman. The mouths of the legal gentry are already watering at the prospect which this announcement opens to them. And certain is it that, if great discretion, forbearance, and wisdom be not exercised by the London Hospitals, a very large share of this money—if not the whole of the oyster—will find its way into the pockets of the men of the long robe. The money is left to the *Hospices* of London and Paris; and if the Hospitals—of all descriptions in London—themselves cannot agree to a satisfactory definition of the term, the law will have to discover its meaning for them; and, as we have said, will probably reduce the legacy to one-half before it arrives at any conclusion as to the real value of the term. Hospital governors should recollect the tale, as told lately by Lord Palmerston, of the Hartley Charity at Southampton. The lawyers had just half of that enormous sum. True wisdom, in this case, should teach the *Medical* Hospitals to be very generous, and allow a fair share of the sum to go to all the old

Hospitals, whether mere almshouses or not, rather than fritter away such a glorious legacy as this in a legal squabble. The executors have written to all the Hospitals, etc., of London, informing them of the legacy, and asking whether they consider they come under the term *Hospices*, and, if they do, to send in their claim. But this is not the only knotty question arising out of this will which has to be decided. The testator has also devised money to what is termed in the will, *Hospice de Lunatics de Londres*. Surely, the lunatic asylums—the charitable lunatic asylums—had better draw lots for or divide the money, than go a-fighting at law over it. The men of law often laugh at medical practice ; but we venture to say nothing has been done in physic more profoundly stupid than the framing of the terms of these legacies. They were manufactured, we suppose, by a French lawyer ; but he might have had wit enough, one would have thought, to ask the advice of an English lawyer in the case. At all events, no professional will-maker could, with malice prepense, have more effectually cut out work and profit for his class than the maker of this will has unwittingly done. Here are the terms of the Decree :—

"Pursuant to a Decree, an inquiry is to be made what is the effect, according to the law of France, of the residuary bequest to the Paris and London Hospitals (Hospices de Paris et Londres) contained in the will of Lord Henry Seymour, late of Paris (who died in August 1859); and what institutions are, according to the law of France, meant by the word 'Hospices'; and what institutions are entitled in France and England to the residuary bequest contained in the will; and what institution was meant by the London Lunatic Hospital (Hospice des Lunatics de Londres). All claimants are, on or before the 9th of November, 1863, to prove their claims at the chambers of the Master of the Rolls."

Ovariotomy had been performed three times in Ireland, but never with success until last week, when Mr. Spencer Wells operated on a lady, 55 years of age, who has since progressed towards recovery in a most favourable manner. The operation was witnessed by Drs. Corrigan, Beatty, Churchill, and other leading practitioners of Dublin ; and by Dr. Mackesy of Waterford. Two other operations have been performed since, a full report of which will appear in due time. Very great interest was manifested in these cases by the profession in Dublin ; and they will probably have a considerable effect on the progress of ovariotomy in Ireland.

M. Blondin naturally defends his trade of rope-walker. Accidents therefrom, he says, arise solely through the spurious imitations of those incapables and uneducated who attempt this flight in high art. But M. Blondin forgets one thing: viz., that the key to the success of his business is to be found in the fact of the brutal and brutalising excitement awakened in the minds of the spectators, at the appearance, if not at the reality, of the danger incurred during his performance. It matters little, comparatively speaking, to society, whether or not the rope-walker breaks his neck. That is mainly his affair. What we object to, and have always objected to, in the business, is the debasing influence which such sights exercise over the minds of the members of society who have a thirst for this kind of excitement. Bull-fights and high rope-dancing may go well together ; for they are equally demoralising. We trust, therefore, that M. Blondin will leave these performances behind him in Spain ; and, as he promises, stick in future to the low rope on his return to England. His physical descent will be his moral elevation in the estimation of all good citizens.

M. Nélaton proposes and practises a new method of cauterisation, using a fine jet of flame, produced by the combustion of ordinary gas, for the purpose. The actual cautery, we are told, is replaced by this small flame, which is projected from a thread-like tube, is about fifteen *millimètres* long and two or three in diameter, and may be handled as readily as a pen or a stick of lunar caustic. The actual cautery rapidly cools down, is larger than required, and creates much vapour and smoke when applied, and so conceals from view what is going on, and moreover is a formidable and horrid looking affair. The flame, on the contrary, burns calmly and equably, and may be applied exactly where it is wanted. No hæmorrhage follows the flame, the coagulation taking place in the deep vessels of the part. The deep effect of the flame is remarkable. A minute application to muscle will carbonise it to the depth of half a *centimètre*, and disorganise as much more of the tissue beneath. Bones are rapidly destroyed ; in two or three minutes the two layers, the compact tissue, and the diploë of the tibia, were reduced to an earthy mass. An open artery attacked by the flame is folded up on itself. In this way, according to M. Nélaton, we can produce in a very short time, and with the simplest apparatus, over which we have complete control, much greater effects than can be produced by the most powerful cauteries of classic surgery, not even excepting those resulting from the use of the electric battery. An elastic bag containing the gas is employed, which bag is subjected to moderate pressure.

Baron Barbier has left a *rente* of 2000 *francs* for the founding of an annual prize, to be given to "him who invents an operation, instruments, bandages, apparatus, or any mechanical means, recognised as of general utility, and superior to any previously employed." This prize will be adjudged in November next.

CIVIL SURGEONS' PAY IN INDIA.

The following letter (taken from the *Englishman*, an Indian journal), which we are assured states the bare truth, explains clearly enough the cause of the unpopularity of the Indian medical service. We recommend it to the serious consideration of those gentlemen, who may have an ambitious desire to distinguish themselves, or obtain a livelihood in India.

"I beg to supply you with a *verbatim* copy of the pay bill of a civil surgeon for the month of April last:—

			Rupees.
Civil Surgeon's pay for April 1863			330 0 0
Vaccination allowance			20 0 0
Total			*350 0 0
Deduct subscription to Medical Retiring Fund	36 10 0		
Do. Do. Military Fund ...	12 8 0		
Do. Orphan Fund	6 4 0		
Do. for 3 children	5 0 0		
Income Tax	10 0 0		
		70 11 0	
Total Recd. ... Rs.		279 5 0	

"Out of this sum the following unavoidable expenses have to be defrayed:—

House-rent (for the cheapest house in the Station)	75 0 0
Chokeedaree Tax	2 8 0
The keep of a couple of horses (the smallest number with which the Civil Surgeon's duties can be performed)	47 0 0
Pay of a Baboo to write official letters ...	10 0 0
Total ...	134 8 0

"The sum of Rs. 144-13-0 is left to meet servants' wages, bazar expenses, and every other call upon his purse to which a man, with a wife and three children, is liable.

"Let me add a memorandum of some of the duties to be performed for the above magnificent remuneration:

"1. Medical charge of a jail, containing between seven and eight hundred prisoners, each of whom has to be inspected weekly; the charge involves the examination of all articles used for the prisoners' food, all sanitary and conservancy arrangements, and daily visits to the hospital.

"2. Medical charge and general superintendence of a charity hospital, every surgical operation of which must be performed by the civil surgeon himself, for want of any one else who can do it. I must not omit to say that for this duty he receives palky allowance at Rs. 28-14 per month, exclusive of income-tax.

"3. The management of all the accounts and correspondence in the government school.

"4. Medical charge of some three hundred approvers kept by the dacoity establishment.

"5. The superintendence of lock-ups at five sub-divisional head-quarters, and of charity hospitals at two of them, involving a correspondence which is multiplied by the stupidity and carelessness of inefficient subordinate officers.

"6. *Post mortem* examinations in all cases of murder, suicide, or suspected death (sometimes as many as six or seven in the week, in all stages of decomposition) reported throughout the district.

"7. A visit twice or three times per annum to each of the sub-divisions, for which travelling allowance is given at 2 annas a mile, being less than the journeys actually cost.

"8. Medical charge of the government training school, the officers of police court, amlah, telegraph establishment, etc.

"Allow me to add, in conclusion, that the above description is that of the pay and the duties of an officer who ranks as a major in the army, and after a service of nearly thirteen years.

"June 7th, 1863. An Exile."

* A *Rupee* is about 1s. 10d.; and contains 16 *annas*.

Correspondence.

SUPPORTING THE PERINÆUM: THE ABDOMINAL BANDAGE.

Letter from John Russell, Esq.

Sir,—It would seem that the subject of abdominal swathe after labour, and protection of the perinæum during the passage of the child's head, had been almost ventilated to exhaustion; and the subject of protection of the perinæum underwent such a thorough digest some time ago by Dr. Graily Hewitt, that there would appear little room to add more on the subject. And it is only to suggest a mode of protection, which was not embodied in those papers, that has induced me to offer this communication.

Judging from my own attempts to retard the advancement of the head, I believe it to be impracticable (at any rate for any benefit.) For supposing that by applying direct force to the prominent part of the child's head you retard its progress; such pressure opposed by the *vis a tergo* must necessarily tend to shorten the long, and increase the short, diameter of the cranium, and thereby cause greater distension of the perinæum. I never have myself had a ruptured perinæum in practice, during the passage of the head in a natural presentation although I have attended patients in whom ruptures had occurred in former labours. My plan has always been to carefully watch the advancement of the head, and as it passes the edge of the perinæum, to compress it with the points of the fingers (generally supported by the other hand), placed immediately anterior to the perineal margin, forcibly upward against the pubes; carrying the fingers back as the head advances; taking care not to entangle the perinæum between the fingers and head, and guarding especially against any injury by the finger-nails; and relaxing the pressure during the intervals of relaxation of pains. By these means the elastic cranial bones will be found to yield under the fingers, relieving the centre from all pressure, and leaving a space between it and the head; and the secondary effect is to transfer the strain to the sides, and on those points of the perineal edge, where in cases of threatened rupture, the bilateral section has been recommended.

We observe that where nature anticipates unusual distention of any part, she directs an additional quantity of blood to it; and in no case is this fact more apparent than in the vulva, in anticipation of parturition. From this we may infer that, blood is necessary for the distention of integument, etc. And the effect of pressing against the child's head through the perinæum, as has been recommended, must be to express the blood, and thereby lessen the elasticity of the parts.

Such strong conviction seems to have taken possession of the minds of both advocates and opponents of

the abdominal swathe or binder, that it puzzles one to imagine from what data the observations have been formed. And if neither party be wrong, the instrument must be simply inert and useless. If such were rightly the explanation, the subject might be left as it is.

The ends which it may be expected to serve, are, I conclude, 1. To assist the recently very much distended abdominal muscles and the integuments covering them, to regain their ordinary dimensions and lost tone more rapidly than they otherwise might; and while this is being accomplished, to act as a substitute by exerting pressure on the abdominal and pelvic viscera; and as some ladies have been led to believe, to prevent or lessen the alteration in their figures, which might otherwise ensue. The latter idea is a mere phantom, as any effect that it might exert, would be equally powerful in two months, as immediately after delivery. For observation teaches that in all parts of the body, the integuments and muscles are always disposed to contract in proportion to the pressure underneath them, as resistance may be removed. This principle we see illustrated in emaciated subjects; in amputations in which at the time of the operation the flaps have been baggy and unsightly, but which in all cases that I have seen, have contracted to the form of the subjacent parts and formed, what have been called (by licence of surgery) *beautiful stumps*. The same takes place with the scrotum after castration, as we see exemplified more particularly in the brute creation. I am, therefore, led to doubt the correctness of the conclusion, that the binder exerts any influence in producing contraction of the abdominal muscles. The tendency of contraction of the abdominal muscles as exerted at intervals, is to expel the contents of the pelvic viscera, and sometimes the viscera themselves or a portion, as exemplified in cases of prolapsus ani; and, I think, I may adduce prolapsus uteri. And no one would, I think, upon reflection, use an instrument in imitation of such action in such direction, while the uterus occupies such a very delicate position as it must do for many days after delivery. A friend lately told me that patients, who in former labours had worn a swathe, expressed themselves as deriving much comfort on its being disused.

2. The pressure which it may exert on the uterus is useful. The fundus uteri, immediately after delivery, will ordinarily be felt to reach to a line about an inch higher than the wings of the ilia, so that a binder applied with the view of restoring the waist would impinge on the fundus uteri and force it downwards, encouraging prolapsus uteri. Some practitioners have told me that they apply the swathe round the false pelvis and hypogastrium. If any pressure should be brought to bear upon the uterus in this situation, it must necessarily interfere with the distention of the bladder. The above arguments will, undoubtedly, be well weighed in the minds of others. But they force my own mind to the conclusion that, the abdominal binder after labour cannot be otherwise than injurious.

I will now say a few words on the mode of performing vaccination. My presumption is based upon very extensive experience in past years, having on some occasions vaccinated as many as seventy children during a morning. I recommend the plan of scarifying with (not, as Dr. Graily Hewitt recommends, a sharp lancet, but) one but moderately sharp—by which wider scratches will be produced, and less blood flow. The spot should be freely scarified till blood begins to show in a few of the scarifications. The blade of the same lancet should then be charged with lymph, and (as it were) the same spot be rescarified. This plan has the advantages of producing a large compound and confluent vesicle, is very expeditious, produces but little or no pain, and will be found to be highly successful.

I am, etc., JOHN RUSSELL.

Bawtry, August 1863.

Medical News.

UNIVERSITY OF LONDON. Preliminary Scientific M.B. Examination for Honours.

Chemistry and Natural Philosophy.—Second Class.

M'Dougal, Arthur, Owen's
Bushell, Stephen Wootton, Guy's Hospital
Kelly, Charles, King's

Third Class.

Adams, Arthur Bagley, London Hospital } Equal.
Maybury, Augustus Constable, St. Thomas's } Equal.
Whitwell, John Maude, University } Equal.
Brown, James Campbell, University of Aberdeen
Wagstaffe, William Warwick, St. Thomas's Hospital

Biology.—First Class.

Howse, Henry Greenway (Exhibition and Gold Medal), Guy's

Second Class.

Brown, Charles Campbell, University of Aberdeen

Third Class.

Dyer, William Turner Thiselton, King's

APOTHECARIES' HALL. On August 20th, the following Licentiates were admitted:—

Carter, Richard, Newbury, Berks
Challen, John Furnell, Alpha House, Old Kent Road
Evans, Thomas Griffith, Narberth, Pembrokeshire
France, George Henry, Hightown, near Leeds
Howes, Frank Charles Plumtre, Belton, Great Yarmouth
King, Francis, Southampton Row, Russell Square
Long, Charles Frederic, Ipswich
Redfern, Thomas, Chesterfield
Wood, Francis Henry, New Romney, Kent

At the same Court, the following passed the first examination:—

Hayward, John William, Guy's Hospital

ARMY MEDICAL SERVICE. List of the candidates who were successful at the Competitive Examination in February last, and who have passed through a course at the Army Medical School.

Names.	Studied at	No. of Marks.
Chandler, Edward	London	4935
Creyk, William, M.B.	Aberdeen	4737
Venning, Edgcombe	London	4500
Brebner, Alexander, M.D.	Aberdeen	4458
Nash, William, M.D.	London	4385
Dudley, William Edmondson	Dublin	4233
Doig, Alexander	Glasgow	4125
Martin, Henry Arthur	London	3980
Quinton, William West, M.B.	Dublin	3959
McNalty, George William	Dublin	3924
Martin, William Thomas	Dublin	3821
Davis, John Norman	Galway	3772
Page, William John	Dublin	3653
Ferguson, Frederick, M.D.	Dublin	3628
Segrave, Richard George	Dublin	3013

APPOINTMENTS.

CHURCHILL, Augustus H., Esq., appointed House-Surgeon to the Wallasey Dispensary, Birkenhead.

FERGUSON, George, M.B., appointed Surgeon to the Royal General Dispensary, Bartholomew Close.

HANDYSIDE, Peter D., M.D., elected Lecturer on Anatomy at Surgeons' Hall, Edinburgh.

*HOUNSELL, H. Strangways, M.D., appointed Physician to the Torbay Infirmary.

*JACKSON, J. Hughlings, M.D., appointed Assistant-Physician to the London Hospital.

WALKER, Joseph, M.D., elected Dental Surgeon to the Westminster Hospital.

POOR-LAW MEDICAL SERVICE.

BRAYTON, Jonathan, Esq., to the Workhouse of the Whitehaven Union.

CLARIDGE, Charles Henry, Esq., to the Fulham Town District of the Fulham Union.

CLARKE, Joseph, Esq., to the Bailieborough Dispensary District of the Bailieborough Union, co. Cavan.

DIVER, Ebenezer, M.D., to the Heckfield District of the Hartley Wintney Union.

ENGLEHEART, Stephen Paul, L.R.C.P.Ed., to District No. 2 of the Bromley Union, Kent.

FELCE, Stamford, L.R.C.P.Edin., to District No. 2 of the Launceston Union.

HARDING, Charles F., M.D., to the West Woolwich District of the Greenwich Union.

HIRST, Charles, L.R.C.P.Ed., to the West Ardsley District of the Wakefield Union.
MACDONALD, John Edward, Esq., to the Tuosist Dispensary District of the Kenmare Union, co. Kerry.
MERRYWEATHER, J. Hutchinson, Esq., to the Guisborough District and the Workhouse of the Guisborough Union, Yorkshire.
O'CONNOR, Martin, L.K.Q.C.P.I., to District No. 5 of the North Witchford Union, Cambridgeshire.
OWEN, George, Esq., to the Leanwrin District of the Machynlleth Union.
RENSHAW, Charles J., M.D., to the Ashton-on-Mersey District of the Altrincham Union.

ROYAL NAVY.
ROCHE, William S., Esq., Surgeon, to the *Charybdis*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—
MATTHEWS, B. P., Esq., to be Assistant-Surgeon 18th Kent R.V.

To be Honorary Assistant-Surgeons:—
CLOWES, F., Esq., 14th Norfolk R.V.

DEATHS.

DOUGLASS. On August 19th, at 16, Bernard Street, aged 55, Eliza Ash, widow of James N. Douglass, M.D.
HABERSHON. On August 16th, at Hastings, aged 3 months, the infant son of *S. O. Habershon, M.D., Wimpole Street.
LAYNG. On August 20th, at Broadstairs, Isabella, wife of Edward Layng, Esq., Surgeon.
PRESTON, Richard, Esq., Surgeon, Stand, near Manchester, aged 62, on August 20.
SPARROW. On August 19th, at Portsea, aged 6 months, Georgina, youngest son of the late George W. P. Sparrow, M.D., Surgeon 60th Rifles.
STEWART, Alexander, M.D., Inspector-General of Army Hospitals, at Lansdowne Road, Kensington Park, aged 73, on August 23.
STUART, Robert, M.D., at Calcutta, aged 53, on July 8.

ALLEGED SUICIDE OF A NAVAL SURGEON. Dr. Galbraith, surgeon of the *Sebastopol*, is reported to have committed suicide off New Zealand.

IMPORTATION OF OPIUM. For the year 1864, 27,000 chests of Patna opium, and 20,000 of Benares, are calculated by the *Scindian* as forthcoming.

DR. MACLACHLAN, chief medical officer of Chelsea Hospital, has retired from office through illness. The duties of the Chelsea Hospital medical staff have been consequently amalgamated with those of the Military Asylum.

A TRIUMPH OF SURGERY. His Majesty the King of the Belgians is enjoying excellent health at Ostend. He makes frequent excursions on horseback in the neighbourhood of the town.

LONGEVITY IN IRELAND. Among the 5,798,967 persons enumerated in Ireland at the census of 1861, no less than 742 are returned as being of the age of 100 years and upwards. 278 of these aged persons were men and 464 were women.

SURGICAL PRACTICE. It is officially stated that the total number of Federals wounded in the three days battle at Gettysburg is about fourteen thousand. A fraction over two thousand wounded still remain in the hospitals there.

THE LATEST USE FOR PETROLEUM. An assistant surgeon, writing from Gettysburg, says:—"Will you allow me, as one alleviation of the horrors of the battlefield, to call your attention to the use of coal oil in suppurating wounds? As volunteer assistant, I received permission from the surgeons of the First Division of the Fifth Corps, Gettysburg, to use it in the most offensive cases. By its manifest utility, and the solicitations of the wounded, I was induced to enlarge its use until I became satisfied that what cold water is to a wound in its inflamed state, coal oil is to it in its suppurating state, dispelling flies, expelling vermin, sweetening the wound, and promoting healthy granulations. It can be used by an assistant of ordinary judgment with perfect safety, and to the great comfort of the patient. I have seen two patients, whose wounds had been dressed with it, asleep before I was through with the third." (*Missouri Democrat.*)

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. On Wednesday last, Sir William Armstrong opened the proceedings of this Association with an eloquent address to one of the most brilliant audiences ever assembled in Newcastle-on-Tyne.

BOVINE DISEASE, AND HOW TO CURE IT. From Rome we hear of the ravages made by the distemper among the cattle in the Campagna. It is calculated that more than ten thousand beasts have fallen victims to the malady since it set in. No measures of an efficacious nature have been taken to check it by the Papal government. There have been religious processions, *neuvaines*, and the like, in the hope of averting the evil, but as yet they have not produced the desired effect.

YANKEE ENROLLING SURGEONS. We have noticed the fact that the enrolling surgeons, with many honourable exceptions, were mere political doctors, and totally unfit for their position. The evidences of their incapacity begin to appear as the conscripts gather at their rendezvous. From authentic sources, we learn that the most obvious diseases are passed over without notice. At Riker's Island, the rendezvous for the eastern part of the State of New York, are men suffering from cardiac diseases, amaurosis, etc. (*American Med. Times.*)

DEATH OF THE INSPECTOR-GENERAL OF ARMY HOSPITALS. Alexander Stewart, Esq., M.D., Inspector-General of Army Hospitals, died at his residence, Lansdowne Road, Kensington Park, on the 24th inst. He was in his seventy-third year. He accompanied the army, and served with considerable distinction, during the Peninsular campaign. He was present at several of the severest actions, when his professional services were eminently useful. In December 1845, he was appointed Deputy Inspector-General, and in March 1852, Inspector-General, when he retired on half-pay. He had the war medal and clasps for the battles at which he had served.

MORTALITY IN THE UNITED STATES. Mr. Kennedy computes the annual number of deaths in the United States as having been 1 in 45 or 46 of the population; and when allowance is made for the greater proportion of persons in their prime amongst this population, by reason of constant immigration, the mortality will nearly equal that of England, if the latter is rightly estimated by Mr. Kennedy as being 1 in 44 of the population. Much interesting information is given respecting the deaf and dumb, the blind, the insane, and the idiotic. According to the census of 1860, the deaf and dumb portion of the population amounted to some 15,077 persons, whereof 14,269 were whites, and 808 slaves; the blind to 12,635, 11,125 free and 1,510 slaves; the insane to 23,999, 23,593 free and 406 slaves; and the idiotic to 18,865, 17,286 free and 1,579 slaves.

SURGICAL CERTIFICATES. According to a Connecticut journal, the *Hartford Times*, the exemptions by surgeon's certificate of draughted men since the commencement of the draught in New England amount to the enormous proportion of seventy-three per cent.! The amount of fee given for this service is variously estimated. If a man be very poor—and the surgeon also—a glass of whisky is sufficient *honorarium* to offer and accept. But, as a general rule, the price varies with the worldly circumstances of the person "who will not be a soldier," and ranges from one to twenty dollars. The would be exempt is stripped—and if the surgeon find a greenback between the man's toes, under his arm-pit, behind his ear, between his teeth, or elsewhere, the matter becomes as clear to his capacity, as it previously was to that of him who does not wish to risk his life for his country, and the business is settled to the mutual satisfaction of doctor and patient. But the dishonesty does not answer its purpose, the government having resolved to admit of no exemptions but such as are signed by its own appointed army surgeons.

United States Population. In 1860 the population amounted to 31,445,089, showing in round numbers an increase of 8,250,000 over that of 1850; of 13,333,000 over that of 1840; of 18,500,000 over that of 1830; of 21,750,000 over that of 1820; of 24,200,000 over that of 1810; of 26,000,000 over that of 1800; and of 27,500,000 over that of 1790, when the population only amounted to 3,929,827. The average decennial rate of increase was 34.6 per cent. Of the entire population 26,975,575 were white, and 4,441,765 coloured, and of these latter 3,953,760 were held as slaves. While the whites, between 1850 and 1860, gained 38 per cent., the African race increased only 22 per cent., though it must be remembered that during this period some 1,500,000 immigrants entered the United States. Unlike the census returns of England, those of the United States, as published by Mr. Kennedy, give an excess of males over females of 750,000, which was attributable to the greater influx of male immigrants from Europe.

Pauper Lunatic Asylums. On the day of the prorogation an act was passed to amend the Lunacy Acts, in relation to the building of asylums for pauper lunatics. It is enacted that where, in pursuance of the Lunatic Asylums Act, 1853, an agreement for providing a common asylum has been duly entered into between divers counties properly so called, and such agreement has been afterwards varied by the admission as a party thereto of a county of a city, or county of a town, the original agreement is to be binding on the counties originally parties thereto, in the same manner as if no variation of such agreement had been made. By section 8 of the 25th and 26th of Victoria, c. 88, the guardians of a parish were to make provision for the reception of "chronic lunatics," and doubts have arisen as to the meaning. It is now declared that chronic lunatics are to include those chargeable to other parishes or Unions, as well as the chronic lunatics chargeable to parish or Union into the workhouses of which they are proposed to be received.

A New Test for Albumen. Mr. Lightfoot has found that the aqueous solution of camphor is a delicate test for albumen, which it coagulates as a film, and in other interesting forms. Into a perfectly clean foot-glass some water is poured, and one or two bits of camphor are dropped upon it from a tube. When rotation has been established for a few minutes, one drop of fluid albumen from an egg is allowed to fall upon the surface, and to remain undisturbed for a few minutes. On looking at the underside of the water surface, a fine film of uniform thickness will be seen to occupy the whole surface of the liquid, and to imprison the bits of camphor which have, in consequence, lost their power of roaming about by this mechanical impediment of the albuminous sheet. The camphor is, however, still vibrating. If the film be now broken, it will hang in shreds or fall down and settle at the bottom of the glass. It is sufficiently coagulated to permit its separation by a paper filter, which, after drying carefully, may be weighed. By this process minute portions of soluble albumen may be quantitatively estimated in analytical investigations of various organic matters. As a microscopic test, an aqueous solution of camphor will be found of great use in rendering delicate organs of minute structure more distinctly visible. (*Chemical News.*)

Scottish Registrar-General's Report. The report of the Registrar-General for Scotland for the second quarter of 1863 records a very high birth rate—namely, in the annual proportion of 383 births in every 10,000 of the estimated population. But the death rate was high also—231 per annum in the 10,000. Again a fatal epidemic of measles has followed an epidemic of small-pox, and it is noticed as an additional reason for securing the people from small-pox by vaccination, since it may happen that by extinguishing small-pox we may also be reducing the fatality from measles. Diphtheria has prevailed extensively in Scotland, and in several instances almost assumed the epidemic form. The weather during the quarter was distinguished by more humidity and less sunshine than usual, and the continuance of this weather almost without interruption for nearly two years seems to have produced debility or laxity of the constitution. It would seem that changes in weather are as beneficial to health as changes in diet. The excess of births over deaths in the quarter was 11,704, making the natural increase in the population of Great Britain 82,940; but emigration took away a third of this number of British-born subjects. It speaks well for the general prosperity of Scotland that the marriage rate has been above the average in both the first and second quarters in the present year.

Social Science Congress at Edinburgh. The seventh annual meeting of the National Association for the Promotion of Social Science is to be held at Edinburgh. The opening address will be delivered on October 7th, by Lord Brougham. The business of each of the six following days will be opened by addresses from the presidents of the different departments; and, after the address, the sectional meetings will be held in the Law Courts and Free Assembly Hall. The concluding general meeting will take place in the Church of Scotland Assembly Hall, on Wednesday, October 14th. The Council will meet in the library of the writers to the signet, and the Parliament House will be opened as a reception room, the College and law libraries and other public buildings and places of exhibition will be opened to members during the week. Conversaziones will be held in the University, in the Museum and Hall of the Royal College of Surgeons, and in the National Gallery, on the evenings of the 8th, 9th, and 12th. A working men's meeting will be held in the Corn-Exchange on the evening of the 9th, at which Lord Brougham will preside; and on the 13th, the Association dinner will take place in the Music Hall. The Royal Scottish Academy intend to hold an exhibition of the works of deceased and living artists of Scotland, collected for the occasion, during the meeting of the Association. The Speculative Society of Edinburgh propose to celebrate the centenary of their foundation by a dinner, to be presided over by Lord Brougham, who was one of its most active members about sixty years ago. The Scotch railways, generally, have agreed to give return tickets to members and associates, and the leading English lines will afford facilities to visitors through their tourists' tickets.

Liverpool Health Committee: Tribute to Dr. Cameron. The following flattering and handsome acknowledgment of services rendered by Dr. Cameron, in his capacity of Acting Medical Officer of Health at Liverpool, was made at the last meeting of the Committee:—"The Chairman said, before the Committee proceeded with the public business of the day, he would call attention to the appointment of Dr. Trench. That fact would sever the connection between Dr. Cameron and the Committee; and he was sure that every gentleman would bear him out, when he said that the Committee were deeply grateful to Dr. Cameron for the very cheerful way in which, immediately upon the decease of Dr. Duncan, he had stepped in to fill up the vacuum, and had since that time voluntarily fulfilled the duties of Medical Officer of Health. The great exertion, scientific acquirements, and the sacrifice of time that Dr. Cameron had brought to bear to the discharge of the duties of the office, were such that he (the Chairman) was sure he only spoke from his heart the sentiments of the Committee (*hear, hear*) when he said they were all deeply indebted to Dr. Cameron for his assistance; and he therefore moved—'That this Committee desires to record the high sense entertained of the very valuable and

efficient services rendered by Dr. Cameron as Acting Medical Officer of Health since the death of Dr. Duncan, and beg to render their thanks to him for those services, which he so kindly undertook to perform, under circumstances that must have involved a great sacrifice of time and labour.' (*Hear, hear.*) Mr. Lawrence entirely concurred in every word that the Chairman had said; and moved—'That a sum of 150 guineas be presented to Dr. Cameron, as a slight acknowledgment of the very valuable services he had rendered as Acting Medical Officer of Health.' Both resolutions were carried unanimously." (From the *Liverpool Daily Post*, July 10, 1863.)

The Proposed New Medical Bill. We are not surprised that the proposal to introduce a new Medical Bill into parliament, with clauses affecting pharmacy, and restricting the dispensing of medicines to men proved to be qualified for the duty, should have excited the attention of the pharmaceutical body; but we confess we were not prepared for the opposition that appears to be threatened to this measure. The Bill, in the form in which it has been issued, contains but a rough draught of the proposed amendments. However, it serves to explain the principles which it is proposed to carry out, and with reference to which the opinions of the licensing bodies have been asked. The objects contemplated are quite in accordance with principles which have always been recognised by the Pharmaceutical Society. The adoption of these principles has repeatedly been urged upon chemists and druggists in the pages of this journal. It has been insinuated that the Pharmaceutical Society would be benefited in some especial manner by the proposed Act, and that they therefore have a particular interest in promoting the measure. This we entirely deny. Indeed, so far is it from being the case, that we have no hesitation in saying that the measure would be a far greater boon to those who are without than to those who are within the pale of the Society. We have no exclusive interest in promoting this; on the contrary, self-interest might dictate a different line of policy; but the interests we advocate are those of pharmacy and of the whole body of pharmaceutical operatives. If the proposed Bill be carried into effect, it will necessarily cause a complete revolution in the state and practice of pharmacy in this country, involving, no doubt, many important changes in the constitution of the Pharmaceutical Society. The sphere of action for the Society would be greatly widened, but at the same time it is probable that the nature of its operations would in some respects be restricted. (*Phar. Journal.*)

Sulphuring Vines. At the last sitting of the Academy of Sciences a paper was received from M. Bouisson on ophthalmia produced by the sulphuring of vines. From the moment this practice was had recourse to for the purpose of destroying the oidium it was perceived that sore eyes became very prevalent among the labourers engaged in that work. Sulphur is employed under the form of a sublimate called flowers of sulphur, or else in a triturated state. In the former case it contains a small but perceptible quantity of free sulphuric acid; in the latter case there is hardly a trace of it; and accordingly the sublimate is infinitely more efficacious than the mere powder. Under the microscope the powder presents irregular forms ending in angles and points, while the flowers appear under the form of very small round globules; hence the mechanical action of the former is much more irritating than that of the flowers of sulphur. But mechanical irritation being less active than the chemical one of sulphuric acid on the conjunctiva or external coat of the eye, triturated sulphur is less injurious to that organ than flower of sulphur. Regarding the instruments used for the diffusion of sulphur the bellows are less hurtful to the eyes than the sieve, which scatters about a great deal of the powder in the air. A man works seven hours per day, during which time he expends ten *kilogrammes* of sulphur. The operation lasts five days per hectare, and is repeated three or four times during the season. Sore eyes are chiefly prevalent during the last sulphuring process, showing that heat and drought increase the irritating effects of sulphur. Women and children being chiefly employed in the operation they are most subject to this kind of ophthalmia, which, however, is not malignant, and generally consists in a mere inflammation of the conjunctiva. The mixture of sulphur with lime, recently proposed, is more hurtful to the eyes than sulphur alone; but mixture of sulphur and plaster is better for the eyes, though detrimental to the respiratory organs.

Vivisections in Paris. The atrocities of vivisection continue to occupy the attention of the Paris papers. The *Opinion Nationale* says: "The poor brutes' cries of pain sadden the wards of the Clinique, rendering the sojourn there insupportable both to patients and to nurses. (The Hôpital des Cliniques, situated on the square of the School of Medicine, contains a hundred and fifteen beds for adults, and thirty-seven for children. Sick and wounded persons are received there as at the Hôtel Dieu. It has, moreover, a special department for accouchements.) Only imagine that when a dog has not been killed at one sitting, and that enough life remains in him to experiment upon him in the following one, they put him back in the kennel all throbbing and palpitating! There the unhappy creatures, already torn by the scalpel, howl until the next day in tones rendered hoarse and faint by another previous operation intended to deprive them of voice. The kennel in which they are kept is close to the Clinique, whither poor pregnant women betake themselves for deliverance." Mr. C. Sauvestre, who signs the letter from which the above is an extract, quotes, in confirmation of his statements, a letter addressed to M. Husson, Director-General of Public Assistance (hospitals, asylums, etc.), by a distinguished physician. "You doubtless are aware, Monsieur le Directeur," says Dr. Bossu,—"That, during the course of physiology of the Faculty, the dogs destined for experiment are shut up in the pavilions of the Practical School, which touch the hospital of the Clinique. These dogs cry and howl night and day, notwithstanding the preliminary operation performed on them with the view of rendering them mute. Will you, whose solicitude for the sick is so great, join your complaints to ours in order to obtain from the competent authorities that henceforward no more dogs shall be taken to the Practical School, and that the repose, the sleep, the moral tranquillity of our poor lying-in women shall be respected? Assuredly it will not be said that, for the sanguinary and useless exhibitions of a course which serves only to expose the state of science, the repose of a whole hospital, and that of twenty neighbouring houses, is to be disturbed."

A Professional Claim. Beck *v.* Sterne. This was an action by the same plaintiff as in the case "Beck *v.* Farey", tried in the other court last week, and partly arose out of the same transactions. It was an action by Dr. Snow Beck to recover £591 for medical attendances, etc., on the defendant's wife and family from 1856 to 1859 inclusive. The parties had known each other since 1854, but had quarrelled. The plaintiff was called, and said he was a member of the College of Surgeons; and he had attended the defendant and his family as surgeon and accoucheur, and generally as medical attendant, during the years from 1856 to 1859, at Clapham and Stratford. When cross-examined, the plaintiff admitted that he had never sent in any account of his present claim until this action. He had been for some years intimate with the defendant, and had been recommended by him to the Samaritan Hospital, and had been a co-director with him of the Australian Investment Society; and he had been accustomed for years to dine

with the defendant. He was pressed whether he had not charged for visits when he had gone home and dined with him; and this he denied. He had been good friends with him up to 1859. He produced some little annual pocket-books, in which he said entries of the attendances were made, but in which he admitted that other matters not professional were indiscriminately entered. He said he was not a physician, though he was styled "physician to the Samaritan Hospital", and was called "Dr. Snow Beck" on his door. Pressed if he visited patients as a physician, he said he had done so, and received his guinea fees, generally, at parting. Sometimes he attended gratuitously, though not for years; and sometimes gave advice gratis to a friend at dinner. The attendances at Clapham in 1856 were generally on Sundays. He often dined there on the Sunday, and took his wine with the family. He admitted that the defendant had made him occasional presents—a present of a case of champagne and a set of diamond studs, but prior to this account. He also had a roll of linen for shirts [*a laugh*]—not very fine. He had paid, however, for all this by his medical attendance for three years. The defendant had also lent him a watch, which he had kept some time. He had dined with the defendant on Sundays in 1857-58-59 ; but he charged patients for attendances, though on occasions when he dined with them. He rarely went to the house without dining. He attended the family as a general practitioner; but, being then asked how he came to charge £3 : 3 an attendance, he said that a general practitioner could charge anything; and, when pressed as to whether a general practitioner charged even a guinea for attendance, he said he meant that he attended as surgeon and physician, and, he added, as consulting physician and surgeon. He admitted that he had brought an action against another friend for £300, for six years medical attendance; and that was after several years.—The learned Judge: It is usual, and, indeed, the rule, is it not, for a physician to be paid at the time of his attendance?—Plaintiff: It is usual; but there are exceptions.—The learned Judge: Did you ever hear of such a bill as this before?—Plaintiff: Yes, I have.—The learned Judge: Have you? Then it is more than I have.—Dr. Rogers of Berners Street, was called to prove that the plaintiff's charges were fair and reasonable. A Dr. Shorthouse, of Carshalton, and a Dr. Jones were called to give similar evidence. They admitted that general practitioners usually sent in bills at Christmas. Mr. Chambers submitted that the Medical Registration Act of 1858 did not enable the plaintiff to recover for attendances as physician before registration under that Act, which only came into operation on the 1st of January, 1859. Mr. Serjeant Shee said that Act did not preclude recovery for services as a surgeon or accoucheur before that Act. The learned Judge, however, said he was of a different opinion on the latter point, for before the Act physicians could not sue. The learned Judge ruled that he could only be entitled to recover for his services as surgeon and accoucheur before the registration. The jury said they were all in favour of the defendant. The learned Judge said he was not at all surprised at it, for in all his experience a more outrageous claim had never been brought into a court of justice. [The Secretary of the Samaritan Hospital wishes the public to understand that Dr. Snow Beck's connexion with that institution was of very short duration, and dates some years back.]

Quackery. Quackery is not limited to any place, time, or calling. It is found in the fashionable as well as the unfashionable dwelling places of the human family—in aristocratic as well as in plebeian quarters. Go where you please, quackery like superstition and folly, is sure to be met with. Nor is quackery a thing of recent growth. Our old ancestors practised and supported it to quite as great an extent as men now do. Monarchs in days gone by were medical quacks. They were foolish enough to believe in, or hypocritical enough to "touch" for king's evil and other maladies. And further, quackery is met with in every trade and profession. There are legal quacks and theological quacks; in short quackery is a hydra-headed monster, and one that has power to adapt itself to large or small places, to rich or poor, to the learned or ignorant, to all time and every conceivable circumstance. It is an evil, an almost unmixed evil, and as such it only produces evil. The deceptions practised by quacks, in such a district as ours, are very painful in character and number. If we take the medical quack alone as an instance, it will be apparent to every one of discernment and common sense that he must be an awful purse-sucker, and even health destroyer among those who believe in his nostrums. Scores of cases have come to our knowledge, in Merthyr, of worthless scamps forcing their vile concoctions upon simple-minded, unsuspecting people, to the permanent undermining of health. The harvest which they reap is, in most cases, a bountiful one. Taking a walk through the streets of Merthyr, Dowlais, or any of the surrounding places, the hideous, lying bills of the quack meet one at every turn, evidencing only too plainly the number of the victims, and the profitableness of the pursuit. (*Merthyr Telegraph.*)

Metropolitan Association of Medical Officers of Health. The report of the Secretaries for the Session 1862-3, states that during the past year there have been thirteen general meetings of the Association. The Association at present consists of forty-two ordinary members, medical officers of health; and of seventeen honorary members, among whom are several noblemen and gentlemen distinguished for their efforts in the cause of sanitary science. The work of the Association during the past session has not only had reference to subjects of direct local interest to metropolitan officers of health, but has embraced the consideration of several wide social questions, and has been directed to the elucidation of some general hygienic problems of great importance. The chief matters of immediate metropolitan interest were, 1. The licensing of cowhouses under the provisions of the "Metropolis Local Management Amendment Act"; 2. The sanitary inspection of bakehouses in London, legislative supervision of such establishments being advocated of the kind that has since been provided by the "Bakehouses Regulation Act"; 3. An outbreak of cholera in the Norwood parochial school, upon which a paper was read by Dr. Gavin Milroy; 4. The scheme of the Metropolitan Board of Works, for discharging into the Thames, at Fulham, the deodorised sewage of the western end of the metropolis; upon this subject a memorial was presented to the Metropolitan Board, and a deputation of the Association had an interview with that body, with the effect of obtaining a revision of the scheme and its ultimate abandonment; 5. The presence of epidemic small-pox in London. A circular has been addressed to the Boards of Guardians of the metropolitan unions, urging the necessity for increased hospital accommodation for cases of small-pox and suggesting measures to promote the universal vaccination of the community. The desirability of petitioning the Privy Council to apply to the metropolis the provisions of the "Diseases Prevention Act" of 1848 was also taken into full consideration. Upon existing impediments to vaccination a paper was read by Dr. Druitt. A series of subjects of great social importance was submitted to the Association in a paper by Dr. Lankester, on some points in common between the duties of coroner and those of medical officer of health. Arising out of this paper, the point on which immediate action seemed most desirable was the inefficiency of the present law of registration in ascertaining duly the cause of every death. A sub-committee of the

Association is at present engaged in pressing this point upon the Registrar-General with a view to the amendment of the registration laws. In the course of the year the Association has held communication with the Epidemiological Society, concerning a proposition to collect and utilise the statistics of pauper-sickness. Upon general hygienic subjects the Association is indebted to its President, for directing attention to the Modes of Analysis of Bread; to Dr. Murchison, for an elaborate essay on the Causation of Continued Fever; to Mr. Acton, for a paper on the Increasing Mortality in England from Syphilis; to Mr. Orton, for a communication on the Injury resulting to Health from the use of Arsenical Paper Hangings; and to Professor Gamgee of Edinburgh, for a paper on the Diseases of Animals in their Relation to Public Health. A petition to parliament was adopted in view of Mr. Gamgee's paper. This petition, which was confided to Mr. Edward Holland, M.P., prayed for a better system of inspecting cattle at places of import and in the markets, and showed reasons in support of a bill that had been recently introduced by Mr. Holland into the House of Commons for preventing the spread of contagious disorders among animals. Through the advocacy of Viscount Raynham, an amendment has already been procured in those clauses of the "Nuisances Removal Act" that relate to the seizure of diseased meat. The Association congratulates itself on having attained an important public position, and on having exercised a useful influence in promoting sanitary science.

Sanitary Science Abroad. As I have previously stated, the impression made upon my mind by the sanitary survey of the principal health towns of Italy was unsatisfactory in the extreme. The authors whose works I have read on winter climates have, it appears to me, made an extraordinary but all-important omission. They have studied winds, sunshine, cloud, temperature, protection, and all the various elements which constitute climate, forgetting hygiene, and yet are not the laws of hygiene of more importance to the invalid than all the rest put together? Of what avail is it to place a patient suffering from a constitutional disease, such as phthisis, in the most favourable climatic condition, if every law of hygiene is violated, if he is made to live in the midst of a foul, badly drained, badly ventilated town, such as Florence, Rome, Naples, or Malaga? In these unhealthy centres of southern population, where the mortality is habitually very high amonst healthy natives (much higher, as we have seen, than in our most unwholesome manufacturing localities), what right have we to expect the general health of our patients to rally? In reality, it would be as reasonable to send consumptive patients in the summer months to live in the worst parts of Whitechapel, Liverpool, or Glasgow, as it is to send them in winter to live in the centre of these unhealthy southern towns. In choosing a winter residence, therefore, hygienic conditions should be first considered, even before warmth and sunshine. (*Dr. Bennet on Mentone, etc.*)

POPULATION STATISTICS AND METEOROLOGY OF LONDON—August 22, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 912 / Girls.. 876	1788	1337
Average of corresponding weeks 1853-62		1811	1324

Barometer:
Highest (Fri.) 29.987; lowest (Mon.) 29.564; mean, 29.758.

Thermometer:
Highest in sun—extremes (Sun.) 115 degs.; (Wed.) 83.3 degs.
In shade—highest (Sun.) 76 degs.; lowest (Fri.) 46 degs.
Mean—58.1 degrees; difference from mean of 43 yrs.—2.9 degs.
Range—during week, 30 degrees; mean daily, 17.2 degrees.
Mean humidity of air (*saturation*=100), 72.
Mean direction of wind, S.W.—Rain in inches, 0.29.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Dr. Rigby's Portrait.—A subscriber wishes to know when he may expect to receive his copy of the engraving from the late Dr. Rigby's portrait. [We have received several inquiries of the same kind. Editor.]

Liability of Masters.—Will any of your readers, who may have been compelled to appeal to a County Court under the following circumstances, inform me the result. A domestic servant is sent home ill from a town where she is residing, and passes through a severe typhoid fever, requiring daily attendance for four weeks. After recovery, she returns to her duties. Can her master, who is in good circumstances, be compelled to pay the medical attendant's charge or not?—D. I.

[We do not see how any legal claim can be made on the master, unless he called in the medical attendant. Editor.]

Professional Apathy.—A correspondent asks us how it is that the profession on the occasion of the appeal last year made to them by the Therapeutical Committee, for the purposes of enlightening our knowledge concerning the effects of remedies, sent in only six or seven returns on Scarlatina and Jaundice; and about twelve on Pneumonia. The question is worthy of serious consideration, and of a serious answer.

The Annual Meeting of the Association.—The following are a few remarks on the late meeting of the Association, extracted from a leader in the *Dublin Medical Press.*

"We have now to lay before our readers the sayings and doings of another institution; which, although not strictly speaking national, is sufficiently British to justify solemn editorial recognition..... Hospitality there was, if we can call that hospitality where gentlemen entertain themselves; and splendour doubtless there was also, but where, the reporter does not distinctly indicate..... That dignity and grace there was, we do not pretend to deny, and more than that, all the amenities which grace such festive occasions, with full enjoyment of agreeable social intercourse; and no wonder, considering the generous hospitality and splendid entertainment..... The progress then of the Association is satisfactory, and its numerical strength improves; so let us rejoice, albeit we in Ireland here derive little benefit from its creature comforts or its intellectual feasts.*.... As an Association for the promotion and diffusion of medical knowledge, the labours of its members seem devoid of activity or energy; the contributions on the present occasion having this object in view, are few in number and deficient in quality and originality.† It is not in any unfriendly spirit that we thus call in question the character of this Society..... Never in the memory of man has there been such necessity for the interference of competent and influential bodies to avert the consequences impending from illicit proceedings and collusions between medical speculators and official authorities; and never, perhaps, less prospect of a salutary effort to resist dangerous encroachments."‡

* Strictly speaking, this is hardly the fact; because, in almost every number of the *Press*, several columns of intellectual food, taken from our pages, are served up to the readers of the Irish journal.

† Never were papers more original and better in quality presented to our annual meeting. We are sorry our contemporary was not there. Had he been, he would have sung a very different note.

‡ Why, instead of exercising the easy and useless business of fault-finding, does not the editor lend a hand to the good work?

COMMUNICATIONS have been received from:—Dr. THOMAS K. CHAMBERS; Dr. BLANSHARD; Mr. R. O. BLYTHMAN; Dr. GRAILY HEWITT; Mr. C. MARRIOTT; Dr. HARTSHORNE; Dr. WILLIAM NEWMAN; Dr. AITKEN; Dr. CAMERON; Dr. E. WELLS; Mr. J. SPROULE; Mr. H. WASBROUGH; and Mr. J. LANCASHIRE.

BOOKS RECEIVED.

1. A Manual of Zoology. By M. Milne-Edwards. Translated from the last French edition by R. Knox, M.D., F.R.S.E. Second edition. Edited by C. C. Blake. London: 1863.
2. The Influence of Weather on Disease and Mortality. By R. E. Scoresby-Jackson, M.D., F.R.S.E. Edinburgh: 1863.
3. Special Therapeutics. By J. C. Lory Marsh, M.D. London: 1863.
4. Debate in the House of Commons on the Proposed Introduction of the Metric System. London: 1863.

ADVERTISEMENTS.

Sydenham College Medical

SCHOOL, SUMMER LANE, BIRMINGHAM (opposite the General Hospital).

The SESSION 1863-64 will commence on FRIDAY, the 2nd of OCTOBER next, with an INTRODUCTORY ADDRESS by DR. JORDAN, at Three o'Clock in the afternoon.

Anatomy and Physiology—ROBERT C. R. JORDAN, M.D.; T. H. BARTLEET, M.B.

Practical Anatomy and Demonstration—Messrs. GEORGE ELKINGTON, FROUD JONES, and DAVID JOHNSON.

Principles and Practice of Medicine—BELL FLETCHER, M.D., F.R.C.P.L. and JAMES RUSSELL, M.D., L.R.C.P.L., Physicians to the General Hospital.

Principles and Practice of Surgery—ALFRED BAKER, F.R.C.S., and DAVID BOLTON, F.R.C.S., Surgeons to the General Hospital.

Surgical Pathology—OLIVER PEMBERTON, M.R.C.S., Surgeon to the General Hospital.

Dental Physiology and Surgery—THOMAS HOWKINS, M.R.C.S.E.

Chemistry—ALFRED HILL, M.D., F.C.S., Analyst to the Borough of Birmingham.

SUMMER SESSION.

Midwifery and the Diseases of Women and Children—FRANCIS ELKINGTON, M.D., Consulting Accoucheur to the Lying-in Hospital.

Materia Medica and Therapeutics—J. BASSETT, M.R.C.S.; A. J. HARRISON, M.B.

Practical Chemistry—ALFRED HILL, M.D., F.C.S.

Botany—FREDERICK WESTCOTT, Assoc. L. S.

Forensic Medicine—THOMAS SWAIN, M.R.C.S.

Medical Tutor—

Classics and Mathematics—WM. BATES, B.A.

French—

This College was established for the purpose of affording a complete Medical Education. It is situated opposite the General Hospital, so as to afford Students every advantage which can be derived from Clinical Instruction and Study in an Institution which contains two hundred and forty beds, at which more than twenty thousand patients received medical and surgical aid during the past year, and which, from its close proximity to the mining and manufacturing districts, affords opportunities for the practical study of Medicine and Surgery equal to those of any similar institution in the kingdom. It is governed by a Council composed of more than sixty of the most eminent Medical Practitioners of the midland counties. Attendance upon the Lectures and Hospital Practice will qualify for examination at the Royal Colleges the Army, Navy, and Indian Boards. In conformity with the recent regulations of the Examining Boards, Classical and Mathematical Tutors have been appointed, as well as a General Tutor, who is in attendance daily to assist in the discipline of the College, to superintend the dissections, and to hold classes for the instruction of Students. Clinical Lectures will be delivered by the Physicians and Surgeons of the General Hospital, and Prizes are given annually for the best sets of Medical and Surgical Reports. The Chemical Laboratory is fitted with every convenience, and special care is taken to instruct the Students in Manipulative Chemistry. Ample opportunities are afforded for obtaining a practical knowledge of Midwifery. Prizes are awarded in each class, and one is given by the Council for general proficiency.

Further particulars may be obtained on application to the Principal, Dr. Bell Fletcher, Waterloo Street; to the Treasurer, Dr. Russell, Newhall Street, who is authorised to receive Students: or to the Secretaries, Mr. Bassett, 1, St. Paul's Square, and Mr. Howkins, Bennett's Hill, Birmingham.

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fluid preparation of Bismuth, not decomposed by dilution. This article has been extensively used at the Bristol General Hospital, and in private dispensing, since 1857; and is recommended by many of the faculty as more efficacious and more convenient of administration than any other form of the remedy.

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St. George's Hospital Medical

SCHOOL. SESSION 1863-64.—The WINTER COURSE of INSTRUCTION will commence on Thursday, October 1st, with an Introductory Address by Mr. HENRY LEE, at 2 P.M.

Physicians—Dr. Page, Dr. Pitman, Dr. Fuller, Dr. Barclay.
Assistant-Physicians—Dr. Ogle, Dr. Wadham.
Consulting Surgeons—Mr Cæsar Hawkins, Mr. Cutler.
Surgeons—Mr. Tatum, Mr. Hewett, Mr. Pollock, Mr. Henry Lee
Assistant-Surgeons—Mr. Holmes, Mr. Brodhurst.

LECTURERS.

Descriptive and Surgical Anatomy—Mr. Holmes, and Mr. Rouse
Physiology and Comparative Anatomy—Dr. Wm. Ogle.
Chemistry—Dr. Noad, F.R.S.
Medicine—Dr. Pitman.
Surgery, Mr. Tatum.
Pathology—Dr. Ogle and Mr. Henry Lee.

On the payment of £100 a pupil becomes perpetual to the Practice of the Physicians and Surgeons and to all Lectures, may compete for all prizes, Exhibitions, and for the office of House-Surgeon, and may become Clinical Clerk and Dresser for two periods of three months each.

On the payment of £90—£45 paid at the commencement of the first Winter Session, and £45 the second Winter Session—a pupil is admitted to the Hospital Practice and Lectures required by the various Examining Bodies.

Gentlemen can enter to the Hospital Practice and Lectures separately.

The Hospital contains 350 beds. Clinical Lectures are delivered by the Physicians and Surgeons every week.

A MATERNITY DEPARTMENT, for the delivery of married lying-in women at their own homes, is established at the Hospital: with a Ward for the reception of women suffering under diseases peculiar to the sex.

The William Brown Exhibition, of Forty Pounds per annum, tenable for three years, will be "bestowed on the candidate who shall show the best general fitness for the exercise of the medical profession, and whose moral conduct shall in all respects be satisfactory."

The following Prizes will be awarded at the termination of the Session.

Sir Charles Clarke's Prize for Good Conduct.
The Thompson Medal.
Sir Benjamin Brodie's Clinical Prize in Surgery.
The Lewis Powell Clinical Prize in Medicine.

A general Examination will be held at the end of the Summer Session, and a certificate of proficiency will be given to each pupil who passes to the satisfaction of the Examiners, and the following Prizes to the most distinguished, viz.:—

A Prize of Ten Guineas to pupils in their first year.
A Prize of Ten Guineas to pupils in their second year.
A Prize of Ten Guineas to pupils in their third year.

Further information may be obtained from Dr. Barclay, the Treasurer of the School, from any of the Lecturers, or from Mr. Hammerton, at the Hospital.

Round Shoulders, Stooping Ha-

bits, Contracted Chests, and other Deformities of this class, are effectually cured by CHANDLER'S IMPROVED CHEST-EXPANDING BRACES for both sexes of all ages. Their action is to carry the weight of the shoulders off the chest, and throw the arms behind the body, thus causing the wearer to walk and sit perfectly erect, and are especially recommended to children for assisting the growth, preventing deformities, and producing a noble and symmetrical figure, superseding the old braces and stays.
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Clinical Lectures

DELIVERED AT

CHARING CROSS HOSPITAL.

BY

HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON PHYSIOLOGY AND PATHOLOGY AT CHARING CROSS HOSPITAL MEDICAL SCHOOL; AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

Lecture VIII.—On the Diagnosis of Dropsies. (*Concluded.*)

Case I. *General Mechanical Dropsy from Disease of the Heart.*—Case II. *General Mechanical Dropsy from Disease of the Lungs.*—Case III. *Acute Dropsy from Exposure to Cold.*—Case IV. *Dropsy after Scarlatina.*—Case V. *Œdema of Feet from Pressure of Enlarged Liver.*—Case VI. *Ascites with Atrophied Liver.*—Case VII. *Ascites with Enlarged Liver.—The Relation of Ascites to Œdema of the Legs.*

Case I. George Gelden, aged 44, was admitted into the hospital for shortness of breath and swelling of the legs. For twenty years he was a waiter at an hotel, and drank to excess; but he has lately been a light porter, and has drunk moderately. For the last few years he has suffered occasionally from gout; and at the end of last year, about six months ago, was taken with a severe cold on his chest. Six weeks ago his legs began to swell, and have rapidly increased in size, the swelling having gradually extended from the ankles up to the thighs. At the time of his admission, the legs were enormously large, hard, tight, and pitting deeply on sustained pressure. There has been no œdema about the face, body, or upper extremities. There is but little cough or expectoration; breath very short on the least exertion, accompanied with palpitation; while perfectly at rest the breathing is tranquil. *On listening over the apex of the heart a strong systolic bruit is heard.* No albumen in the urine.

What was the diagnosis in this case? Cardiac dropsy, due to mitral regurgitation. And on what was this diagnosis based? In the first place, the dropsy had the distribution of "general mechanical" dropsy, commencing at the lowest part of the body, and gradually creeping up; then we had the essential symptom of *dyspnœa* present; then the freedom of the upper parts of the body from puffiness, and, above all, the absence of albumen in the urine, relieved the kidneys from all onus. The only doubt, then, at this stage of the inquiry, would be, whether the seat of the mechanical impediment giving rise to the dropsy was the heart or lungs, whether it was a case of cardiac or pulmonary dropsy, whether it was due to bronchitis or heart-disease. This doubt was soon solved; for not only was the amout of mischief found in the lungs inadequate to the production of such results, but, on exploring the heart, we found enough to explain everything—a suitable and sufficient cause for all the symptoms—a grave derangement of the heart's machinery, such as would, sooner or later, give rise to all the effects of mechanical blood-stasis. The effects were such as pointed to the cause; and, on searching for the cause, we found physical evidence of its presence. The chain of evidence was then complete.

I may mention one thing in relation to this case, though it has not to do with the question of diagnosis—the special object of this lecture. It is, that it offers a very good example of the wonderful power of hydragogue catharsis in reducing dropsy of this kind. At the present time, after having been in the hospital three weeks, the swelling of this man's legs is almost gone. Its cause—the heart-disease—is, of course, exactly the same; but we have been pumping out of him five or six watery motions every morning by means of half-drachm doses of compound scammony powder; and this discharge of water has, by reducing the volume of the blood, so disencumbered the heart's damaged machinery, and, at the same time, so stimulated absorption, that the result is what you see.

Case II. James Shearer, aged 42, has served for twenty-one years in the Scots Fusilier Guards, and was in the Crimea; otherwise has been on home duty; had rheumatic fever twice, but, with that exception, has always enjoyed good health, and the rheumatism did not affect his heart or chest: no consumption in his family. His illness dates from April twelvemonth. He was walking down to New Cross with his wife and children, and noticed a pain in his right side along the lower ribs, rising towards the armpit. In a month the pain had risen higher in the side, and was accompanied with a tightness of the chest and a sense of oppression of the breathing. He seemed quite well as long as he was sitting still; but when he began to move, he lost his breath. He had a slight cough, mostly dry; and what little expectoration he had was chiefly in the morning. The next thing he noticed was a swelling in the left ankle, and shortly after in the right; it soon gradually extended up the legs; by November the swelling had reached the top of the thighs. No other part of the body was swollen, except that he felt a little tightness round the belly. He mostly lay on the left side (the right being the affected one). By this time the cough was very bad, in paroxysms of four or five minutes duration; the spitting more abundant; the sputum grey, containing no blood, not even rusty. In December he spat blood, ten days in succession, five or six times a day; but the phlegm was free of blood, and the blood of phlegm—the two perfectly distinct. At this time the sputum had a peculiar taste, that it had not had before; but there was no change in its appearance, nor did the patient ever notice any offensive smell with it, nor did any one else. The spitting of blood never returned but on one occasion, the morning after the illuminations for the Prince of Wales's marriage; he had been out on that occasion, and coughed violently on coming home. From December to April the swelling of the feet and legs got less; the breathing slightly better, but still very bad; the coughing and spitting night and morning, though less than there had been. He went on slightly improving (the breathing becoming clearer, but the swelling of the legs never entirely leaving him) till the end of May, when he was called out for eight days' drill. His breathing was equal to slow marching, but he could not manage the "double", which doubled him up; he also drank too freely. The result was, that the difficulty of breathing returned, and the swelling of the legs

reappeared. In this state he came into the hospital.

Physical Examination. Heart perfectly healthy; left lung perfectly healthy; right lung dull in its lower three-fourths, front and back. Over the dull region there is loss of respiratory murmur, of vocal resonance, and of vocal fremitus. Right side immovable in breathing, all the movement being performed by the left. No ægophony. Urine—no albumen; in all respects perfectly healthy.

Now here we evidently have another case of "general mechanical" dropsy, only, instead of the heart being the *point de depart* of the stasis, it is the lung. We have the characteristic distribution of the dropsy; the presence of the essential symptom—dyspnœa, the dropsy varying as the dyspnœa; the kidneys functioning perfectly; the heart healthy; but three-fourths of one lung functionally destroyed—not the seat of respiration, and therefore not the seat of free blood-transit. The diagnosis of this case, in relation to its clinical history and physical signs, is very interesting, and not very clear; but I will not now divert your attention from my main object by discussing it. I will merely remark that both this case and the preceding illustrate the fact that you may have extensive œdema of the legs from heart or lung-disease without albuminuria; in other words, that a mechanical source of general dropsy may be sufficient to produce serous transudation from the capillaries of the lower extremities, and yet not be sufficient to produce serous transudation from the capillaries of the kidney. This merely shows that the capillaries of the lower extremities are the most delicate percipients of any source of general stasis of the circulation, and the Malpighian capillaries less so. Formerly, I was not sure that this was the case; but these cases, and other similar ones that I have seen, set the point at rest.

Case III. William Bush, aged 20, by trade a house-painter, presented himself among the out-patients of this hospital on the 20th of March last, and was at once seen to have œdema of the face, which was pallid and puffy. He said he was swollen all over, and showed his legs, which were large and pitting. He stated that his illness commenced some days previously (after having got wet through and suffered his wet clothes and shoes to dry on him) with shivering, pains in the head and loins, swelling of the face, and afterwards feet, legs, and entire body. His urine was examined, and found to be loaded with albumen. He was at once ordered into the hospital.

On admission, we found him in the state described; his face, especially his eyelids, so swollen as to be quite disfigured; the entire cutaneous surface more or less œdematous, the stethoscope leaving a depression wherever it was applied. The heart and lungs were found to be perfectly healthy, except that the breathing was slightly accelerated; and there was a little dry rhonchus here and there, with short dry cough. He stated that he had been perfectly well up to the commencement of this attack, a few days previously; and that he had *never suffered from difficulty of breathing.* On examining the urine, we found it so charged with albumen that, on boiling it, the test-tube might be momentarily turned upside-down without anything escaping—so completely was it solidified. It was scanty, and of a specific gravity of 1015, not bright; and, on putting it aside to stand, an abundant deposit subsided, which, on examination by the microscope, was found to be organic, and to consist partly of tube-casts, granular and epithelial, of small and medium size, but chiefly of disintegrated epithelium-cells.

After this patient had been some days in the hospital, he experienced an aggravation of his symptoms from exposure to cold, in consequence of drafts in the wards. We noticed that his face was more puffed; he complained of pains in his loins, and vomited; and his urine became charged with blood, in addition to the albumen. From that time forward, however, under appropriate treatment, he has uninterruptedly improved; the blood soon disappeared; every trace of the dropsy has gone; and all his other symptoms have vanished, except that there is still a trace of albumen in his urine, and may be for some time to come.

Here we have a case manifestly of a different complexion from those which we have just been considering. We have the heart and lungs *both* perfectly sound, and no dyspnœa up to within a few days of his being seen, and even then so slight as not to be a source of any distress. It is manifest, then, that the dropsy is not of the "general mechanical" type, since that arises alone from heart or lung-disease. Moreover, the dropsy is universal, and developed with great rapidity, showing itself not first in the feet and gradually creeping up, but first of all in the face. Moreover, we have such an amount of albumen in the urine as no mechanical source of dropsy would ever produce, and a deposit showing the kidneys to be the seat of primary disease. Two symptoms commonly present in cases of this nature—namely, vomiting and pain in the loins—were absent when the lad came in; but they appeared, as has been narrated, a few days later. That nothing may be wanting, add to all this that the symptoms were preceded by such an exposure to cold and wet as would be sufficient powerfully to check the action of the skin—and the chain of evidence is complete.

It is evident, then, that we have here one of those cases of what is called "acute dropsy" from surface cold, always associated with derangement of the kidney, and which I have named "dropsy from cutaneous asphyxial congestion".

Let us now turn to another case, very similar.

Case IV. Louis Tiller, a boy aged 14, was brought to the hospital the other day, on account of a swelling of his entire body and face, which had suddenly made its appearance a few days previously. He was led into the out-patient room by his mother, his gait feeble, his breathing oppressed, and complaining of headache and pain in his back. But the most striking thing about him was his appearance. His face was bloated, and his eyelids so swollen that his eyes were very imperfectly opened; there was a peculiar semitransparent opalescence about his eyelids, and a quaggy fluctuous tremor of them on being gently tapped. The body was so much enlarged that the waistcoat and trousers could not be brought together; the navel was deeply set; the scrotum was very much swollen; the legs had, from their swelling, lost the natural shape of a boy's limbs, and they pitted deeply on pressure; the application of anything to any part of the surface of the body left its impression, and the corrugations of the boy's linen were mapped out on many parts of the trunk. In fact, there were all the appearances of universal subcutaneous dropsy. The face and the entire surface of

the body were blanched. The urine was scanty, and said to be very dark; on having some passed, and examining it, it was at once seen to be darkly smoky from the presence of blood; and, on boiling it, a copious deposit of albumen was thrown down. Heart and lungs healthy; breathing oppressed; no cough; respiratory murmur every where natural: *no dyspnœa before the swelling appeared.*

You will see at once how like this picture is to the preceding, and how clearly the dropsy is of the same nature. The process of reasoning that would diagnose the one would diagnose the other, and I need not repeat it. The only point of difference in the two cases was the cause. In this latter case, like the other, the dropsy appeared suddenly—the boy went to bed apparently without it, and got up with it; but there was no recognised exposure to wet or cold previously. But inquiry elicited that three weeks before, he had had a rash that was suspected to be scarlatina, and his hands, etc., had peeled. There could be no doubt then that this was a case of "dropsy after scarlatina," and the only difference in respect to the cause was, the particular *materies morbi* with whose elimination the skin and kidneys were struggling.

Case v. Within the last few days there has come into the hospital a man exhibiting, if my diagnosis is correct, a form of dropsy which is not a very common one; his history is as follows.

John Bradley, aged 45, has been for some years past a steward on board an Indiaman, and has drunk enormously of spirits. Some short time ago he noticed that he was getting larger in the belly than usual, that he could not button his waistcoat and trousers so well as he formerly could; and this has gone on increasing till now they will not meet by two or three inches; lately his legs have become rapidly œdematous, and are now largely so. On examining the heart there is found no evidence of disease, and in the lungs nothing but slight bronchial sounds apparently quite insufficient to indicate a pulmonary explanation of the dropsy. On physically examining the abdomen it is at once evident that its distension is not due to fluid, as there is not a trace of fluctuation; but we find that the liver is greatly enlarged, occupying the epigastrium, and extending four or five inches below the margins of the right ribs. No albumen in the urine, which is in all respects perfectly healthy.

Now let us trace the process of reasoning by which we arrive at the diagnosis of the nature of the dropsy in this case. In the first place the *distribution* of the dropsy is the same as in "general mechanical"—it is dropsy of the lower extremities. But we have not the sources of general mechanical dropsy; the heart and lungs are not the seat of such disease as could generate it; and we know no other source of general mechanical dropsy except disease of the heart or lungs. The kidneys have clearly nothing to do with it, for they are functioning naturally, and are evidently healthy. But how about the liver? That we find is evidently *not* healthy. Can that in any way produce the dropsy of the legs? We know that the liver has nothing to do with the circulation of the legs; but that it *has* to do with another circulation, that of the abdominal viscera, and that it is on this circulation that disease of the liver tells, and that when it produces dropsy that dropsy is abdominal dropsy, or ascites. But there is one way in which disease of the liver *may* give rise to œdema of the lower extremities, and that is probably the way in which the dropsy of the legs has been produced in this case. When the liver undergoes great enlargement it becomes a veritable tumour, capable of producing all the effects of a tumour. Immediately behind the posterior border of the liver is the inferior cava, and in a supine position the liver may be said to rest upon it. In health things are so apportioned that no disturbance results; but when the liver is greatly increased in size and weight it presses on the cava, in the supine position, to such a degree as to impede the flow of blood through it, and thus to give rise to the results of pressure on a large venous trunk, one of which results we know to be œdema, corresponding in extent to that segment of the circulation which is tributary to the venous trunk pressed on. Now in this case we have all the conditions for such a production of such a dropsy, and in the absence of any other explanation I cannot but believe that this is the true one. If this is so, this is an example of what I have called "local mechanical" dropsy.

But there is one difficulty in the way of this diagnosis that I must not conceal from you. Any impediment to the return of blood to the heart by the inferior cava produces not only œdema of the lower extremities but enlargement of the superficial veins of the abdomen; now, in this case there is no such enlargement of the superficial abdominal veins. But, at any rate, whether our diagnosis is right or wrong, what I have told you about the case is sufficient to illustrate the principles upon which the diagnosis of local mechanical dropsy is based.

Case vi. Joseph Slater, aged 61, an agricultural labourer, was admitted into the hospital for ascites and swelling of the feet and legs. Of temperate habits, and has always had good health. He first noticed the swelling of his belly early in February; it gradually increased, and he came to the hospital. He had had pains in the back, but none in the belly; had lost flesh and strength; the bowels had acted regularly; the urine was high-coloured, turbid, and scanty.

On examining the patient we found him emaciated and sallow, and the abdominal cavity enormously distended with fluid—the circumference of the abdomen forty-five inches; the thrill on percussion highly developed in consequence of the tension with which the thin parietes were stretched over the fluid; the superficial abdominal veins enlarged. There was one appearance which was rather peculiar; the umbilical opening was very much enlarged, about an inch in diameter, and through it projected a sort of hemisphere of peritoneum, driven forward by the fluid beneath it, and covered by the thinned integument above it, constituting a sort of serous hernia; it was about as big as half a large walnut. The characteristic thrill could be elicited in this little cavity, and when the light shone through it it had the semitransparency of a hydrocele. No outline of the liver could be made out. The legs were but little swollen, chiefly about the ankles. The motions were pale; the urine evidently containing bile; no albumen. Heart and lungs healthy.

In this case you see the features of the dropsy were very well marked, and were of an entirely different character from those of the previous cases;

and up to a certain point the diagnosis was perfectly clear. The urine asserted the kidneys to be healthy, and the stethoscope asserted the heart and lungs to be healthy. There seemed nothing, then, left but the liver. That this was the organ at fault was further shown by the sallow skin, the pale motions, and the bilious urine. Moreover, the particular form of the dropsy—ascites—was that which directly points to the liver. But there was just one point that raised a doubt as to whether the liver itself was the seat of the organic change causing the dropsy; it was quite clear that that cause was something impeding the portal circulation and hindering the escape of bile; but it might be all that, and yet not the liver. I have mentioned that the feet were swollen and the superficial veins of the abdomen enlarged; it seemed, then, that the disease, whatever it was, was something exercising pressure on the inferior cava; if this was the liver the organ ought to be enlarged, so as to constitute a tumour and an incumbent weight on that vessel. But no trace of enlargement of the liver could be found; and I may mention that afterwards, when the man was tapped and the dropsy became, therefore, less a source of obscuration, no enlargement of the liver could be detected. It seemed, therefore, to be more probable that the source of the dropsy was some disease (it might be cancer) not involving the whole liver texturally, but either foreign to the liver or growing *from* the liver, and so placed as to press on the portal vein, hepatic duct, and inferior cava.

The man died (I purposely avoid now all further detail of the case), and the *post mortem* examination shewed that this refinement of diagnosis was wrong, that the cause of the dropsy was a textural degeneration of the liver, not attended with an increase of its bulk, but with a great diminution of it, the liver weighing only a pound and a half. Another case which was in the hospital at the time, and which I will now relate, happily illustrated, a short time subsequently, where the fallacy of our reasoning was.

Case vii. John Holland, aged 40, was admitted into Charing Cross Hospital June 3rd, with an enormously distended belly and œdematous legs. He had led a very wild and irregular life, and had drunk an immensity of spirits. His symptoms were of many months standing, and into them vomiting and jaundice had largely entered. He was emaciated, pallid, and sallow, the sallowness sometimes rising to jaundice. Heart and lungs healthy; urine containing no albumen. There was the same hernial protrusion of the peritoneal sac at the umbilicus as in Slater's case, only to a much greater extent—as big as a hen's egg; and the legs were much more œdematous, as much so as one often sees in an advanced stage of heart-disease. There was this difference, too—that in spite of the drummy tension of the abdomen with fluid, and the dulness which this produced, we thought we could detect great enlargement of the liver. Afterwards, when the man was tapped, and the serum (twenty-four pints) was drawn away, this became very conspicuous, and the lax parietes could be thrust beneath the margin of the liver, and fairly under the organ, thus bringing its edge into view, which was five or six inches below its natural seat.

There seemed, then, no difficulty in explaining the double dropsy in this case—the ascites was owing to a textural disease of the liver, probably cirrhotic, impeding the transit of blood through it, while the œdema of the legs was due to the pressure of the enlarged organ back on the inferior cava. But mark what followed. When this man was tapped his legs and thighs were enormously œdematous, more so than they had been at all; *within eight and forty hours afterwards not a trace of œdema was to be seen.*

From this sudden disappearance of the œdema of the legs after the tapping, we learned two things:—

1. That the pressure of the enlarged liver on the inferior cava was *not* the cause of the œdema of the legs; for the liver was just as large after the tapping, but the œdema was gone.

2. That the pressure of the incumbent fluid on the great inferior systemic vessels *was* the cause of it, and, therefore, might be the cause of it in Slater's, or any other case. This proof that ascites is of itself sufficient to generate so great an amount of œdema of the lower extremities is a most important clinical fact, as it removes the necessity for any other explanation of dropsy of the legs in any case in which ascites is present. Had I known this when I was diagnosing Slater's case I should have been content with the hypothesis of simple liver disease, as a sufficient interpretation of it.

Gentlemen, I must here conclude my lecture. There are yet two forms of dropsy whose diagnosis I have not illustrated; for the good and sufficient reason that I have no cases wherewith to illustrate them; one, the primary dropsy of serous cavities; the other, the dropsy of watery blood. I must illustrate these on some future occasion.

How Inoculation came about. At a time when small-pox was as destructive as the plague itself, Lady Mary Wortley Montagu, happening to be at Adrianople, was struck with the fact that the Turks were in the habit of making terms with the disease by receiving it into their system by way of the skin, instead of by the lungs, as in the natural mode of infection. Possibly, the lively nature of the lady's letters had more to do with the sensation this new practice created in England than the magnitude of the truth she made known, and to this day we believe that the public have some idea that it was a discovery made by her ladyship, and which she had the boldness to put in practice upon her own son. Yet no fact is more certain than that throughout Asia the practice of inoculation had obtained for ages; and that the Chinese—the inevitable nation to which we have always to go back for the birth of any great discovery—systematically employed inoculation as early as the sixth century. Yet, strange to say, in Asia this precious knowledge came to a dead standstill, and had it not been for the lively English lady inoculation might not have been introduced into England for another half-century, and possibly vaccination would even now be in the womb of time. That inoculation was a grand step towards the practice of vaccination there can be little doubt, although science did not at the time appreciate the fact. It taught us that the disease received into the circulation by the skin was infinitely less dangerous than the disease "caught" by inhalation through the lungs, a circumstance which medicine cannot explain to this day. The deaths from small-pox during some of the severe epidemics of the last century were not less than a third of those attacked, but the improved practice of inoculation reduced these deaths to one in two hundred. (*Once a Week.*)

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ON THE INFLUENCE OF A LONG COURSE OF NITRIC ACID IN REDUCING THE ENLARGEMENT OF THE LIVER AND SPLEEN, THAT SOMETIMES RESULTS FROM THE SYPHILITIC CACHEXY.

By George Budd, M.D., F.R.S., London.

The attention of pathologists has for some years been directed to the enlargement of the liver; or simultaneously of the liver and spleen; or of the liver, spleen, and kidneys; of which I many years ago sketched the clinical history, under the heading "Scrofulous Enlargement of the Liver"; but which, in consequence of the discovery since made, that some elements of the enlarged glands commonly exhibit the chemical reaction of starch, has recently been described as the "Amyloid Degeneration."

This disease occurs under various circumstances, but especially in persons whose health has been long impaired by constitutional syphilis or scrofula. The most striking examples of it are seen in the victims of scrofulous or syphilitic caries.

In such cases, after the disease of the bone has existed a considerable time, it is found that, without pain, or tenderness, or other symptom specially directing attention to these organs, the liver and spleen are much enlarged. By and bye, the urine becomes albuminous.

Albumen continues to pass off in the urine; the patient, often without much loss of flesh, grows paler and paler; and, at length, death occurs—not from the disease of the liver or spleen, but from that of the kidneys.

After death, it is found that the kidneys are enlarged, as well as the liver and the spleen, and that the three organs have undergone the same kind of morbid change.

The object of this communication is not, however, to describe the course of the disease, or the characters of the morbid change; but to make known that the nitric acid (or the nitro-muriatic acid), long continued, has, in certain circumstances, great remedial power over it. The nitro-muriatic acid has for many years been extensively used for its influence in modifying the nutrition of the liver; and, in very many instances, under its long continued use, enlargement of the liver—presumably of the kind in question, occurring under different circumstances—has been found gradually to disappear.

I should trespass too much on the time of the meeting were I to enter on a subject so wide, and at present so indeterminate, as the general influence on nutrition which these acids have.

To bring my observations within due compass, and at the same time to make them more definite, I shall restrict myself to the disease of the liver and other abdominal glands, consequent on the syphilitic cachexy, more especially on syphilitic caries; and to the influence of nitric acid upon it.

It is difficult, on such a subject, to convey to others the results of individual experience without some appeal to facts which that experience embraces; and I shall, therefore, relate, as briefly as I can, three cases that have recently fallen under my notice, which may serve to illustrate the sequence of events to which I have referred, and the kind and degree of influence which, when the disease is of syphilitic origin, the nitric acid exerts.

Case I. A medical graduate of Edinburgh, of very temperate habits, during his studentship, towards the close of 1841, contracted a venereal sore, followed by enlarged inguinal glands. This malady was treated by local remedies only; and at the end of a month or five weeks his health was re-established. He remained in good health till the autumn of 1853, when he had, for some weeks, ulcerated sore throat.

In March 1854, he had an attack of pneumonia, for which he took a large quantity of calomel; and before he had recovered from the debility which this illness caused, the throat became ulcerated again; the ulceration commencing in the soft palate, and soon spreading to the uvula and tonsils.

In July, a piece of the vomer came away. Subsequently, from time to time, small pieces of the nasal bones were detached, and, at length, the bridge of the nose sank. To check this ulcerative process, iodide of potassium in very large doses, and a combination of the syrup of iodide of iron with cod-liver oil, were taken, alternately, for some months. The ulceration of the fauces was stopped by these remedies; but the patient was left weak, and a puriform discharge from the nostrils continued.

In the autumn of 1859—when the disease of the nasal and palate bones had existed between five and six years—he suffered considerably from acidity of the stomach, flatulence, and other dyspeptic symptoms, and noticed an unnatural fulness and prominence of the epigastric region.

On account of these ailments, he paid me a visit on December 24th, 1859. He was then pale and much emaciated; weighing only nine stone seven pounds, though five feet eleven inches and half in height. The skin was dry, and the tongue unnaturally red.

The fulness and prominence of the epigastric region was found to be chiefly owing to enlargement of the liver; the lower edge of which, from the thinness of the abdominal walls, could be distinctly traced, reaching in the median line as low as the umbilicus. The spleen was likewise enlarged, being plainly felt extending about the breadth of three fingers below the false ribs.

The urine was voided more frequently than natural; and, on examination, was found to be of specific gravity 1012, and to contain a considerable quantity of albumen.

The fauces exhibited the scars of former ulcers, which had removed the uvula and much of the soft palate, but no actual ulceration was visible. There was still an abundant puriform discharge from the nostrils.

The case was considered to be one in which disease of the liver, spleen, and kidneys, of the kind specified above, was consequent on protracted caries,* most probably of syphilitic origin; and twenty minims of dilute nitric acid, with a dessertspoonful of the fluid extract of sarsaparilla, twice a day, and a generous diet, were prescribed. No change of residence or occupation was adopted.

The medicines were taken continuously; and on the 28th of April, 1860—that is, after the lapse of four months—the patient had improved much in condition, and had gained a stone in weight. The liver and spleen were much reduced in size. The urine was of specific gravity 1010; clear, moderately acid, and contained only a very small amount of albumen.

The diet since the preceding December had comprised solid animal food twice a day, at breakfast and dinner; and, in addition, strong soup for lunch, and a pint of Guinness's porter daily, but no other alcoholic drinks.

* The condition of the liver is not exactly alike in all cases of this kind. In some cases it contains oil enough to add considerably to its bulk; in others, scarcely any.

The patient was directed to continue taking the acid and sarsaparilla; which, with only a fortnight's intermission, he did from this time to October 12th, when I had an opportunity of seeing him again. He was then stouter and stronger than before, and no perceptible enlargement of the liver or spleen existed. The urine was now free from albumen. The specimen examined was of specific gravity 1018, very slightly acid when just passed. There was still a puriform discharge from the nostril, but not one-tenth as much as on my first examination.

On account of the persisting discharge from the nostril, and the absence of any discoverable ill effects from their use, the medicines were continued till the beginning of April 1861. On May 1st of that year, I examined the patient again. He then considered his health re-established. His weight was eleven stone one pound. The liver and spleen could not be felt beyond their usual limits. The urine was of specific gravity 1010, barely acid when just passed, and, as at the preceding examination, contained not a trace of albumen.

The acid and sarsaparilla were thus taken more than fifteen months, with only a fortnight's intermission; and the result was a gradual and progressive improvement of health.

During this long course of nitric acid, with a highly animal diet, there had been no gravel or red sediments in the urine; and from an early period of the course to its end, there had been no indications of undue acidity of the stomach, although, before the acid was taken, acidity of the stomach and flatulence had been among the symptoms most complained of.

The effect of the plan of treatment appeared to be, a gradual amendment in the disease of the nostril; a gradual diminution of albumen in the urine; return of the liver and spleen to their natural size; and restoration of the general health.

Case II. On June 6th, 1862, I was called to a gentleman, of powerful frame, 35 years of age, who for several years had been grievously afflicted with disease of the bones of the kind in question.

As long ago as the year 1855, several pieces of necrosed bone, from the size of a shilling downwards, belonging to the outer table of the skull, had been removed from the forehead and top of the head. The left knee, in consequence of the long existence of ulcers near it, had been contracted, so that the foot could not be placed to the ground; above the right knee was an ulcer still open, apparently connected with the femur; on the forearm another open ulcer; and the bones of the forearm, and the tibia on each side, were thickened in parts and uneven.

For some months he had been confined to his bed and chair; and, from the shortening of one leg and general muscular debility, he was unable to stand. The liver was much enlarged; the spleen could be felt projecting some inches below the ribs; the urine contained a large amount of albumen.

At this time, some diarrhœa existed, with occasional vomiting. These ailments were soon removed by attention to diet and by pills of creasote and opium; and twenty minims of dilute nitric acid were then ordered to be taken twice a day. Subsequently, the dose of the acid was increased to twenty-five minims twice a day. A generous diet, which had been previously taken, was allowed. No change was made in the mode of life.

Soon after I first saw the patient, he went to his usual country residence: and in the middle of November, I received a report from his medical attendant, stating that he had improved in condition, and that the quantity of albumen in the urine had lessened.

He continued to take the acid; and in February 1863, I saw him again. I found the liver reduced in size; the spleen scarcely to be felt; and the general condition much improved. The amount of albumen in the urine was less than in the preceding summer; but was still considerable.

As yet no attempt had been made to walk. Soon after this, an apparatus was contrived for the gradual extension of the contracted knee; and, by the aid of crutches, he began to walk about the room. From twenty-five to forty minims of nitric acid, with eight minims of tincture of sesquichloride of iron, were taken daily from this time till July 13th, when twenty-five minims of the acid were directed to be taken regularly twice a day; and acid foot-baths were ordered in addition.

On July 13th, the liver could be felt in the epigastric space, but on the right side did not extend below the false ribs. The spleen could no longer be felt. The sores were all healed. The urine, which was clear, and of natural colour, still, however, contained albumen.

The acid has thus been taken continuously for thirteen months; and, though scarcely any bodily exercise has been possible, the result has been—reduction of the liver and spleen almost to their natural size; diminution in the amount of albumen in the urine; healing of the sores; and improvement in the general health. Notwithstanding the large quantity of acid taken, the urine, when tested, has never been more than moderately acid, and no heartburn nor undue acidity of the stomach has ever been complained of.

Case III. An officer in the army, of robust frame, 35 years of age, had syphilis eleven years ago. This was followed by sore-throat. In less than twelve months from the time of infection, he began to have pains in the bones, worse at night. Subsequently, during the Crimean war, in which he was engaged, nodes formed on the shins and on the right radius. He continued to suffer, more or less, from pains in the bones for several years.

Six years ago, abscesses formed on the right forearm and on both legs—all, apparently, in connection with the bones; and, ultimately, in the arm, a piece of bone, as large as a shilling, exfoliated. The sore on the arm from which the piece of bone came remained open three or four years; the other sores healed more quickly.

Two years ago, after exfoliation of the piece of bone referred to, all the sores healed. From that time, his health was comparatively good for twelve months. Law proceedings in reference to some property then gave him, for several months, much anxiety. The pains in the bones recurred; his sleep became broken; his appetite impaired; and he began to suffer from thirst.

These various ailments continued, notwithstanding the cessation of the mental disquiet to which he ascribed his relapse; and when I first saw him, on Feb. 12th of the present year, he was pallid and cachectic, and so weak that he could not walk a quarter of a mile without fatigue. His weight, which in health was between thirteen and fourteen stone, was now eleven stone. He complained of pains in the bones, sleepless nights, and profuse morning perspirations. His appetite was much impaired; he suffered from thirst; and had occasional nausea.

During the eleven years that had elapsed since the commencement of illness, he had taken two or three courses of mercury and great quantities of iodide of potassium. The bones of the forearm and the tibia on each side were thickened in parts, so that their surface was rendered uneven; and the skin above them was scarred by the former sores. The liver was much enlarged, reaching in the median line nearly to the umbilicus, and on the right side below that level. The urine contained albumen which, when coagulated in a test-tube and allowed to subside, rose to one-third of the height of the urine in the tube. Twenty minims of dilute nitric acid twice a day were prescribed.

On March 6th, the acid was directed to be taken three times a day; and ten minims of liquor cinchonæ were added to each dose. From the first, there was a

rapid improvement in the patient's condition; the pains in the bones lessened; appetite and sleep returned; the excessive thirst abated.

On June 15th—that is, after the acid had been taken rather more than four months—the patient had gained one stone and four pounds in weight; could walk any reasonable distance without fatigue; and had, indeed, little to complain of. The liver was found to be much reduced in size. The urine was of specific gravity 1016, and only faintly acid. It still contained albumen, but in very much less quantity than at first.

He continued to take the acid; and on July 1st, when I last heard from him, he considered his health so far re-established that he was indisposed to follow the advice I gave him, to decline joining his regiment, which was on foreign service.

Here, the acid has been taken a very much shorter time than in the preceding cases; but the result has been—reduction in the size of the liver; diminution in the quantity of albumen in the urine; and remarkable improvement in the general health.

The cases just related appear to warrant the following conclusions:—

1. That, when the liver and spleen have become diseased in the manner specified, in sequel to protracted syphilitic disease of the bones, nitric acid, long taken, has a remarkable influence in gradually effecting the removal of the morbid deposit to which these organs owe their increased size, restoring the organs to a more healthy condition, and improving the general health.

2. That, under such circumstances, there is unusual *tolerance* of the acid, which may be taken continuously for many months without inducing excessive acidity of the urine, or any inconvenience attributable to undue acidity of the stomach.

The cases further afford a strong presumption that nitric acid, taken earlier, would prevent the disease of the abdominal glands, which, when established, it tends to remedy; and they, perhaps, warrant the inference, that since the virtues of iodide of potassium were discovered, nitric acid has been too much neglected in the treatment of long-standing constitutional syphilis.

Nothing so quickens our perceptive faculties to discover diseases in their nascent state as knowledge of their causation. The knowledge that the peculiar disease of the liver, spleen, and kidneys, that we have been considering, often results from the syphilitic or scrofulous cachexy, more especially when the bones have been for some time affected, may, in many instances, enable us to anticipate its occurrence, or to detect it before it is far advanced, and, consequently, to adopt preventive measures, if such there be; or, at least, to apply what remedies we have before irremediable changes of structure have occurred.

When, as in the cases related above, together with enlargement of the liver, there is albuminous urine, showing that the kidneys have become affected, the acid acts much more rapidly and certainly in reducing the size of the liver than in restoring the healthy action of the kidneys.

One reason of this is, that the healthy action of the kidney requires a more perfect restoration of healthy structure than is implied by mere diminution of bulk; and that changes of structure, which in the liver we are unable to detect, in the kidney are readily and plainly revealed by the presence of albumen in the urine.

It is probable, however, that when the acid is absorbed from the stomach, its remedial action is really much greater on the liver than on the kidney; because it is carried to the liver directly in the portal blood, while it can only reach the kidney when it has passed in succession through the capillary system of the liver and the lung, and has become distributed in the general arterial current; and it is, therefore, possible that the acid, if taken in baths, when it would be absorbed by vessels that go directly to the lung, might have a more rapid and more powerful action on the kidney.

I need hardly remark, that it is only when the disease of the bone,* on which the enlargement of the liver, or of the liver and spleen, is consequent, can be arrested; or when this peculiar change in the liver and spleen arises from other conditions that admit of removal, that such results as were witnessed in the preceding cases can be looked for.

When the enlargement of the liver and spleen are consequent on disease of bone which is irreparable; or when, otherwise, the conditions which led to this enlargement remain in force, the malady, though even then its course may be retarded, usually makes progress; and life, if not previously destroyed by some other affection, is at length cut short by disease of the kidney.

For reasons already stated, my remarks have been for the most part restricted to the enlargement of the liver and spleen consequent on the syphilitic cachexy; but I should not have occupied the time of the meeting, were it not for the belief that the subject, when duly considered, will be found to have a much wider scope.

The enlargement of the liver and spleen, and the albuminuria, in cases like those related above, though occurring in sequel to protracted syphilitic disease, are not special syphilitic affections; but are merely the result of the impairment of the general health which protracted syphilis occasions.

The remark was many years ago made by the late Dr. Graves, that long-continued syphilitic disease induces a state of constitution closely resembling, if not identical with, that to which the term scrofulous is commonly applied. The remark is quite true; and it serves, in some degree, to explain the circumstance, that persons of scrofulous constitution, as a general rule, suffer much more from the effects of syphilis than persons in whom no scrofulous taint exists. Additional confirmation of the remark is furnished by the fact that long-continued scrofulous disease, more especially when the bones are affected, is often followed by disease of the liver, spleen, and kidneys, identical in its nature, as far as we can judge, with that which, in the preceding cases, was the remote effect of the syphilitic virus.

The disease of the liver, spleen, and kidneys, then, in cases like those related above, is not to be considered as a specific result of syphilis; but as a result of the induced scrofula which protracted syphilitic disease so often occasions.

The effect of a long course of nitric acid in the cases related above is, therefore, suggestive of the question, What degree of influence does this agent possess in remedying, and, better still, in preventing the glandular enlargements, the slowly healing ulcers, and the other forms of disease that result from the more common variety of scrofula?

I have been persuaded by long experience, that in tuberculous disease of the lung, nitro-muriatic acid, long taken, tends to prevent the further deposit of tubercle; and that, in scrofulous glandular enlargements, this acid and, still more, the nitric acid, has often a very beneficial effect. What is the degree of influence which the acid exerts in such cases, and what are the limitations to its use, further and more careful observation must determine.

P.S. Although the affection of the liver, spleen, and kidneys, which is the subject of this paper, is not the peculiar and specific result of syphilis, these organs, and especially the liver, are occasionally, but rarely, the seat of disease that is, strictly speaking, syphilitic.

Nearly twenty years ago, I described under the heading, "Knotty Tumours of the Liver," peculiar tumours

* The circumstance that the affection of the abdominal glands is especially apt to occur in sequel to caries, suggests the question, whether protracted suppuration tends to cause it?

occasionally found in that organ, consisting of an inorganised, albuminous material, looking like cheese, an opaque, tubercular matter, in distinct masses, that, in different instances, vary in size from a hazel-nut to a large orange.

When I first gave a detailed description of these tumours, and for many years afterwards, I was ignorant of their origin. Some years ago, the discovery was made, I cannot say whether by a German or a Swedish physician—and the discovery has since been fully confirmed—that these tumours are the special result of syphilis. In two cases, during the past year, I have found them in conjunction with the affection of the liver, spleen, and kidneys, which is the subject of this communication.

When these syphilitic deposits occur in the liver, they remain for some time without very serious results; but the inorganised albuminous matter of which they consist, like the matter of tubercle, may at length soften and decompose; and subsequently, through its agency, gangrenous or destructive inflammation may be set up in the contiguous tissues. This event happened in one of the two cases to which I have just alluded.

A BRIEF ACCOUNT OF THE LITERARY HISTORY, BOTANICAL CHARACTERS, AND THERAPEUTICAL PROPERTIES OF THE ORDEAL BEAN OF OLD CALABAR.

By George Harley, M.D., Professor of Medical Jurisprudence in University College, London, and Assistant-Physician to University College Hospital.

In a communication recently (June 9th, 1863) made by the author to the Royal Medical and Chirurgical Society of London, in which the action of the Ordeal Bean on the animal body was compared with that of Woorara and Conia, the following conclusions were drawn:—

1. The ordeal bean may cause contraction of the pupil, when taken internally, as well as when it is applied locally.

2. Atropine and the Calabar bean, as shewn by Dr. Robertson, are physiologically antagonistic.

3. The ordeal bean paralyses the motor nerves, and leaves sensibility, intelligence, and muscular irritability unimpaired.

4. It excites the salivary and lacrymal secretions.

5. It destroys life by paralysing the nerves supplying the respiratory muscles; being in fact, a respiratory poison.

6. Although it may weaken the heart's power, it neither stops the circulation, nor arrests the heart's action. It is not, in fact, a cardiac poison.

7. It is closely allied in its effects to woorara and conia, most closely perhaps to the latter; but it differs from both, in its tendency to produce muscular twitchings, and in its power of inducing contraction of the pupil. Neither woorara nor conia exert generally or locally any such effect on the iris.

8. The ordeal bean will prove a most valuable addition to the *Pharmacopœia*, by giving us not only a useful myotic, but also a powerful anodyne, capable of soothing nerve-irritation without either destroying intelligence or endangering life by arresting the heart's action.

Such being the conclusions arrived at, it is easy to perceive that in all probability this substance will form an important addition to the *Pharmacopœia;* and steps have already been taken by some of our leading pharmaceutists—Bell, Squire, and others—to obtain a large supply of the material. I deem it not inadvisable to lay before the Association a brief account of the literary history, botanical characters, and therapeutical action of the ordeal bean, specimens of which are now on the table.

Fifteen or twenty years ago, Messrs. Waddell, Young, Baillie, and Taylor, missionaries of the United Presbyterian Church of Scotland, on the West Coast of Africa, gave in the *Missionary Record* a description of the ordeal bean, and detailed the effects they had seen it produce on the natives of that portion of Africa, where they were stationed. These gentlemen also sent to this country several specimens of the bean.

In 1846, Dr. Daniell made allusion to it in the *New Philosophical Journal.* In 1855, Professor Christison described its effects on the rabbit, and upon himself (*Edinburgh Medical Journal*, March 1855, p. 193). In 1858, Dr. Sharpey studied its action on the frog; and in 1860, the botanical properties of the plant were carefully and minutely described by Professor Balfour (*Transactions of the Royal Society of Edinburgh*, vol. xxii, p. 305).

Here, however, its history stopped, and here most probably would it have remained for some time to come, had not Dr. Fraser, in 1862, discovered that the extract of the bean, when applied to the eye, produces contraction of the pupil; and Dr. Argyll Robertson had the courage to turn this discovery to practical account. Since the appearance of Dr. Robertson's observations (*Edinburgh Medical Journal*, March 1863), we have been further favoured, with remarks on the practical utility of the bean, by Dr. Neill (British Medical Journal, May 16th, 1863); Mr. Soelberg Wells (*Medical Times and Gazette*); Mr. Ernest Hart (*Lancet*, May 30th, 1863); Dr. John W. Ogle (British Medical Journal, June 13th and 27th, 1863); M. Giraldès (*Bulletin Général de Thérapeutique*, Juillet 15, p. 34); and Dr. Fraser is at present publishing his Inaugural Dissertation in the *Edinburgh Medical Journal* (July and August). Such then being, as far as I am aware, its literary history, I shall now proceed to describe the plant.

The *eséré*, as it is called by the natives of Old Calabar, appears to be indigenous to the West Coast of Africa. It is a long twining plant, the stem of which occasionally reaches the length of fifty feet, while it rarely exceeds two inches in diameter at its thickest part. It has trifoliate primate leaves, papilionaceous flowers, and leguminous fruit. The stem yields a limpid, acrid juice. The pods average six inches in length, and contain two or three beans. The beans are kidney-shaped, have a hard rough shell, are of a reddish brown colour, and have a deep furrow with raised edges of a pale-brown hue along their convex margin. They measure an inch in length, by three-quarters of an inch in breadth. The shell of the bean is closely attached to the kernel, which is of a white colour. It is exceedingly hard, according to Christison; weighs from thirty-six to fifty grains; and is perfectly devoid of aroma or acrimony. It tastes, in fact, exactly like an ordinary haricot-bean, and could not by the taste alone, be distinguished from one, which character, as Christison justly observes, is a very dangerous peculiarity. The beans contain about 2·7 per cent. of an active alcoholic extract, from which the alkaloid has as yet failed to be separated. Plants have been grown in Edinburgh from the beans, both by Professors Syme and Balfour, but in neither case did they flower. The characters of the plant were, however, otherwise exactly the same as those already described, and Professor Balfour names it *Physostigma Venenosum;* nat. ord. *Leguminosæ;* sub. ord. *Papilionaceæ;* tribe, *Euphaseoleæ.*

The ordeal bean of Old Calabar is given to persons suspected of witchcraft, in order to discover if they are guilty or innocent. Those who recover are supposed to be innocent, while those who succumb to the poisonous effects of the nut are branded as guilty. According to the missionaries' accounts, the accused are taken to the Fetish House (Town Hall), and are there made to "chop nut," as it is called, before the whole people.

They have either to eat from twenty to thirty seeds, or to drink an infusion from them. In the latter case death quickly supervenes, sometimes in thirty minutes, and generally within an hour. The symptoms observed are, gradual paralysis of all the voluntary muscles. The person has a stupid look, and a drunken gait. His limbs cease to obey him, his breathing becomes laborious, and he sinks and dies without any apparent suffering. Should he chance to be seized with vomiting and purging, his safety is in general secured.

The only Europeans who are known to have partaken of a poisonous dose of ordeal bean are: 1. Dr. Christison, who took, as an experiment, about six grains of the nut, then, on the following morning, about twelve grains. The first dose had apparently little effect, the second was followed by alarming symptoms. The pulse became frequent; the heart's action feeble and irregular. There were giddiness and faintness, without uneasiness; and loss of voluntary motion, without loss of consciousness.

2. Two servant girls, in Glasgow, who through curiosity, ate about five grains of the kernel. They were observed by Dr. Maclaren (Dr. Fraser, in the *Edinburgh Medical Journal*, August 1863, p. 131), who described the symptoms of one of them as follows. A few minutes after eating a piece of the kernel of the size of a pea, she became sickish; and, on going out into the street on an errand, she felt stupid and giddy, with a sensation of great feebleness over the whole body, rendering progression difficult. She did not vomit till after taking a quantity of hot water. She then went to bed, slept tolerably well, but for two days afterwards was feeble and out of sorts.

As far as I am aware, the only person who has studied the therapeutical action, upon man, of the Calabar bean administered internally, is Dr. Fraser (*Edinburgh Medical Journal*, August, p. 124). That gentleman has tried the substance in cases of erysipelas of the head, delirium tremens, febricula, acute bronchitis, rheumatic fever, and irritable stomach. He uses the remedy in the form of tincture;* five minims of which, possessing the activity of three grains of the kernel, he considers the proper dose to begin with. This dose, however, may be trebled, he says, without pushing the physiological action to any extreme; for, though the five minims usually exert some influence on the circulation, the dose has in general to be considerably increased before either a permanent or a decided effect can be produced. A weak pulse he considers a contraindication; a hard and rapid one an indication for its employment.

The Calabar bean was observed in general to exert a cathartic action on the bowels; and, as this action was unaccompanied with tenesmus, he believes it may be usefully turned to account. Dr. Fraser also used the tincture as an anodyne in various neuralgic affections with marked relief, and without the disagreeable after-effects of opium. It may be applied topically as an anodyne as well as given internally.

But its most remarkable, and at the same time its most important, topical action is on the eye. As I have many times repeated Dr. Fraser's experiment, I may perhaps as well quote a few passages from my own observations.

The local application to the eye, either of an aqueous solution of the alcoholic extract, of the solid extract itself, or of a glycerine solution, induces marked contraction of the pupil in from fifteen to twenty-five minutes; and, in illustration of this, I may cite the following experiment, which was performed on a cat. The cat is by far the best animal to employ in experiments of this kind, in consequence of its possessing a highly developed and bright coloured iris. A drop of the glycerine solution of the Calabar bean, prepared by Messrs. Bell and Co., was applied to the surface of the conjunctiva; in fifteen minutes the pupil was contracted to the size of a mustard-seed, and in forty minutes the iris appeared to extend over the whole eye. There was no local inflammation or irritation visible. I have several times repeated this experiment with the different preparations of the bean, and have invariably obtained the same result. The contraction of the pupil takes place, on an average, in from fifteen to twenty-five minutes, according to the strength of the agent employed.

The next point is, how long do the effects of the bean on the pupil last?

As an interesting illustration of this point, I may briefly relate the following experiment. Into the right eye of a cat was put a piece of the alcoholic extract of the Calabar bean, of the size of a pin's head; into the left, two drops of a strong chloroform solution of atropine (twelve grains to the ounce). In five minutes the right pupil was already somewhat contracted; but the left seemed as yet unaffected. In twenty minutes the right pupil was much contracted, the left only partially dilated. In forty minutes the right pupil was reduced to a point, the left nearly fully dilated. In one hour and a half the right pupil was scarcely visible, except on the eye being turned from the light, when it expanded a little; the left iris had now nearly entirely disappeared. In six hours, the pupils were in the same state. In twenty-four hours, they were still found in the same condition. In seventy-one hours the right pupil was one-third dilated, and very sensitive to light; the left was just commencing to contract, and not distinctly sensitive to light. In ninety-six hours the right pupil had regained its normal condition; the left was still somewhat dilated. The result of this experiment proved three things; first, that the action of Calabar bean manifests itself more quickly than that of atropine; secondly, that it is more transient in its effects; and thirdly, that the effect may not entirely pass off in less than four days. (Dr. Fraser has observed it to continue for five days).

The next point to ascertain is, if the myotic action of the ordeal nut is under control, and if, as stated by Dr. Robertson, it and atropine are physiologically antagonistic—that is to say, have the power of mutually neutralising the effects of each other.

For this purpose, some of the alcoholic extract prepared by Dr. Christison, and kindly given to me by Dr. Sharpey, was applied to the left eye of a dog, while a couple of drops of the strong solution of atropine in chloroform were put into the right eye of the same animal. In half an hour the left pupil had contracted to a point, and the right become so dilated that the iris appeared as a mere rim. In order that the effects of both substances might fully manifest themselves before proceeding with the experiment, the animal was placed aside until the following day; when, on examination, it was found that the left pupil still remained a mere point, and the right iris an exceedingly narrow ring. Such being the case, one drop of the atropine solution was now put into the eye with the contracted pupil, and a piece of the Calabar bean, of the size of a mustard-seed, into the eye with the dilated pupil. In fifteen minutes the pupils were of equal size, the left having expanded, the right contracted. In one hour the left pupil was fully dilated, leaving but a narrow ring of iris visible; the right was contracted to the size of a pin's head. The result of this experiment clearly shows that atropine and Calabar bean have, as has been asserted, the power of mutually neutralising the local effects of each other.

The effect of the ordeal bean on the accommodation of the eye, which was first noticed by Dr. Robertson, has been carefully described by him and nearly all subsequent writers; and at the present moment, it may be said to be universally admitted that the ordeal bean

* Through the kindness of Mr. Hills, of the firm of Bell and Co., I have obtained an elegant preparation of the bean in powder: the dose of which, I believe to be from three to six grains; and I hope shortly to be able to lay before the profession a short summary of its therapeutical effects in nervous affections.

has not only the power of restoring vision which has been artificially impaired by the application of atropine, but even that impaired by disease. When applied to the eye of a long-sighted individual, it restores normal vision; and when applied to a normal eye, it induces short-sightedness. The power of the Calabar bean over the accommodation of the eye has been so well illustrated in the cases related by Robertson, Bowman, Wells, Hart, and Hulke, that I need not take up the time of the meeting by dilating on this subject. I may merely mention, that the effect produced on the accommodation-power of the eye is not simply due to the power the Calabar bean exerts over the size of the pupil, but is believed to be chiefly due to its inducing contraction of the ciliary muscle, and thereby altering the focal distance of the eye.

The most convenient manner in which the Calabar bean can be applied to the eye, is by means of paper saturated with a solution of the bean, after the manner of Streatfeild's atropine paper. Messrs. Bell and Squire have kindly furnished me with some of these papers; they are divided into very small squares, one of which has merely to be placed under the lower lid, and left there for about ten or twenty minutes, when its effects will become evident. Bell's paper is the strongest; for it neutralises the effect of atropine paper, while the other does not.

I shall now pass to the consideration of the effect of the Calabar bean on the general system, which is of even greater importance than the mere local effects just alluded to.

Dr. Christison concluded from his experiments on animals, and from the symptoms the bean produced upon himself, that the poison affects "directly and violently the functions of the heart, and the exercise of volition over the muscles". The results of my experiments, although in the main establishing the correctness of this view, have nevertheless led me to suggest a slight modification of it as regards the action of the poison on the heart. But, before giving my reasons for so doing, I may first remark, that the ordeal nut is a poison of terrific strength; indeed, I am acquainted with but very few that act either more quickly or more energetically. I have seen, for example, a young rabbit killed in less than two minutes by a small portion (a grain and a half) of the alcoholic extract placed under the skin of the back; and, on removing the unabsorbed portion of the poison from the wound with the point of a knife, and inserting it, on the following day, under the skin of a full grown, strong, and healthy cat, in two minutes convulsions were induced; in five minutes, the limbs were paralysed; in nine minutes, the breathing became stertorous; and in thirteen minutes, the animal was dead.

Curiously enough, cold-blooded animals, such as the frog, are but little sensitive to the effects of this poison; and this is the more remarkable, seeing how powerfully it affects the nervous system. On one occasion, I put under the skin of a frog the same quantity as killed the young rabbit in two and the cat in thirteen minutes; and it produced no effect whatever. On another occasion, I dropped under the skin of a frog's back one drop of Bell's glycerine solution, one minim of which is equal to four grains of the bean; and it had not the slightest effect. In two hours afterwards, I poured three drops of the same solution into the animal's mouth; and, at the end of an hour and a half, the animal appeared perfectly unaffected. This result surprised me very much; for three drops of the same solution, put under the skin of the shoulders of a rabbit, induced weakness of its limbs in two minutes, convulsive twitchings in five, stoppage of the respiration in seven and a half, and death in eight minutes. In both the rabbits just alluded to, there was marked contraction of the pupils. Hence it appears that the poison exerts its myotic power on the pupil through the general system, as well as locally. Its action would also seem to be quicker when given hypodermically in poisonous doses, than when applied to the conjunctiva; for the rabbit's pupils became contracted in two minutes. In Dr. Fraser's paper, he states that, in his experiments, the contraction of the rabbit's pupil only occurred in twenty minutes. This must, however, have arisen from his using a very much weaker extract than I employed. That used by me I obtained from Professor Sharpey. It was prepared some years ago by Professor Christison; and, although it has been constantly exposed to the air, is still in first-rate condition.

The effects of the poison on the system, when not given in poisonous doses, appear to be transient; for on one occasion I put under the skin of a frog's back a piece of the alcoholic extract of the size of half a small barley-corn. In half an hour, the animal's head dropped upon the table; and, although he looked sleepy and lethargic, when roused, he leaped about energetically. As soon as he was left undisturbed, however, he dropped to sleep again. In three-quarters of an hour, the breathing was very slow, and the animal looked as if paralysed. Such, however, was not the case; for, on being pinched, he woke up and sprang about vigorously. In an hour and a half the effects of the drug began to pass off, and in two hours the animal was perfectly lively; indeed, he even looked more lively than before receiving the poison. In the transient nature of its effects, the Calabar bean closely resembles both woorara poison and conia.

The most interesting part of the action of the poison yet remains to be described; namely, its effects in paralysing the functions of the motor nerves, and leaving the functions of the central organ intact. It appears, indeed, to act entirely on the motor nerve-system; for even the muscular irritability is unaffected. I have repeatedly said that the limbs of the animals were paralysed, and so they were; but this did not arise from the poison affecting the muscles. On the contrary, the muscles responded immediately to the direct application of either galvanic or mechanical stimuli. It was therefore upon the nerves, and the nerves only, that the poison had acted. For example, when the sciatic nerve of one of the rabbits poisoned by the ordeal bean was exposed after death, and galvanism applied to it, no contraction in the muscles followed the application of the stimulus; whereas, on the other hand, no sooner was galvanism directly applied to the muscles themselves, than violent contractions were immediately induced. This shewed, that it was not the muscles that had lost their irritability; but that the nerves had lost their power of calling the muscular irritability into play.

Again, as in the case of woorara or conia, the involuntary muscles of the heart, in animals poisoned by the ordeal nut, go on beating long after life is extinct. Dr. Christison's idea, therefore, of this poison acting directly and violently on the heart, is not strictly correct; for although the poison may for a time reduce the cardiac pulsations, it certainly does not arrest the heart's function.

In the case of the cat, already spoken of, the contractions of the heart were reinduced by galvanism forty minutes after the animal was dead; which would not have been the case if the bean had acted as a cardiac poison. In the case of one of the rabbits, the auricles pulsated regularly at the rate of seventy per minute twenty-five minutes after death; and it was still possible, an hour and ten minutes after death, to reinduce the pulsations of both ventricles and auricles by mere mechanical stimuli. Dr. Fraser found that the direct local application of the poison to the voluntary and involuntary muscles—the heart included—caused them to lose their contractile power.

Regarding this local effect of the poison, I have had

no experience; but I may mention, that the experiments performed by Dr. Sharpey on the frog, and which he kindly allowed me to embody in my paper read before the Royal Medical and Chirurgical Society, shew, even more clearly than the above, that the action of the Calabar bean on the heart, when administered by the mouth or by a wound, is not that of a cardiac poison. In one of the experiments related, circulation was observed in the web of the frog's foot about sixty hours after apparent death. Dr. Sharpey also found that, although the ordeal bean leaves the blood-heart unaffected, it possesses the power of arresting the pulsations in the lymph-hearts of the frog. He further found that, when, before poisoning a frog with the bean, a ligature is applied to one of the hind legs of the animal, in such a way as to include everything except the sciatic nerve, reflex muscular contraction can be induced in the limb in which the circulation has been stopped (consequently, the non-poisoned limb), either by the direct application of mechanical or galvanic stimuli to the limb itself, or to some other part of the body, thereby proving that it is not the sensory but the motor nerves alone that are paralysed. The poison in this respect, as Dr. Sharpey remarked, closely resembles woorara. I may add, that the ordeal bean still further resembles woorara and conia, in leaving the intelligence of the animal unimpaired. In all the animals I experimented upon, consciousness seemed quite unaffected up to the time of death. So that, as Dr. Christison says, it is not the power of volition that is destroyed, but the power of making volition effective.

From these facts, I think it will be conceded that I am justified in stating that the ordeal bean will prove a most valuable addition to the *Pharmacopœia;* and that, besides its ophthalmic uses, the chief benefits will be derived from it in spasmodic affections of the nervous system—such as chorea and tetanus, or other diseases where we desire to subdue muscular spasm without affecting the intelligence. In neuralgic affections, I have no doubt, it will prove equally valuable, on account of its anodyne virtues; but, as to its action in febrile and inflammatory affections, I cannot, with my present knowledge, see how it can be nearly so advantageous as other well known remedies. However, I may see cause as my knowledge increases to alter these views; and I shall only be too glad to learn from my fellow members of the Association how and when the remedy may be most usefully employed.

A Boat is to be established at the Naval Lunatic Asylum at Yarmouth, for the benefit of the lunatics.

Sewage and its Value. Can sewage be turned to any profitable account? is a question continually forced on the attention of the Board. The ratepayers, who are confidently assured that it is worth from one to two millions sterling a year, naturally remonstrate, and the Board of Works, with a cruel sarcasm, answer the remonstrances by forwarding to the vestries an account of the proposals they have received for taking the sewage. These are nine in number, and of very different natures. One is of a kind that would render most of the work already done unnecessary, and compel the expenditure of another million and a-half in additional works. This gentleman estimates the profits to be derived from the adoption of his plan, at a million, on which he merely asks for a percentage, and proposes to give the Board half the balance. A company offers *five pounds* a year for this million's worth of sewage. Others offer a peppercorn rent for fourteen years, after which they propose to divide the profits with the Board, if they can make any. Another proposes to guarantee the Board ten thousand a year; and in this way vanish the ratepayers' hopes of realising that million a year which was to render almost all local taxation unnecessary.

Original Communications.

REMARKS ON THE TREATMENT OF DELIRIUM TREMENS BY DIGITALIS.

By J. W. M. Miller, M.D., M.R.C.P., Physician to the Royal Portsmouth Hospital.

I was summoned on July 14th, 1863, to E. G., aged 35, a military officer, who exhibited many symptoms of alcoholism. The next day, he was slightly incoherent and tremulous; and I then elicited from his wife that he had partaken very freely of brandy, as a medicine, when on the coast of Africa. As his bowels had been relaxed for some hours, I ordered him a creasote mixture, combined with opium, and directed that his diet should consist of beef-tea, arrowroot, and weak brandy and water. On the 17th, every feature of the disease was fully developed; his pulse was very rapid, 140 per minute; and the delirium and restlessness extreme. At 3 P.M., I gave him half an ounce of tincture of digitalis; and this was followed by a drachm-dose every hour, until an ounce had been taken; but not the slightest amelioration of the symptoms ensued—not even an improvement in the character of the pulse. The next morning at three, I commenced the opium treatment, by administering forty drops of the sedative solution; and I remained at his bed-side two hours, repeating the dose at the completion of each hour. My patient soon became calmer. I then left him, recommending patience for a short interval. In the course of an hour or two, he fell into a comfortable slumber, which continued for eighteen hours, with only two short intervals. His recovery from this time was complete and rapid.

Remarks. What is the value of digitalis in delirium tremens? This is a question still *sub judice*. It is now three years since the late Mr. Jones of Jersey brought his experience and views before the profession. In his hands the remedy appeared almost a specific; for out of seventy cases of the disease, sixty-six recovered without any other remedy. At first, this novel treatment received much favour, and digitalis was vaunted by many as a true antidote for alcoholism; however, its reputation has not been maintained. It has received an extensive trial from many practitioners in all parts of the country; and it is my opinion (judging from the cases which I have collected from many sources, as well as those which have happened in my own practice) that, although digitalis is an useful remedy as a calmative, and possesses some advantages over opium, still it has no peculiar power over the disease itself. It does not cut short the attack by inducing sleep at once. Its action is directly upon the nervous system as a calmative and soporific; at the same time, it stimulates the heart and augments its contractility. When it is given in large doses, there appears to be but little risk of increasing cerebral congestion and producing profound coma; and, therefore, it is especially indicated in those cases in which inflammation of the brain is threatened, and where the administration of opium would be attended with danger.

I have recorded the case above just as an illustration of my views. The digitalis here seemed useless; but, in all probability, if the order of the remedies had been reversed, it would have appeared successful, as the disease was running its definite course, and sleep is its natural termination. If we endeavour to determine upon the right treatment of delirium tremens by examining all the recorded cases, and seeking for that medicine which was administered immediately before sleep, and appeared to afford relief, we shall indeed be confounded by a mass of conflicting testimony. The question to be decided is this: What are the best remedies for quieting

the excited brain and calming the disturbed system, so that the patient may fall into a refreshing slumber, in which state alone the nutrition of the organ can be restored? Nature may be thus assisted by the judicious use of calmatives to allay irritation and diminish restlessness; and it is in this way that opium and digitalis may be usefully employed. I believe there is great danger in the old and empirical practice of pushing remedies until artificial sleep or a state of narcotism is induced; and that this ought to be the simple principle of our treatment—to remove, as far as possible, any palpable derangement of the system, and promote tranquillity of mind and body, so that the patient may sleep to recover.

"RED VULCANITE" IN DENTISTRY.

By Edward Wells, M.D., F.R.C.P., Reading.

[*Read before the Reading Pathological Society.*]

Rev. Mr. C. being, as he considered, in perfect health, went about six weeks back to a dentist in London, who fitted him with a frame containing upper and lower teeth. Immediately upon wearing them, he found a metallic taste in his mouth, which was very disagreeable. By degrees, his health began to fail; he became weak and nervous, lost his appetite, and began to emaciate; had flatulency, fœtid breath, and looseness of bowels.

After wearing the teeth for six weeks, he became convinced that they were the cause of his ailments; that he was, in fact, being slowly poisoned.

This led him to send for me. I found him suffering from nervous prostration. Pulse 100, weak; tongue coated with a white film; the urine was whey-like, having an extremely fœtid odour, faintly acid; specific gravity 1009, slightly albuminous on boiling.

On examining the teeth, which are exhibited, the basis is found to be what is termed "red vulcanite", a composition, as I learn, of vermilion, sulphur, and India-rubber, vulcanised. This composition, therefore, contains the red sulphuret of mercury, probably to some amount, as the colour is entirely due to that salt.

Now, as the "red vulcanite" is largely used in dentistry, it is possible that it may not so rapidly affect many persons as it did my patient; for Mr. C. is peculiarly sensitive to the action of mercury. When ill, he is never able to take the least mercurial medicine without experiencing its toxic effects. This is probably due to his being predisposed to an affection of the kidneys. He was therefore peculiarly susceptible of the poisonous effects of the vermilion contained in the basis; and, from the condition of the urine, I think there is no doubt he was suffering from the injurious impression made by the mercury on the urinary organs. It is not improbable that there may have already existed some disease of the kidney *in a latent form*, which has been called into action by the absorption of the mineral. Such an explanation of his symptoms, however, would not render the use of such a basis—in his case, at least, as well as in many others—a whit the less objectionable.

In the short time that has elapsed since leaving off the teeth, he has become gradually better and stronger. The urine is much less fœtid; the appetite has improved; and the tongue is cleaner. The improvement has been sufficient to leave him still fully convinced that the teeth were the cause of his illness.

I have ventured to bring this case before you, as in consequence of its great adaptability to the mouth, the "red vulcanite" is largely used, and it is possible you may be called to cases in which it is acting injuriously on the system, but in which the patient has failed to discover the cause, and in which it may fall upon the medical attendant to diagnose the *causa mali*.

P.S. The urine has since risen to specific gravity 1020.

Transactions of Branches.

SOUTH MIDLAND AND CAMBRIDGE AND HUNTINGDON BRANCHES.

ON GAOL-DIETS, AND ON THAT OF THE HUNTINGDON GAOL IN PARTICULAR.

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[*Read at Peterborough, July 9th*, 1863.]

Incidentally to the great question of How to Treat our Criminals, much has been said and written about the way in which they are fed. The popular opinion seems to be that the inmates of our gaols live in the enjoyment of a better diet than that of our paupers and our agricultural poor. Having been a gaol-surgeon for now nearly thirty years, I feel justified in bringing the subject before my medical brethren; and wish first to examine briefly and critically our present gaol-diets, and then to relate a little of my experience of the past.

But, first of all, a few words must be said on what a gaol-diet ought to be. The law assumes, and therefore we need not argue the point, that the prisoners ought not to suffer in health through their imprisonment. They must, then, have enough proper food to keep them in health. They do, or rather they ought to, go through a great deal of hard labour. They ought, therefore, to have a quantity of ingesta sufficient to cover the ensuing bodily waste. The influence of the prison is depressing, and most probably lowers the assimilative powers of the body. Their diet, therefore, should be rather in excess of what would be required under other circumstances. The food should be presented in a digestible form; but everything that merely pleases the palate should be avoided. Monotony, on the other hand, inasmuch as it impairs digestion and assimilation, should be shunned. Lastly, the material should be as cheap as possible, consistently with other requirements. In fine, if we consider the prisoners as so many persons to be trained in the easiest and most economical manner for the purpose of undergoing prison-labour, we shall put ourselves in the best position for estimating the value of the various diets suggested for their use.

I purpose in the present paper to consider only the case of prisoners of long sentences; *i.e.*, of above three months imprisonment with hard labour; for it is in connection chiefly with these that any interest is attached to the question of diet; and though making references to other gaols, I shall speak mostly of the Huntingdon County Gaol, with which I am particularly connected.

Let us compare the diet, then, of such prisoners as these with the daily food of other classes.

It is impossible, with our present knowledge, to lay down an incontrovertible standard diet. The best, perhaps, of such standard diets as have been proposed, is that of Moleschott, who says that the standard man should consume within twenty-four hours, of nitrogenous material, 4½ ounces; of starch and sugar, 14½ ounces; of fat, 3½ ounces. This will provide about 300 grains of nitrogen, corresponding to about 600 grains of urea, and about nine ounces of carbon—thus supplying the standard daily waste and allowing a surplus for loss, etc. The dietaries of soldiers and sailors correspond very closely with this.

Our well-to-do classes consume, perhaps, more than this, especially of the nitrogenous elements. I found that a young man, aged 27, weighing between eleven and twelve stone, of active employment, consumed, of nitrogenous matter, 5 ounces; starch and sugar, 13 ounces; fat, 4 ounces.

An average of the daily food of ten labourers gave me, nitrogenous matter, 4 ounces; starch and sugar, 16 ounces; fat, 3 ounces.

The Huntingdon Union Workhouse diet for able-bodied paupers was, nitrogenous matter, 3 ounces; starch and sugar, 11 ounces; fat, 1 ounce.

So much for non-criminal classes.

The diet in Huntingdon County Gaol, for prisoners of long sentences, is, nitrogenous matter, 4 ounces; starch and sugar, 21 ounces; fat, ½ an ounce.

The diet recommended by Government gives, nitrogenous matter, 3½ ounces; starch and sugar, 16 ounces; fat, ½ an ounce.

A few others prisons that I have taken by hazard give as follows:—

	Nitrogenous matter. Ounces.	Starch, etc. Ounces.	Fat. Ounces.
Knutsford .	3	16	½
Durham . .	4	17	½
Lewes . .	1½	17	¼
Haverfordwest.	5	23	1½

Let us first compare the diet of the Huntingdon County Gaol with that of the non-criminal classes. We shall then see that the sum total of the quantities of the three great groups of alimentary principles exceeds that of every other class; it is 25½ ounces, as compared with 22½ for the standard, 22 for the well-to-do, 23 for the labourers, and 15 for the workhouse.

This difference, however, is entirely owing to the large amount of starch, etc., in the Huntingdon County Gaol diet; for it surpasses the workhouse only in its nitrogenous element, and is below them all in the amount of fat. The prisoner in this gaol consumes 6½ ounces more starch than the standard man should do. Is that a benefit? Certainly not; for scarcely anything can be more sure in physiological dietetics than that a proper relative proportion between the various groups of alimentary principles is necessary for the full digestion and assimilation of that which is taken into the mouth. Without fat, the starch and nitrogenous material lose half their value, and so *vice versâ* with each in turn. The Huntingdon County Gaol-diet, then, has a far less value in the body than it has on paper. The deficiency in nitrogenous matter does not amount to much; the prisoner consumes about as much nitrogen as the labourer, ½ an ounce less than the standard, 1 ounce less than my specimen of the well-to-do classes, and 1 ounce more than an inmate of the workhouse.

With regard to the fat, there is always very great difficulty in estimating its quantity without making an actual analysis, on account of ever occurring variations. The meat at our gaol is generally lean; and I have calculated upon that hypothesis. But even if the meat there were generally fat, it would not disturb the result, that the prisoners get a deficient allowance of fat. They only get about ½ an ounce daily, compared with 3 for standard and labourer, 4 for the well-to-do, and 1 for the workhouse.

In estimating, then, the value of their diet, we must deduct some of the nitrogenous material and some of the starch and sugar as rendered unavailable for assimilation and use by the lack of fat. If we thus treat ½ an ounce of nitrogenous material and five ounces of starch (and this estimate is certainly rather under than above what is reasonable), this will give us as remaining for the actual working food of the prisoners: nitrogenous matter, 3½ ounces; starch, 15 ounces; fat, ½ an ounce—a diet which is not only below the standard, but below that of our labouring poor. It is still above that of the workhouse paupers; but then it must be remembered, that the latter are not put to hard labour, while the former ought to be consuming in work a large amount of tissue every day; so that, compared with the requirements of the recipients, the workhouse diet is quite as good, if not better, than that of the gaol.

Both in the workhouse diet too, and especially in that of our labouring classes, there is a change and variety that is not met with in that of the gaol. This must also help to place the former on a higher level than the latter.

The fact is, that two-thirds of the total nutriment consumed by the prisoners at Huntingdon County Gaol is derived from bread alone. His diet is essentially still a bread diet, formed upon the old bread and water punishment system by successive additions of other articles of food. There is given to him two pounds of bread every day. Bread is the first thing refused when the appetite fails. A labouring man, on the other hand, rarely eats, I believe, above a pound or a pound and a half daily. The labourer, too, consumes more meat, as a rule, than the prisoner, and is generally led by circumstances to choose that meat which after all is the best for him, because it contains so much fat, viz. pork; though he has the advantage of occasionally varying it with beef and mutton. He can also modify his bread element by exchanging it in part for various nutritive and salutary vegetables.

If, now, we compare the diet of the Huntingdon County Gaol with that of other gaols, we find that while, on account of the large supply of bread, it exceeds the majority in the starch elements, it is in turn surpassed by some on that point. In Haverfordwest, for example, where the whole diet is a vegetarian one, the ration of two pounds and a half of bread runs the analysis up to nitrogenous matter five ounces, and starch, etc., twenty-three ounces daily.

It would be useless to discuss the diets of all the various gaols. The Government scheme may be taken as a fair average, which, differing from that of the Huntingdon County Gaol chiefly in having the excess of bread cut off, gives, as I have said, nitrogen 3½, starch 16, fat ½. This is inferior, or at least not superior, to the ordinary labourer's diet, and, excepting what applies to the great surplus of starch, might be criticised in the same manner as the Huntingdon County Gaol.

On the whole, then, we may conclude that the diet of our prisoners is not superior either to that of our labouring classes, or, considering the differences of circumstance, to that of our pauper poor; and, while it fairly approaches the standard diet, is certainly not more than the prisoners require, but might, by internal changes, so to speak, brought about without altering the sum total of nutriment, be made really more efficacious and healthy, and perhaps, let me add, cheaper.

That no *absolute* reduction is advisable, is very clearly shewn by my experience as surgeon to the Huntingdon County Gaol. With a proper supply of food, extra diet is required only for cases of illness brought on by causes not special to the gaol, nor arising from the diet. These are necessarily few. With an insufficient quantity of food, men are constantly being put on extra diet for diseases caused by, or whose severity is increased by malnutrition, or in order to prevent them having such diseases. The consequence is a transference of power from the governor to the surgeon, a hinderance to the discipline of the gaol, and an augmentation of tradesmen's bills. The governor's ambition is to have as small an extra diet list as possible. That may always be taken as a fair token of the good condition of the gaol otherwise. The prisoners themselves like a large extra diet list, and I believe are rather inclined in favour of a scanty dietary and idleness, with a good prospect of extra diet from the hands of a merciful and indulgent surgeon in case of sickness, as compared with a full stomach, good health, and abundant treadwheel.

In 1835, the diet at Huntingdon County Gaol for long-sentence men consisted of two pounds of bread, with one quart of oatmeal porridge, or one quart of soup

daily; giving nitrogenous matter, 3½ ounces; starch, etc., 16½ ounces; fat, less than ½ ounce.

In June 1844, the diet was altered nearly to its present form, giving nitrogenous matter, 4 ounces; starch, 21 ounces; fat, ½ ounce.

In 1849, there were further slight alterations, not affecting the total nutriment, but producing a more favourable distribution of the various principles.

From 1835 to 1844, I was always embarrassed with scurvy. In one year I had as many as eleven cases of decided scurvy, and four cases of incipient scurvy, cured by prompt antiscorbutic treatment. I believe I should have had very many more, had not my experience led me to put on extra diet all prisoners who had passed six months incarceration with hard labour, *in order to prevent their having scurvy*. In the summer of 1844 scurvy left the gaol; and, during nearly twenty years, I have only had two slight cases.

In the year ending September 1844, out of 329 admitted, 223 were placed on the sick list, and 68 were placed on extra diet, giving percentages of 67·7 and 20·6. In the year ending September 1845, they had fallen to 33·6 and 4·6 per cent. respectively. I have failed to get the returns of the sick for the years preceding 1844; but there was nothing exceptional in the year. For the extra diet bills for 1842, 43, and 44 were £28:8:1; £36:17:7; and £27:3:11; giving per head of those admitted, 2s. 6d., 2s. 4d., and 1s. 8d., respectively. In 1845, the expense fell to 9d per head. By the change in the dietary, then, the health of the prisoners was bettered rather more than two-fold. And the change was permanent. Amid the subsequent yearly variations, the level of 1844 and the preceding years was never reached. Between 1835 and 1844, at least two letters were written by the visiting justices to the surgeon, stating that the large amount of extra diet given by him was subversive of the discipline of the gaol. I am not aware that any such letters have been written since. I am conscious that these figures only roughly and indirectly represent the influence of diet. To obtain thoroughly accurate results, I ought to have compared year by year the total amount of time spent in gaol by prisoners of long sentences. But the labour required for such a task would be very great. Meanwhile the facts I have stated can, I think, leave no doubt on the mind, that the inferior diet of 1835 defeated the purposes of punishment by its being insufficient to keep the prisoners in health. I have a very vivid impression of the radical change effected by the introduction of the diet of 1844. And yet the addition of alimentary principles was only one ounce of nitrogenous matter, and 4½ ounces of starch, etc. The great thing seems to have been the breaking down of the monotony of bread, oatmeal porridge, and soup, by the introduction of meat and potatoes.

So much for my experience, which satisfies my own mind that any return to the low dietary of 1835 would be in every sense an evil. It is, of course, with the prisoners of long sentences only that I have dealt with in the present paper. For with short sentence men, lack of food is used as a punishment. Now, of 1,006 prisoners admitted into the Huntingdon County Gaol during the last five years, ending September 1862, only 102—that is about 10 per cent—were those whose period of confinement exceeded three months. About 50 per cent. were fed on bread and water, or bread and oatmeal gruel. How unreasonable is the present state of public opinion, which thinks that our criminals are fed sumptuously every day; and that it is mere sentimentalism, and bad policy to let them live so well! And how different from the feelings of thirty years ago! Then, as I remember painfully of my own experience, gaol-surgeons were in the eyes of the public unfeeling brutes, who let prisoners die as if they had been dogs. Now the same enlightened body thinks them fools who pamper them like pets. We, however, are not obliged to veer with every shift of the weather-cock. Our duty is at the present to do our best that our criminals should suffer neither gain nor loss from public panics, but that their treatment should be based on the fixed principles of medical science and experience.

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VIVISECTIONS.

We have no hesitation in saying that the thanks of society are due to the Society for the Prevention of Cruelty to Animals, for having called the attention of Louis Napoleon to the so-called vivisections which are, and have for years past been, practised in France, and, as it is pretended, for scientific purposes. The attention of people in France has been thereby thoroughly aroused to the matter; and we cannot doubt that, at all events, some diminution of the amount of cruelties practised under the name of vivisections will result from the inquiry.

In the name, however, of the good cause which the aforesaid Society protects, we would ask the managers of it to proceed with the sense, moderation, and reason, which should belong to such a body, and not as blind enthusiasts, as devotees, or as misguided bigots. They should understand (as they certainly would do if they made themselves masters of the whole of the subject of experiments on the lower animals) that there is no comparison to be made between the unnecessary cruelties inflicted on animals in France, as above referred to, and the experiments made on animals for the purpose of settling important physiological questions. Enthusiasts usually act with indiscrimination, confounding together things of totally different signification, and setting them down as worthy of equal praise or condemnation. They thus injure the cause they advocate, however good in principle it may be. In this case, the managers of this Society do great injustice both to themselves and to men who possess as much sensitiveness, and feeling, and sympathy, towards the lower animals as they do.

Of this, at all events, that Society may be very sure: no efforts of theirs will avail to arrest the progress of scientific knowledge in this direction. So long as we are ignorant of the functions or uses of any part of the human body, so long, it is certain, will philosophers be engaged in the effort to clear up the mystery. The very basis of a scientific practice of medicine and surgery rests on our knowledge of the anatomy and the physiology of the animal body. Those gentlemen who attempt to cry down as wicked and base all experiments on the lower animals, have little idea of what would be the de-

graded condition of medicine and surgery at this day, but for the knowledge obtained through such experiments. They speak vainly and through ignorance. They little know the amount of suffering which these experiments have saved, and daily save, the human race. They have little idea of the amount of suffering which would still be inflicted on humanity by the practitioners of medicine and of surgery, if physicians and surgeons were ignorant of the facts which such experiments have supplied to them ; and which could have been supplied to them by such experiments alone.

We need not waste the time of our readers who understand these things, in pointing out how closely connected are our operations in surgery and our daily practice of medicine with the knowledge obtained through experiments on animals. But we would be contented to rest the decision of the matter even with the public on one simple case, which is comprehensible, we should imagine, to the understanding of the secretary and managers of the Society for protecting animals. We would willingly rest the question on the answer which they must give to this case.

They have all heard of chloroform ; of the incalculable amount of misery, of agony, which has been spared to humanity by the discovery of that blessing. It requires, indeed, some little mental effort, and some knowledge of what surgical operations are, to appreciate fully the value of this agent; *i.e.*, the extent of suffering which it has removed. This agent, be it remembered, came out of the quiet laboratory of the philosophic mind which discovered it, and its blessings have been rapidly spread thence over the whole face of the earth. Well, this discovery was not made, and perfected, and rendered available for man's purposes, without the performance of experiments on animals ; it could not have been made without such experiments on living beings. Many animals were suffocated and, no doubt, died painful deaths in the eliciting of this grand discovery.

Now, such being the facts of the case, we ask these gentlemen: Are they ready to come before the world and declare that, in their opinion, the result does not justify the means through which it was obtained ? Have they the courage boldly to tell us, that they would rather that all the agonies attending the operations which are daily performed all over the world, from now to the crack of doom, should be still endured, than that half a score of dogs, or cats, or frogs, or mice, should have been suffocated ? But this is really, and positively, and manifestly, what they do affirm as their opinion, when they come forward and assert that *all experiments* on animals are unjustifiable, and to be repressed by their Society.

But these gentlemen are not such cruel enthusiasts as this, nor so bigoted to the cause which they too blindly advocate, as to give such an answer as the above in the case of chloroform. True it is, that, according to their own avowed principles, they are logically forced to do so ; but their common sense would save them from such a grossly absurd conclusion. Until they tell us to the contrary, we shall conclude that, in this instance at all events, they admit that the result sanctified the experiments. And then, what follows inevitably from such admission is this, that *some* experiments on animals are justifiable. We ask those well-intentioned and highly honourable minded men who give their names to this Society, to ponder on this plain case; and we are satisfied that, when they have done so, they will have the moral courage at once to accept the inevitable conclusion which results from its consideration.

We have selected this capital case of chloroform, because it supplies us with an instance which must bring conviction home to the mind of every sane non-professional man not blinded by enthusiasm or bigotry. To the professional man—to him, we mean, whose education enables him especially to connect cause and effect in matters physiological—scores of similar cases, not readily appreciable to the non-professional mind, will readily present themselves. His daily practice presents him with abundant proofs of the misery which he is enabled to spare human beings through the knowledge which he has obtained solely from experiments made on animals—knowledge which he could have obtained in no other way, and, therefore, suffering which he could not have relieved, had not those experiments been performed.

Now, if this protecting society, instead of vain and wrongful declamation against experiments on animals in the mass, were to occupy itself in discussing what experiments are justifiable, and what unjustifiable ; if it would attempt to define the limits within which true humanity should confine them, and the conditions under which alone they should be performed,—it would, in our opinion, be occupied with an excellent and humane work ; and, more than this, we believe that it would be really productive of immediate benefit to the objects of its sympathy. In such a work, that Society should have our very cordial approbation.

But there is one other fact to which we must call the attention of the Society for protecting animals; and we do so in order to show the absurdities into which the Society has logically fallen through its unreasoning declamation against experiments on animals. A noble lord, and, if we are not mistaken, a keeper of foxhounds (which sporting position may he long maintain !), is at the head of the Royal Society for Protection of Animals ; and many honourable sporting gentlemen also support it. Now, the object of the Society is, as we understand it, to put

down, as far as it may, all unnecessary pain which may be inflicted on animals; and, under this head, vivisections are denounced. Are these gentlemen, then, and this noble lord, ready, on the principles which they advocate, to put down their guns and their foxhounds? They are bound to do so on their own principles, if consistent. We have no hesitation in asserting that more pain (and manifestly unnecessary pain) and suffering is produced in animals by the gun of the sportsman on the 12th of August, the 1st of September, and the 1st of October, than is occasioned in any twenty years of vivisections, as practised in this country. The fact is obvious, and readily comprehensible to any one who will give the facts of the case due consideration. Out of every hundred animals shot at, a certain percentage get away *wounded*. What is meant by the term *wounded?* Why, simply this: that the animal has been vivisected by the shot which struck it; and that, according to the nature of the part so cut up, will the pain of the animal be great or small, of short or long duration. A hare goes off with a broken leg, the two sharp ends of the bone sticking through the skin; and he may live for days in this state, and even recover from it. What vivisecting process of the physiologist can be compared with the pain inflicted on this animal by the shot of the sportsman? The pain and torture suffered by wounded animals is, at all events, a positive fact, and is one which cannot be ignored by this Society, when properly brought under its notice, if it be logical and honest in its way of dealing with vivisections. Has not the physiologist a perfect right to turn round upon the sportsmen-managers of this Society, and ask them how they dare to bring this charge of cruelty against him, whilst they themselves create ten times the amount of unnecessary pain to animals for their mere amusement? What pain inflicted on an animal by the physiological experimenter is greater than the torture suffered by reynard during that last quarter of an hour of his life, when, with his tongue hanging out of his mouth and his tail draggling in the dirt, he is putting on his last struggle to escape his destroyers? And the physiologist has this to say, which gives him an infinite superiority over the sportsman: he experiments with the object of relieving human suffering, and he operates whilst the animal is under chloroform. The sportsman has no other object than amusement in the business. We mention these things, be it understood, simply to show the absurdity of the position which the Society, or its Secretary, has assumed in this attempt to control the doings of scientific men.

We will, on a future occasion, point out what seem to us to be the conditions under which vivisections may be justifiably performed.

THE SEA-SIDE CONVALESCENT HOSPITAL.

Our readers may remember, that a testimonial in favour of the Sea-side Convalescent Hospital was, some years ago, extensively signed by London hospital physicians and surgeons. This was well. But the use made of this testimonial by the Convalescent Hospital managers is not well. The managers of the hospital, with the Bishop of London president, and the Earl of Chichester vice-president, and so on, make an appeal to the public; and in doing so, they take an opportunity of issuing something like a slander upon London hospitals. If this had been nothing but an ordinary advertising move on the part of the Sea-side Hospital, we should have taken no notice of it; but we feel bound to object to it, because the medical testimonial above referred to, with all the signatures attached, is appended to the something like a slander; and, consequently, London hospital physicians and surgeons are made to appear in the quality of birds that foul their own nests; or, rather, are made to endorse statements which they know are untrue. The testimonial is put in such a way in this document, as to lead the reader to suppose that all the sentiments of the penny-a-liner-appeal which precedes it are subscribed to by the physicians and surgeons of London hospitals whose signatures are attached to the testimonial. In the appeal we read as follows:—

"But the (General) Hospital has also its *dark side*, its depressing associations. 'From morning to night, in the long dreary hours of the sick man, is there aught in those gloomy corridors that shall supply, through surrounding mental influence, agencies at all curative, at all hopeful of cure, to the disordered body? We say despairingly No! The wards are dreary as the grave. No single feature there to cheer or solace; the very walls themselves are meagre, lifeless, cold, and blank; even the rays of the life-giving Sun find too often no entrance. You shall place a flower, a hardy flower, in those corridors; you shall watch it, water it, pay it every attention, and, in spite of all the art of a Sir Joseph Paxton himself, it would die! In such places how can sick men recover? But this evil is as nothing compared with the other surrounding. Misery here, misery that requires silence, comfort and retirement, meets misery as bad, nay even worse than its own. It is a wearing and painful sight to the healthy attendants; how much more so to the prostrated sick?' Amid such associations, *Science may arrest disease—restoration to health is impossible.* The annexed testimonial, signed by the highest dignitaries of the Church, and by nearly every man of eminence in the medical profession, speaks more eloquently," etc.

Where the Sea-side Hospital picked up the above bit of flowery buncombe, which it quotes, for the purpose of opening the purse-strings of the public we know not. Nor do we care to know. But we beg to tell that Sea-side Hospital that it has not acted fairly in making it appear that the physicians and surgeons of London endorse such untrue, and trumpery, and catch-penny stuff, as this. For its own credit, we trust that the Sea-side Hospital will

not again append the testimonial, with the names which are attached to it, to such a document as the one we are referring to. The proceeding is unworthy of the institution. We need hardly say, that there is not a single one of the medical gentlemen who signed that testimonial who would not consider it an insult to have his name quoted as sanctioning the terms of the appeal. The testimonial, used in this way, is prostituted to a purpose for which it was never intended. The Sea-side Hospital managers ought to know that not one single one of their names would ever have been obtained to the testimonial, if the signers had been aware that they would have been used in this way. In speaking the sentiments of ourselves, we know that we are speaking the sentiments of other London hospital medical men who signed the testimonial.

THE WEEK.

Every year several deaths are recorded from accidental poisoning, the poison being swallowed through the carelessness of the druggist who made up the draught, etc., taken. Surely, facts of this kind indicate that the making up of prescriptions ought to be committed to the hands of those, and of those only, who have proved themselves, in some way or other, capable of duly performing the important business they have taken in hand. This week again furnishes us with an instance of death from carelessness in the supply of physic. Tincture of rhubarb was sought for at the druggist's shop. Laudanum, or some narcotic, was supplied ; and the child was poisoned. Unfortunately, the vomit, etc., were put away ; and analysis could not show the nature of the poison, so as to bring the charge home to the druggist.

"Mr. Latham made a *post mortem* examination. He was of opinion that death had resulted from some narcotic poison. The child who had been sent for the tincture of rhubarb pointed out the bottle from which she had been served, and said that the medicine had been given her from that bottle only. This bottle proved to be the one in which laudanum had been kept. The jury found that there was no direct evidence to show the cause of the deceased's death. Both the jury and himself, said the coroner, felt that the medical evidence had to some extent failed; but there was no doubt in the minds of the jury, or in his own mind, that this child had died from having had poison administered to him which had been sold for tincture of rhubarb. But the medical evidence was not of sufficient strength to justify a verdict of manslaughter. He had, however, to caution Woolley, the druggist. He was sorry to find that this was not the first time he had sold poison by mistake. He should like the public to know clearly and distinctly that the poison had been sold by him in mistake; and he trusted that the censure he was then called upon to administer would exercise a salutary influence on his mind, so that consequences of a more serious nature might not hereafter follow in that locality from the use of drugs which he might dispense. There is no doubt whatever', concluded the coroner, 'that this child has been lost by the poison; but the jury give you the benefit of the partial failure of the medical evidence. Do consider that you are very seriously to blame, and that you deserve the reprimand that I have now given.' Mr. Woolley, who is a young man, apparently about 25 years of age, and who has been an articled apprentice to a surgeon, was very much affected during the delivery of the coroner's reprimand, and, burying his face in his handkerchief, gave free vent to his tears."

The annual meeting of the British Association for the Advancement of Science has been held at Newcastle-on-Tyne, under the presidency of Sir W. G. Armstrong. It appears to have passed off very successfully, as far as can be judged from the number and titles of the papers read in the several sections. We shall give, as opportunity offers, abstracts of such papers as are likely to interest our readers. The next meeting is to be held at Bath ; invitations were also received from Dundee, Nottingham, and the Potteries. Sir Charles Lyell is to be the next president.

Methylated spirit, though condemned as dangerous by the Pharmaceutical Society in the manufacture of tinctures, is, it appears, nevertheless extensively employed for that purpose, and especially in the preparation of sweet spirits of nitre. This kind of spirit, a druggist tells the *Times*, affords a cheap and pleasant stimulus ; "taken with hot water and a lump of sugar, it is tolerably palatable." He adds that the Treasury is mulcted to the extent of a million a year in consequence of the illegitimate use of strong drinks in this way.

The ravages committed in our army through syphilitic diseases, the fearful number of men annually kept off duty and permanently injured thereby—to say nothing of the future generation of diseased offspring thence resulting—are attracting at last the attention of the public. What is required to meet the evil, and what alone in this country is practicable, is, that lock hospitals should be established in all our garrison towns ; or, in other words, that the freest means of cure should be opened to those unfortunate females who spread these disorders among the troops. The idea frequently suggested by members of the profession—viz., that prostitutes in this country should be regulated after the continental fashion—is one which, we are very certain, will never be put in practice in this country. The practice interferes with the liberty of the subject, and, in our opinion, is indefensible on moral grounds, and only very partially effects the object desired. We refer, however, to the subject for this reason : If these lock hospitals are established, it must be by government aid. Hence they will offer a good opportunity for testing practically the practice of the profession respecting the matter of

gratuitous medical services. We do sincerely trust that none of our brethren will be so weak as to offer to undertake the duties of these anticipated lock hospitals gratuitously. We speak thus early, in anticipation of coming events, that the profession may have an opportunity of deciding how they will act when the time for making the appointments comes. Here is a case in which the profession has manifestly the ball in its hands, if our brethren will only hang together. There is no occasion, in this instance, to be shouting out to the powers in office to help us. All we have to do here is simply to be true to ourselves. Let us be resolved to be wise in time.

The letter of our Liverpool special correspondent contains an account of a trial which has recently taken place in that town, and the result of which must be regarded as of great importance to surgeons. For, had the prosecution succeeded in demonstrating to the satisfaction of the judge and jury, that Mr. Hakes and his colleagues acted unjustiably towards the patient, the verdict would probably have been such as almost to deter surgeons from performing operations, unless their patients should first give them an indemnity from prosecution in the event of mishap. There is, indeed, scarcely an operation in surgery, that is not liable sometimes to turn out wrong. In the present instance, we have been informed, the difficulties and dangers of an attempt at reduction of an old standing dislocation of the thigh-bone were explained to the patient, who of his own free will submitted to the experiment, and could, therefore, have no just ground for complaint. As to the part taken in the trial by members of our own profession, two London surgeons—Messrs. Curling and Erichsen—were ready to give evidence for the defence ; while two others—who and whence we know not—were in court for the purpose of "aiding the prosecution." They may congratulate themselves that they lost the opportunity of disgrace which their appearance in the witness-box would have afforded. As to Mr. Hakes and his colleagues, they deserve, and we are sure have, the congratulations of their brethren on the fortunate issue of the persecution to which they have been subjected.

The researches of M. Mène show that the quantity of carbonic acid contained in the air varies in the course of the year ; it increases in February, March, April, and May ; and diminishes from June to August, increasing again from September to November : the maximum is found in October. During the night there is more carbonic acid in the air than during the day, and more after rain.

Dr. Tugendhart of Vienna has proposed a scheme for the benefit of patients who want a doctor, which we recommend to the favourable consideration of all those who take an interest in the "*who to consult*" movement. Is the one scheme the parent of the other ? "Patients who come to Vienna," says Dr. Tugendhart, "to consult medical authorities, meet with so many difficulties, that they rarely ever obtain a satisfactory consultation. I have thought it well to establish an agency for consultation, the object of which is—1. To assist the patient in choosing as quickly as possible a consultant specially suited for his complaint ; 2. To arrange and direct the consultation ; 3. To make an exact and scientific report of the results of the consultation, for the benefit of the ordinary medical attendant ; and 4. To give consultations by correspondence. Most of the clinical professors to whom I have explained my proposal have recognised its great utility ; and I trust that the scheme will receive the patronage of practitioners and of the public in the different provinces."

M. Matthieu (de la Drôme) who, as our readers may remember, at the beginning of the year, promised us a fearfully rainy summer, has tumbled on a most unfortunate year for the fulfilment of his prophecy.

On the 15th of August, Napoleon's *fête*, all the expectant world in France is in agonies. On this day, the *Moniteur* issues the list of those who are to be decorated, or raised a step in the Legion of Honour. Of course, there are grievous many disappointments, and many surprises, on that day. Happily, we doctors on this side of the water are spared this trial. The homœopaths have had a lift through the person of a Dr. Cabarrus, who has been raised to the rank of officer of the Legion. Dr. Cabarrus belongs to the homœopaths ; but we read that his connection with them is "rather elastic"; which compliment is a very dubious one as regards his honesty. To the grade of Chevalier have been exalted Maisonneuve the rash, Dr. Anselme, Dr. Rochard, Dr. Salle, and many others. How would a bit of ribbon suit our English button-holes ?

Professor Bernard presented a note from M. Delore on the absorption of therapeutical agents by the skin. M. Delore considers that the action of a large number of these agents is confined to a local action on the papillæ of the skin ; that narcotics, for instance, have a sedative, and resolvents an excitant action. Mineral waters act for the most part in a like manner. He does not, however, deny the fact of cutaneous absorption. He considers a medicament to be absorbed when it is introduced into the vessels of the skin, and its presence may be traced in the body. Therapeutical action does not, therefore, in his view, necessarily imply the absorption of the therapeutical agent. He admits the absorption of mercury when salivation is excited—of belladonna when the pupil is dilated—of iodine when its presence can be shown in the urine. Of 117 cases observed by him, absorption took place in one-half.

M. Blanchet, in a paper, points out the practicability of catheterism of the duodenum and of the first portion of the large intestine, and the use of the operation.

RECOMMENDATIONS OF THE GENERAL MEDICAL COUNCIL,

IN REFERENCE TO GENERAL AND PROFESSIONAL EDUCATION; AS AMENDED IN 1863.

I.—*General Education and Examination.* The Medical Council are of opinion that it is desirable—1. That all students pass an examination in general education before they commence their professional studies. 2. That the time of commencing professional studies shall be understood to be the time of commencing studies at a medical school; and that no qualifying body be held to have complied with the recommendation of the Council which shall allow the examination in general education to be passed after the commencement of professional study. 3. That, as far as may be practicable, testimonials of proficiency granted by the national educational bodies, according to the following list, be accepted, with such modifications as the Medical Council may from time to time think proper to make. 1. A Degree in Arts of any University of the United Kingdom, or of the colonies, or of such other universities as may be specially recognised from time to time by the Medical Council; 2. Oxford responsions or moderations; 3. Cambridge previous examinations; 4. Matriculation examination of the University of London; 5. Oxford middle class examinations (senior); 6. Cambridge middle class examinations (senior); 7. Durham middle class examinations (senior); 8. Durham examinations for students in arts, in their second and first years; 9. Durham registration examination for medical students; 10. Dublin University entrance examination; 11. Queen's University, Ireland, two years arts course for the diploma of licentiate in Arts; 12. Preliminary examinations at the end of A.B. course; 13. Middle class examinations; 14. Matriculation examinations; 15. First class certificate of the College of Preceptors; 16. "Testamur" granted by Codrington College, Barbadoes; 17. Degree of Associate in Arts granted by the Tasmanian Council of Education, with a certificate that the student has been examined in Latin and mathematics. 4. That the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council. 5. That no certificate of proficiency in general education, which does not affirm the proficiency of the candidate in Latin, be deemed a sufficient proof of preliminary education previous to the commencement of professional studies. 6. That students who cannot produce any of the testimonials referred to in the third resolution, be required to pass an examination in arts, established by any of the bodies named in Schedule (A) of the Medical Act, and approved by the General Council, provided that such examination be in every case conducted by a special board of examiners in arts. 7. That, without professing to lay down any complete scheme of general education for persons intending to become members of the medical profession, the Committee recommend that the scheme of examination in Arts of the licensing bodies be, as nearly as practicable, similar to that of any of the national educational bodies above specified. 8. That after October 1st, 1861, all medical students be required to be registered. 9. That the lists of students registered be closed within fifteen days after the commencement of each session or term. 10. That no student beginning professional study after September 1861, be registered, who has not passed an Arts examination in conformity with Resolutions 3 or 6. 11. That the several bodies in Schedule (A) of the Medical Act, either jointly or severally, open a register for students commencing their studies in medicine. 12. That after Jan. 1863, all junior middle class examinations be excluded from the list. 13. That the said register be opened on the first day of each session or term, and remain open for fifteen days; and that within seven days after its close, the officer in charge transmit a duly authenticated copy thereof to the Registrar of the Branch Council of that division of the United Kingdom to which the body or bodies belong. 14. That the Registrar of the Branch Council lay the copy of the said register before the Branch Council, in order that the Branch Council may take whatever steps may seem necessary to secure its accuracy; and that it be thereafter transmitted, with any remarks by the Branch Council thereon, to the Executive Committee. 15. That the licensing bodies shall have power to admit exceptions as to the time of registration, if satisfactory to them, and transmit lists of such exceptions to the Branch Council of the part of the United Kingdom in which such exceptions shall have been granted, with the grounds stated. 16. That the various educational and licensing bodies be requested to transmit to the Registrar of the General Council, returns embodying any alterations which they may from time to time introduce into their courses of general study and examinations, which qualify for the registration of medical students; and that a copy of such returns be sent by the Registrar, as soon as convenient, to each member of the General Council.

II.—*Professional Education.* 17. That the age of twenty-one be the earliest age at which any professional licence shall be obtained. 18. That four years of professional study be required after the examination in general education.

III.—*Professional Examinations.* 19. That the professional examinations be divided into at least two distinct parts; that the first be not undergone until after the termination of two years of study; and the final examination not until after the termination of four years of study. 20. That the first professional examination be conducted partly in writing and partly *vivâ voce*; and that such parts as admit of it be made as practical and demonstrative as possible. 21. That the second examination be conducted partly in writing, partly *vivâ voce*, and practically, so far as may be convenient and attainable. 22. That the professional examinations be held by the several licensing bodies (except in special cases) at stated periods, to be publicly notified. 23. That returns from the licensing bodies in Schedule (A) be made annually on the 1st of January, to the General Medical Council, stating the number and names of the candidates who have passed their first as well as their second examinations, and the number of those who have been rejected at the first and second examinations respectively; and that the Registrar forward a sufficient number of forms, with a notice for their being returned, in due time. 24. That it be recommended to all the examining boards that they should require from every candidate for examination before them, a statement, signed by himself, whether he has, or has not, been rejected within three months by any of the examining boards included in Schedule (A) of the Medical Act. 25. That it is not desirable that any university of the United Kingdom should confer any degree in medicine or surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed all examinations required for the Bachelorship in Arts, or the examinations equivalent to those required for a degree in Arts.

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

THE action for alleged surgical negligence, which has been so long expected to come off, was commenced on Friday, August 28th, before Mr. Justice Mellor and a special jury. The plaintiff, Hodges, a man about 40 years of age, was deputy-registrar of the Liverpool Court of Passage; the defendants, Messrs. David Chalmers, Ellis Jones, and James Hakes, the three honorary surgeons of the Northern Hospital. Mr. James, Q.C., Attorney-General for the Duchy of Lancaster, for the plaintiff, opened the case, and read from Sir Astley Cooper's work on *Dislocations* a paragraph to the effect "that the latest period after a dislocation at which it is proper to attempt forcible reduction is three months for the shoulder, and eight weeks for the hip, except in persons in advanced age or of very relaxed fibre." The plaintiff's statement was in substance as follows. When walking to the court where he was employed, on a very wet day, his foot slipped; and, having an umbrella in his hand, he was unable to break his fall, and came down with great violence on the pavement. On rising, he found he was unable to walk, took a cab and went home to bed, where he remained for a few days, but had no medical advice whatever. In a short time he was able to walk with a crutch and a stick, and resumed his official duties, walking to and from the court daily, a distance of more than a mile. After some time, the frosty weather rendering the roads slippery, he became nervous about falling, and then for the first time—namely, eight months from the date of the injury—he consulted his family doctor, who, being a physician, referred the patient to Mr. Hakes, one of the defendants, who, after a careful examination, pronounced it a dislocation of the hip, and advised him to undergo an attempt at reduction, as, in his present state, he would be lame for life; whereas, if the operation were successful, it would greatly improve his condition. It was proposed that he should go into the Northern Hospital, to which he consented; and, while in that institution, he underwent, according to his account, three attempts at reduction, each time under the influence of chloroform. Every operation was followed by great suffering; and at one time he made up his mind he was going to die. After the third attempt, Mr. Hakes told him that, unfortunately, the operation had been unsuccessful; and that, what was worse, the thigh-bone was broken. The limb was set; he remained in the hospital until the fracture had firmly united; and has ever since followed his usual occupation, is able to walk with a stick and a high-heeled boot; but he alleged that ever since the fracture, now more than twelve months, he has suffered much greater pain than he did before, and that he cannot walk so far nor without more fatigue than he could before he had been under the defendants' care.

Such was the plaintiff's story, embellished here and there with ingenious attempts to make things appear as unfavourable as possible to the defendants; who, however, he was obliged somewhat reluctantly to acknowledge, treated him with every kindness and attention. A friend was called to corroborate some portions of his evidence, and deposed to being present at the operation, and having heard distinctly the bone snap. He was also in the room during the consultation, and overheard the doctors, who, he said, "differed as to the dislocation". No further evidence was offered on the part of the prosecution; and the affidavits of the defendants were read, in which they described the case as one of long-standing dislocation of the femur into the ischiatic notch, and detailed the steps they took to reduce it—namely, two attempts by forcible extension by the pulleys. On the first occasion, failure was due to some part of the apparatus having given way. On the second, when extension had been carried as far as was deemed proper, and while one of the operators was attempting by manipulation to lift the head of the femur into the acetabulum, the thigh-bone snapped, producing a transverse fracture of the femur about an inch below the great trochanter. The fracture was set, and in due course the defendant discharged from the hospital, with the bone firmly united, but the dislocation still unreduced.

This being the plaintiff's case, Mr. Brett, Q.C., submitted that there was no case against any of the defendants, in which the learned judge at once concurred; observing that, although the plaintiff was much to be pitied, and that they must all regret that the operation was not successful, it was monstrous to attach blame to the surgeons, who had done their best in a difficult case; nor should they forget that there was risk in all surgical operations. The plaintiff was accordingly nonsuited.

There was a large attendance of medical men in court, all of whom were, of course, deeply interested in the proceedings. Before the case commenced, all witnesses, not excepting medical men, by desire of the prosecution, were ordered out of court—a proceeding which seemed to excite much surprise, and even elicited an exclamation from the judge. In addition to local celebrities, Mr. Erichsen and Mr. Curling were in attendance, ready, if called upon, to come into court to give evidence for the defence. It is confidently stated that at least two medical men were in court for the purpose of rendering assistance to the prosecution. Fortunately for themselves, and seemingly for the credit of their profession, they were not placed in the witness-box; and, therefore, their conduct escapes any more tangible reproof than the withering contempt and pity of all right-minded and honourable men.

On the whole, the issue of this trial must be regarded as highly satisfactory, showing as it does that surgeons are not responsible for unavoidable casualties occurring in their practice; and therefore, provided they use reasonable skill and caution in the course of their treatment, they are not called upon to defend themselves against unfounded charges of malpraxis, concocted by designing and ungrateful patients. It is to be hoped this case will put a stop to the new feature in the speculative commerce of the present day, which consists in attempting

to extort money by trading upon the casualties of life. One other lesson may, I think, be drawn from this case; and that is, the impropriety, or rather the necessity for extreme caution, in allowing non-professional persons to be present during consultations and operations; not because we fear publicity, or desire to surround our proceedings by mystery, but from the inevitable tendency on the part of the general public to misunderstand, and perhaps unintentionally to misrepresent, what they see and hear on such occasions, which may do and indeed often has done much mischief to the profession and to the public themselves.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 1ST, 1863.

HENRY OLDHAM, M.D., President, in the Chair.

Fibroid Tumour Situated in the Anterior Wall of the Uterus, which Obstructed Labour. Dr. ROBERT BARNES exhibited the uterus of a woman who had died soon after labour from the effects of ruptured bladder. The labour had been obstructed, and there had been retention of urine for many hours. The patient had been attended by an unqualified practitioner. The cause of the obstruction to the delivery and of the retention of urine was a fibroid tumour situated in the anterior wall of the uterus near the cervix, which had been driven down by the child's head and jammed against the symphysis pubis, closing the urethra. Dr. Barnes observed that in the decidual *débris* taken at a distance from the seat of the placenta he had in this case found atrophied remains of the chorion villi, which had not been wanted for the formation of placenta.

Hydrocephalus with Spina Bifida. Dr. BARNES exhibited a stereoscopic photograph, representing a child in whom hydrocephalus coexisted with spina bifida. The child was a year old. The hydrocephalus only became developed at the age of nine months. Dr. Barnes cited this case as an illustration of the views of Mr. Hutchinson, who regarded spina bifida as due to an affection of the spinal arachnoid, similar to the disease of the cerebral arachnoid which resulted in hydrocephalus, and not as a malformation dependent upon arrest of vertebral development.

Distortion of the Head in Face-Presentation. Dr. BARNES exhibited a stereoscopic photograph of a child's head remarkably distorted in consequence of delivery by face-presentation. The occipital region was flattened in, whilst the forehead was enormously raised and projected. Dr. Barnes observed that such cases illustrated the mechanism of face-presentation, and remarked that, although the deformity would quickly disappear in a great measure, yet that some degree of the peculiar moulding imparted to the head by the mode of birth would probably remain in after-life. In like manner, the sugar-loaf occipital elongation resulting from the common mode of birth was not unfrequently retained in adult age.

Case of Tuberculosis of the Uterus. Mr. R. S. TOMLINSON related the case of a lady, aged 55, who had been suffering from a profuse uterine discharge upwards of two years. The discharge was of a dirty-brown colour, without smell. The uterus was found to be enlarged, but no conclusion could be formed as to the nature of the disease. She died fifteen months afterwards. The uterus was found enlarged, and the cavity of the organ was filled with tubercular masses; the Fallopian tubes were enlarged, and similarly affected. The inner surface of the uterus presented, on removal of the tuberculous masses, a honeycomb appearance.

Dr. OLDHAM remarked that he had seen at least six cases of uterine phthisis. The disease appeared to attack the cavity almost always, and he had usually found the uterus to be of small size. In one case, however, he had seen the organ enlarged, and the patient died of tubercle elsewhere.

ON THE USE OF WIRE LOOPS, HORSE-SHOE WIRES, ETC., FOR CORRECTING ANTE- AND RETRO-VERSION, OBLIQUITY, AND PROLAPSE OF THE UNIMPREGNATED UTERUS. BY CHARLES CLAY, M.D.

The author, in this paper, endeavoured to point out the positive injury done by the use of the generality of pessaries, particularly the old class, which, on account of their cheapness, are still sanctioned by the profession. Improved stem pessaries were shown to be so expensive as to be little applicable to the extent of the evil for which they are proposed. In order to meet this difficulty, the author proposed a new and very simple series of instruments suitable for various malpositions of the uterus, ante- and retro-version, obliquity, and prolapse, and at a cost so extremely small as to favour their general application. These instruments were made of medium-sized copper wire, bent and soldered in a convenient form, and tinned.

Dr. GRAILY HEWITT believed that in most cases of retroflexion of the uterus mechanical treatment was not applicable; but that in a few cases in which a cure of the distortion was possible, such mechanical treatment was required. He had been in the habit of using an instrument, with the results of the action of which he was perfectly satisfied. It consisted of a stem of ivory of the length of the uterine cavity, and straight; this stem was mounted on a globular air-pessary. The air-pessary, when distended maintained the stem in the uterus, and prevented it from slipping out. The instrument was less liable than others, he believed, to injure the uterus.

Dr. ROUTH said the use of internal pessaries for retroversion was always hazardous. Dr. Hewitt's instrument he believed to be very ingeniously contrived; but even this failed sometimes to give relief. Dr. Simpson's was very efficient; but that also produced occasionally serious results. One drawback in this and in Dr. Hewitt's was that the stem *in utero* was too long, and irritated especially the fundus uteri. Inflammation of this part was accompanied with very distressing as well as severe consequences. Moreover, it was chiefly due to this fundal endometritis that retroverted womb gave annoyance at all. In the absence of this fundal inflammation, many patients went about with retroverted wombs without inconvenience. Hence one advantage of using short-stemmed pessaries, by which all further irritation at the fundus was avoided. The reason of this distress was obvious. That part of the uterus was supplied by nerves from the renal plexus, and not the inferior aortic, and was therefore in direct nervous relation with the splanchnic nerves and semilunar ganglia superiorly, and with the ovaries (also supplied from the same sources) inferiorly. Dr. Simpson's instrument fixed the uterus *in situ*, and so every jerk of the body was felt by the uterus. Dr. Hewitt's instrument was likewise too long in the stem, though this might be remedied; but although it admitted considerable freedom of movement of uterus, it was sometimes forcibly ejected, because not always firmly secured inferiorly. To meet these difficulties, he (Dr. Routh) had devised a modification. His instrument could sometimes be borne where others were not tolerated. It consisted of a coiled wire bell-spring, covered with caoutchouc, and at about two inches or less from its upper end separated by a gutta-percha disc from the lower portion. Upon the disc, with the coiled

wire within the organ, the uterus rested, while the lower end was secured by tapes or a napkin. By means of a sound to which the curve of the retroverted uterus was previously given, and then passed within the coil, it might be easily applied. The spring, when the organ was replaced, would by its elasticity maintain the organ *in situ*, while it would not impede full movement of the uterus with the movements of the body. Of course the instrument should not be used till after all inflammation had subsided, under the use of leeches or other local depletion, aperients, etc. Sometimes the use of sponge-tents to reduce the uterine volume, after Dr. Moir's plan, was also of great use as a previous measure.

Dr. GREENHALGH had found misplacements of the uterus extremely common, and productive of considerable distress among the patients at St. Bartholomew's Hospital and in private practice. In prolapsus and procidentia he strongly recommended the cautious use of a modified Zwanke's pessary, which formed a floor upon which the uterus could rest, and took off all tension from the ligamentous supports of the uterus; while astringent injections could be thrown into the vagina, with a view of constringing the dilated and relaxed parts forming the floor of the pelvis. In retroversions and retroflexions he had used a great variety of mechanical contrivances, both intrauterine and vaginal, but, he was compelled to admit, with little or no benefit. He entirely concurred with most practitioners that all intra-uterine supports should be done away with, on account of the irritation and inflammation thereby occasioned, which had too frequently led to fatal results. The plan he at present pursued in such cases was, first to remove all complications, when possible, by appropriate local and general treatment; and then from time to time to replace the uterus by means of the finger or uterine sound, and in some few cases to introduce sponge-tents into the seat of the uterus; thus he had succeeded occasionally in rectifying the faulty position of the uterus, after which, in a small proportion of cases, impregnation had followed.

Dr. BARNES regarded the treatment of retroflexion of the uterus as a subject of great importance. He had occasionally, by the adaptation of various forms of pessary constructed for special cases, succeeded in relieving this complaint. With reference to prolapsus uteri, he could not understand how any one largely engaged in the treatment of uterine disease could ignore the value of pessaries if these were constructed on sound principles. It was important to distinguish the varieties of prolapsus. There was one class which occurred in women who had passed the child-bearing age, in which the prolapsus depended upon atrophy of the uterus and absorption of the fat and other tissues, which in younger women padded the pelvis and helped to keep the pelvic organs *in situ*. Wanting this support, the uterus was apt to fall through under straining from cough or from labour. This form he called prolapsus from senile atrophy. It was so purely a mechanical disorder, that it required mechanical means as a substitute for the natural support that was lost. Nothing answered so well here as a pessary. The form he used had a small cup which received the uterine neck; this cup was supported on a curved stem so small as not in any way to disturb the vagina, which, on the contrary, was able to grasp the stem and almost to support the pessary by itself. The end of the stem was, however, suspended by elastic bands to an abdominal belt. This elastic support enabled the uterus and pessary to move freely, as in the natural condition, under the various movements of the body. This form of pessary, he understood, had been in use at King's College Hospital. In a vast majority of cases it answered admirably. He had never less than a hundred women under his care wearing this instrument. It gave complete relief, and enabled them to follow any laborious occupations with comfort. In another class of cases occurring during the child-bearing period, and commonly dependent on inflammation or congestion with enlargement of the uterine neck caused by delivery, pessaries were not so useful. It was often found that the prolapsus was cured by removing the uterine engorgement which caused it. But even here there were cases in which the support and rest afforded by the pessary he had described were of essential service in removing the congestion and inflammation. When the uterine neck was prolapsed, the circulation of the blood was mechanically retarded. When the uterus was replaced, the vessels being restored to their natural position, the circulation was freed, congestion and œdema disappeared, the bulk and weight of the organ diminished, and the vagina, being enabled to contract around the stem of the pessary, gradually recovered its tone; and thus the pessary might fairly be said to cure the prolapsus. The value of the stem-pessary in procuring "rest" for the prolapsed uterus, complicated with œdema and engorgement, was, he felt satisfied, not sufficiently appreciated. But the pessary must be well constructed on the principle he had described. The balls, still too often used, which acted only by stretching the vagina and filling the pelvis, only made matters worse, and were the most absurd and mischievous contrivances.

Dr. OLDHAM, being asked by some of the Fellows to give the results of his experience as to the use of pessaries generally, stated that he rejected them; he had tried them all, but had come finally to confine his mechanical treatment to the employment of simple external support by means of a well-arranged pad and bandage, and that only in very bad cases; the internal treatment consisting in the use of the cold douche, and attention to the state of the general health. In very many cases constipation was a troublesome complication. Small doses of aperients were most efficacious; out-door exercise, especially horse exercise, was most valuable.

Case of Difficult Labour; Delivery by Forceps; Retention of Urine and Subsequent Sloughing of Lining of Bladder. By WILLIAM MARTYN, M.D. Dr. MARTYN was called at 7 P.M., on April 17th, to attend Mrs. H. in labour at the full time; her fourth confinement. Sharp pains began the night before, the liquor amnii having escaped three or four days. For the last seven hours the pains had been violent and incessant, without satisfactory progress. The forehead of the child presented, the face looking towards the right sacro-iliac joint. The brim of the pelvis was small and round; meconium appeared in the discharges; the patient was much exhausted. After drawing off the urine, Dr. Martyn applied the forceps and brought down the child (full size), dead, in twenty minutes; the head was much disfigured, and the occiput forced back between the shoulders. The patient was now doing well. On April 22nd, four days after delivery, the patient was very ill; she was fevered, exhausted, and very restless; she complained of much pain in her belly; the vaginal discharges were offensive. On inquiring if she had passed urine, Dr. Martyn learned that it had dribbled away for some time, but she had passed none naturally since her labour. Her belly was very full and tender; pulse very quick. He drew off five pints of bloody highly ammoniacal urine; the room stank with it. For eight days the catheter was required twice a day; the urine was loaded with dirty offensive matter. There was much pain and distress about the bladder. On May 17th, she could still not pass any urine except by drops. Lumps of thick offensive matter escaped by the urethra from time to time. On the 19th, she could not pass urine; she was often upon her knees making great efforts to do so. Dr. Martyn found a portion of slough hanging out of the urethra, which he drew out easily; it was not large. In the evening more appeared, which the patient drew out of the urethra; it was followed by a gush of offensive urine.

The slough appeared to be the whole lining of the bladder, and consisted of mucous and submucous tissue, some muscular fibres, and a patch of about the size of a half-crown, with the appearance of a peritoneal surface; the mucous surface had some grit of phosphates upon it. The slough measured eight inches by five or six. Such a specimen had been shown by Mr. Spencer Wells under similar circumstances, when it was doubted whether it was human bladder tissue at all. The patient recovered, but the bladder remained irritable; she could not retain urine more than an hour or so. Dr. Martyn believed that the urine, in being long retained, becomes sufficiently ammoniacal to produce the well known caustic effects of ammonia on the animal tissues, and hence all the results; the mucous lining, in fact, becoming blistered and destroyed by the changed urine. The catheter then was the efficient means to prevent such a destructive process in every case.

Ascites with Ovarian Disease. By GUSTAVUS MURRAY, M.D. The subject of this case was a young woman, aged 28, married, but without family. She was admitted into the Great Northern Hospital, and was tapped on June 12th, when thirty-three pints of fluid (ascitic) were drawn off. She refilled in the course of three days, and was again relieved by the wound giving way; but nevertheless she still rapidly continued to fill, and died on the 27th from peritonitis, which set in on the fifth day after tapping.

Post mortem examination disclosed an ovarian multilocular solid tumour, weighing six pounds. It was firmly bound down in the cavity of the pelvis, but capable of easy and complete removal. Dr. Murray found that the trocar had pierced one of the upper cysts of the tumour, which contained a thick creamy fluid, and thought it likely that this coming in contact with the peritoneum acted as an irritant, and gave rise to the inflammation which proved fatal. The state of the patient on her admission to the hospital was such that it was considered better to tap first, and endeavour to improve her general health, which had not been good for eighteen months, before proceeding to ovariotomy. The author brought this case before the Society as one showing the fatal result of tapping; whereas, even in her emaciated condition, he believed that, had ovariotomy been performed, the case might have done well.

Medical News.

APOTHECARIES' HALL. On August 27th, the following Licentiates were admitted:—

Chapman, James, Wingham, Kent
Hayden, William Gallimore, Charing Cross Hospital
Kelly, Thomas, Tipton, Staffordshire
Kendal, Cuthbert Robert, Gateshead
Williams, Robert, Liverpool

At the same Court, the following passed the first examination:—

Powne, Benjamin Lambe, St. Bartholomew's Hospital

APPOINTMENTS.

POOR-LAW MEDICAL SERVICE.

DOWNES, Thomas R. C., Esq, to the Munslow District of the Ludlow Union.
FENNELLY, Richard, L.R.C.P.Edin., to the Finglas and Glasnevin Dispensary District of the North Dublin Union.
FFOLLIOTT, Francis, L.R.C.P.Edin., to the Kilworth Dispensary District of the Fermoy Union, co. Cork.
KEATINGE, Patrick, M.D., to the Callan Dispensary District of the Callan Union, co. Kilkenny.
LARKIN, Charles R., Esq., to the Bishop's Castle No. 2 District, and for the Norbury District of the Clun Union, Salop.
MACNAUGHTEN, Peter, Esq., to the Parochial Board of Morven, Argyleshire.
WHITE, J., Esq., to the Road District of the Frome Union.

ROYAL NAVY.

CLOSE, Henry A., Esq., Assistant-Surgeon, to the *Royal Adelaide*.
HART, George V., Esq., B.A., Assistant-Surgeon, to the *Medusa*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

MORGAN, W. W., M.D, to be Surgeon 2nd Administrative Battalion Monmouthshire R.V.

DEATHS.

BROWN, W. C., Esq., Surgeon in Her Majesty's Indian Service, at Exeter, aged 44, on August 26.
BUDD. On August 25th, aged 22, Robert Sutton, second son of John W. Budd, M.D., Plymouth.
MORSE, John N., Esq., Surgeon, late of Moulmein, at Lodowick Terrace, Regent's Park, aged 45, on August 11.

BEQUEST. The late Dr. Avery Roberts has left £500 to the Lewes Dispensary.

A PLAGUE. Five hundred sick soldiers have arrived at New Orleans from Vicksburg. A malignant typhoid fever is raging at Vicksburg, seven out of ten cases proving fatal.

RECEIPT FOR A DEEP BLACK NEUTRAL INK. Take 42 ounces of powdered galls, 15 ounces powdered Senegal gum, 18 quarts of distilled or rain water, 18 ounces of green vitriol free from copper, 3 drachms of liquor ammonia, an 24 ounces of spirit of wine; mix these in an open vessel, and allow them to stand, stirring frequently, until the ink attains the desired blackness. This ink will not corrode steel pens. (*Chemical News.*)

PHTHISIS CONTAGIOUS. Two wards in this hospital—the Santissima Salvatore—are devoted to cases of tuberculosis or pulmonary phthisis, the average age of the patients being apparently between twenty and thirty. As this disease is universally regarded here as *contagious*, they are never mixed up with persons labouring under other diseases, but have separate rooms or buildings assigned them. (*Dr. Lee.*)

CHEMICALS AND PHARMACEUTICALS. Exhibitors of chemical products are, of course, a numerous class; little is known of annatto or garancine manufactures, but they appear to be as distinct occupations as starch-making or colour-grinding; in all, the makers or vendors of chemical products are divisible into 108 different species. Medical and pharmaceutical processes furnish employment to twenty trades. Aquaria, botanical collections, and objects of natural history, are in a manner scientific toys; and their preparation gives employment to ten classes of tradesmen, who have undergone special training with this end in view. (*Report of Commissioners.*)

METHYLATED SPIRITS. One of the last Acts passed in the late session was to reduce the duty on rum. It recites that, by the Act 18th and 19th Victoria, cap. 38, spirit of wine was allowed to be methylated duty free; and that it is expedient to allow foreign and colonial rum to be methylated, on payment of reduced duty. Rum may now be "methylated" in the Customs warehouse; but the wood naphtha, or methytic alcohol, or other article to be mixed with the rum, is to be provided by the Inland Revenue Commissioners; and the mixture is to be denominated "methylated spirits", and such spirits may be exported.

THE NON-RESTRAINT SYSTEM. A Dr. Erlenmeyer writes as follows:—"Your system of entire non-restraint in the refusal of every patient likely to require restraint is the only practicable method. All other systems of non-restraint are founded in deception, error, or even vulgar imposture, with the view of gaining over the public. It is, as Neumann, to the ire of the editor of the *Journal of Mental Science*, says, merely *an English swindle*. A strait-jacket or a restraint-chair are a thousand times more humane than the abominations of the non-restraint system in that establishment where devilish wickedness reigns." (*Journal of Mental Science.*)

Dr. Wing's Excursion to Llandudno. In June 1862, Dr. Wing removed thirty-five of the private patients of the Northampton Asylum to lodgings in Llandudno, in North Wales, for change of air. "This trip was undertaken with the unanimous approbation of the committee of management, and received also the unqualified approval of the Commissioners in Lunacy. All returned home without a single accident of the most trifling character, and without any circumstance whatever having occurred to cause a regret that the project had been set on foot and carried out; nor was the conduct of any such as to give reasonable ground of complaint to the most fastidious. When the scale upon which this expedition was arranged is considered, as also the distance of Northampton from the sea-board, and the many miles between that town and Llandudno, it deserves to be reckoned a great success, and an advance in the treatment of the insane." *The Report of the Medical Superintendent of the Northampton General Lunatic Asylum, 31st December*, 1862. (*Journal of Mental Science.*)

Garibaldi. Dr. Albanese, in a letter to Professor Zanetti, says that Garibaldi's wound is cicatrised; that during his convalescence, which lasted a hundred days—that is to say, from the latter part of March, when the last splinter of bone was extracted, to July 10th—the cure was retarded by two attacks of articular rheumatism; but this was conquered by vapour baths, cold douches, and medicine. The foot at the moment when the wound healed was very stiff, had scarcely any power of movement, and there was danger of anchylosis. Cold douches were repeated three or four times a day, and slight mercurial frictions were resorted to with considerable success. In certain directions, however, the movements of the foot are still difficult. Dr. Albanese advises mineral baths, suphureous and ferruginous, or mud baths, such as there are at Dax, in the department of the Landes, and in some other places. But as Garibaldi refuses to leave Caprera, he is to use artificial mineral baths and local mercurial frictions.

Action for Libel at Liverpool. The plaintiff, the Rev. J. S. Padley, sought to recover damages from Mr. H. R. Cooper, a surgeon of Ixworth. Captain Baddeley, an Indian officer, went to reside with the Padleys, and, when he died, bequeathed all his property to the plaintiff. On this the defendant, a relative of the Baddeleys, applied to the coroner to have the body of Captain Baddeley exhumed, alleging that he had been poisoned. The coroner, after making inquiries from the police, refused to hold an inquest. The defendant then addressed the Secretary of State in several memorials, to the effect that Captain Baddeley had died from neglect at the hands of the Padleys. He also addressed communications to the *Bury Post*, *Stamford Mercury*, and other papers, reflecting upon the plaintiff. After the case had proceeded some length, Mr. James said that his client was ready to express his regret for publishing them. His lordship remarked, that the apology came very late. Mr. Temple, for the plaintiff, said that, as the action had not been brought for the sake of damages, a verdict would be taken for £150. A verdict was, therefore, entered for this amount.

Casualties in the United States Army. Assistant-Surgeon R. L. Braden, U.S.V., has become insane, and been committed to the Government Asylum for the Insane, at Washington, D.C.—Assistant-Surgeon W. G. Moore, 61st Ohio Vols., was mortally wounded while attending to his duties in rear of his regiment at the battle of Gettysburg, July 3, 1863, by a cannon-ball, which took effect in his left thigh, lacerating and contusing it extensively from the gluteal region to the knee. The femur was not broken nor the femoral artery divided. Reaction, however, did not succeed the severe shock, and he died on July 6th, the whole limb being in a state of mortification or gangrene, which extended to the gluteal, scrotal, and iliac regions.—Surgeon Thurm, who has been sick in the General Hospital, at Fairfax Seminary, Va., for some weeks past, has returned to the Army of the Potomac.—By command of the President, Assistant-Surgeon Charles Woodward, 26th Illinois Vols., has been dismissed the service of the United States for uttering disloyal sentiments.—Surgeon William Arnold, 37th Ohio Vols., is hereby mustered out of the service of the United States, to date January 6th, 1863, the date of his muster in, he having rendered no service to the government.—Assistant-Surgeon E. B. Zule, 2nd Iowa Cavalry, is hereby discharged the service of the United States, on account of incompetency.—The following officer, having tendered his resignation, is hereby honourably discharged the service of the United States on account of physical disability. Surgeon W. T. Black, 1st Louisiana Vols., upon condition that he receives no final pay, until he furnishes evidence of service from January 1st, 1863, to the present day, no rolls of this regiment having been received at this office since December 1862.

Vacancies. The following appointments are vacant: House-surgeon to the Ardwick and Ancoats Dispensary, Manchester; resident medical officer to the Leeds Fever Hospital; assistant house-surgeon to the Sheffield Public Hospital; junior house-surgeon to the Preston Dispensary; medical officer for the Tregynon district of the Newtown and Llanidloes Union, Montgomeryshire; medical officer for the Bangor Dispensary district of the Belmulett Union, Mayo; medical officer for the Askeaton Dispensary district of the Rathkeale Union, Limerick.

Californian Midwifery. The treatment of the parturient female by the several tribes of Indians which inhabit the frontier north of California, known as the Indian Reservation, is as follows:—During the incipient stage of labour, she shuts herself up alone; when this period passes, and the labour proper is ushered in, she calls for help, when from four to six females rush to her relief. It may be remarked that these assistants had been previously selected by herself. One of these women acts as midwife, and her orders are implicitly obeyed, in a manner which would be well worthy of imitation by those more enlightened. During the labour, the woman sits upon the ground, and, as her pains return, four of her aids lift her up, and then forcibly thrust her back to the earth again. This process is continued until near the close of her labour; as soon as the head of the child has been delivered, it is seized by the midwife, who then carefully aids the mother in its expulsion. When the child is born, the midwife removes, without delay, the placenta; the mother now remains quiet, for fifteen or twenty minutes, when she goes to the nearest spring or pool of water, in which she bathes herself thoroughly. She is next caused to undergo a species of steam-bath, which is prepared by digging a hole in the earth, in which are placed hot stones, which are covered with sticks, over which are placed herbs; next water is poured upon the stones, the patient, meanwhile, being placed over them in such a manner as to be exposed to the vapour thus generated; she is exposed to this *medicated* vapour bath, wrapped in blankets, for half a day, and thus returns to her hut, from which I have often seen her come forth, in two or three days afterwards, in comparatively good health, and resume her ordinary avocations. The new-born child is seldom washed, but it is wiped, and wrapped tightly in its blanket, and then placed in a willow basket, of such form as to neatly fit the babe, an opening being left for the face, but over this opening a lid is placed, and kept close for a few days. In this basket the child is borne upon the mother's back, until it is five or six months old; it is, no doubt, owing to this mode of being carried, that the exemption of the Indian race from spinal curvature is due. (*San Fran. Med. Press.*)

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. THOMAS'S HOSPITAL.

CASE OF DIABETES TREATED BY THE USE OF THE TURKISH BATH.

By R. H. Goolden, M.D., Physician to the Hospital.

Wm. Spence, aged 21, farm-labourer, was admitted into Luke's Ward, on February 10th, 1863. He had been ill five months, from his own account. He complained of great and increasing debility, so that he was obliged to give up work, becoming very much emaciated, and having intense thirst. The skin was dry and harsh. He passed large quantities of urine. He had good appetite; no cough. The chest was well developed and healthy. Pulse 84, feeble. The tongue was coated with dirty mucus, brown in the centre, and very red at the apex and edges. He had no headache; no recollection of a blow on the head or accident; nor had he suffered from other illness.

The emaciation and debility were excessive, so that he appeared to take little notice of what was passing about him; and roused himself with difficulty to answer questions. The specific gravity of the urine was 1041; the quantity as yet was not determined.

On admission, he had a warm bath; and his hair was cut close. He was ordered five grains of calomel and five grains of Dover's powder at night, and a senna draught in the morning; a drachm of sulphate of magnesia in peppermint-water three times a day. The urine, being measured, was found to be thirteen pints.

Feb. 21st. The quantity of urine was fifteen pints; specific gravity, 1043. He left off his medicine, and was ordered a Turkish bath on alternate days.

Feb. 25th. The amount of urine was ten pints; specific gravity, 1041. The diet of this patient was determined at this date as follows:—Mixed diet—Twelve ounces of bread, and three-fourths of an ounce of butter; one pint of tea with milk (no sugar) for breakfast; and the same for tea; milk, with rice- or bread-pudding. Alternately for dinner—Half-pints of milk; four ounces of roast meat when dressed, without bone. Extras—Greens; half a pound of beefsteak; a pint of porter; two eggs; and an unlimited supply of water, lemonade, and other hospital drinks.

March 4th. Urine of specific gravity, 1040; quantity under ten pints.

March 11th. Urine of specific gravity, 1037; quantity under ten pints. He was very much more alive and cheerful, and increasing in strength.

March 14th. Urine of specific gravity, 1030; quantity under ten pints.

March 21st. Urine of specific gravity, 1037; quantity under nine pints.

April 1st. Urine of specific gravity, 1027; quantity under eight pints.

April 4th. Urine of specific gravity, 1030; quantity under seven pints.

The specific gravity was less after coming from the bath.

April 8th. Urine of specific gravity, 1031; quantity under seven pints and a half.

April 18th. Urine—specific gravity of two portions, taken at different times in the day, 1041 and 1030; total quantity, under seven pints and a half. He had been taking some sweetmeats, which accounted for the higher specific gravity.

April 25th. Urine of specific gravity, 1030; quantity under seven pints.

May 6th. Urine of specific gravity, 1030; quantity under six pints.

May 13th. Urine of specific gravity, 1031; quantity under five pints and a half.

The bath was omitted.

May 20th. Urine of specific gravity, 1032; quantity under six pints.

May 30th. Urine of specific gravity, 1032; quantity under six pints.

June 3rd. Urine of specific gravity, 1035; quantity under five pints.

The bath was now resumed.

June 6th. Urine of specific gravity, 1030; quantity under five pints.

June 13th. Urine of specific gravity, 1030; quantity under five pints.

The pepsine was discontinued.

June 27th. Urine of specific gravity, 1031; quantity under five pints.

July 1st. Urine of specific gravity, 1028; quantity under five pints.

July 15th. Urine of specific gravity, 1030; quantity under five pints.

July 18th. Urine of specific gravity, 1028; quantity under five pints.

Gluten-bread was ordered as a substitute for hospital bread.

July 22nd. Urine of specific gravity, 1033; quantity under five pints.

July 29th. Urine of specific gravity, 1035; quantity under five pints.

Since taking the gluten-bread, he has suffered much dyspepsia; and shows more sugar in urine.

I will not offer any remarks upon this case, beyond the fact that it is uncomplicated with remedies. Although not cured, and still under treatment, it shows that, in this particular instance at least, the bath is as powerful a remedial agent as any that we have tried.

The sweat has been several times tested, and there is not a trace of sugar in it; but the usual quantity of urea and chloride of sodium; differing not at all from the results given in the perspiration of healthy persons.

The skin has become soft and perspiring. He has increased in weight and muscular development; so that he has become capable of doing good work, and makes himself useful in the hospital. He is a very cheerful and intelligent man for his station; in strong contrast to his first appearance.

I was induced to try the Turkish bath in this, which I considered a hopeless case, because I had heard of a case (not very well authenticated) which had been relieved at one of the public baths. I was satisfied that, with proper care, very debilitated patients may be subjected to it without any fear; and having the patients under our own control, we could stop them at any time. And, moreover, a number of cases (seven) of albuminuria with dropsy, and in some cases with heart-disease, have been subjected to the Turkish bath; without any inconvenience in any one case. Four of these cases have got entirely rid of albumen in the urine. All the cases have been relieved of the dropsy. When I have other cases of diabetes in the hospital (and I shall be glad to receive any, if sent from any part of the country by medical practitioners) I will report progress.

Since the above report, the quantity is reduced to four pints, and specific gravity from 1022 to 1030; and this improvement followed the application of ice to the cervical vertebra in an India-rubber bag, as suggested by Dr. Chapman.

WESTMINSTER HOSPITAL.

CASE OF SEVERE INJURY TO THE ABDOMEN: RECOVERY.

Under the care of CHRISTOPHER HEATH, Esq.

[*Reported by* MR. HORRIDGE, *House-Surgeon.*]

CORNELIUS H., aged 9, was brought into the Westminster Hospital at 11 A.M. on August 15th, having been just run over by a cab. The boy was in a state of collapse; the pulse hardly perceptible; the skin cold and bedewed with cold sweat. The wheel of the cab had passed obliquely across the lower ribs of the right side and over the abdomen, leaving a mark on the ribs, but none on the abdominal wall. The patient was wrapped in blankets, and a hot bottle was put to his feet. A small quantity of hot wine and water was administered. Under this treatment, the condition of the boy improved; but he complained of great pain in the abdomen. Mr. Heath ordered him to suck ice, and to have teaspoonful doses of brandy and water every hour. He was ordered to have five minims of liquor opii sedativus every six hours; and a linseed poultice was applied to the abdomen. At night the symptoms of collapse returned, the skin being again covered with perspiration, and the pulse scarcely perceptible. Warm applications were again applied with success; and the urine having been drawn off with a catheter (none having been passed all day), he had a tolerable night, though complaining much of pain in the abdomen.

August 16th. The boy was more comfortable this morning. Pulse 130, and very small. Respiration was very hurried, and performed almost entirely by the thoracic wall. The abdomen was very tense and tender. He vomited a quantity of bilious matter after having taken a small quantity of beef-tea. He vomited again at night, after having been given some tea contrary to orders. He was ordered beef-tea injections, with ten minims of liquor opii sedativus, every eight hours.

August 17th. Pulse 160; respiration 40. His condition was improved. The abdomen was not so tense. His urine was passed naturally; and he had a slight evacuation from the bowels, in which there was a tinge of blood. He was ordered to have a drachm of brandy and half an ounce of beef-tea every two hours; and the opiate injection twice in the day.

August 19th. Pulse 92. He had a quiet night. The belly was much less swollen. He was ordered to continue the brandy and beef-tea and the opium injections. At 7 P.M., he had an attack of intense pain in the abdomen, which, however, passed off.

August 20th. He had a good night. The abdominal wall was relaxed.

August 21st. He looked much better. The bowels were open naturally. He had no pain in the abdomen even on pressure. Pulse 80; respiration 30. He was ordered bread with beef-tea.

August 25th. He had complained for the last two days of being hungry; and as there were no symptoms of abdominal mischief, and the boy was able to get up, he was put on middle diet.

August 28th. He was discharged cured.

REMARKS. The foregoing case is of some interest as a record of recovery after an apparently severe injury. Mr. Heath remarked that, when he saw the patient on admission, the symptoms would have warranted the diagnosis of rupture of the liver with internal hæmorrhage, or the rupture of the stomach or intestine. It was remarkable that the symptoms of collapse recurred nearly twelve hours after the injury without apparent cause. The treatment was adopted on the supposition that possibly (if not probably) some intestine might be injured; and the patient was, therefore, put under the influence of opium, and the smallest quantities of nourishment were administered, and principally by the rectum. The rapid recovery may be taken probably as a proof that the injury was really only a severe contusion, notwithstanding the gravity of the early symptoms.

ROYAL SOUTH HANTS INFIRMARY.

DISLOCATION OF THE LUMBAR SPINE.

Under the care of R. S. FOWLER, Esq., Senior Surgeon to the Infirmary.

[*Reported by* MR. HENRY APPLETON, *Clinical Clerk.*]

G. S., aged 25, farm-labourer, was admitted into the Infirmary at Southampton, August 8th, 1863. When first seen, he was insensible, but noisy and restless; his respiration was hurried and difficult, and face very livid; pulse 140; extremities cold. Warm water bottles were placed to his hands and feet; hot flannels to his chest; and brandy was administered directly.

On examination, several ribs were found to have been fractured on his left side; and the physical signs of pneumothorax were present. There was also a small lacerated wound of the perinæum, about half an inch deep.

In the evening, he was sensible, but in great pain. He remembered slipping off the shafts of a cart he was driving at the time of the accident; and from the contusions above the left ilium and fracture of the ribs of that side, there was every reason to believe that the wheels of the vehicle must have gone over him.

August 9th. He had not yet passed any urine. A catheter was introduced, and about twenty-four ounces of natural coloured urine were drawn off. On being asked if he could move his legs, he did so freely. Respiration was still laboured—56 per minute; pulse 130. The fractured ribs were strapped up in the usual manner with some relief, and twenty-five minims of tincture of opium were given.

11 A.M. Mr. Fowler bled him to twelve ounces. This was followed by a sensible improvement in his breathing and pulse, and he was ordered a pill containing two grains of calomel and half a grain of powdered opium, with conserve of roses, every two hours until four pills were taken; and afterwards every three hours. Low diet was also ordered.

5 P.M. He died very suddenly, whilst taking his tea, exactly twenty-four hours after admission.

SECTIO CADAVERIS, twelve hours after death. The livid appearance of the face was strongly marked. There were no other marks or contusions besides those already mentioned. On the left side, four ribs were found fractured at their posterior angles, with effusion of blood and laceration of the pleura and lung. His spine was found dislocated between the first and second lumbar vertebræ; the lower vertebra being thrown behind and to the left side of that above it. The cord, notwithstanding the pressure and complete dislocation to which it was subjected, was not severed.

The case is worthy of record, as showing that a patient may still have power over his lower extremities, though complete over-riding of the spine may occur from dislocation.

PETROLEUM. The existence of petroleum appears to have been brought to the notice of the white population in the middle of the last century by the Seneca Indians, who found it upon Oil Creek, a branch of the Alleghany, in Pennsylvania, and near the head of the Genesee River, in New York, and who used it for wounds and in religious ceremonies, and sold it under the name of Seneca oil. It was not until 1845 that it was known to exist to any large amount. Before the close of 1860 the number of wells and borings was estimated to be about 2,000. Since August 1861, the product has rapidly increased, and the present capacity of the wells is estimated at from 250,000 to 300,000 barrels per week.

Transactions of Branches.

MIDLAND BRANCH.

GUN-SHOT WOUND OF THE RIGHT WRIST-JOINT: REMOVAL OF THE LITTLE FINGER WITH ITS METACARPAL BONE, AND EXCISION OF MOST OF THE CARPAL BONES.

By Wm. Newman, M.D.Lond., St. Martin's, Stamford.

[*Read at Derby, July 2nd, 1863.*]

J. H., a healthy lad, aged 14, met with a severe injury to the right wrist on November 6th, 1856. He was carrying in his left hand a loaded single-barrelled gun. In passing through a hand-gate, his right hand was placed just over the muzzle; and at the same moment the trigger was caught by the lower bar of the gate. The piece was at once discharged.

I saw him within an hour after the accident. The integuments were thoroughly stripped from the lower third of the forearm on the ulnar half and palmar aspect. The ulnar nerve and artery were torn across, and lay visible in the wound. The lower end of the ulna was exposed, but not denuded of periosteum, and not detached from its connection with the radius. The flexor tendons were dislodged from their position, and turned *en masse* on to the ball of the thumb. The shot had evidently shattered most of the carpal bones. Loose irregular bits of bone could be felt with the finger quite across to the radial side of the articulation. The metacarpal bone of the little finger was comminuted throughout its lower two-thirds. There was no injury either of the radial artery or median nerve.

November 7th. Mr. Eaton of Ancaster met me in consultation. I determined to attempt to save a fairly useful hand, by excising the fractured bones. The lad was put under the influence of chloroform; and I made a first incision on the outside along the whole length of the fifth metacarpal bone; then dissected out the smashed metacarpal bone, and removed the little finger. Having done this, I could reach easily enough the damaged bones of the carpus. These were removed, leaving untouched only the trapezium, trapezoid, and a part of the scaphoid; but so thoroughly had the bones been penetrated and fractured by the charge of small shot, that it was difficult even on after examination to make out the exact injury. The bleeding was of small moment; only two small branches needed a ligature.

November 9th. The wound looked dark and sloughy; still the boy was fairly well. He had some wine, and an opiate at night.

November 16th. The sloughs had nearly all cleared away, and granulations were fast springing up. His appetite was good; and the lad slept well.

November 29th. He was going on well. The hand was slowly being drawn over to the ulnar side. To obviate this, I got a tin splint made to fit the radial side of the forearm, from which a projecting piece was carried the full length of the fingers. To this the whole hand was daily bandaged; but the distortion, though checked, was not thoroughly prevented.

December 28th. The wound was now nearly healed. The hand was nearly as much drawn over to the ulnar side. The cicatrix was irregular and puckered. Some power had been regained over the fingers: within a certain limit, both flexion and extension were possible.

The after progress of the case was thoroughly satisfactory.

Two years subsequently (Jan. 1859), I had a cast taken of the hand; and the accompanying woodcut, taken from a photograph of the cast, represents very faithfully the then aspect of the limb. At the same time, this note was made: "The lad is strong, healthy, and in daily active service with a farmer. He can write, carry a bucket empty or full, strike with the clenched fist even forcibly, use a whip; and, indeed, except from the altered direction, there is but little inconvenience from the mutilation of the hand."



I have since frequently seen him. The conditions remain as good as possible.

The above is a fair instance of successful conservative surgery. It may be worth the suggestion, that in some cases of disease of the carpal bones, a similar operation might be practised with advantage, even by including, for the sake of more free access, a partial mutilation in the removal of the little finger and its metacarpal bone.

The carpal bones have been removed usually by incisions dividing the extensor tendons. Mr. Butcher (*Dublin Quarterly Journal of Medical Science*, 1855 and 1859) divides those of the fingers; but leaves the extensor tendons of the thumb intact, with the result of a mobile thumb, apposed however to stiffened and immovable fingers. Such a condition would be avoided by the adoption of the lateral (ulnar side) incision.

[In the short discussion which followed this paper, Mr. Fearn, surgeon to the Derby General Infirmary, mentioned that in two cases he had successfully followed a very similar line of incision for the removal of diseased carpal bones.]

EAST ANGLIAN BRANCH.

CASE OF AMPUTATION OF THE LEG AND FOOT IN A CHILD TWENTY MONTHS OLD.

By C. B. Rendle, Esq., Saxmundham.

[*Read at Yarmouth, June 26th, 1863.*]

I was summoned on June 2nd, by telegram, to see a little child, whose legs had been crushed by a railway truck. I found my medical friend, Mr. Packard of Leicester, with the patient, and we at once examined the extent of injury. The child was just twenty months old. We found that the truck had passed over the left leg a little below its upper third, completely crushing and separating it, the tibia being divided at that spot, while the fibula projected, bared of its coverings, for some two or three inches. The muscular tissue was severely la-

cerated, but the knee and the parts immediately below it were uninjured. The front of the right foot had been crushed, and almost entirely severed. There had been very little loss of blood; but the little child lay exhausted, and moaning, and with a very feeble pulse. After it had somewhat rallied by the aid of wine, I gave it chloroform; and, with the assistance of Mr. Packard, proceeded to amputate the shattered limbs.

I began with the right foot; and making an upper flap, I at first performed the ordinary Hey's operation—removing the foot at the tarso-metatarsal joint; but, finding that I could not save sufficient tissue to cover the bones fairly, I removed the three cuneiform bones and the anterior portion of the cuboid. We tied three vessels, but there was no hæmorrhage, as the child was so faint, that the pulse was hardly observable.

After the child had somewhat rallied by small doses of brandy, I proceeded to amputate the left leg a little above the injury, sawing through the bones, on a level with the tubercle of tibia, and retaining all available tissue to make the flaps. We tied three vessels, and then brought the flaps together in both stumps by sutures and a few straps of adhesive plaister, and then applied water dressing.

The child remained for some hours in a very faint and exhausted state, and I hardly expected that it would rally at all.

The next morning, I found the child with a very feeble frequent pulse, restless, and with a faint low moan. It had scarcely slept during the night, though it had taken a drachm and a half of tincture of opium since the operation. We intermitted the laudanum, and gave small doses of brandy in milk every hour.

On the following day (June 4th), the improvement in the child's appearance was very great. There was a good steady pulse, and a warm moist skin; and the child had slept well during the night. Both stumps were looking healthy. The water-dressing was re-applied. The brandy was to be given at less frequent intervals; and an opiate when the child was in pain.

I will not repeat the daily progress of the case; but at the end of the first week we found both stumps looking healthy. There was a tendency in the right foot to be pointed downwards from the action of the muscles of the calf, but this was easily obviated by bringing strips of plaister round the stump from behind forwards.

By the end of the second week, the healing had made great progress; union having taken place at either end of the right stump, from which the ligatures had come away, leaving a slight gap in the centre to be closed by granulations. A considerable portion of left stump has also cicatrised, but the ligatures remain.

By the end of the third week (June 23rd), the right foot is nearly healed, and forms an excellent stump; the left stump is still open at the outer angle, as two ligatures still remain; but the rest of the stump has almost entirely cicatrised, with a good cushion over the ends of the bones.

I have no doubt but that in a few days the recovery will be complete.

The case is remarkable from the very early age of the little patient; who, after it had recovered from the immediate effects of the accident, and the double amputation, suffered scarcely any constitutional disturbance during the repair of so extensive an injury.

Opening of a School-Church at Goole. Last week, a new school-church at Goole in Yorkshire was opened with Divine service by the Archbishop of York. The incumbent of the parish, to whose exertions and liberality the building of the church is in a great measure due, is our excellent associate, the Rev. Dr. Bell. It is gratifying to observe him manifesting the same zeal for doing good in his sacred calling, as he has shown in his capacity of a member of the medical profession.

Reviews and Notices.

A Manual of Zoology. By M. Milne-Edwards. Translated from the last French Edition. By R. Knox, M.D., F.R.S.E. Second Ediition. With many Additional Observations, and illustrated by 572 highly finished Wood-Engravings. Edited by C. Carter Blake, F.G.S., F.A.S.L. Pp. 564. London: 1863.

This volume is a translation of one of the Manuals of Natural History in ordinary use in France, under the sanction of the Council of Public Instruction. Its author, M. Milne-Edwards, stands in the highest rank among European *savants;* and his translator, the late Dr. Knox, was a man in every way competent and worthy to perform the duty of rendering the work accessible to the English reader. The present edition has been increased by about sixty pages; the increase being in part accounted for by the addition of nearly a hundred new engravings, whereby the value of the book, as a means of instruction, has been augmented.

While the reputation of the author and of the translator affords a guarantee of the scientific excellence of this manual, the simple attractive style in which it is written leads the student by a pleasant path to the acquisition of that knowledge which it is the object of the book to impart, and is calculated to excite in him a permanent interest in the science of zoology.

The book commences with some preliminary ideas on the objects and utility of Natural History; on the division of natural bodies into three kingdoms, and on the differences between these; and on the classification of the functions of animals.

The author then gives a History of the Principal Functions of Animals; describing, in simple language, the functions of Nutrition—including Absorption, Digestion, the Blood, Circulation, Respiration, Exhalation, Secretion, Assimilation and Nutritive Decomposition, and Animal Heat. He then describes the Functions of Relation, speaking of the Nervous System, of the Senses, of Movements, of the Voice, and of the Intelligence and of Instinct. When a function is described, an account is also given of the organs affecting it: thus, under the head of "Movements", we find a description of the vertebrate skeleton, and of the structure and action of muscles.

From these general matters the author proceeds to the Conformation, Classification, and Geographical Distribution of Animals. This part of the work occupies about 360 pages, and is profusely illustrated by drawings.

This is a book which ought not only to have a place in the private library of every intellectual man, but to be used as a text-book in our schools and colleges. It would seem that we are behind our French neighbours in the encouragement which we give to the diffusion of natural history knowledge among the public. Yet there is no branch of knowledge more elevating to the mind than that of the physiology and classification of the animal kingdom, and the observation of the gradual rise from the amorphous rhizopod up to man; the stream sometimes dividing in its upwards course—as in the mol-

lusca and articulata—and, it may be, again uniting, so that, although there be an ascent, it is not in one direct line. As the author eloquently observes,

"Insects can neither be placed before nor after the mollusks without violating some of the most evident zoological relations; and if we really desire to express by a figure the relationship of animals, it cannot be to a scale or ladder to which the animal kingdom is to be compared, but to a river, which, weak at its source, increases little by little as it approaches the sea, rolling not all its waters in the same bed, but dividing often into branches more or less numerous, sometimes reuniting after a longer or shorter course, sometimes remaining from that time forward distinct; or which at other times are lost in the sands and disappear for ever; or, surging up once more, reappear at some distance, to continue their route towards the common goal." (P. 197.)

We would, then, recommend our readers not only to study this book for themselves, but to recommend its perusal to their friends, of whatever profession they may be. One other reason for this recommendation they will readily appreciate; that the diffusion of the knowledge which the book contains must tend to produce a better understanding of the laws under which the functions of life are carried on, and a closer regard to these laws than is now often paid.

In conclusion, we must not omit to state that there is nothing in this volume which renders it unfit to be placed in the hands of readers of both sexes.

Progress of Medical Science.

Development of Ascaris Lumbricoides and Trichocephalus in Man. From researches which have been continued over several years, M. Davaine has found that the ova of *ascaris lumbricoides* and of *trichocephalus dispar* are expelled from the human intestines before arriving at maturity. Development ordinarily commences several months after expulsion; and the embryo remains for a long time enclosed in the shell of the ovum. In some ova which M. Davaine had kept during three years, the embryos were still alive.

Having ascertained that the embryos retained a latent vitality at a temperature below that of the human body, and that the ova are not capable of being dissolved in the gastric juice, M. Davaine was led to believe that the solution or softening of the shell was effected only by the action of the intestinal juices, and that the embryo could leave the ovum only at the ordinary temperature of mammalia. To determine whether these suppositions were true, he made the following experiments.

Some ova of lumbricus containing embryos, and some which had not yet undergone segmentation, were placed together in nearly equal number in very small bottles, which were closed with a piece of linen. These bottles were introduced into the stomach of a dog; and, on their being discharged two days afterwards in the fæces, their contents were carefully examined. The ova that had not undergone segmentation were still found; but those which had contained embryos had disappeared. Several embryos were free in the contents of the bottles. The experiment gave a similar result on being repeated. He hence concludes that the shell is not dissolved by the intestinal juices, since the non-segmentated ova were found in the bottles after their discharge; but that it is sufficiently softened to allow the embryos, called into activity by the heat of the intestines, to penetrate it and escape.

In October 1861, some ova of lumbrici, which had been preserved since October 1857, appeared to have undergone no alteration. M. Davaine gave three or four hundred of these ova to a cow one year old. When the animal was killed four months afterwards, no worms of any kind could, even by minute search, be found in the intestines. He does not conclude from this that the embryos were not alive, because other experiments indicate that they were; but that the ascaris lumbricoides of man is not developed in the cow. The ascaris of this animal he believes to be a distinct species from the ascaris lumbricoides of man, as well as from the *ascaris megalocephalus* of the horse and the ascaris of the pig.

On October 8th, 1862, M. Davaine carefully examined some ova of the lumbricus which had been kept since the same day of the month in 1857. In about one-third of the ova, the embryos had undergone a change; in the remainder, they were perfect. Having exposed some of these ova for several hours to a temperature of from 30° to 40° cent. (86° to 104° Fahr.), M. Davaine, on carefully crushing the shells of some, observed in several of the embryos movements, evidently of a vital character. He then made the following experiments.

A rat was kept fasting during twenty-four hours; and M. Davaine gave it some milk containing a large number of ova of ascaris, which had been kept five years. Twelve hours afterwards, the rat was killed. The milk was found in the whole intestinal canal, from the stomach to the cæcum. In the stomach and first half of the small intestine, the ova were found intact; in the second half, but almost exclusively at the end of the small intestine, he found live embryos which had escaped from the ova, and others which had only half escaped. Many of the ova were still entire. He ascertained distinctly that the ova are not dissolved: the embryos escape at one end, where he believes there is a small operculum.

The embryos which escape into the rat's intestines, being incapable of undergoing further development in that animal, are expelled with the fæces. A rat was fed for eight days exclusively on milk containing ova of the ascaris lumbricoides. The fæces, on being examined daily, were found to contain live embryos. It was also found that many ova were expelled before the embryos had escaped, or while they were escaping. This M. Davaine believes to depend on the comparative shortness of the animal's intestines, in consequence of which sufficient time is not afforded for the escape of all the embryos.

Similar experiments were made with some ova of trichocephalus dispar, which had also been kept five years. Having only a small number of these ova, M. Davaine found very few in the intestinal matter and in the fæces. He found no embryos free or in the act of escaping from the ovum; but careful examination left no doubt that those which remained in the ova were alive.

From the facts observed with regard to the ascaris lumbricoides, it is to be concluded that, if experiments were made with a large number of the ova of trichocephalus dispar on animals having a great length of intestine, the embryo of this worm might be detected in the act of escaping. It is, indeed, remarkable that the embryo of the ascaris lumbricoides does not escape in the stomach or upper part of the intestine in the rat, but in that part of the intestine which would correspond, in respect of distance traversed and duration of sojourn, which is the ordinary seat of lumbrici. In man, the normal seat of the trichocephalus is the end of the small intestine or the cæcum, where it may be supposed to be developed. In the rat, the intestine is too short to furnish a corresponding course; and this is, no doubt, the reason why the ova are found entire in the fæces of that animal.

The above mentioned facts show that the ova of the ascaris lumbricoides and trichocephalus dispar are developed externally to the human body, but that the em-

bryo escapes only when it is introduced into the intestines with the food or drink. Two conditions are doubtless necessary to the escape of the embryo—softtening of the ovum in the intestinal juices; and the stimulation of the embryo into activity by a temperature of about 104° Fahr. Whatever be the animal that furnishes these conditions, the embryo escapes if it have had a sufficiently long sojourn in the intestines; but, if the animal be not that in which the ulterior development of the parasite naturally takes place, the embryo soon perishes and is discharged.

In the human lumbricus and trichocephalus, the duration of life in the embryo is at least five years: hence M. Davaine reiterates a remark which he made to the Academy of Sciences in 1858; that, during this long interval of time, the ova of these parasites may be carried by the rain into brooks, rivers, and wells, the water of which is used for drinking or in the preparation of food; and that in this way completely developed ova may be introduced into the human intestinal canal, where the embryos will escape and acquire their complete development. (*Gazette Médicale de Paris*, 27 Juin 1863.)

Pulmonary Congestion in Children, Simulating the Early Stage of Phthisis. In a lecture delivered at the Hôpital des Enfants Malades, M. Bouchut summed up his remarks in the following conclusions.

There are cases of chronic pulmonary congestion which perfectly resemble, in their physical signs, tubercle of the lungs in its first or crude stage. These congestions are asthenic, and are readily cured by the use of sulphureous waters; while true tuberculosis is much less amenable to this treatment.

Chronic pulmonary congestion is observed in children as well as in adults; it is the result of acute congestion, of bronchitis, of pneumonia either simple or attendant on measles, of rheumatic or herpetic bronchitis, or of pulmonary apoplexy which has not been entirely recovered from.

A kind of chronic pulmonary apoplexy, characterised by infiltration, destroying the pliability of the lung-tissue, and increasing its density, constitutes the anatomical condition of chronic pulmonary congestion.

Chronic pulmonary congestion may exist alone, and may remain so without the development of tubercle; on the other hand, it is tolerably often only the first phase of phthisis. In the same way as there are chronic hyperæmic states of the glands in children, which may or may not be followed by tubercle, so pulmonary congestion may be found to constitute the entire disease. Chronic pulmonary congestion must, however, always be looked on with suspicion, because it may be the origin of true phthisis.

Whatever be the nature of the induration of the lung —whether it be from congestion, exudation, apoplexy, or tubercle—its effect will be to partially arrest the blood-changes, by impeding the access of air to the pulmonary vesicles, and will produce the same physical signs.

Chronic pulmonary congestion, in scrofulous patients, necessarily leads to phthisis; in plethoric, rheumatic, and herpetic individuals, it remains in the congested or indurated state until resolution takes place.

Nothing has so great a resemblance as chronic pulmonary congestion to the first stage of phthisis; for the physical signs are alike, and the general symptoms are almost the same. The physical signs of chronic pulmonary congestion are, relative dulness of the chest; weakening of the vesicular murmur; prolonged expiratory murmur; some mucous rhonchi; and increased vocal resonance—signs generally held to be characteristic of crude tubercle in the lung. The general symptoms are cough, with or without expectoration; emaciation; and sometimes *malaise*, weakness, or a febrile state.

Chronic pulmonary congestion lasts from a few months to several years; but recovery generally takes place, unless the affection become complicated with tubercle. Pulmonary tubercle is very rarely recovered from: most of the alleged cases of recovery have in reality been cases of pulmonary congestion. The disease is more readily recovered from in rheumatic and herpetic than in scrofulous subjects.

The treatment should consist of cod liver oil in the winter, and of quinine-wine and arseniate of soda in the summer; and the patient should be sent to the sea-side or to the country. (*Gazette des Hôpitaux*, 21 Juillet, 1863.)

A Hitherto Undescribed Conjunctival Lesion Attending Night-Blindness.* M. Bitot of Bourdeaux, in a communication to the Academy of Medicine, has called attention to what he believes to be a hitherto undescribed affection of the eye attending night-blindness, and consisting of an assemblage of glistening white points on the cornea, giving the appearance of a pearly or silvery spot. His observations were made on twenty-nine cases of night-blindness which came under his notice in the Foundling Hospital at Bourdeaux. Of these, 19 were males and 10 females. The night-blindness appeared between the ages of 9 and 17 in boys; between 10 and 19 in girls. The weakest children were free from it; it was most common in those who appeared to have the best constitutions.

The conjunctival lesion presents the following characters. It is always seated on the part of the eye which is exposed, during the waking state, to the action of the air. Its situation is generally to the outer side of the cornea; M. Bitot has never seen it above or below this membrane. It is readily distinguished by standing in front of the patient, and desiring him to direct the eye inwards. The spot is of a pearly silvery colour; it may be described as an aggregation of small points or delicate short lines. The colour varies little; but is more or less intense in different subjects, and according to the time when the spot is observed. When it is about to disappear, the whiteness loses its glistening appearance.

The form of the spot differs, not only in different subjects, but also even in the two eyes of the same individual. In general, it is triangular, with the apex turned outwards, and the base slightly concave, lying next the cornea. In some cases, it was circular or oval; in others, simply linear. Most usually, the particles composing it are agglomerated, so as to produce a dotted surface; sometimes they are disposed in parallel wavy lines, giving the spot an undulated or corrugated appearance. These forms may be modified by pressing on the eyelids with one or two fingers; and the change in form depends on the fact that the constituent parts of the spots do not appear to be connected, but simply in juxtaposition and capable of a certain amount of displacement.

The extent of the spot is in proportion to the intensity of the night-blindness. It was very large in two of M. Bitot's patients, who were absolutely incapable of distinguishing objects after sunset. It was never so large in persons who could see in the evening, although confusedly. At the commencement of the disease, the spots scarcely exist; they are represented by some pearly points, the first seat of which is always to the outer side of the cornea; these points multiply and extend as the night-blindness increases. In a general inspection of the eyes of the children of the hospital in 1861, M. Bitot found three in whom no affection of the sight was suspected, but who presented the spots in an early stage;

* We would suggest the use of the terms *night-blindness* and *day-blindness*, as the best means of avoiding the confusion arising from the different meanings which writers apply to *hemeralopia* and *nyctalopia*. In the present instance, M. Bitot uses *hemeralopia* to denote *night-blindness*.

he predicted that they would be affected with night-blindness, and the event soon confirmed his prediction.

The spots, which increase during the progress of the night-blindness, and even encroach on the intracorneal portion of the conjunctiva, decrease as soon as the sight becomes stronger; and the decrease is rapid or slow, in proportion as the recovery of the sight takes place quickly or only by insensible degrees. When the sight has regained its normal condition, not a vestige of the spots remains.

M. Bitot has examined into the question whether these spots may be mere coincidences with night-blindness, and be connected with scrofula. So far from this being the case, he has found that, although scrofula was very common among the children in the hospital, the general health of those who had night-blindness was generally very good—two only of the twenty-nine being scrofulous. On the other hand, among the numerous rickety and scrofulous children, none presented any appearance of the conjunctival spots; and M. Bitot is not aware that such a lesion has been described as connected with scrofula. In 1862, he examined the eyes of such of the night-blind patients of the preceding year as had not quitted the hospital; and in none of these was there any reappearance of the spots.

As to the nature of these spots, M. Bitot has found, by scraping them with the nail and by microscopic examination, that they are produced by a special desquamation of the epithelium of the conjunctiva. Around the spots, especially to the outer side and as far as the palpebral commissure, the conjunctiva of the bulb does not present its normal characters. It has lost its moisture, softness, and brilliancy; and resembles parchment. Pressure on the eyelids accurately determines the limit between the disordered and the healthy portions. (*Gazette Médicale de Paris*, 4 Juillet, 1863.)

Sulphate of Copper in Pencils. The frequent employment of sulphate of copper as a caustic, and the inconvenient form of its crystals when used for this purpose, has suggested to a Spanish pharmaceutist, Don Mariano Llovet, to fuse it in pencils like nitrate of silver. The rapidity with which it loses its water of crystalisation interferes with changes in its form; it therefore requires to be mixed with some other substance which, producing no change in its caustic properties, allows it to take the desired shape. M. Llovet therefore used sulphate of alumina and potass (ordinary potass alum); mixing one part by weight of this salt with two of sulphate of copper. The two salts are powdered and placed in a clay or porcelain vessel over a spirit-lamp or any other sufficient source of heat, so as to be gradually melted together. The mass, when melted, is poured into a mould, which should be of bronze, so as to prevent the precipitation of metallic copper. The pencils obtained are of a clear bluish green colour both internally and externally, and offer some resistance to breaking. The caustic property of the sulphate of copper remains unimpaired. (*Union Médicale;* and *Gazette des Hôpitaux*, 28 Juillet, 1863.)

Red Line on the Gums in Phthisis. This sign, the importance of which was insisted on by the late Dr. T. Thompson, has been investigated by Dr. J. Picard. He has found it present in thirty-five consumptive patients, in all stages of the disease; sometimes on both gums, sometimes on one only. In some cases, it extended along the whole length of the gum, while in others it was limited to one or two teeth; sometimes it was continuous, sometimes interrupted. The colour varied, being an intense red, or a violet or rose hue; sometimes scarcely deeper than that of the pallid gums themselves. In most instances, the line was level with the gum; sometimes it was raised; its breadth varied from one-hundredth to eight-hundredths of an inch. Sometimes there was a diffused ill-defined redness, which gradually shaded into the colour of the gum. In some patients, the red line disappeared as the disease advanced. In twelve cases, the gums were in so bad a state that it was impossible to arrive at any result from examination. The line was present in twelve doubtful cases of phthisis; and was absent in fourteen others. It was well marked in fifteen very healthy persons, who were free from cough, and regarding whom there was no reason for expecting that they would become phthisical. Dr. Picard observed the red line also in twenty cases of various diseases, especially typhoid fever. It is also strongly marked in persons who have been taking iodide of potassium or mercurials, or who have slight gingivitis from incrustation with tartar. Dr. Picard derives the following conclusions from his observations:—1. The red line is frequently present in pulmonary consumption, but has no semeiological value, since it is met with in non-phthisical persons, and is absent in some who are manifestly consumptive. 2. Instead of increasing with the evolution of the tubercular disease, the red line may disappear at an advanced stage of the malady. 3. The existence of the red line in persons in good health does not warrant the prediction that they will become consumptive. (*Gazette des Hôpitaux*, 4 Août, 1863.)

The Urine in Typhoid Fever. According to MM. Primavera and Prudente, absence of chlorides from the urine is a pathognomonic sign of typhoid fever. During the increase of the disease, or when it is about to end fatally, there is also a very considerable diminution of the phosphates and urates. When recovery commences, the phosphates are first rapidly increased; then the urates in like manner; and finally, the reappearance, though tardy, of the chlorides, shows that convalescence is fully established. (*Presse Méd. Belge;* and *Bull. Génér. de Thér.*, 30 Août 1863.)

British Medical Journal.

SATURDAY, SEPTEMBER 12th, 1863.

SCARLATINA EPIDEMICS.

The medical press has few duties more important than that of calling the attention of the profession to the prevalence of epidemic diseases. It is by carefully watching the circumstances under which they arise and spread, that we can alone hope to obtain an insight into their causes, and thus to be enabled to mitigate or arrest their ravages. The public mind has lately been aroused by the unusual prevalence of one of the greatest scourges of humanity; viz., small-pox. But the still greater prevalence of another epidemic disease scarcely, if at all, less formidable than small-pox, has attracted comparatively little notice. Yet at the present moment the metropolis and many parts of England are visited by an epidemic of scarlet fever unequalled for many years. During the fifteen years 1847-1861 inclusive, the deaths from scarlatina and diphtheria*

* These two diseases are classed together, not from any belief in their identity, but from the circumstance that, prior to 1859, no distinction was made between them in the Official Returns of the Registrar-General.

in England and Wales amounted to 262,429, and in London alone to 38,890. In other words, one out of every twenty-three deaths occurring in London was due to scarlatina; and one out of every sixty-three of the population perished from scarlatina during the period in question. The smallest number (1169) occurred in the year 1850, and the largest (4767) in 1848. In the former year, one out of every forty-one deaths in the metropolis was due to scarlatina; in the latter, one out of every twelve. In the present year, the number of deaths in London from scarlatina and diphtheria, up to August 22nd, has been no less than 3330, and is weekly increasing; in August alone, it was 547. Of the total number of deaths occurring in London during the eight months (46,855), one in every fourteen has been due to scarlatina; and, according to this rate of mortality, about one in every thirty-five (instead of one in sixty-three) of the population would perish from scarlet fever in the course of fifteen years. When it is remembered that the next three months of the year are those in which scarlet fever has always been found to prevail most, it may safely be said that London is at present suffering from an epidemic more formidable than any which has been witnessed for upwards of twenty years, and probably surpassing even that of 1848. This great prevalence of scarlet fever, moreover, is not confined to the metropolis. The mortuary returns of Manchester, Leeds, Sunderland, Peterborough, Leicester, Plymouth, Stockport, and many other localities, tell a similar tale. Throughout the length and breadth of the land the disease is rife.

The above figures represent only the deaths from scarlet fever. Although no disease is subject to greater variations in the rate of mortality at different times and places, the gross mortality is probably about 7 per cent. Accepting this supposition, it follows that the number of cases in London during the last fifteen years has been 555,571, and during the first eight months of the present year has amounted to no less than 47,571. The reader, whose own family has been visited by the fell destroyer, can figure to himself the vast amount of human misery which these figures imply. Although not uncommonly the disease runs such a mild course that medical treatment is almost unnecessary, it is, on the other hand, but too true, that very many cases are amenable to no treatment whatever. Great strength of constitution avails nothing. The various vaunted specifics may be tried, but they will be resorted to in vain. They who publicly maintain that, under this or that line of treatment, they have never yet lost a case of scarlet fever, mislead the profession and the public, and show that they have had little experience of the disease in its more severe forms. Assertions of this nature are most unjust, and do great injury to the profession. The unfortunate parent, bereft of his family, and hearing that this or that practitioner never loses a case of scarlet fever, is too apt to attribute the deaths of his children to his own medical attendant not having had recourse to the infallible specific.

It is plain, then, that if we wish to arrest the ravages of scarlet fever, we must look to prevention rather than to cure. In the whole range of medicine there is no subject more deserving of investigation, or which promises more rich and beneficent results, than the etiology of scarlet fever. There can be no doubt that, in the vast majority of cases, the disease is traceable to contagion; but no satisfactory effort has yet been made to ascertain from what part of the body of the patient the poison comes. We have no data for determining whether it be given off by the skin, by the mucous membrane of the throat and nose, or by the lungs. A few experiments made many years ago tend to show that the disease cannot be produced by inoculation of the blood of the infected, but they are far from conclusive. It is not unreasonable to hope that an inquiry into the precise source of the poison, and into the possibility of exciting the disease in a modified form in man or the lower animals, might lead to results not inferior to those which have accrued from vaccination. The investigation would undoubtedly be attended by many difficulties; but the reward would be great—an immortal name, and the well-earned gratitude of posterity.

Other questions which merit inquiry are, the influence of different meteorological conditions on the prevalence of scarlet fever, the laws which appear to regulate the rise and fall of great epidemics, and the possibility of the poison having a spontaneous origin. The last is a question which must not be put aside by bold theoretical generalisations, but can only be definitely settled by a careful observation of facts. Although scarlet fever differs from certain other diseases, which owe their origin to a specific poison, in the circumstance that the cases, where the poison cannot be traced to a person previously infected, are more exceptional, it is possible that the poison may occasionally be developed independently, in like manner as certain observers maintain, with some show of reason, that the poison of enteric fever is more commonly developed. Measles is a disease the poison of which, like that of scarlet fever, is generally believed to be of necessity derived from an infected individual; but the recent observations of Dr. Salisbury of Ohio, and of Dr. Henry Kennedy of Dublin, render it extremely probable that even measles may sometimes have an independent origin. As yet, however, we know of no cause capable of generating the poison of scarlet fever. There is no evidence that defective drainage or other sanitary defects can produce scarlet fever, although there is good reason for believing that such causes may in-

tensify the disease and cause it to assume a typhoid character. One well-established point, in connexion with the mode of prevalence of scarlet fever, however, deserves notice; and that is the circumstance that, whether epidemic or not, it rages most during the autumn, or from the middle of September to the middle of November. This fact, whatever be its explanation, has been alluded to by almost every writer since the time of Cullen, and is abundantly elucidated by the returns of the Registrar-General for the last twenty years. Careful investigation, however, has shown that the influence of season cannot yet be traced to any particular meteorological condition. The prevalence of the disease, indeed, appears to be unmodified by temperature, barometric pressure, or electric tension.

Inasmuch as an equivalent to vaccination is still a desideratum in the case of scarlatina, and we know not the external conditions on which its varying prevalence depends, and whether or not it is capable of independent development, our efforts to avert it must for the present be confined to such measures as are best calculated to prevent the propagation of the poison. The contagious character of scarlatina is so universally admitted, that it is needless to insist on the necessity for isolating infected individuals. Isolation, when practicable, is almost invariably resorted to. There are other circumstances, however, connected with the propagation of the poison of scarlatina, which are less generally admitted, and on the importance of which we would particularly insist.

In the first place: There is overwhelming evidence to prove that the poison of scarlet fever may attach itself to clothes and other objects; or, in other words, that it may be transmitted by means of *fomites*. Several unequivocal examples have come under our notice where medical men have been the vehicle of transmission of the poison to their own families or to their patients. There are even well authenticated instances where the poison has been transmitted to a long distance from the infected family by means of a letter. The stability of the poison is also surprising. It has been known to adhere to bedclothes and wearing apparel for many months, particularly if these articles have been shut up and not freely exposed to the atmosphere. A case has lately been communicated to us where a clergyman appears to have contracted scarlet fever from the hair of his deceased daughter months after her death. Facts such as these point to the necessity for subjecting the clothes of infected persons to heat and other disinfectants, and for painting and papering afresh the apartments which they have occupied, and also to the great impropriety of employing public vehicles for the conveyance of persons suffering from scarlet fever.

Secondly: There is little truth in the prevalent notion that children at the breast and under two years of age are not liable to contract scarlet fever. From the mortality tables of the Registrar-General, it has been shown that, out of a total of 12,962 deaths from scarlet fever in children under five years of age, occurring in different parts of England from 1843 to 1847, no fewer than 1289 were under one year, while 2874 were over one and under two years. Not only is this so, but in a large proportion of cases at this early age, the disease is inevitably fatal.

Thirdly: Contrary to the opinion of some excellent authorities, one attack of scarlet fever does not confer absolute immunity from subsequent attacks. Not a few reliable instances are on record where persons have suffered from a second, or even from a third, attack of scarlet fever. During the present year, four examples of a second attack in the same individual, two of which were fatal, have come under our own notice.

This leads us, in the fourth place, to a most important point in reference to the propagation of scarlet fever. It is well known that adults protected by previous attacks, but exposed afresh to the poison are extremnly liable to suffer from sore-throat attended by no eruption, and with little or no fever. It is less generally known, however, although no less true, that persons suffering from this sore-throat are capable of imparting scarlet fever in its most virulent form to unprotected persons. The sore-throat from which those persons suffer is, in fact, nothing more nor less than scarlet fever in a very modified form; and there can be no question that the most malignant forms of scarlet fever are often contracted by communication with cases of the mildest character. We are inclined to go even a step further. Adults repeatedly exposed to the poison of scarlet fever, whether protected by previous attacks or not, are liable to suffer from sore-throat from time to time on the occasions of such exposure. We have satisfactory evidence for believing, that in every such attack they are in a position to impart scarlatina to unprotected children with whom they are brought in contact. Moreover, it is very doubtful if these attacks of sore-throat without eruption confer any great immunity from subsequent attacks of ordinary scarlatina. This belief is founded on observations such as the following. Scarlet fever breaks out in a large family. Some of the children are attacked with the disease in a typical form; others suffer merely from slight sore-throat; while others present no symptom of the disease whatever. Those belonging to the third class are at once isolated and escape entirely; while they who suffer merely from sore-throat are allowed to communicate freely with those who have the eruption and other symptoms well developed. The result is that one of the children who at first suffered only from sore-throat, with slight fever, contracts typical scarlet fever and dies. This subject, however, and, indeed, the whole ques-

tion of the etiology of scarlet fever we earnestly commend to the attention of our professional brethren.

THE LIST OF MEMBERS.

This day's Journal contains the List of Members, published annually in accordance with the laws of the Association. The list presents an increase of about one hundred above the number on the roll in June 1862.

This augmentation is satisfactory ; but it ought to be much greater. In order that the Association may carry out efficiently the work which it has before it, and give to the profession its proper weight as a scientific, social, and political body, it ought to embrace every honourable practitioner of medicine in the United Kingdom. Instead of numbering its two or three thousand members, it ought to number its ten, twelve, or fifteen thousand ; and we believe that this can be attained, if the right means be employed with energy and perseverance.

The increase of the Association depends, of course, in the first place, on the evidence which it can give of its disposition and power, so far as its present organisation allows, to carry out the objects for which it was founded. That such evidence is forthcoming, those who already belong to its ranks, and have observed how it has laboured in "the promotion of medical science, and the maintenance of the honour and interests of the medical profession", know well; and surely nothing more can be required than to place such evidence fairly before those who have stood aloof from us, to induce them to join our ranks.

But exertion is necessary to raise the numerical strength of the Association to its proper standard ; and this exertion is capable of being made both by combinations and through official agency, and by individual members.

The establishment of Branches, by which the members residing in the various districts are enabled to enjoy the benefits of the Association, has always been a powerful means of drawing neighbouring practitioners into the ranks of the Parent Society. The frequent reports of the Branch meetings, which appear in our pages, show how, on almost every occasion, an addition is made to the number of members in the district where the meeting is held ; and a comparison of the number of names on the lists of several years ago, in various counties where Branches did not then exist, with the numbers that have appeared on the list in the same localities since the formation there of Branches, clearly demonstrates the benefit to the Association which arises from the cultivation of these offshoots of the parent tree. The highest credit is due to the officials of the Branches for the zeal with which they have endeavoured to impress on their neighbours the value of such an organisation as ours ; and to their exertions, and to the attractions afforded by the meetings of these societies, must be ascribed very much of the increase in numbers which the Association has undergone.

We understand that it is intended to employ active measures for the formation of Branches of the Association in those localities in which they do not already exist. Nothing but success can be reasonably expected from such efforts, judiciously directed and perseveringly carried on ; for we are sure that practitioners who do not belong to the Association require only to be made aware of the satisfaction given by the proceedings of the Branches, to be induced to respond to the invitation given them to enter the ranks of these useful societies, and of the Association.

THE WEEK.

The profession will, we are satisfied, again endorse the selection which Sir James Clark has made, in the appointment of Mr. Spencer Wells to the office of Surgeon to Her Majesty's Household. We are glad, indeed, to seize this occasion of remarking how deeply indebted to Sir James Clark we all are for the careful and judicious way in which he has ever acted in this matter of choice of Her Majesty's medical advisers. The task, though honourable, is evidently one of considerable difficulty, requiring great discrimination, and no doubt, in many cases, a sacrifice of personal feeling. The general expression of satisfaction which has been manifested by the profession at large, is a clear and certain proof that no man in the profession could have fulfilled the task more truly and honourably than Sir James Clark has done.

Dr. Daunt, who resides in the Brazils, writes as follows to the *Dublin Medical Press* of leprosy. His experience confirms the views given in the report just issued by the College of Physicians respecting the non-contagiousness of leprosy.

"What may be the origin of leprosy in Brazil? It is most singular that this disease, almost extinct in Europe, should rage in Brazil in a degree perhaps equal to that in which it existed in Europe in the middle ages. The circumstances are worse in which the lepers of the nineteenth century find themselves. For them, in this age of philanthropy and freemasonry, are wanting those noble institutions with which Catholic charity in the ages of faith covered Europe. Misery in its most cruel forms is the lot of these poor wretches. There are also no police regulations which limit the intercourse between the healthy and the lepers, so that contagion has no barriers except in the instinctive horror which the lepers inspire. There is much still to be learnt as to this disease, and especially as to its relations with disease of the nervous centres. Partial palsy and a wasting of some of the muscles are frequently present long before there is any skin-disease. The sentient nerves are chiefly affected. For some exquisitely just

notions of this malady, and on the light in which it was viewed in middle-age Europe, I refer the reader to Rev. Mr. Faber's beautiful poem of *Sir Launcelot*, which will amply repay perusal to all cultivated tastes."

Baron Liebig is at present engaged in proving, to his own satisfaction, at all events, through the pages of *MacMillan's Journal*, that Bacon was little better than an upper-class kind of charlatan.

We believe that numerous powerful parties, who object to the Stangate site for the St. Thomas *in futuro*, intend if possible to persuade the Lord Chancellor to put his *veto* on that site. It must not, therefore, be concluded that, because St. Thomas's Governors and the Commissioners have agreed as to terms, etc., for the Stangate elevation, the matter is finally arranged. We should, of course, suppose that the wishes of the Governors will eventually carry the day with the Lord Chancellor.

The number of the *Social Science Review* for the 5th inst., contains an excellent summary of the proceedings of the British Association at Newcastle. This journal is, we believe, edited by a talented and well known member of the medical profession.

Some remarkable experiments have been lately made by M. Longet with a new apparatus for transfusion of blood. They were perfectly successful. A dog, weighing 11 *kilos.* 750 *grammes*, was fixed by the side of a dog which was to supply the blood. The femoral artery of the first dog was opened, and in about fifteen minutes he lost 815 *grammes* of blood; that is, all the blood which would flow out. The animal became anæmic, and had three syncopes. He was recovered from two of them by cold water affusions, but not from the third attack. He was now completely exsanguineous; his mucous membranes had lost their colour; breathing had ceased: convulsions came on; and every one thought the animal was dead. In about eighty seconds after the occurrence of this apparent death, from 80 to 90 *grammes* of blood were thrown into his veins; and then the respiration was gradually re-established. The transfusion was continued up to 125 *grammes;* and, after ten minutes, 125 *grammes* were injected. So that the dog, which had lost 815 *grammes*, received 250 *grammes* of blood. The animal gradually recovered; and, after a short interval, he ran round the room. Eight days afterwards, the dog was quite well, and was used for a different experiment. The conclusions drawn from this fact are: that life is not immediately destroyed even by the most severe hæmorrhages; and that, by restoration of the blood, life may be preserved.

M. Gintrac thus expresses his conversion to the belief of the contagiousness of typhoid fever. "An old pupil of the Parisian school, physician in a large town, for a long time attached to an extensive hospital, I had never observed a positive fact of the transmission of the fever, and I had little faith in the idea of its being contagious; but facts have since then passed under my eyes which have altered my views. I now conclude that, under certain circumstances which are not yet determined, typhoid fever is contagious."

M. Reybard of Lyons, who lately died at Paris after a few days illness, left 500 *francs* to the Medical Association, and 1000 *francs* to l'Hôpital d'Annonay. M. Reybard was engaged in some experiments at Paris, and was called upon to perform an operation at La Pitié on a patient having urinary fistula. He pricked himself during the operation; and the puncture was followed by purulent infection, which carried him off in five days. "He died", says the journal, "from a disease contracted in the practice of his profession, like a soldier on the field of battle."

M. Lami, through M. Dumas, tells the Academy of Sciences that thallium—one of the new bodies discovered through spectral analysis—has poisonous properties. A very small quantity suffices for the destruction of dogs, rabbits, and fowls. The chief symptoms are intestinal pains, tremblings, paralysis of lower extremities, and death. M. Lami was led to consider thallium a poison, in consequence of having experienced, during his preparation of it, symptoms which were new to him, and, amongst them, a remarkable feeling of weariness. Its presence in the body is readily shown. A portion of any part of the body poisoned by it, not bigger than a pea, is enough for the analyst. Its presence will be instantly disclosed by spectral analysis. We shall hear more of this, no doubt; for M. Lami has presented M. Bernard with a quantity of thallium for experiment—the Society for the Protection of Animals notwithstanding. We need hardly add, that thallium will be rapidly introduced into the practice of medicine. We shall now every day expect the announcement from some *confrère* of the wonderful "effects of thallium" in epilepsy or some other like incurable disease, with, of course, a list of cases distinctly illustrative of the statements and belief of the author.

"We learn from England," says the *Wien. Med. Woch.*, "that Professor Czermak's journey through Great Britain has been productive of great things. He has been received in London, Dublin, Edinburgh, and Glasgow, as the true discoverer of this new method—laryngoscopy, rhinoscopy, and local treatment by means of the reflector. His demonstrations were attended by the most illustrious members of the profession in those cities. This is one of those rare instances in which an Austrian surgeon has met with such a success in *reserved* England."

It is worthy of note, that at this very time, when the *Times* is endeavouring to write up the establishing of licensed houses of prostitution in this country as a means of diminishing the spread of syphilitic diseases, the *Vienna Medical Journal* is obliged to be engaged in *defence* of that system of things in Germany. That journal admits that the present system of regulation does not answer, and calls out for more stringent laws. The system is loudly attacked at this time in that country, on the score of its comparative inefficacy, and its injury to morality and religion.

L'Union Médicale suggests that the medical journalist should "close up" during the holidays. "Why should not we also have our month's holiday? Our subscribers rush off and care little for our prose. Our numbers are filled during their absence, as ever, with science and wit; and there they lie piled up on the table untouched."

Yellow fever has been the subject of a long and learned debate in the French Academy of Medicine. The main fact which has resulted from the discussion is the demonstration, through a searching examination of facts, of the infectious nature of the fever; and, of course, the practical conclusions resulting from such demonstration is the subjection of vessels and individuals who are visited with the fever to quarantine. One orator said that the vessels in question ought to be destroyed.

TREATMENT OF DROWNING.

The following Rules have been just issued by the Royal Humane Society. They are stated to be "the result of the labours of the Committee of the Royal Medical and Chirurgical Society of London."

Directions for Restoring the Apparently Dead.

I.—*If from Drowning or other Suffocation, or Narcotic Poisoning.* Send immediately for medical assistance, blankets, and dry clothing; but proceed to treat the patient *instantly*, securing as much fresh air as possible.

The points to be aimed at are: first, and immediately, the restoration of breathing; and, secondly, after breathing is restored, the promotion of warmth and circulation.

The efforts to restore life must be persevered in until the arrival of medical assistance, or until the pulse and breathing have ceased for at least an hour.

Treatment to Restore Natural Breathing.

Rule 1. *To Maintain a Free Entrance of Air into the Windpipe.* Cleanse the mouth and nostrils; open the mouth; draw forward the patient's tongue, and keep it forward; an elastic band over the tongue and under the chin will answer this purpose. Remove all tight clothing from about the neck and chest.

Rule 2. *To Adjust the Patient's Position.* Place the patient on his back on a flat surface, inclined a little from the feet upwards; raise and support the head and shoulders on a small firm cushion or folded article of dress placed under the shoulder-blade.

Rule 3. *To Imitate the Movements of Breathing.* Grasp the patient's arms just above the elbows, and draw the arms gently and steadily upwards, until they meet above the head (this is for the purpose of drawing air into the lungs); and keep the arms in that position for two seconds. Then turn down the patient's arms, and press them gently and firmly for two seconds against the sides of the chest (this is with the object of pressing air out of the lungs. Pressure on the breast-bone will aid this.)

Repeat these measures alternately, deliberately, and perseveringly, fifteen times in a minutes, until a spontaneous effort to respire is perceived, immediately upon which cease to imitate the movements of breathing, and proceed to induce circulation and warmth (as below.)

Should a warm bath be procurable, the body may be placed in it up to the neck, continuing to imitate the movements of breathing. Raise the body in twenty seconds in a sitting position, and dash cold water against the chest and face, and pass ammonia under the nose. The patient should not be kept in the warm bath longer than five or six minutes.

Rule 4. *To Excite Inspiration.* During the employment of the above method excite the nostrils with snuff or smelling-salts, or tickle the throat with a feather. Rub the chest and face briskly, and dash cold and hot water alternately on them.

The above directions are chiefly Dr. H. R. Silvester's method of restoring the apparently dead or drowned, and have been approved by the Royal Medical and Chirurgical Society.

Treatment after Natural Breathing has been Restored.

Rule 5. *To Induce Circulation and Warmth.* Wrap the patient in dry blankets, and commence rubbing the limbs upwards, firmly and energetically. The friction must be continued under the blankets or over the dry clothing.

Promote the warmth of the body by the application of hot flannels, bottles or bladders of hot water, heated bricks, etc., to the pit of the stomach, the arm-pits, between the thighs, and to the soles of the feet. Warm clothing may generally be obtained from bystanders.

On the restoration of life, when the power of swallowing has returned, a teaspoonful of warm water, small quantities of wine, warm brandy and water, or coffee, should be given. The patient should be kept in bed, and a disposition to sleep encouraged. During reaction large mustard plasters to the chest and below the shoulders will greatly relieve the distressed breathing.

II.—*If from Intense Cold.* Rub the body with snow, ice, or cold water. Restore warmth by slow degrees. In these accidents it is highly dangerous to apply heat too early.

III.—*If from Intoxication.* Lay the individual on his side on a bed with his head raised. The patient should be induced to vomit. Stimulants should be avoided.

IV.—*If from Apoplexy or from Sunstroke.* Cold should be applied to the head, which should be kept well raised. Tight clothing should be removed from the neck and chest. Stimulants should be avoided.

Appearances which Generally Indicate Death. There is no breathing or heart's action; the eyelids are generally half-closed; the pupils dilated; the jaws clenched; the fingers semi-contracted; the tongue appearing between the teeth, and the mouth and nostrils are covered with a frothy mucus. Coldness and pallor of surface increases.

Pharmaceutical Conference. During the meeting of the British Association, a conference of pharmaceutists was held. It is at present proposed to continue the conference at each of the British Association gatherings.

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Oke, W. S. M.D. Physician to the Royal South Hants Infirmary, Southampton
Page, Frederick, M.D. Medical Officer to the Royal Portsmouth Hospital, Landport
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Francis, D. J. T. M.D. Senior Physician to the Infirmary, Northampton
Knott, James P. Esq. Blisworth
Leete, John G. Esq. Thrapstone
Lever, John G. Esq. Culworth
McLosky, Patrick, M.D. Rothwell
Marshall, Francis H. L.R.C.P.Ed. Moulton, Northampton
Martin, Joseph C. Esq. Oundle
Mash, James, Esq. Surgeon to the Infirmary, Northampton
Moxon, William, Esq. Northampton
Olive, George, Esq. Northampton
Osborn, Ashby G. Esq. Northampton
Paley, William, M.D. Physician to the Infirmary, Peterborough
Pearce, John W. Esq. Peterborough
Porter, H. M.D. Peterborough
Porter, William George, Esq. Consulting-Surgeon to the Infirmary, Peterborough
Prichard, T. M.D. Abington Abbey, Northampton
Purdy, H. Esq. Wollaston, Wellingborough
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Spurgin, B. Esq. Thrapston
Starling, Thomas John, Esq. Higham Ferrers
Swann, F. B. Esq. Weedon
Terry, Henry, Esq. Consulting Surgeon to the Infirmary, Northampton
Terry, Henry, jun. Esq. Surgeon to the Borough Gaol, Northampton
Walker, Thomas, M.D. Surgeon and Honorary Physician to the Infirmary, Peterborough
Walker, Thomas James, M.D. Surgeon to the Infirmary, Peterborough
Walker, William H. Esq. Bugbrooke
Watkins, Robert W. Esq. Towcester
Williams, Hugh. Esq. Thrapston
Williams, William, Esq. Guilsborough
Wing, Edwin, M.D. Superintendent of the County Asylum, Northampton

NORTHUMBERLAND.

Number of Members..7.
Branch..None.

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Clarke, Richard, Esq. Newcastle-on-Tyne
De Mey, W. F. M.D. Newcastle-on-Tyne
Gibb, Chas. J. M.D. Surgeon to the Infirmary, Newcastle-on-Tyne
Lynch, John, Esq. Blyth
Matthews, John, M.D. Tynemouth
Wilson, George, M.D. Alnwick

NOTTINGHAMSHIRE.

Number of Members..23.
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Higginbottom, Marshall Hall, Esq. Nottingham
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Maltby, William, Esq. Basford
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Robertson, W. Tindal, M.D. Physician to the General Hospital, Nottingham
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Stevenson, Fred. Esq. Nottingham
Stiff, W. P. M.B. Resident Physician to the Lunatic Asylum, Nottingham
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Taylor, Henry, Esq. Surgeon to the Dispensary, Nottingham
Thompson, John N. Esq. Nottingham
Thompson, Joseph, Esq. Surgeon to the General Hospital, Nottingham
White, Joseph, Esq. Surgeon to the General Hospital, Nottingham
Wilkinson, W. Esq. Harthill, Worksop
Wood, William, Esq. Nottingham
Wright, James, Esq. Bottesford
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OXFORDSHIRE.

Number of Members..6.
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Giles, Richard, M.D. Oxford
Hester, James Torry, Esq. Surgeon to the Radcliffe Infirmary, Oxford
Jeston, Thos. W. Esq. Henley-on-Thames

RUTLAND.

Number of Members..2
Branch..

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Keal, William, Esq. Oakham

SHROPSHIRE.

Number of Members..73.
Branches { Shropshire Ethical. Shropshire Scientific.

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Baddeley, William Edw. L.R.C.P.Ed. Newport
Bakewell, Samuel G. M.D. Church Stretton
Beddoes, William M. M.D. Physician to the Salop Infirmary, Shrewsbury
Bennion, Edward David, Esq. Oswestry
Bidwell, Henry, M.D. Albrighton
Blaikie, Robert, Esq. Oswestry
Bratton, James, Esq. Shrewsbury
Bromfield, John, Esq. Whitchurch
Brook, Henry, Esq. Bishop's Castle
Brookes, And. G. Esq. Belmont, Shrewsbury
Brookes, W. P. Esq. Much Wenlock
Broughton, R. Esq. Ruyton-of-the-Eleven-Towns
Brown, John, Esq. Whitchurch
Burd, Edward, M.D. Physician to the Salop Infirmary, Shrewsbury
Cartwright, Peploe, Esq. Oswestry
Clement, William James, Esq. Shrewsbury
Davis, Edward Esq. Ditton Priors
Davis, William, Esq. Surgeon to the Wellington Dispensary, Pain's Lane Wellington
Downes, Thomas R. C. Esq. Munslow
Eddowes, William, Esq. Pontesbury
Eddowes, William, jun. Esq. House-Surgeon to the Infirmary, Shrewsbury
Evans, Maurice B. Esq. Ellesmere
Fenton, Henry, Esq. Surgeon to the Dispensary, Shrewsbury
Fulcher, George A. Esq. Clun
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Morris, William W. Esq. Clun
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Thursfield, William, Esq. Surgeon to the Dispensary, Bridgnorth
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Wilding, Richard, Esq. Church Stretton
Willing, Geo. F. B. L.R.C.P.Ed. Cressage
Wilson, Joseph G. L.R.C.P.Ed. Wem
Wood, Samuel, Esq. Senior Surgeon to the Salop Infirmary, Shrewsbury

SOMERSET.

Number of Members..97.
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Alford, Henry J. M.B. Surgeon to the Taunton and Somerset Hospital, Taunton
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Bennet, William F. Esq. Yeovil
Bernard, C. E. M.D. Weston-super-Mare
Boodle, Robt. H. Esq. Chilcompton
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Burt, Giles Richard, L.R.C.P.Ed. Ilminster
Bush, William, Esq. Senior Surgeon to the Bath Eye and Ear Infirmary, and to the Eastern Dispensary, Bath
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Collins, Chas. Howell, Esq. Chew Magna
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Culling, Robt. Esq. West Lydford, Somerton
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Day, William W. Esq. Long Ashton
Falconer, R. Wilbraham, M.D. Physician to the United Hospital and General Hospital, Bath
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Fox, Charles Joseph, M.D. Brislington
Fox, Edward F. Esq. Brislington
Fox, Francis K. M.D. Brislington
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Harries, Charles Alexander, Esq. Bath
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Hinton, Joseph, Esq. Charterhouse Hinton
Hutchins, W. Esq. Keynsham
Jenks, George S. M.D. Bath

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Kidgell, George, Esq. Wellington
Kinglake, Hamilton, M.D. Taunton
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Liddon, Wm. M.B. Surgeon to the Taunton and Somerset Hospital, Taunton
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Marchant, R. Esq. North Curry, Taunton
Martin, Richard W. Esq. Martock
Mason, Frederick, L.R.C.P.Ed. Surgeon to the Eye Infirmary, Bath
Mortimer, R. L.R.C.P.Ed. Bishop's Lydiard
Munckton, William Webber, Esq. Coroner for West Somerset, Curry Rivel, Taunton
Norris, Hugh, L.R.C.P.Ed. South Petherton
Olivey, Hugh P. Esq. North Curry
Parry, Henry H. Esq. House-Surgeon to the General Hospital, Bath
Parsons, Joshua, Esq. Frome
Prankerd, John, Esq Langport
Randolph, Henry W. Esq. Surgeon to the Wiveliscombe Dispensary, Milverton
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Silke, W. Murray, Esq. Nether Stowey
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Soden, J. Esq. Surgeon to the United Hospital, Bath
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Stockwell, Thomas G. Esq. Surgeon to the General Hospital and Eastern Dispensary, Bath
Stone, Robert Nathaniel, L.R.C.P.Ed. Bath
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Stuckey, George, Esq. Martock
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Terry, George, Esq. Mells, near Frome
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Wallis, Charles C. Esq. Castle Carey
Walter, W. W. Esq. Stoke-under-Ham
Watson, Thomas Sandon, M.D. Senior Physician to the General Hospital, Bath
Weatherley, Frederick, Esq. Portishead
White, William A. Esq. Frome
Woodforde, Francis Henry, M.D. Taunton
Wybrants, Jonathan, M.D. Shepton Mallett

STAFFORDSHIRE.

Number of Members..38.
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Belcher, Robert Shirley, Esq. Surgeon to the Dispensary, Burton-on-Trent
Browne, Benjamin S. Esq. West Bromwich
Browne, William, Esq. Surgeon to the Dispensary, Lichfield
Bury, George, Esq. Handsworth
Coleman, E. Hayling, Esq. Senior Surgeon to the South Staffordshire Hospital, Wolverhampton
Cooke, William H. M.D. Aldridge
Cooper, Richard, Esq. Leek
Cotterell, Peter A. M.D. West Bromwich
Day, Henry, M.D. Physician to the County Infirmary, Stafford
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Downes, W. Esq. Handsworth
Duncalfe, Henry, Esq. West Bromwich
Gatis, James. Esq. Wolverhampton
Girdlestone, William T. Esq. Penkridge
Holyoake, Thomas, Esq. Kinver, Stourbridge
Hopkins, William, L.R.C.P.Ed. Handsworth
Horton, Henry, Esq. Wednesbury
Howitt, George E. Esq. Wednesbury
Jackson, Thomas V. Esq. Wolverhampton
Kite, W. J. Esq. West Bromwich
Lowe, George, Esq. Burton-on-Trent
Lynes. William, M.D. Wednesbury
Male, C. T. Esq. West Bromwich
Monckton, D. Henry, M.D. Rugeley
Moore, E. Denniss, Esq. Walsall
Moore, Thomas, Esq. Cradley Heath
Morgan, M. Butler, Esq. Senior Surgeon to the Dispensary. Lichfield
Nesbitt. F. A. Esq. Wolverhampton
Newnham, Christ. A. Esq. Wolverhampton
Partridge, S. Esq. Darlaston near Wednesbury
Proctor, Herbert E. L.R.C.P.Ed. Wednesbury
Thomson, Spencer, M.D. Burton-on-Trent
Underhil , Thomas, Esq. Great Bridge, Tipton
Underhill, William L. Esq. Tipton
Welchman, C. E. E. Esq. Lichfield
Wollaston, R. M.R.C.P. Physician to the General Infirmary, Stafford

SUFFOLK.

Number of Members..46.
Branch..East Anglian.

Adams, Edward B. Esq. Surgeon to the Dispensary, Bungay
Bartlet, A. H. M.D. Surgeon to the East Suffolk Hospital, Ipswich
Beck, Henry, Esq. Needham Market
Blackett, Edward B. M.D. Physician and Surgeon to the Dispensary, Southwold
Bullen, George, Esq. Senior Surgeon to the East Suffolk Hospital, Ipswich
Bullen, George, jun. Esq. Ipswich
Chevallier, Barrington, M.D. Physician to the East Suffolk Hospital, The Grove, Ipswich
Cooper, William, M.D. Bury St. Edmund's
Cooper, W. R. Esq. Ixworth
Crowfoot, William Edward, Esq. Surgeon to the Dispensary, Beccles
Day, William H. M.D. Newmarket
Durrant, Christopher Mercer, M.D. Physician to the East Suffolk Hospital, Ipswich
Ebden, W. H. Esq. Haughley
Edwards, George C. Esq. Ipswich
Elliston, William, Esq. Ipswich
Faircloth, Richard, Esq. Newmarket
Freeman, Spencer, Esq. Stowmarket
Fyson, Robert, Esq. Newmarket
Gardner, James, L.R.C.P.Ed. Bungay
Gissing, John Stearn, Esq. Woodbridge
Goodwin, John W. M.D. Physician to the Suffolk General Hospital, Bury St. Edmund's
Gorham, Richard V. Esq. Yoxford
Gramshaw, Henry, Esq. Laxfield
Growse, Robert, Esq. Bildestone
Hammond, Charles C. Esq. Surgeon to the East Suffolk Hospital, Ipswich
Haward, Frederick, Esq. Halesworth
Hele, Nicholas F. Esq. Aldeburgh
Image, W. Edmund, Esq. Surgeon to the Bury and Suffolk Hospital, Bury St. Edmund's
Jones, Robert Edwards, Esq. Long Melford, Sudbury
Kilner, John, Esq. Surgeon to the Suffolk General Hospital, Bury St. Edmund's
Kirkman, John, M.D. Resident Physician to the Suffolk Lunatic Asylum, Melton
Leech, Henry P. Esq. Woolpit
Mann, Charles P. Esq. Boxford
Marshall, Charles G. Esq. Woodbridge
Martin, Robert, Esq. Ipswich
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Miller, Walter W. M.D. Eye
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Rendle, Charles B. Esq. Saxmundham
Sampson, George G. Esq. Surgeon to the East Suffolk Hospital, Ipswich
Simpson, E. Esq Long Melford, Sudbury
Smith, Charles C. Consulting Surgeon to the Suffolk General Hospital, Bury St. Edmund's
Thompson, Robert, Esq. Brandon

SURREY.

Number of Members..66.
Branches { South-Eastern. Metropolitan Counties.

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Balchin, Richard, Esq. Godalming
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Berney, Edward, Esq. Croydon
Bottomley, George, Esq. Croydon
Bush, John, Esq. The Retreat, Clapham
Butler, William H. Esq. Guildford
Carpenter, Alfred, M.D. Croydon
Chaldecott, William, Esq. Dorking
Chapman, George, Esq. Lingfield
Ciaccio, J. V. M.D. Rockingham Row, New Kent Road
Clapton, Edw. M.D. Assistant-Physician to St. Thomas's Hospital, Wellington Street
Clark, Frederick Le Gros, Esq. Surgeon to St. Thomas's Hospital, St. Thomas's Street
Clark, Willington, Esq. Sutton
Cleaver, Henry A. Esq. Croydon
Coles, William F. M.D. Croydon
Cox, Abram, M.D. Kingston-on-Thames
Davies, W. Esq York Town, near Bagshot
Forster, J. Cooper, Esq. Assistant-Surgeon to Guy's Hospital, St. Thomas's Street
Hallowes, Frederick B. Esq. Redhill
Harris, Henry, Esq. Reigate
Hassall, Richard, M.D. Richmond
Henley, Thomas L. Esq. Croydon
Hetley, F. M.D. Norwood
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Johnson, Jeffery S. Esq. Croydon
Jones, Sydney, Esq. Assistant-Surgeon to St. Thomas's Hospital, St. Thomas's Street
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Lloyd, Henry J. Esq. Harleyford Street
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Martin, Peter, Esq. Reigate
Matthews, Arthur, Esq. Melbourne Place, Old Kent Road
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Patrick, Jarman, Esq. Norwood
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Ray, Edward, M.D. Dulwich
Reece, Richard, Esq. Walton-on-Thames
Rendle, James D. M.D. Medical Officer to the Government Convict Prison, Brixton Hill
Rogers Harrison, C. H. Esq. Lansdowne Road, Clapham Road
Roots, W. Sudlow, Esq. Kingston-on-Thames
Roper, Alfred G. Esq. Croydon
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Shurlock, Mainwaring, Esq. Chertsey
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Stedman, James R. M.D. Guildford
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Stilwell, George, Esq. Epsom
Street, William, Esq. Reigate
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Ward, Joseph, Esq. Epsom
Webster, George, M.D. Dulwich
Westall, Edward, M.D. Caterham
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Wisden, William, Esq. Oxted
Yate, Frederick, Esq. Godalming

SUSSEX.

Number of Members..51.
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Boxall, H. Esq. Wisborough Green, Horsham
Bull, John Henry, Esq. Lindfield
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Byass, Thomas Spry, M.D. Cuckfield
Caudle, Adolphus W. W. Esq. Henfield
Collett, Henry, M.D. Worthing
Cunningham, J. M. M.D. Hailsham
Davies, Robert C. N. Esq. Rye
Dill, Richard, M.D. Brighton
Eden, Thomas E. Esq. Brighton
Elliott, Robert, Esq. Senior Surgeon to the Infirmary, Chichester
Foreman, Robert C. M.D. Brighton
Furner, Edmund J. Esq. Surgeon to the Sussex County Hospital, Brighton
Gravely, Richard, Esq. Newick, Uckfield
Gravely, Thomas, Esq. Cowfold
Hall, Alfred, M.D. Physician to the Dispensary, Brighton
Harris, W. J. Esq. Worthing

Hodgson, George P. Esq. Brighton
Holman, Henry, Esq. East Hoathly
Humphry, Frederick A. Esq. Assistant-Surgeon to the Sussex County Hospital, Brighton
Ingram, William, Esq. Midhurst
King, William, M.D. Consulting Physician to the Sussex County Hospital, Brighton
Leslie, Percy, M.D. Eastbourne
Lowdell, George, Esq. Surgeon to the Sussex County Hospital, Brighton
McCarogher, Joseph, M.D. Senior Physician to the Infirmary, Chichester
Moore, George, M.D. Hastings
Ormerod, Edward Latham, M.D. Physician to the Sussex County Hospital, Brighton
Philbrick, Thomas, M.D. Brighton
Prince, C. Leeson, Esq. Uckfield
Pursell, John, M.D. Brighton
Rogers, Robert J. Esq. House-Surgeon to the Sussex County Hospital, Brighton
Ross, Andrew, M.D. Worthing
Sharpe, Alfred, M.D. Worthing
Smith, John P. M. Esq. Surgeon to the Dispensary, Brighton
Smythe, Lewis, M.D. Lewes
Stephens, Joseph, M.D. Brighton
Taaffe, Richard B. P. Esq. Surgeon to the Eye Infirmary, Brighton
Tatham, George, Esq. Brighton
Taylor, William E. M.D. Pulborough
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Weekes, George, Esq. Hurstpierpoint
Weekes, W. H. Carlile, Esq. Hurstpierpoint
Wilton, William, Esq. Brighton
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Wooldridge, William, Esq. Preston, Brighton

WARWICKSHIRE.

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Baker, Robert L. Esq. Bordesley, Birmingham
Barker, John, Esq. Coleshill
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Chavasse, Samuel, Esq. Birmingham
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Davies, J. Redfern, Esq. Birmingham
Davis, H. Esq. Great Hampton Street, Birmingham
Drever, John, Esq. Birmingham
Duke, Abraham, M.D. Rugby
Elkington, Francis, M.D. Consulting Accoucheur to the Lying-in Hospital, Birmingham
Elkington, George, Esq. Lecturer on Anatomy in Sydenham College, Birmingham
Elkington, J. Esq. Erdington, Birmingham
Evans, G. F. M.D. Physician to the General Hospital, Birmingham
Fayrer, George, M.D. Henley-in-Arden
Fleming, Alexander, M.D. Physician to the Queen's Hospital, Birmingham
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Harrison, Alfred J. M.B. Newhall Street, Birmingham
Heslop, Thomas P. M.D. Physician to the Hospital for Children, Birmingham
Hill, Alfred, M.D. Lecturer on Chemistry and Toxicology in Sydenham Coll. Birmingham
Hinds, William, M.D. Professor of Botany in Queen's College, the Parade, Birmingham
Hitchman, John, Esq. Leamington
Horton, Joseph John, Esq. Birmingham
Hoskins, Abraham, Esq. Birmingham
Howkins, Thomas, Esq. Lecturer on Dental Physiology and Surgery in Sydenham College, Birmingham
Jeaffreson, Samuel J. M.B. F.R.C.P. Physician to the Hospital, Leamington
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Johnstone, James, M.D. Senior Physician to the General Hospital, Birmingham
Jones, George, Esq. Birmingham
Jordan, John, Esq. Birmingham
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Marsden, William, Esq. Skipton
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Roulston, J. Esq. Helperley, Boroughbridge
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Russell, W. C. Esq. Doncaster
Ryott, William Hall, F.R.C.P.Ed. Thirsk
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Sandwith, Thomas, M.D. Beverley
Scholfield, Edward, M.D. Consulting Physician to the Dispensary, Doncaster
Settle, Henry N. L.R.C.P.Ed. Leeds
Shann, George, M.D. Physician to the County Hospital, York
Sleight, Robert L. Esq. Hull
Smith, George Pyemont, M.D. Lecturer on Medical Jurisprudence in the Leeds School of Medicine, Mount Stead, near Otley
Smith, Samuel, Esq. Senior Surgeon to the Leeds General Infirmary, Park Place, Leeds
Somerville, Thomas, Esq. H.M.S. *Cornwallis*, Hull
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Sykes, John, M.D. Physician to the Dispensary, Doncaster
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Trousdale, W. Maw, Esq. West Butterwick, Bawtry
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Wightman, John, Esq. York
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Wilson, Wm. Murray, Esq. Horsforth, Leeds
Wood, Arthur, Esq. Kirby Moorside, near York
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Wood, William, M.D. Surgeon to the House of Correction, Wakefield

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Parry, Evan, Esq. Crickhowell
Williams, James, Esq. Brecon

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James, James, Esq. Aberayron
Jones, John, Esq. New Quay, by Lampeter

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Rowlands, James, Esq. Surgeon to the Infirmary, Carmarthen
Thomas, Benjamin, Esq. L.R.C.P.Ed. Llanelly
Watkins, David R. Esq. Carmarthen

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Edwards, James, M.D. Benarth, Conway
Hughes, Hugh Robert, Esq. Surgeon to Carnarvon and Anglesea Infirmary, Bangor
Hughes, Thomas Hunter, Esq. Pwllheli
Jones, Robert, Esq. Carnarvon
Jones, Robert, Esq. Conway
Maugham, William, M.D. Carnarvon
Rees, Hugh, Esq. Llanberis
Roberts, Hamilton A. Esq Consulting Surgeon to the Carnarvon and Anglesea Infirmary, Brynmeurig, Bangor
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Evans, David N. Esq. Ruthin
Griffith, Thomas Taylor, Esq. Consulting Surgeon to the Infirmary, Wrexham
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Hughes, William, Esq. Llanrwst
Ingman, John, Esq. Ruabon
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Jones, George Thomas, L.R.C.P.Ed. Superintendent of the North Wales Lunatic Asylum, Denbigh
Jones, Thomas Eyton, Esq. Surgeon to the Infirmary, Wrexham
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Owen, Thomas, Esq. Abergele
Roberts, Richard C. Esq. Ruabon
Robertson, John, M.D. Llangollen
Turnour, Arthur E. M.D. Senior-Surgeon to the Infirmary, Denbigh
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Jones, Thomas Evans, Esq. Llanasa
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Roberts, Owen, M.D. St. Asaph
Theed, Frederick, Esq. Rhyl
Williams, G. Harvey, M.D. Bodawen, near Rhyl
Williams, James, Esq. Surgeon to the Flintshire Dispensary, Holywell
Williams, William, M.D. Mold
Wolstenholme, John H. Esq. Holywell

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Evans, Franklen G. Esq. Taff's Well, Cardiff
Evans, Thomas, Esq. Cardiff
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Howell, Edward, M.D. Consulting Physician to the Infirmary, Swansea
Jones, Thomas, M.D. Dantwyn, Swansea
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Nicol, David, L.R.C.P. Physician to the Infirmary, Swansea
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Davies, William A. Esq. Llanidloes
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Corbin, M. A. B. Esq. Guernsey
De Lisle, De Beauvoir, M.D. Guernsey

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Mackie, George, M.B. Insch

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BANFFSHIRE.

Manson, Alexander J. Esq. Banff

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Browne, W. A. F. M.D. Edinburgh
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Wiseman, Robert, Esq. Cupar

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Ritchie, Charles, M.D. Physician to the Royal Infirmary, Glasgow
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CORK.

Beamish, William, M.D. Physician to the Fever Hospital, Cork
Berry, Parsons, Esq. Mallow
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Ormston, Henry B. M.D. Bandon

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Association Intelligence.

THE LIST OF MEMBERS.

The General Secretary will feel obliged if members who may be incorrectly described in the list published in this day's Journal, will forward to him the necessary corrections.

13, Newhall Street, Birmingham, Sept. 12th, 1863.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Ship Hotel, Dover, on Thursday, September 24th, at 3 P.M.

Dinner will be ordered for 5 P.M.

THOMAS BOYCOTT, M.D., *Hon. Secretary.*

Canterbury, September 7th, 1863.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Newcastle-on-Tyne, August* 1863.]

The Anatomy of a Young Chimpanzee. By D. EMBLETON, M.D. On December 11th, 1862, the body of a male chimpanzee, said to be about one year and a half or two years old, which had died of bronchopneumonia in a menagerie at Newcastle, was purchased for the College of Medicine. It was scantily covered with black hair except around the muzzle and arms, where the hair was silvery grey. It was fresh and in good condition, the trunk rather bulky, the chest large, the arms strong and muscular, the hands partly covered on the back with black hair, which did not extend to the fingers; the palmar surface smooth, naked, and of a dusky flesh colour; the thumb small and short, measuring with its metacarpal bone two inches, the middle finger being five inches long. The legs were comparatively short and weak, but fleshy to the heels; the feet rather more covered on the dorsum with hair than the hand; the toes and the sole resembled in smoothness, absence of hair, and colour, the corresponding parts of the hands; the great toe was freely detached from the others, and resembling a strong thumb, measuring with its metatarsal bone two inches and a half; the third toe three inches and a half. The thumb appeared much shorter, slenderer, and weaker than the other fingers; the great toe thicker, stronger, and shorter than the other toes. The whole body weighed 16 lbs. 6 oz. avoirdupoise. There exist thirteen pairs of ribs, and therefore thirteen dorsal vertebræ; and the number of lumbar vertebræ is reduced to four. The diaphragm was well arched, and very strong; the psoas parvus muscle was present, and attached as in a man. The opponens pollicis muscle was wanting; the others appeared to be disposed as those of the human hand. Professor Huxley having maintained, in his *Man's Place in the Creation*, that the hind limb of the so called Quadrumana is not a hand, but in reality a foot, it was necessary to direct particular attention to the muscles and tendons of that part. The posterior region of the leg is flat, and rather broad, and the fleshy parts of the lateral muscles are continued down to the ancles; the gastrocnemii are the principal feature hiding the presence of the soleus, and the plantaris is absent. The peroneus brevis, which is inserted into the fifth metatarsal bone, arises above the peroneus longus; the tendon of which, passing behind the outer ancle, runs obliquely into the sole of the foot. Next internal to the peronii lies the rather slender extensor longus digitorum, the four tendons of which pass to the four outer toes. Between this muscle and the edge of the tibia lie three muscles, one being a good deal overlapped by the other two. These two send their tendons to be inserted, the *inner* into the inner side and under part of the first cuneiform bone; the *outer* into the base of the metatarsal bone of the great toe. The third muscle, at first deeply placed, comes out, a little above the ancle, from beneath the other two; and its tendon, lying between that of the outer of the two and the tendon of the long extensors, runs to be inserted upon the dorsal surface of the base of the first phalanx of the great toe. On the dorsum of the foot, to the short extensor of the toes, a broader muscle, and extending further towards the inner side of the foot, than in man, by means of a considerable superadded slip, which diverges abruptly inwards from the other part of the muscle, and is inserted into the base of the second or terminal phalanx of the great toe.

Every toe then, in the chimpanzee, has, at least a long and short extensor for its phalanges, whilst the great toe has an extensor for its metatarsal, another for its cuneiform bone. Thus it may be said that there are four muscles of the great toe to ensure free and varied mobility in the sense of extension; the fifth toe has, as in man, in addition to its phalangeal extensions, the peroneus brevis attached to its metatarsal. Of the four extensions of the great toe the two innermost appear to represent the tibialis anticus of human anatomy, divided to secure variety of motions in the root of the great toe; the next would quite answer to the extensor proprius pollicis only, it is inserted into the base of the first instead of the terminal phalanx; the fourth or short extensor is a new foot-muscle, unrepresented in either the hand or foot of man.

In the sole of the foot the three superficial muscles, the abductor pollicis, the flexor brevis digitorum, and the abductor minimi digiti, are, as in the human sole, the first to come into view. On detaching the last two from the heel-bone, we find, towards the outer border of the foot, a flexor brevis minimi digiti, and in the middle region the lumbricales and the tendons of the long and short flexors of the toes, with a small muscle accessory to the lumbricales arising from the long flexor tendon before its division. No musculus accessorius arising from the os calcis and attached to the long flexor tendon was observed. At the outer border of the foot, on abducting strongly the great toe, which can thus be brought to nearly a right angle with the rest of the foot, the abductor pollicis is seen as a short muscle, extending from the heel to the base of the first phalanx of the great toe; and close to it lie the two halves of the flexor brevis pollicis, separated by the tendon of the flexor longus pollicis. Between the great toe and the second is the adductor pollicis. All these muscles of the great toe are highly developed and of great power; and if they all act together will very forcibly pull the great toe towards the middle of the sole of the foot; if the flexors of the other toes are made to act at the same time the result will be a strong, rather oblique opposition of the great toe to the other four toes; and if an object like the branch of a tree be placed in the sole, it will be grasped with much firmness. There remains, however, to be noticed an interesting arrangement by which that action will be enforced and made more secure. The muscle called flexor longus pollicis is largely developed in the leg, extending down to the inner ancle, and ends in a strong tendon which runs into the sole of the foot close to the os calcis, and apart, as in man, from the other tendons. Opposite to the foot of the great toe, it divides into two slips; one, the lesser, runs outwards at a certain angle, being con-

fined at first under a strong ligament, as under a pulley, to the great toe; the other, the larger division of the tendon, passes straight onward to the other toes, supplying each with an additional tendon. When this muscle is put in action, it will necessarily draw the great toe and the other four toes together simultaneously, towards the middle of the sole. This addition of a fourth set of flexor tendons for the four outer toes, and with it a distinct provision for the simultaneous action of those toes with the first, is very remarkable, and seems to complete the foot of the chimpanzee as a perfect instrument of prehension.

The additions to the ordinary mechanism of the human foot that have here been noticed, are not, so to speak, borrowed from the hand, but are either extensions of the plan of the foot, or new parts that occur neither in the hands nor in the foot of man.

The function of prehension by the foot, as is well known, is one enjoyed, not only by apes and monkeys, but by many other animals; the parrots, cockatoos, and other birds, and the chameleon, to cite familiar examples, have prehensile feet; it is attached to the nasal organ in the tapirs and elephants, to the lips in the giraffes, horses, etc., and to the opposite or caudal end of the spine in certain monkeys and marsupials. Prehension, therefore, cannot be taken in the characteristic function of the hand, of the higher animals.

The tongue, broad, fleshy, soft, and delicate, much resembled the tongue of a child. The milk-teeth, twenty in number, somewhat blackened, were all present. The total length of the alimentary canal was fifteen feet ten inches, or about six and a half times the length of the body.

The œsophagus was somewhat narrow; the stomach was shorter and more globular than in man; the left end, or cul-de-sac well defined; the pyloric extremity funnel-shaped and abruptly bent back towards the cardia, which it nearly touched, was slightly marked off at the bend by a constriction, and there were two other smaller constrictions between this part and the duodenum. The peritoneum appeared to be disposed very much on the human model.

The liver, with the gall-bladder, all the parts at the transverse fissure being cut close off, weighed ten ounces and a half. Its vessels and membranes resembled those of a child. It was divided into two great lobes, right and left; and each of these had a small rather detached lobule situated beind the transverse fissure, and bordering on the fissure of the vena cava. The spleen was rather thin, longish, and notched on its anterior border. The suprarenal glands were long and of a yellow colour, contrasting with the kidneys, which were brown and also unlobulated.

The vault of the cranium having been removed, casts in plaster were at once taken of the inner surface of the bone; of the brain covered by the dura mater; and after the brain was removed, of the cerebral surface of the base of the skull. Before the brain was in any way disturbed from its natural position, the relation of the posterior lobes of the cerebrum to the cerebellum was carefully observed; the former projected backwards over the latter a quarter of an inch. The circle of Willis was quite human. The entire encephalon, with arachnoid and pia mater, vessels and nerves attached, and as much of the spinal cord as could well be reached by an ordinary scalpel, was carefully removed, and its weight was found to be 13 oz. and 6 drachms; which is to the weight of the whole body nearly as one is to nineteen. The three great lobes of each cerebral hemisphere were well developed; the two anterior lobes formed together a blunt projection forwards, and their under surfaces were distinctly concave; the middle lobes were more prominent downwards than in man; and the projection of the posterior lobes backwards overlapped the cerebellum. The convolutions of the cerebral hemispheres were numerous, somewhat intricate, and partially symmetrical. Two main sulci, traceable from the Sylvian fissure, the other from the base at the back of the crura cerebri, appeared to mark out, even on the top of the hemispheres, the division into anterior, middle, and posterior lobes, or masses of convolutions. The island of Reil in the fissure of Sylvius was quite evident, with three small convolutions. The corpus callosum showed, as in man, distinct though minute transverse markings, and a longitudinal raphe formed of two slightly raised lines and an intervening groove. A section of the right hemisphere to expose the lateral ventricle, showed as bold and as numerous projections of the external sulci into the white centrum ovale as are commonly seen in the human cerebrum. The ventricle itself was beautifully distinct; its anterior cornu curving boldly outwards in front of the striated body; its middle cornu winding outwards and downwards to the very bottom of the large middle lobe, and containing the hippocampus major and the corpus fimbriatum; and the choroid plexus and its posterior cornu extending in an ample curve backwards and inwards, so as almost to touch the grey matter of the surface next the median line, and having within it the hippocampus minor. On the floor of the body of the ventricle were the corpora striata, the tænia semicircularis and the free edge of the fornix, with the choroid plexus; these last lay on the velum interpositum, which covered the third ventricle and the optic thalami, quite as in man. Further investigation in this direction was forborne, as it was thought desirable to preserve, for the present occasion, the parts already enumerated. The fourth ventricle was closed behind, and had its small choroid plexus after the human pattern; a second similar, but smaller, plexus existed on each side, just outside of the ventricle, and attached to the cerebellum. The point of the calamus scriptorius was well defined, but no white lines of origin of the auditory nerve were distinguished; on the side of the medulla oblongata, the usual nerves were met with, and the pyramids and olivary bodies were clearly to be seen, but they were not further examined. The cerebellum was laminated, and had the great human divisions; on examining that part which overhangs the medulla oblongata, the inferior vermiform process, and other parts enumerated in human anatomy, could, without difficulty, be dissected out; the superior vermiform process, also, was evident on raising up carefully the posterior lobes of the brain.

The conclusions arrived at in this investigation were those which have already been made public by Professor Huxley; 1. The chimpanzee is not, properly speaking, quadrumanous, but possesses four prehensile extremities, two hands, namely, and two feet; and, 2. The brain of the chimpanzee differs from the brain of the man only in size and weight, therefore, in the smaller size and extent of its cerebral convolutions, the same parts without exception exist in both brains. Whether the cerebral matter of the ape differs from that of man in microscopic characters, or how otherwise it may differ, are problems yet to be worked out.

The Eggs of Birds. By John Davy, M.D. F.R.S. The author, after pointing out certain qualities of resemblance common to the eggs of different kinds of birds, such as, especially, the alkaline nature of the albumen, and the acid of the yolk, and that the two are in opposite electrical conditions, described the results of the experiments he had made to endeavour to ascertain in what respect the eggs of different species differ. Some of the conclusions which his results seemed to warrant were the following.

1. The colour and markings of eggs are very various; the colouring matter is of an organic kind very similar to that of leaves and flowers, and in part depends on molecular arrangements.

2. The albumen in quantity greatly exceeds the yolk, but in eggs of different species in no regular manner,

whilst in all the quantity of solid matter in the yolk is proportionally much larger than in the white.

3. The temperature at which the coagulation of the albumen takes place varies in almost every instance; and the firmness of the coagulum does not appear to be regulated by the proportion of solid matter which the albumen yields in evaporation.

4. The coagulum of each has an aspect of its own, varying in different instances as to tint and degree of translucency, and in some varying in colour.

The author, taking into consideration the many sources of error to which experiments on eggs are surrounded, offered his results, and the conclusions from them, merely as approximations.

The Ventilation of Barracks. By STEWART CLARK, Esq. Dr. Embleton read a paper which set out by stating the general agreements as to the baneful influence of impure air on the human constitution, and the healthful and invigorating effect of living in a pure atmosphere. The Scotch Highlander is able to walk forty, fifty, and even sixty miles a day among his native hills on no better fare than a dish of porridge and a piece of oatmeal cake, and this chiefly in consequence of the change of air through which he is passing. The British soldier, recruited from the crowded city or the ill-ventilated workshop and dwelling-room, bears the fatigue and hardships of lengthened campaigns and long forced marches in the fresh air; but, taken direct from his so-called comfortable barracks, he is easily fatigued, hardly able to endure a march of [illegible] miles, and a ready prey to cholera and other passing epidemics. Air vitiated by the exhalations of the human body and impure water may not be the sole causes of epidemic cholera, dysentery, and diarrhœa; but they are doubtless the principal; and the benefit derived during the visitation of these diseases, from the removal of the afflicted into camp where an unlimited supply of fresh air and pure water prevails, results chiefly from oxidation and removal of the foul-air poison. The continuation of the epidemic depends on the extent of the mischief done by the long continued inhalation of impure air and the restorative powers of the system. The necessity for pure air being thoroughly established, it had been truly urged by a late writer on the subject, "If fresh air will not go where we wish it we must drive it, and instead of trusting to languid currents created by indirect means for the ventilation of crowded apartments, it should be pumped in per force." All the barracks recently erected in India are well supplied with means for natural ventilation, still when occupied by the regulation number of men the air during night time is very impure. It has been shown that, in a tropical climate, natural ventilation will not proceed during certain atmospheric conditions; and, however well any apartment may be supplied with doors, windows, etc., no movement of the internal air will take place, sufficient to change the atmosphere. Therefore, ventilation by artificial means must be resorted to, otherwise the inmates must suffer. It is evident that, on account of the climate, the peculiar construction of suitable buildings renders ventilation by heat or vacuum impracticable; and therefore the "plenum" is the only method by which the ventilation under consideration can be accomplished. Fresh air forced into an apartment, may not, it is true, completely expel the foul; but, if openings for the ingress of the air be judiciously arranged, the greater part of it will be got rid of by the open doors and ventilators, and what remains will be so completely diluted that no harm will come of inhaling it.

OIL A PREVENTIVE OF PLAGUE. The oil-porters of the Levant are, it is said, never attacked by the plague; The theory, we suppose, being that the oleaginous state of their skin shuts out the cutaneous entrance of the poison.

Correspondence.

TREATMENT OF A POOR-LAW MEDICAL OFFICER.

LETTER FROM JOHN LODGE, ESQ.

SIR,—I received yesterday the inclosed letter from Mr. Oxford, Clerk to the Keynsham Board of Guardians.

The Bitton District comprises an area of 5,066 acres, with a population of 3,050, chiefly coal-miners and labourers; in fact, it is essentially a poor neighbourhood. The nearest point from my own residence is two miles; and the salary paid by the guardians is £40 a year, which includes all extras except midwifery. From 1852 to 1855, the district was held by no less than five medical men. I was appointed medical officer in 1855, and during that time I have secured the full confidence of the poor and the ratepayers. About eighteen months ago, a change was made in the construction of the Board; and since then the most frivolous charges have been brought against me, and it has now culminated in an attempt to eject me from office. Whether this attempt will prove abortive depends on the gentlemanly feeling of my professional brethren. They have now an opportunity of proving the *esprit de corps* of our profession; but, if they lend themselves to a system of oppression, they must expect in turn to be treated with contumely. I am, etc., JOHN LODGE.

Keynsham. Sept. 9th, 1863.

P.S. I have been medical officer to the Keynsham District for nearly nine years.

The Clerk of the Keynsham Union to John Lodge, Esq.

Keynsham, Sept. 8th, 1863.

DEAR SIR,—I am directed by the Board of Guardians to inform you that, as the term for which you hold the office of medical officer of Bitton District will expire on the 29th instant, it is their intention, previous to filling up the appointment, to advertise the vacancy in the public newspapers; and that the election to the office will take place on Tuesday, the 22nd instant.

I am, dear sir, yours truly,

John Lodge, Esq. THOS. OXFORD, *Clerk.*

ANTIQUITY OF TRANSFUSION.

LETTER FROM S. WILKS, M.D.

SIR,—The interesting article on Transfusion by Dr. Graily Hewitt, in a late number of your JOURNAL, has suggested to me to send you the following quotation, which shows that the practice is much older than many suppose, and that the operation was a reciprocal one; that is, not only did the patient receive pure, healthy blood into his veins, but he gave back his own impoverished fluid to the supplier; the object of the operation being, not to supply a loss of blood, but to change bad for good. No wonder the victims died.

The quotation is from Villari's *Life of Savanorola*, on the death of Pope Innocent VIII; but is mentioned also by Sismondi and other writers.

"The vital powers of Innocent VIII rapidly gave way; he had for some time fallen into a kind of somnolency, which was sometimes so profound that the whole court believed him to be dead. All means to awaken the exhausted vitality had been resorted to in vain, when a Jew doctor purposed to try to do so by the transfusion, by a new instrument, of the blood of a young person—an experiment that had hitherto only been made on animals. Accordingly, the blood of the decrepid old pontiff was passed into the veins of a youth, whose blood was transferred into those of the old man. The experi-

ment was tried three times, and at the cost of the lives of the three boys, probably from air getting into their veins; but without any effect to save that of the Pope. He expired on the 25th of April, 1492; and without loss of time they set about the election of his successor."

I am, etc., SAMUEL WILKS.

11, St. Thomas Street, Southwark, Sept. 7th, 1863.

CALABAR BEAN PAPER.

LETTER FROM JOHN W. OGLE, M.D.

SIR,—In Dr. Harley's communication to your last number (September 5th), regarding the Calabar bean, I see that the "*paper*" preparation of this agent, as furnished by Messrs. Bell and Co., is contradistinguished from that supplied by Mr. Squire as being *unable to neutralise* the effect of atropine paper. Having myself used the paper made by Mr. Squire extensively for the purpose of removing the dilatation of the pupil obtained by the application of belladonna and atropine (as related in a former number of your JOURNAL), it appeared to me only right to reassert that, in my hands, it proved amply effective for the purpose. As I stated in the remarks alluded to, a very much smaller portion of the atropine paper than the squares commonly used* is more than sufficient to induce dilatation of the pupil; and, if such a small portion be used, the strength of Squire's Calabar bean paper will be found sufficient. All that is required, in having recourse to it as antagonising the effects of the atropine paper, is to insert, in the first place, a sufficiently small portion of the atropine paper, and subsequently a sufficiently large portion of the Calabar bean paper. Of course, there can be no difficulty in strengthening the solution of the Calabar bean paper so as to make it potent enough to cope with more of the atropine paper. The first paper of the kind made, prepared, I believe, by myself (following Mr. Streatfeild as regards the atropine), was intended to be equivalent to the atropine paper in strength. Unfortunately, its preparation failed; and then Mr. Squire's appeared. I am, etc., JOHN W. OGLE.

13, Upper Brook Street, Grosvenor Square, W.

* The fifth part of an inch square, equivalent to one drop of a solution of the strength of two grains to the ounce.

USE OF NEGRO TROOPS. The comparative liability of white and coloured troops to diseases of a malarious origin has long since attracted the attention of the English authorities, and has doubtless greatly influenced the composition of their forces serving in malarious countries. From the annual report of the British army for 1859, it appears that in Jamaica the ratio of mortality is as follows:—White 101·9, black 8·2; Bahamas, white 159·0, black 5·6; Sierra Leone, white 410, black 2·4. These facts have an important bearing on the present policy of our government in organising negro regiments for service in the malarious regions of the South. Already Surgeon-General Hammond has been able to contribute an item of statistical information bearing on this point. In a recent communication to the Secretary of War he states that Medical-Inspector Townshend reports, that in the Department of the Gulf white and coloured troops are found serving together, and equally subjected to malarious influences. The ratio of sick, of diarrhœa, dysentery, remittent, intermittent, typhoid fevers, etc., is white 10·8 per cent., and coloured 0·8 per cent. The argument in favour of the employment of coloured troops at the South, if based on their comparative immunity from the diseases peculiar to that region, is conclusive. (*American Medical Times.*)

Medical News.

UNIVERSITY OF EDINBURGH. List of candidates who received Medical Degrees on Saturday, August 1st, 1863, with the titles of their Theses. [*a*. Denotes those who have obtained prizes for their Dissertations; *b*. Those deemed worthy of competing for the Dissertation Prizes; *c*. Those commended for their Dissertations.]

Amy, Frederick, Jersey. (On Varicose Veins.)
Barry, Joseph Edward, England. (On Tracheotomy.)
Bell, Alexander Montgomerie, Scotland. (On Simple Fractures, and their Repair.)
*c*Beverley, Michael, England. (Commentaries on a Few Cases in Paton's Ward, Royal Infirmary.)
*c*Boyd, Hugh, Scotland. (On Scorbutus; its Nature, Causes, Symptoms, and Treatment.)
*a*Braidwood, Peter Murray, East Indies. (On the Development of Striped Muscular Fibre.)
Brakenridge, David James, Scotland. (On Enteric or Typhoid Fever.)
*c*Cameron, Lewis, Scotland. (On some of the Forms of Jaundice.)
*c*Charteris, Matthew, Scotland. (On the Cranial Circulation.)
Coates, Frederick William, England, (On Amaurosis.)
Craw, John, Scotland. (On Veratrum Viride.)
Crombie, John Liddle, Scotland. (On Diseases of the Rectum.)
*c*Davidson, John Hannah, Scotland. (Practical Remarks on the Management of Pregnancy and Parturition; and on the Inflammatory and Febrile Diseases of Puerperal Women.)
*c*Dickson, Archibald, Scotland. (On the History of the Treatment of Delirium Tremens.)
Dickson, John Rogerson, Scotland. (Reports on Cases in the Wards of the Royal Infirmary, 1862-63.)
Dickson, William James, Scotland. (On Phrenological Doubts and Difficulties.)
Ducat, Andrew David, Scotland. (On Otorrhœa.)
*a*Duckworth, Dyce, England. (Observations on the Anatomy of the Capsulæ Suprarenales.)
Duncan, Francis Metcalf, Scotland. (On Podophyllum Peltatum.)
Dunlop, Andrew, Scotland. (On the Ancient History of Medicine.)
Elwes, Charles Walter, England. (On Hernia.)
Eshelby, Douglas William, England. (On Diphtheria.)
Ferguson, John, Scotland. (On Scrofulous Diseases of Joints.)
Finlay, Robert Bannatyne, Scotland. (Notes on the Surgery of Hippocrates.)
Gassin, Jean Baptiste Jérémie, Mauritius. (On Progressive Surgery.)
Gillespie, James Robert, Canada. (On the Changes in the Blood as regards Gout and Rheumatism.)
Goodall, Alexander, Scotland. (On Croup.)
*c*Grosvenor, George Fox, England. (On Puerperal Fever.)
Hammond, Gordon, Scotland. (On Gastric Ulcer.)
*c*Haynes, Stanley Lewis, England. (On Morbus Coxarius.)
Hedley, William Snowdon, England. (On Polysarcia.)
*c*Higginson, Henry Talbot, Ireland. (On Light and Heat.)
Jameson, William Hugh, Scotland. (On Diphtheria.)
Jeffrey, William, Scotland. (On Neuralgia.)
Jobson, William, Scotland. (On the Pathology and Analogies of Sinus and Fistula.)
*c*Lewis, Alfred, England. (On Variola.)
Lindsay, Edwd., Canada. (On Dysentery and its Complications.)
Lisle, Richard Philip, Wales. (On the Forces which Cause the Circulation of the Blood.)
Lowe, Robert Whittington, Scotland. (On Anæsthesia in Midwifery.)
M'Donald, Alexander, Scotland. (On the Etiology of Pulmonary Hæmorrhage.)
Mackie, John, Scotland. (On Rupture of the Uterus.)
*c*Main, Alexander James, Scotland. (Observations on the Effects of Sulphur in increasing the Sulphuric Acid in the Urine.)
Martin, James, Scotland. (On Paralysis.)
Maxham, John William, Canada. (On Idiopathic Dyspepsia.)
Melladew, Henry Frederick Lawaetz, England (On Scarlatina.)
Mercer, Nigel Gray, Scotland. (On the Pathology and Treatment of the Enlarged Prostate.)
Middleton, John, Scotland. (On Typhus Fever.)
Millar, John, Scotland. (Contributions to Palæophytology.)
*b*Millingen, Charles, Constantinople (Contributions to the Histology and Physiology of Insects.)
Moffatt, Paul, England. (On the Physiological and Therapeutical Actions of Exercise.)
Nesham, Thomas Cargill, England. (On Cancer.)
Packer, James Macnamara, Barbadoes. (On Epilepsy, its Causes and Pathology.)
Potter, John Baptiste, England. (On Typhus and Typhoid Fever.)
Pringle, John, Scotland. (On Rheumatic Fever.)
*c*Reid, Walter, Scotland. (Observations on Small-Pox.)
Rhind, James, England. (On Injuries of the Head.)
Richard, Robert Angus Campbell, East Indies. (On Scurvy.)
*c*Robertson, John, Scotland. (On Rheumatic Endocarditis.)
*c*Robertson, Robert, Scotland. (On the Pathology, Diagnosis, and Treatment of Thoracic Aneurism.)

Ross, David Palmer, Penang. (On Gun-Shot Wounds.)
Rutherford, James, Scotland. (On the Articulations and Movements of the Human Trunk.)
*a*Rutherford, William, Scotland. (Researches in Anatomy, Physiology, and Pathology.)
Rutherfurd, Edward, England. (On Bronchitis.)
*c*Sheldon, Thomas, England. (On Typhus and Typhoid Fevers.)
Simpson, David James, Scotland. (On Syphilisation.)
*a*Spence, Alexander Ingram, Scotland. (On the Mode of Actions of Poison.)
Strachan, John, Scotland. (On the Relation between Cardiac and Pulmonary Disease.)
Thurgar, Benjamin Bingay, England. (On the Distinctions between Typhus and Enteric Fever.)
*c*Thyne, Thomas, Scotland. (On the Perforating Ulcer.)
Todd, Alexander, Ireland. (On the Pathology and Treatment of Ulcer of the Stomach.)
Turner, Richard, Wales. (On Heart Disease.)
Tuxford, Arthur, England. (On the Causes, Diagnosis, Treatment, and Pathology of Typhus and Typhoid Fevers.)
*c*Walker, Thomas, B.A., New Brunswick. (Notes on Cases from the Royal Infirmary.)
*c*Watson, Jas., Scotland. (Observations on some New Remedies.)
White, George Rankine, New York. (On the Function of Digestion.)
Wilson, James Clark, Scotland. (On the Epidermis and its Modifications.)
Wilson, John, Scotland. (Observations on Morbus Addisonii.)
Williamson, Ninian Alexander, England. (On Hygiene.)
Wood, Thomas Arthur, Isle of Man. (Report of Medical Cases, with Commentaries.)
Wright, George Arthur Wellesly, Scotland. (On Infanticide.)

The following candidates received the Degree of M.B. and C.M.

*c*Davidson, Alexander, M.A.Edinburgh, Scotland. (Notes on Heart Disease.)
Wilson, George, M.A.Aberdeen, Scotland. (On the Position of the Fœtus in Utero.)

APOTHECARIES' HALL. On September 3rd, the following Licentiates were admitted:—

Davies, Pryce Lloyd, Abergele, Denbighshire
Thompson, Thomas, Thirsk, Yorkshire

At the same Court, the following passed the first examination:—

Yates, William, Westminster Hospital

APPOINTMENTS.

ALBERT, George Pascal, Esq., appointed Resident Surgeon and Apothecary to the Western General Dispensary.
*BEDDOES, William Minton, M.D., elected Physician to the Salop Infirmary, Shrewsbury.
BROSTER, J., M.D., appointed one of the Acting Medical Officers to the Southampton Dispensary and Humane Society.
CLAYTON, Mark H., Esq., appointed Surgeon to the Birmingham Bluecoat School.
EDMUNDSON, Joseph, M.D., appointed Resident Physician and Superintendent to the Clonmel Auxiliary Lunatic Asylum.
FERGUSON, G., M.B., elected Surgeon to the Islington Dispensary.
GELSTON, Thomas James, M.D., appointed Physician to the Limerick County Infirmary.
LUCAS, William, Esq., Deputy Inspector-General of Army Hospitals, appointed Principal Medical Officer to the Royal Hospital, Chelsea.
M'CARTHY, Edward, Esq., elected Resident Medical Officer to the Tower Hamlets Dispensary.
MONTGOMERY, Robert, Esq., elected one of the Court of Examiners at Apothecaries' Hall, Ireland.
SCOTT, William Herbert, Esq., elected Surgeon to the Islington Dispensary.
SYMES, Glascott R., L.K.Q.C.P., appointed Assistant-Surgeon to Dr. Steevens's Hospital, Dublin.
*WELLS, Thomas Spencer, Esq., appointed Surgeon to the Household in Ordinary to Her Majesty.
WHITE, Gregory, Esq., appointed Resident Surgeon to the Leith Hospital.
WILDERS, John St. Swithun, Esq., elected Assistant-Surgeon to the Queen's Hospital, Birmingham.

POOR-LAW MEDICAL SERVICE.

GRIFFIN, Richard W. W., M.D., to District No. 2 of the Southampton Incorporation.
HAY, William H., M.D., to District No. 1 and the Workhouse of the Bridport Union, Dorset.
LINEKER, Elisha H., to the whole of the Leighton Buzzard Union, Bedfordshire.
SLATER, Robert, Esq., to District No. 1 of the Ashton-under-Lyne Union.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BRAMELD, H. E., Esq., to be Surgeon 2nd West Riding Engineer Volunteers.
SUNNELEY, J. A., Esq., to be Assistant-Surgeon 2nd West Riding Engineer Volunteers.

To be Honorary Assistant-Surgeons:—

JAMES, H., Esq., 12th Glamorganshire R.V.
LITTLE, J., M.D., 5th Dumfriesshire R.V.

BIRTH.

FRY. On September 7th, at Thaxted, Essex, the wife of *John W. Fry, Esq., of a son.

DEATHS.

NEWBOLT. On August 13th, at Weymouth, Elizabeth Olivia, widow of the late William K. Newbolt, M.D.
OWEN. On September 5th, at Southport, aged 56, Sarah Ann, widow of the late John Owen, Esq., Surgeon, of Manchester.
PIDCOCK, John, M.D., at Watford, aged 90, on September 5.

COUNTY LUNATIC ASYLUMS. The expense last year of the county lunatic asylums in the United Kingdom was £107,663.

TESTIMONIAL. An epergne or candelabrum is to be presented to Mr. T. W. Crosse of Norwich, by the Norwich Pathological Society.

EFFECT OF AGE OF LYMPH ON VACCINATION. Out of one hundred cases of vaccination with dry lymph stored in stoppered bottles for periods rarely exceeding three weeks, only three were unsuccessful; but of three operations with dry lymph which had beeen kept eleven months, two were unsuccessful, the other producing only one vesicle; and a single operation performed with lymph which had been kept for eighteen months also failed. (*Vaccination Report.*)

SOURCES OF VACCINE LYMPH. Mr. Robert Ceely of Aylesbury, has inspected all the sources whence lymph is contributed to the National Vaccine Establishment. Mr. Ceely's inspection did not lead him to recommend any change of the present sources of supply. On the contrary, in those stations which (as being most frequented) gave him the best opportunities of forming conclusions on the subject, he "met with abundant evidence of the perfectly satisfactory character of the lymph there in use." (*Public Health Report.*)

SUPERSTITION. A curious superstitious notion prevails in Somersetshire, if the following statement is to be believed. A local paper reports that in Taunton a child being attacked with scarlatina, and death apparently inevitable, a jury of matrons was empanelled for the purpose of considering the extremity of the case. To prevent the child "dying hard," all the doors, drawers, boxes, and cupboards were thrown wide open, the keys taken out, and the body of the child placed under a beam, whereby a sure, certain, and easy passage into eternity could be secured. Watchers held their vigils throughout the night, and in the morning the child, to the surprise of all, did not die, and is now gradually recovering.

AN EDITOR'S APOLOGY. The rebel invasion of this State, the threatened demonstration against Philadelphia, and the excitement consequent thereon, make it incumbent on us to ask the indulgence of our readers for any irregularities that the extraordinary circumstances in which we are placed may cause. The editor has felt it to be his duty to take up the musket for city defence, and for awhile his time will be partly occupied with military duties. It is hoped that no emergency will arise that will require his whole time, but if there should, there are others who will no doubt lend their aid in the editorial management of the *Reporter*. The same circumstances have so deranged all branches of business, that it will be difficult to get the full quota of work done, or to get it done with the promptness that is desirable. We shall do the best we can. We must ask our subscribers to be indulgent, to send us communications (for the excitement has nearly stopped these), and to answer our calls upon them as promptly as possible. (*Philadelphia Medical Reporter.*)

Sleeping in the Moonshine. A boy, 13 years of age, named Henry Lowry, residing near Peckham Rye, was on Tuesday night expelled his home by his mother for some trifling misdemeanour. He at once ran away to a cornfield close by, and on lying down in the open air fell asleep. He slept throughout the night, which was a moonlight one. Some labourers on their way to work, seeing the boy apparently asleep, aroused him; the lad opened his eyes, but declared he could not see. He was conveyed home, and from thence to an ocular institution, where medical advice was obtained. The surgeon affirmed that the loss of sight resulted from sleeping in the moonshine. The boy is totally blind, and few hopes are entertained of his ultimate recovery.

Vaccination. The Poor Law Board report that in the year ending at Michaelmas last 702,181 children were born in England and Wales, but only 437,693 persons were successfully vaccinated in the year by the public vaccinators. In 1860, with a smaller number of births, 485,927 persons were successfully vaccinated by the public vaccinators. A considerable number of children are probably vaccinated by private medical practitioners who omit to register them, and many children die before the age (three months) at which vaccination is usually performed; but still there can be no doubt that, partly from carelessness or indifference, and partly from prejudice against vaccination, the provisions which the law has made with the object of extending the practice of vaccination have not been properly effectual.

American Military Surgeons. We may safely challenge the governments of the old world to improvise armies of such magnitude, and supply them with a medical corps from civil life which will present a more honourable record. Whatever may have been our deficiencies in the knowledge of military surgery heretofore, it is now certain that we shall soon, if we do not already, surpass all other nations in our proficiency in this department. This war has called into active service not far from five thousand surgeons. Their duties have been of the most varied and active character. They have followed their commands to the camp, to the field, and to the hospital, and thus have become personally familiar with every branch of the army medical service. But hundreds of practitioners have been compelled by sickness or interest to retire to civil life, and other hundreds have taken their places. (*American Med. Times.*)

A Liberal Profession. It is certainly a somewhat remarkable circumstance that, with such a wide field for anatomical and pathological investigation, the medical school of Rome is behind all the others in Italy, and has not produced a really great man, or even a medical work of superior merit, during the present century; nor is it less surprising that in this great city, the real capital of Italy, there is not a single medical periodical published, nor is there a medical society or scientific association of any description in this enlightened city of nearly 200,000 inhabitants. I have inquired of native Romans the reason of this, and have been answered that no secular societies or organisations are permitted here, on account of the danger of their being converted into political associations and used for revolutionary purposes. (*Dr. Lee.*)

Unwholesome Food. An Act of parliament was passed on the day of the prorogation to give additional powers for the enforcement of the Nuisances Removal Act of 1855. It recites that the provisions of the Act cited with regard to the inspection and seizure of diseased and unwholesome meat are defective, and that it is expedient that the same should be repealed, and that other and more effectual provisions in that behalf should be substituted. The Act declares that the medical officer of health or inspector of nuisances may at all reasonable times inspect and examine any animal carcase, meat, poultry, game, flesh, fish, fruit, vegetables, corn, bread, or flour exposed for sale, or deposited in any place for the purpose of sale, or of preparation for sale, and intended for the food of man, the proof that the same was not exposed or deposited for such purpose resting with the party charged. In case any such food appear to him to be diseased, or unsound, or unwholesome, it shall be lawful for him to seize the same, or cause it to be seized and carried away by any officer, servant, or assistant in order to have the same dealt with by a justice; and if it shall appear to the justice that any such animal, or any of the articles mentioned is diseased, or unsound, or unwholesome, or unfit for food, he shall order the same to be destroyed or so disposed of as to prevent such animal or article from being exposed for sale, or used for such food; and the person to whom such animal or article belongs, or did belong at the time of the sale or exposure for sale, or in whose possession, or on whose premises the same is found, shall on conviction, be liable to a penalty not exceeding £20 for every animal or article so found; or at the discretion of the justice, without the infliction of a fine, to imprisonment in the common gaol or house of correction for a term of not more than three calendar months. In case any person shall in any manner prevent such medical officer of health or inspector of nuisances from entering any slaughterhouse or building where such food is kept for sale, or shall in any manner obstruct or impede him or his servant or assistant, when duly engaged in carrying the provisions of this Act into execution, such person shall be liable to a penalty not exceeding £5. The Act and the Nuisances Removal Act for England (1855) are to be read and construed together as one act.

The Channel Fleet at Glasgow. On the evening of Saturday, the 5th inst., the Faculty of Physicians and Surgeons of Glasgow entertained at dinner, in their hall, St. Vincent Street, the medical officers of the Channel Fleet, on their visit to the Clyde. Flag-Surgeon Sloggett, Surgeons Jack of the Royal Oak, Wells of the Warrior, Speer of the Liverpool, Scott of the Resistance, Courtney of the Defence, and Comrie of the Edgar, along with Assistant-Surgeons Jones and Dr. Haines, were present. Staff-Surgeon Lewins, and Surgeon Leitch, of the 41st regiment, now in Glasgow, were also present. The President, Dr. Ritchie, who was in the chair, in addition to the guests of the evening, was supported by Professors Rainy, Pagan, and Easton; and the Visitor, Dr. J. G. Fleming, who was croupier, by Professor Gairdner, and by former presidents, Dr. A. D. Anderson, Dr. Hunter, and Dr. Lyon. A large number of the other Fellows of Faculty were present at dinner. After the usual loyal and patriotic toasts had been drunk, "The Medical Department of the Navy" was given by the President, and that of the "Army" by the Croupier, in appropriate speeches. The existing high efficiency of the medical department of the Navy, and the improved position of naval surgeons, was favourably contrasted with their past condition in former periods, and to them was accorded the credit of having achieved, through many difficulties, so much for the sanitary welfare of the service. It is not often that the medical officers of the public services have an opportunity of meeting with a collective body of their professional brethren engaged in civil practice; and really on this occasion all present seemed to have much pleasure and gratification from the cordial and kind interchange of friendly feelings and sentiments which took place throughout the evening. (*Glasgow Daily Herald.*)

Hospital of San Spirito. This stands on the right bank of the Tiber, near St. Peter's. It is said to have been founded by a Saxon king. It was, however, greatly enlarged at the end of the twelfth century by Innocent III, and has gone on increasing so as now to form almost a small town within itself, being very richly endowed; not

only possessing large landed property in the city, but also much of the territory between Rome and Civita Vecchia. This Pope confided it to the *Brothers of the Order of San Spirito*, from which it derived its name. Successive Popes have done much to enlarge and enrich it. Benedict XIV, *e.g.*, in 1751, added a museum and anatomical theatre; the museum was increased with very choice specimens by Pius VI; still Pius VII added dissecting-rooms, baths, and many other requisites. The most important repairs, however, in its management and administration, as the Romans think, have been made by the present Pope, Pius IX, in the appointment of twenty Capuchin priests to its spiritual assistance, and the erection of a house for them within the inclosure, so that some of them might be in constant attendance on the patients both day and night. The entire establishment consists of a male and female hospital, entirely distinct; divided, as usual, into medical and surgical wards, clinical wards for each sex, with a lecture and operating-room adjacent; a military hospital for the Papal troops, a foundling hospital, and a lunatic asylum. There is space for about 2500 beds in the civil hospital, though ordinarily there are only about 650 medical and surgical cases in the wards. There are, besides, 450 lunatics. 15,000 patients are annually admitted; the mortality averaging about eight per cent., or even less. During the summer months the wards are filled with cases of intermittent and remittent ever from the Campagna, as well as large numbers from the city; in the winter season the number is greatly reduced. The small amount of mortality is attributed to the great proportion of malarious diseases admitted, which are usually promptly cured by large doses of quinine. I counted about twenty beds in the clinical ward, some of them unoccupied. There is a tolerable pathological museum in the hospital, as well as a collection of instruments, and a library, most of which were bequeathed to the institution by the eminent physician, Lancisi. (*Dr. Lee.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.— Great Northern, 2 P.M.— London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—SEPTEMBER 5, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 925 / Girls.. 938	1863	1232
Average of corresponding weeks 1853-62		1830	1282

Barometer:
Highest (Tu.) 29.906; lowest (Sat.) 29.597; mean, 29.700.

Thermometer:
Highest in sun—extremes (Sun.) 109 degs.; (Wed.) 86 degs.

In shade—highest (Sun.) 72.1 degs.; lowest (Tu.) 45.2 degs.

Mean—57.8 degrees; difference from mean of 43 yrs.—0.9 deg.

Range—during week, 26.9 degrees; mean daily, 17.1 degrees.

Mean humidity of air (*saturation*=100), 76.

Mean direction of wind, S.W.—Rain in inches, 0.71.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—In page 274 of last number, column I, line 28 from bottom, for "*eight* months from the date of injury", read "*five* months from the date of the injury."

R. M.'s request shall be attended to.

AN ADVERTISEMENT.—The following advertisement has been forwarded us for publication. We regret to see a profession treated in such a trade-like fashion; but so long as the advertising columns of the daily journals are made the vehicle for the public display of the titles and qualifications of the "Great Ones of the City", we shall not be surprised to see such things as the following in our country journals.

"*Removal of Residence.* Mr. ——, Surgeon, removed to No. —— (five doors from ——). The Surgery, as usual, at the bottom of ——. The house —— to let."

UNQUALIFIED ASSISTANTS.—SIR: At a village in a midland county, there has been practising for the last eighteen months a young gentleman without any medical or surgical qualification, and who has not even attended his hospital practice or lectures. He is aided and abetted in his illegal course by a surgeon of some years standing in a neighbouring county town, about nine miles distant, who goes over when sent for, and lends his name, in order that the gentleman may recover his debts, and apply for, and hold sick clubs: thus enabling him to evade the Apothecaries' Act, and the 36th clause of the new Medical Act, to the injury of the qualified practitioners in the neighbourhood, and the common interests of the profession.

I have the best authority for stating that the gentleman is neither the partner nor the assistant of the town surgeon; although I cannot suppose for a moment that the latter lends his name for an idea only.

Will you kindly favour me with your opinion through the medium of your pages of the whole proceeding; and also point out some plan by which this flagrant evasion of our medical enactments can be prevented. I am, etc.,

August 1863. VINDEX.

[There can be no doubt that the whole proceeding, as here described, is utterly irregular, and utterly unworthy of members of our honourable profession. How it can be stopped legally, we know not. There are many bad things which no law can touch; and which can only be done away with by the force of public and professional opinion. The whole question of unqualified assistants is a very important and difficult one. As far as we can see, there is nothing beyond respect for professional credit to prevent a medical man keeping half a score of assistants, and locating them, as jackals, in the villages around him. So long as the law allows any one, qualified or unqualified, to practise medicine, we fear that there is no remedy, beyond what is derived from the scorn of good men, for the case here referred to. EDITOR.]

COMMUNICATIONS have been received from:—Mr. CHRISTOPHER HEATH; Dr. BOYCOTT; Dr. S. WILKS; Dr. J. W. OGLE; Mr. T. SYMPSON; Dr. C. KIDD; Dr. THOMAS J. WALKER; Dr. MORELL MACKENZIE; Dr. SANKEY; Mr. R. DUNN; Dr. ELLAM; Mr. JAMES ALLEN; Dr. E. WILLIAMS; Mr. J. W. FRY; Mr. R. MARTIN; AN ASSOCIATE; Mr. T. L. PRIDHAM; Mr. F. D. FLETCHER; Dr. LIONEL BEALE; Mr. ERASMUS WILSON; Mr. J. SIDNEY SMITH; Mr. JOHN LODGE; RUSTICUS EXPECTANS; and THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT.

ADVERTISEMENTS.

Laryngoscopes, from 30 shillings each. See the *Lancet*, August 8th, 1863.

Speculums, as originally made by me for Professor FERGUSSON, three different sizes in a Case. 10s.

And every description of Instruments, Splints, Swing Cradles and Apparatus of every description at moderate prices and of the newest construction, as used by the various Surgeons at the Metropolitan Hospitals. W. MATTHEWS, Surgeons' Instrument Maker to King's College Hospital, 8, Portugal Street, W.C. Catalogues gratis.

THE ORIGINAL CHLORODYNE,

INVENTED AND MANUFACTURED, IN 1844, BY RICHARD FREEMAN.

(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S.Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. & L. M. etc., etc., Albert Terrace, London Road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and in all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating, that after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, etc., etc.

"Having been in the habit of using Mr. Freeman's Chlorodyne for some time past, I have much pleasure in stating *that it has never failed to have the desired effect* in whatever case it has been administered."

Manufactured by RICHARD FREEMAN Pharmaceutist, Kennington Road, London, S.;
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz., 8s. 6d.

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CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS. the Profession is directed to the following component parts in his preparation :—

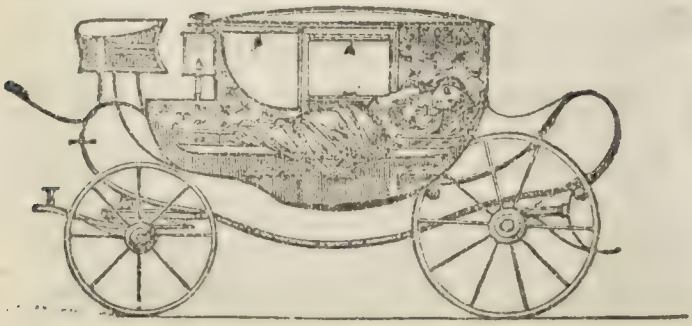
CHLOROFORMYL	ACID. PERCHLOR.	TINCT. CAPSICI.
ÆTHER.	TINCT. CANNABIS INDICÆ.	MORPHIA.
OL MENTH. PIP.	ACID. HYDROCYAN.	THERIACA.

The proportion of Morphia—⅔ gr. in f. ʒi. Dose—Five to twenty Drops.

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

Sold in bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; 4 oz. and 8 oz., 1s. per fluid oz. Sole Manufacturer and Proprietor, A. P. TOWLE, Chemist, etc., Ardwick, Manchester. May be had from Barclay and Son, Farringdon Street; or through any Wholesale House.

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Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in BRISTOL, AUGUST 5th, 6th, and 7th, 1863.]

THE TREATMENT OF HOARSENESS AND LOSS OF VOICE BY THE DIRECT APPLICATION OF GALVANISM TO THE VOCAL CORDS: ILLUSTRATED WITH CASES.

By MORELL MACKENZIE, M.D.Lond., Physician to the Dispensary for Diseases of the Throat.

THE object of this paper is not to enter minutely into the nature of neuroses of the larynx, but briefly to describe those diseases where, from abnormal innervation, the vocal function is disturbed or destroyed, and in which the local application of galvanism appears to act beneficially.

From the earliest period, patients affected with loss of voice have undergone wonderful cures. Superstition has exercised its potent influence, and many have doubtless been relieved by priestly exorcism and magic incantation. Sudden fright has in some cases cured, in others caused,* a loss of voice. In modern times, stimulant vapours have been brought to bear directly on the larynx; and the voice has been restored by the inhalation of chlorine, ammonia, and other irritants, or by the direct application of caustic solutions to the lining membrane of the larynx. Both the mental and physical remedies, however, act on the same principle; viz., that of stimulating the "nerve-force". But whilst in the former the action of the remedy is on the entire nervous system, in the latter its influence is confined to the nerves of the part affected.

It was natural that, when the power of electricity as a therapeutical agent was discovered, it should be applied to the relief of symptoms often presenting obviously nervous phenomena; and many cases are on record, where galvanism, applied to the throat, has cured cases of long standing aphonia. It was not, however, till quite recently, when the introduction of the laryngoscope enabled "the eye to direct the hand", that it became possible to apply the galvanic current directly to the nerves and muscles of the larynx. It sometimes happened, therefore, that the current, when applied externally, took a circuitous course, and failed to effect the desired stimulation, even where the use of electricity was unmistakably indicated.

For the purpose of applying galvanism directly to the vocal cords, I have contrived a very simple and efficient instrument, and with it have several times succeeded in curing cases of long standing aphonia, which had obstinately resisted the ordinary external mode of applying galvanism.

It must not be imagined that I am recommending galvanism as an universal panacea, even in all cases of nervous aphonia or dysphonia. Where there is cerebral lesion, or where the pneumogastric nerve or its branches are seriously injured or pressed upon, it is not to be expected that galvanic shocks could do any good, though they might possibly do harm. On the other hand, where there is merely a diminished tension of the nervous centres, or an exhausted or otherwise impaired excitability of the nerves of the part, electricity will probably do good.

Galvanism of the vocal cords is likely to prove beneficial, therefore, 1, when aphonia occurs as a symptom in conjunction with considerable disturbance of the nervous system; 2, in hysterical aphonia; 3, in aphonia associated with certain blood-diseases, as chlorosis and anæmia; 4, in certain cases of blood-poisoning (arsenical, lead, and perhaps others); 5, in certain cases of purely local paralysis—*a*, in those analogous to the paralysis of the muscles supplied by the facial nerve—*b*, in diphtheritic* paralysis of the vocal cords; 6, in certain cases of muscular strain, where, after due time has been allowed for the muscles to recover their perfect contractility, there still remains a want of power; 7, in certain cases of dysphonia, where there is congestion of the mucous membrane of the larynx, and where local astringents have failed to remove the congestion and restore the voice or relieve the hoarseness. In this classification, an attempt has been made to separate those cases of aphonia caused by impaired innervation from those due to an altered condition of the muscular tissue. From the close association and dependence of the nervous and muscular systems, however, such an attempt can only be very partially successful.

The laryngoscope furnishes more simple and certain indications as regards the class of cases in which galvanism ought to be used, than the most careful analysis of the pathological conditions can possibly afford. When, on examining the larynx of an aphonic patient, and directing him to attempt to vocalise, the cords are seen to remain apart, no mechanical impediment to their closure being present, the case is probably well suited for galvanism. In some cases, the separation between the vocal cords is slight; whilst in others it is very considerable. Sometimes the vocal cords appear to approximate properly; but, on careful examination, a certain want of tenseness may be detected. They are relaxed, and bulge slightly upwards or downwards, according as the air is expired or inspired. This condition would appear to depend on deficient action of the crico-thyroid muscle; and in such cases it is desirable to pay particular attention to that muscle in employing galvanism. It must be admitted, however, that in some cases of nervous aphonia, the vocal cords appear closely approximated and perfectly tense; and in these the functional disturbance must depend on some molecular change not appreciable with the laryngoscope. In most cases of nervous aphonia, the mucous membrane of the larynx will be seen to be abnormally pale, though in some it is slightly congested.

Cases as far as possible illustrative of each of the forms of nervous aphonia in which galvanism is serviceable will now be related. The history of most of them will be much abridged; but one or two of the most remarkable will be given *in extenso*.

1. Cases of aphonia dependent on considerable general

* Many London practitioners will recall the case of a young lady who suddenly lost her voice after seeing Miss Webster, the ballet girl, accidentally burnt to death, some years ago, at Drury Lane Theatre. Miss L. was under the care of a great many practitioners; and caustic solutions, as well as every other kind of treatment, failed to do her any good. After two years, however, she married; and, though the emotion of love had not affected the aphonia, and the effect of gestation had not been sufficiently powerful to cause a change, under the influence of the maternal feelings, whilst playing with her first-born, she regained her voice. This case was mentioned to me by a medical friend, as being one which, in all probability, would have rapidly yielded to internal galvanism.

* In cases of diphtheritic paralysis of the vocal cords, the loss of function appears to be sometimes the result of a powerful blood-disease, whilst at others it seems due to the morbid influence which the false membrane exercises on the nerves of the part. In the former case, diphtheritic paralysis might perhaps be more properly classified with paralyses dependent on chlorosis or anæmia.

disturbance of the nervous system are not uncommon; and though this description will appear, as it undoubtedly is, somewhat vague, there is a tangible reality about the following case, which shows that, in this instance at least, there is no ground for saying, with Goethe,

"Denn eben wo Begriffe fehlen
Da stellt ein Wort zur rechten Zeit sich ein."

Case I. *Loss of Voice, of Three Years' standing, cured by Eight Applications of Galvanism internally; a hoarse Voice returning after the Fourth Application.* Miss Kate H., aged 26, consulted me in March 1863 for loss of voice. The young lady looked rather delicate, if not sickly; but did not complain of weakness. She was of a cheerful disposition, and did not appear in the least degree hysterical. She informed me that, in April 1860, she took cold, had an ulcerated sore-throat, and lost her voice. She afterwards wrote me a more detailed account of her aphonia, which I shall give as far as possible in her own words. "After recovery from the sore-throat, the voice did not return; and in October 1860, her regular medical attendant applied caustic twice to the throat, but without any effect." She then consulted some of the leading London physicians, and, among others, Dr. Walshe, who clearly recognised the nervous character of the disease, and "recommended galvanism to be applied, first by one of Pulvermacher's chains, and afterwards, if that did not succeed, by means of a battery. Neither produced any effect." This distinguished physician then "strongly urged her to leave it to nature, which she did till April 1862, when she had the throat painted with iodine, with no other result than making it very sore on the outside." In May, another eminent physician prescribed "zinc pills, which were taken three times a day for a month, without any result. In June 1862, Dr. Blandford met Dr. Czermak, to examine the throat with the laryngoscope. Galvanic shocks were strongly advised"; and, in the following November, Miss H. placed herself under a physician who has paid especial attention to medical electricity. "He applied galvanism every day with a metallic brush, and afterwards in a stronger form for a fortnight. All this time there was not the least return of the voice."

Miss H. applied to me in March 1863; and, in making a laryngoscopic examination, the vocal cords were seen to be very pale and narrow, as if atrophied. On attempted phonation, they approximated well, but still were distinctly relaxed; and the upward bulging towards their centres was quite perceptible.

I at once applied galvanism to the cords, by means of my "laryngeal galvaniser". The operation was repeated every two or three days; and, after the fourth application of the electro-magnetic current, the voice returned. It was very gruff at first, and "came and went"; so that, though the young lady recovered her voice one evening, when she came to tell me of her good fortune the next day, she was unable to produce a sound. Gradually the voice became more constant, though its monotony was very striking; every syllable and every sentence was pronounced in the same tone, with an entire absence of expression. After the larynx had been galvanised altogether eight times, the voice was completely restored, and perfect as regards modulation. The laryngoscopic evidence of relaxation of the cords disappeared after the third application of galvanism.

Many people would consider this case an example of hysterical aphonia; but I must again repeat, that the patient never showed a single hysterical symptom. Being anxious to investigate the case thoroughly, I wrote to Dr. Alfred J. Tapson (of Gloucester Gardens), the regular professional adviser of the young lady, and he kindly replied as follows:—"Miss Kate H. has been a patient of mine for a good many years, and I well recollect her illness in 1860. She suffered from intense headache, a remarkably quick pulse, and total loss of appetite, attended with great prostration, emaciation, and loss of voice. *She had no hysterical symptoms.* Dr. Todd saw her several times, and was quite puzzled what to make of her symptoms. We both had some suspicions that she might be going to have tubercle in the brain or elsewhere. She gradually recovered her health and strength, but never her voice (though I and many others tried all we could think of). She gave everything a fair trial, being most anxious to regain her voice."

I have entered somewhat minutely into the history of this case, because I was anxious to show that it was entirely free from hysteria, and that the aphonia was dependent on profound disturbance of the nervous system. There were, as Dr. Tapson says, "intense headache, a remarkably quick pulse, and total loss of appetite, with great prostration and emaciation." It is scarcely necessary to observe that such symptoms imply impaired innervation of the most extreme form.

Galvanism was clearly indicated in this case. Dr. Walshe from general investigation, and Dr. Czermak from special examination of the larynx, both recommended electricity. External electricity was vigorously employed by an experienced galvanist, "without the least return of the voice". Electricity applied directly to the vocal cords succeeded rapidly in restoring the voice, which had been completely lost for three years. No comment on the superiority of the internal method of employing galvanism is required.

2. Though cases of hysterical aphonia are occasionally reported in the journals, and are to be found in the works of medical authors, they are in reality extremely rare. Where aphonia affects a young woman otherwise healthy, medical men are apt to consider the case hysterical, even though no symptoms of that disease (beyond the aphonia) are present. Such a palpable plan of begging the question obscures the real nature of the disease, and can only lead to unscientific and unsuccessful treatment. During the last six months, more than three hundred cases in which the voice was decidedly impaired have come under my notice. Of these, there was only one case which could possibly be called "hysterical aphonia". The following are the notes.

Case II. *Loss of Voice of Eighteen Months' duration, cured by Eleven Applications of Galvanism to the Vocal Cords.* Charlotte C., aged 19, a paper-folder, was brought to me in February 1863. She was a tolerably healthy looking, though rather flabby young woman, and had latterly been overworked. The aphonia had existed for eighteen months, and came on quite suddenly, without any known cause. She had never suffered from an attack of hysterics; and the hysteria only showed itself by a strong inclination to cry (which could rarely be restrained) after being galvanised. She did not sob, however, in the usual hysterical way. I applied galvanism to the vocal cords two or three times a week; but the voice was not regained till after the seventh application of galvanism, when it returned suddenly on desisting from the operation. The treatment was gone on with a short time longer, and was not altogether discontinued till the end of March.

3. Two cases of aphonia associated with anæmia, and one in which chlorosis was present, have come under my observation. It is difficult to tell in such cases whether the functional disturbance depends on diminished tension of the nervous centres, on lowered excitability of the nerves of the part, or on impaired contractile power of the muscular tissue itself. One case of anæmic aphonia that I had an opportunity of seeing was under the care of another physician, but in the other I was able to employ galvanism internally.

Case III. *Aphonia, of Six Months' standing, cured by a single Internal Application of Galvanism.* Mary E., aged 22, applied at the Dispensary for Diseases of the Throat on May 19th, 1863. She stated that she had

been out of health for about a year, and that she had lost her voice for the last six months. She was very pale, and complained of great weakness and depression of spirits, for which "she had been taking steel medicine for some time". The aphonia came on gradually; the voice first becoming weak in the evening, then being extinguished in the morning (while she was able to speak quite well in the afternoon); and finally she was quite unable at any time to raise her voice above a whisper. She had remained in this state for six months.

May 21st. I applied electricity to the cords, and the patient immediately spoke.

The operation was repeated first twice and then once a week for a month; but the voice was never once even temporarily suppressed after its restoration on May 21st.

In this case, after the recovery of the voice, the patient's general health rapidly improved. Though, as a rule, in these cases, the anæmia and aphonia stand in the relation of cause and effect, it must not be forgotten that the loss of voice reacts as a depressing power on the general system.*

4. One case of aphonia from arsenical poisoning, and one case of saturnine dysphonia, have come under my observation. I did not make use of galvanism in the first case, because, at the time when it was under treatment, no instrument had been invented for applying electricity to the vocal cords, if indeed the idea of employing galvanism in this way had ever occurred to any one. The case will be found recorded in the *Medical Times and Gazette* of January 11th, 1862; and those who take the trouble to peruse it will probably agree with me in thinking that galvanism would most likely have restored the voice. In the case of saturnine dysphonia, which was of twelve years' standing, there was considerable and irregular atrophy of the left vocal cord. The employment of galvanism in this case would most likely have been unsuccessful; but other cases, uncomplicated with atrophy, would probably be benefited by the direct application of galvanism.

5. In cases of purely local paralysis, galvanism strongly recommends itself. Three cases of this kind have come under my care. In two, the aphonia was soon cured; while, in the other, the patient discontinued his attendance before any result had been obtained. Two cases of this class have also occurred in the practice of Dr. Stokes, the distinguished Regius Professor of Medicine in the Dublin University, which galvanism, directly applied to the vocal cords by my friend Dr. P. C. Smyly, rapidly cured. In one case (already recorded in the *Medical Times and Gazette*, July 11th, 1863), the etiology is somewhat obscure; but in the one which will presently be related, the aphonia seemed to be closely connected with an affection of the pneumogastric nerve.

Case iv. *Loss of Voice, of Eight Months' standing, cured by Ten Applications of Galvanism to the Vocal Cords.* Mr. Charles E., aged 35, applied to me on the 11th April, 1863, on account of loss of voice. He stated "that he had suddenly lost his voice in September 1863, whilst eating an ice." He had tried various remedies, and had worn one of Pulvermacher's chains for some time. At Christmas he had fallen into the hands of the Philistines, and a well-known homœopathic doctor had promised to cure him. The disciple of Hahnemann, however, after four months trial (notwithstanding that he had given the most powerful globules), failed to bring about the most infinitesimal improvement in the voice; and Mr. E. applied to me in April, a wiser, if not a happier man.

On examining the throat with the laryngoscope, no evidence of structural disease could be detected. The lining membrane of the larynx was of normal colour; but, on attempted phonation, the vocal cords only very partially approximated, remaining at least a quarter of an inch apart posteriorly.

I did not see the patient again till a month later, when I applied magnetic electricity to the cords. The operation was repeated seven times, at intervals of one, two and three days, before any effect was produced; but the patient then regained his voice—if, indeed, the harsh discordant sound produced in the larynx could legitimately be called by that name. After three more applications of galvanism, the voice became tolerably clear and strong; and, when last seen (July 1st), the patient stated that "his voice was as good as it ever had been".

Case v. *Aphonia, of Nine Months' standing, cured by Five Applications of Galvanism to the Cords (the First Application partially succeeding).* Henry D., aged 40, a working engineer, applied at the Dispensary for Diseases of the Throat in June 24th, 1863. He stated that, one cold night in November 1862, he was aroused from his sleep by an alarm of "fire". The next morning, he could not sound his voice. He had never had any pain in the throat, nor had he ever suffered from cough.

On examining the larynx, the vocal cords appeared to approximate properly; and there was no appreciable relaxation. The mucous membrane was pale, and there was not a trace of structural disease.

This case was considered to be one of purely local paralysis, caused, probably, by an impression of cold in the neck externally, or perhaps by cold air brought to bear (by inspiration) even more directly on the larynx. It might, however, have been due to the impression of sudden alarm acting on the general nervous system.

The vocal cords were first galvanised June 8th, and the operation gave rise to considerable local irritation; the patient coughed continuously, in a peculiar shrill way, for at least twenty minutes; and, an hour afterwards, expectorated a little blood. Two days later, he was able to speak, though it required a great effort. On examining the larynx then, the lining membrane was seen to be very much congested; and, in spite of the desire of the patient, I did not think it advisable to repeat the operation that day. At the end of a week, I again galvanised the vocal cords, and the same violent irritation was again caused. This time, however, the symptoms of irritation soon passed off; and, after three more applications of galvanism, the voice became natural.

One other patient, suffering from this form of aphonia, was also under treatment. The loss of voice came on suddenly, after travelling to London in a night-train from the north of England. After four applications of galvanism, no effect having been produced on the voice, the patient, getting tired (I suppose) of the treatment discontinued his visits.

One case of paralytic dysphonia, occurring as a sequel of diphtheria, has been successfully treated by the direct employment of electricity.

Case vi. *Diphtheritic Dysphonia, of Fourteen Months' Duration, cured by Twenty-five Applications of Galvanism to the Vocal Cords.* Patrick O., aged 19, was sent to me in April; but I first commenced treatment in the middle of May. The patient stated that, in March

* Independently of the influence which the muscular sensibility of the larynx exercises on the general economy, it must be borne in mind that the respiratory muscles are far more powerfully employed in vocalisation than in ordinary expiration; if, therefore, the tension of the vocal cords is not sufficient to become vocal, it is evident that the hygienic effect of the respiratory process in the system at large must be seriously impaired. Again, "the abundant spontaneous activity of the vocal organ" causes it to exert a constant influence on the intellect; whilst as an organ of expression in relation to emotion, it is scarcely surpassed even by the features. (*Vide* Bain, *The Senses and the Intellect*, p. 307.) It is not surprising, therefore, that the loss of function should act as a powerful depressant on the general system, nor that its restoration should cause such sanative results.

In addition, moreover, to the purely psychical relation between the voice and general system, the aphonia, besides debarring the patient from many social pleasures, by interfering with his attention to business, sometimes causes serious losses and proportionate anxiety and trouble. Here then is another cause of depression.

1861, he had an attack of diphtheria; that, since that time, he had always found great difficulty in speaking aloud; and that, when he did succeed, his voice was always very squeaky. On looking into the throat, the pillars of the fauces presented a peculiarly atrophied appearance; and on the posterior wall of the pharynx there were several lumps of inspissated mucus. On using the laryngoscope, and directing the patient to say "Eh", it was seen that, whilst the right vocal cord advanced well to the centre, the left vibrated slowly, without moving at all towards its fellow. The sound produced was in the falsetto register, and he was unable by the most violent efforts to produce a chest-note. He stated that, before he suffered from diphtheria, he had a remarkably loud and strong voice.

On the application of galvanism to the cords, he at once spoke in the chest-register. The high-pitched squeaking voice soon returned, however—according to the patient's account, "directly he got into the open air". Galvanic shocks were continued first every day, and afterwards every two or three days for two months; when, the voice having been restored for more than a fortnight, and the left vocal cord acting perfectly, it was not thought necessary to continue the treatment.

Case vii. *Aphonia, of Ten Months' Duration, cured by Three Applications of Galvanism to the Vocal Cords.* The following case of aphonia was associated in its origin with an attack of hooping-cough. It is well known that, when adults are affected with pertussis, they generally suffer much more than children do under similar circumstances; and it is now a common opinion that the disease, as Dr. Watson observes, depends "on some morbid influence exercised upon the pneumogastric nerve". I therefore consider this case of aphonia to be dependent on a distinct local paralysis of the muscles in connexion with the vocal cords. This case occurred in the practice of Dr. Stokes; and the patient was galvanised by Dr. P. C. Smyly, by whom the following notes were taken.

"Mrs. ——, a tall, handsome woman, mother of seven children, rather anæmic, but not thin. At each confinement she had severe floodings. Eight years ago, she had hooping-cough. Since then she has suffered from loss of voice every winter. Last August, however, she lost her voice after a slight cold, and has not since recovered it. I saw her for the first time on the 22nd of June, 1863, with Dr. Stokes. I examined her with the laryngoscope, and expressed my opinion that the affection was nervous; for, in fact, there was not a trace of disease, and nothing abnormal, except a slight redness of the mucous membrane. The vocal cords lay quite flaccid. She said, 'Were the house on fire, I could not cry out.' I applied the electric current by means of Dr. Mackenzie's instrument, using a very feeble current. After this application, Dr. Stokes thought he heard a faint sound, at the end of a violent effort on the part of the patient to say 'Eh'.

"On the 24th, I applied a much stronger current than on the first occasion. After this, she could sound several words, but with a great effort.

"25th. I again applied the galvanism, using a very strong current, and repeating the application several times in an hour. This was necessary, as she had to leave town next day. After this application, she could count with ease, and speak whole sentences without effort.

"26th. She called this morning to say that her voice was quite restored, and quite natural, with the exception of a slight huskiness, scarcely perceptible.

"July 13th. Dr. Stokes had a letter to-day from the lady, saying that her voice was as perfect as when she left town."

6. I have had an opportunity of applying galvanism to the vocal cords in two cases of functional disease of the larynx, dependent on muscular strain. In one, there was complete aphonia; but in the other the voice was not entirely suppressed.

Case viii. *Aphonia, of Two Months' standing, cured by Six Applications of Galvanism to the Vocal Cords.* The Rev. Philip S. applied to me early in June, on account of loss of voice. The aphonia came on one evening in April, while he was preaching in a large London church. While in the middle of a sermon, he felt a sudden pain in the throat, and was obliged to finish almost in a whisper. Since then he had never been able to speak out loud. Mr. S. stated that he had lost his voice on two previous occasions, but that hitherto he had always regained it in a day or two.

On looking into the larynx, the vocal cords and other parts appeared healthy, and there was no trace of follicular disease. The cords approximated, and appeared tense; nevertheless, the patient could not emit a sound from the larynx. He had a slight suppressed cough.

June 1st. I galvanised the vocal cords, and repeated the operation on the 3rd, 5th, 8th, 10th, and 12th. The voice returned after the sixth application of galvanism. I did not see the patient again for a week, and the voice was then perfectly natural. Mr. S. has visited me once or twice since, and I am happy to say that the restoration of voice has been permanent.

Case ix. *Aphonia, of Four Months' Duration, cured after Five Applications of Galvanism to the Vocal Cords.* John M., aged 41, a fish-hawker, applied at the Dispensary on May 11th, on account of loss of voice. Aphonia came on suddenly after making great efforts one Saturday evening; but he afterwards partially recovered his voice. It was now so weak, that for four months he had been obliged to give up his *vocation*. On making a laryngoscopic examination, the larynx looked healthy; but, on attempted vocalisation, the cords exhibited a strong tendency to remain apart, though by violent straining they could all but be brought into a state of approximation. The mucous membrane was not particularly congested. Galvanism was applied internally every other day for rather more than three weeks; and the voice was fully restored after its fifth application, when the man resumed his occupation. To prevent relapse, the galvanism was repeated several times after the restoration.

7. Finally, there is a class of aphonic cases, not by any means clearly dependent on nervous causes, which may nevertheless be sometimes relieved by internal galvanism. These are cases of chronic congestion of the larynx. I originally tried this remedy in such (apparently unsuitable) cases on two patients affected with a chronic congestion of the larynx, which had entirely resisted ordinary topical stimulants. I have since employed galvanism in three other such cases—in two with partial, and in one with complete, success.

It is probable that, in chronic congestion of the larynx, galvanism acts as a strong organic stimulant on the local circulation, either by its direct action on the coats of the capillaries, or indirectly by causing strong muscular contractions. It is not pretended that, in ordinary cases of chronic congestion of the larynx, galvanism is the most suitable remedy. There are other agents which yield most satisfactory results, and are far less troublesome to employ. It is quite possible also that, in the instances in which I have employed galvanism successfully in chronic congestion of the larynx, the hyperæmia might have been an accidentally superadded condition upon, or a sequence of, impaired innervation. The following extracts from more copious notes will perhaps give an idea of the value of galvanism in the class of cases now under consideration.

Case x. *Loss of Voice, of Ten Months' standing, cured after Six Applications of Galvanism.* Henry P., aged 40, a watchmaker, applied to me in January, on account of loss of voice. The aphonia had come on suddenly in the previous spring.

With the laryngoscope, the vocal cords were seen to be highly congested, their colour being bright red. Strong solutions (ʒj to ℥j) of nitrate of silver were applied to the larynx every other day. This treatment was continued for a month; and, it not being successful, a solution of sulphate of copper was used, instead of the silver salt. After employing this stimulant for more than three weeks, the voice still being entirely suppressed, it was determined to try the effect of galvanism. After three applications of electricity to the cords, the voice returned. It was rather hoarse at first; but, after three more applications of the electric current, it became perfectly natural.

Case xi. *Dysphonia, of One Year's standing, cured by Fourteen Applications of Galvanism Internally.* Thomas D., aged 53, a pensioner, applied at the Dispensary for Diseases of the Throat in March. He was suffering from hoarseness, which he said had affected him for more than a year, and sometimes he had no voice at all. There was considerable congestion of the larynx; the cords were seen, in the mirror, to be of a bright red colour. The patient was under treatment for three months; and various local astringents (including nitrate of silver, sulphate of copper, and a solution of tannin) had failed to produce any effect.

Galvanism was first employed on June 15th, and repeated every two days till the 29th, when the voice had greatly improved. To prevent relapse in such an obstinate case, the galvanism was continued till July 15th, when the patient was discharged cured. The congestion of the mucous membrane had also disappeared.

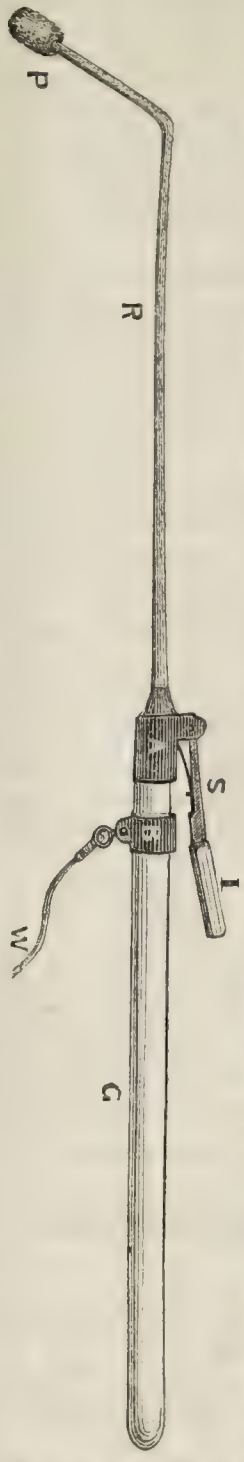
Case xii. *Aphonia, of Six Months' standing, partially relieved by Galvanism applied to the Vocal Cords.* Wm. J. F., aged 37, a painter, applied at the Dispensary in April. He was suffering from complete aphonia; and congestion of the larynx, as seen with the aid of the laryngoscope, appeared to be the cause of the loss of function. After giving a fair trial to nitrate of silver, no effect having been produced, I resolved to employ galvanism. After electricity had been applied to the cords three times, the patient was able to speak in a very hoarse voice. Notwithstanding the prolonged and persevering use of galvanism, the voice did not at all improve after this. I again had recourse to nitrate of silver, and in a fortnight the voice was clear and healthy.

I have used galvanism in two other similar cases; but they are not sufficiently interesting to be related. I may observe, however, that in one instance the result was very much the same as in Case xii, the galvanism being only partially successful; while in the other case of chronic congestion of the larynx, the voice was completely restored after three applications of galvanism.

In addition to these cases, I have already recorded two* in the *Medical Times and Gazette* for February 1863; and the history of a patient under Dr. Stokes's care, on whom Dr. Smyly used my "laryngeal galvaniser", will also be found in the same journal.

A few words on the method of applying galvanism to the vocal cords will perhaps be considered as not out of place. The operation requires but little skill on the part of the operator, and still less fortitude on the side of the patient. Whether magnetic or chemical electricity be employed is not a matter of any importance; for, while I have invariably employed the former, Dr. Smyly, in his two very successful cases, used the latter.

To employ magnetic electricity properly, an assistant is required to turn the electric machine with one hand, and with the other to hold one sponge against the side of the neck, either over the situation of the pneumogastric nerves, or directly on the thyroid cartilage. The operator should hold the laryngeal mirror with the left hand, and with the right introduce the laryngeal galvaniser below the epiglottis. He now touches the spring on the upper part of the instrument with his index finger, and the current passes directly to the cords.



The woodcut shows the instrument* very well; and it can be seen that the current does not pass beyond the metal ring (B) till the operator touches the ivory handle (I), when the spring (S) connects the two rings (A and B); and the current then passes on to its destination. The irritation of a foreign body in the larynx causes the vocal cords to become tightly approximated, and thus it renders it easy to touch their upper surfaces. By placing the point of the laryngeal galvaniser on the arytenoid cartilages, both branches of the pneumogastric may receive the electric impression.

In conclusion, I may observe that I have employed galvanism to the larynx in more than thirty cases, and that no bad effect has ever followed its use. Most patients feel the electric action more acutely externally than in the larynx, though some have told me that they felt an agreeable sensation of warmth passing down from the larynx to the scrobiculus cordis. Others, again, have described a choking and pricking sensation in the throat.

The success attending the application of galvanism to the cords in aphonia will depend entirely on the proper selection of cases suitable for treatment. The absence of any structural disease or inflammatory changes, on the one hand, and a state of impaired innervation on the other, are, of course, the features which promise the most satisfactory results from this method of treatment.

Appendix. The following two cases came under my care only the other day; and as they both illustrate very remarkably the value of the direct application of galvanism to the vocal cords, they are now added to the other reported cases. They both belong to that class in which "aphonia occurs as a symptom in conjunction with considerable disturbance of the nervous system."

Case xiii. *Aphonia of Eight Months' Duration cured by One Application of Galvanism to the Vocal Cords.* Jane R., aged 23, a tall stout young woman, from Frencham, was brought to the Dispensary for Diseases of the Throat on August 24th, 1863. She was suffering from complete aphonia, loss of appetite, and considerable constitutional debility. She was not at all hysterical, according to her own account, nor did she appear to be so. She whispered to me that twelve months previously

* I have lately ascertained that, in one of these cases, the effect of strong solutions of nitrate of silver (applied by means of Mr. Thompson's ingenious hydropneumatic injecting instrument) was more beneficial than I had previously supposed. The "diffusive method" of employing caustic seems in this class of cases to be attended with much more decided effect than the ordinary mode of applying it with a sponge or brush.

* The "laryngeal galvaniser" is made by Mr. Krohne, 241, Whitechapel Road.

she had a very severe sore-throat, which had been lanced and burnt with caustic by Mr. Knowles, of Farnham, under whose care she remained for five months. In December 1862, being then extremely depressed and weak, and having scarcely recovered from her bad throat, she lost her voice; and since then she had never been able to speak a word out loud. Mr. Knowles recommended change of air, and so also did Dr. Cobb (formerly of the London Hospital). After a fortnight's residence in London, the patient applied at the Dispensary in the condition described.

On making a laryngoscopic examination, the approximative action of the vocal cords was seen to be very feeble; otherwise, the larynx was perfectly healthy.

August 25th. I galvanised the vocal cords, and the voice immediately returned. It was weak at first, but soon became full and strong. I only repeated the galvanism once (on the 27th); but the voice was really restored by the first application.

Case xiv. *Aphonia of Five Months' standing cured by One Application of Galvanism to the Vocal Cords.* Miss Gertrude S., a pretty child, aged 10, suffering from loss of voice, but otherwise healthy, was brought to me, on August 27th, by Mr. Taylor of Guildford. Mr. Taylor gave the following account of the little patient's aphonia. He was called to see her in March, when he found her sitting up in bed, and breathing excessively quickly. The physical signs did not at all explain the rapid respiration; and he was struck with its remarkably nervous character. An attack of bronchitis, in which the nervous symptoms predominated, afterwards developed itself; and on recovery it was noticed that the child had lost her voice. Various tonics were tried in vain; and change of air to Brighton (where a laryngoscopic examination was made by Dr. Ormerod) failed to restore the voice.

Finding that the larynx was quite healthy, with the exception of a relaxed state of the vocal cords, in the presence of Mr. Taylor and the child's parents I applied galvanism to the vocal cords. The voice was then and there perfectly restored; and when the little girl left me, she was able to speak in her natural voice.

Original Communications.

THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

By Thomas James Walker, M.D.(Lond.), etc., Surgeon to the Peterborough Infirmary and Dispensary.

IV.—Directions for Using the Laryngoscope.

In order to render my description of the mode of applying the instruments for examination of the larynx and pharynx as practical as possible, I have thrown it into the form of short rules, which will, if followed precisely, at once enable the practitioner to obtain a view of the parts.

A. *For Examination of the Larynx by Unconcentrated Sunlight.*

1. Place your patient, seated quite upright, on a chair of convenient height, facing a window or door through which the sunlight enters.

2. On the window-sill, or on a table between the patient and the window, place a small looking-glass at such an angle, that it shall reflect the sun's rays on to the lower part of the patient's face.

3. Your patient still sitting upright with his head inclined a little backwards, you direct him to open his mouth as widely as possible, and to put out his tongue; you will now perceive whether, from nervousness or from not understanding what is wanted, your patient keeps the tongue in contact with the roof of the mouth; if he should do so, direct him to draw a full breath through the mouth; and, if necessary, let him, while looking at his own throat in a looking-glass, study the proper mode of displaying his fauces.

4. Now alter the position of the looking-glass which reflects the light, until the sun's rays strike on to the soft palate, the shadow of the tongue just falling on the posterior border of the velum. As soon as the light is adjusted, your patient closes his mouth until you are ready to proceed with the examination.

5. Seat yourself opposite your patient and to his right hand, your eye about on a level with his mouth, and the light passing by your right shoulder.

6. Warm the laryngoscope in the flame of a spirit-lamp, or in warm water conveniently placed at your right hand, and test its temperature on the back of your own hand or on your cheek, so as to avoid burning your patient's mouth.

7. Your patient opening his mouth as widely as possible, and putting out his tongue, take hold of this, with a napkin or handkerchief to prevent it from slipping, between the thumb and forefinger of your left hand, and draw it downwards and forwards, being careful not to use so much force as to hurt the frænulum against the lower teeth, and avoiding, also, the placing your fingers or any part of the napkin in such a position as to throw a shadow on to the fauces.

8. Introduce the laryngoscope, held between the two first fingers and thumb of the right hand, quietly into the mouth, following the curve of the back of the tongue and the palate, and touching nothing until you reach the velum.

9. The hand being steadied by resting the ring and little finger against the cheek, press the back of the laryngoscope gently and steadily flat against the uvula and soft palate and raise this, the mirror being held just far enough back to avoid touching the posterior wall of the pharynx, and its face being directed, not to either side, but downwards and forwards.

10. Simultaneously with the introduction of the mirror, direct your patient to draw a deep breath, or to say *a* in a prolonged high tone; thus you give him something to occupy his attention, and also cause him to open up the fauces and the larynx as much as possible.

11. If the preceding rules have been strictly adhered to, in any ordinary case, the epiglottis will certainly now be seen. Should it appear quite at the lower edge of the image seen in the laryngoscope, the instrument is not introduced far enough into the pharynx, and its position must be shifted accordingly.

12. The patient is again directed to utter the vowel sound *a* or *ah* in a prolonged note and a high tone; and now the summit of the arytenoid cartilages with the cartilages of Santorini, constituting two rounded nodules, should be seen behind the epiglottis; and probably deeper down, between these and the epiglottis, the vocal cords will appear. If, however, the parts behind the epiglottis be not visible, and this portion of the image appear dark, the inclination of the mirror must be altered, so that the rays of light may be thrown into the larynx.

13. It may be that no part of the image in the mirror is obscure from want of light; but, the front and edge of the epiglottis occupying the most anterior part of the mirror, immediately behind it is seen the posterior surface of the pharynx. In this case, the inclination and elevation of the laryngoscope being altered, the deeper parts may be brought into view; but the main reason why the larynx is not seen, is that the epiglottis actually overshadows it; therefore, draw the tongue more forcibly forwards, and direct your patient to utter a falsetto

note, to force a laugh or cough, and thus endeavour to alter the position of the parts.

14. Whenever the introduction of the instrument causes retching, withdraw it, and let your patient compose himself before you reintroduce it. The operator will best insure the patient's tolerance of the examination, by dexterously avoiding the touching any part of the pharyngeal wall; by pressing firmly against the velum, not touching it lightly and tickling it; by occupying the patient's attention, and directing him to take a deep inspiration, to utter a vowel-sound, to cough or to laugh, as recommended in Rule 10, whenever any tendency to retch is observed. It will, however, very seldom be found, except in the case of young children, that intolerance of the instrument in the throat prevents our getting a satisfactory view of the larynx; the great difficulty usually is, that the epiglottis intercepts the view.

15. A view of the vocal cords, arytenoid cartilages, and epiglottis, having been obtained, incline the face of the mirror to one or other side, and thus bring into view the parts situated further from the middle line, and which have been described in Part III of these papers.

16. Be careful lest, in looking into the mirror, the head be placed between it and the source of light; the right eye can be brought close up to the mouth without placing the head in such a position as to cast its shadow on the mirror. Keep also the handle of the laryngoscope, and the hand which supports it, well towards the left side of the mouth; otherwise, they will interfere with the illumination of the mirror.

B. *For Examination of the Larynx by Direct Concentrated Artificial Light.*

1. In a darkened room, place your lamp on a table, a little way from the edge, and at such a height that the flame shall be near the level of your patient's mouth when he is seated on a chair. Immediately in front of the lamp, place your globular condenser.

2. Seat your patient upright in a chair, with his face directed towards and exactly opposite to the lamp and concentrator, and distant from the latter from eighteen to twenty four inches, the light being brightest within this range.

3. Your patient's head being placed in position as directed in Rule 3 of Section A, adjust, by means of the screw, the level of the concentrator, until the light falls on to the soft palate.

The remaining rules, as to the position of the operator, the introduction of the mirror, and so on, are the same, whether we employ the sunlight or concentrated artificial light.

C. *For Examination by Artificial Light Concentrated by Reflection.*

1. Place your patient with his back towards a table, near the edge of which you place the lamp or other source of light, in such a position that the light shines over his left shoulder; or, where a lamp is not procurable, the patient being seated in a chair, you may get an assistant to hold a candle just over his left shoulder.

2. Now seat yourself opposite your patient, attach the frame supporting the reflector to your head, and adjust it so that the light is thrown on to the patient's face.

3. Having made the patient open his mouth and expose the fauces, as previously directed, move your own head nearer or further from him, until you ascertain that the back of the pharynx is in the focus of the concave reflecting mirror.

The remaining steps of the examination are precisely the same as in the examination by direct light, which method is, wherever practicable, to be preferred to that of examining by the light concentrated by the reflector; in the latter case, it must be borne in mind that the operator has, as I have already pointed out, to contend with the following disadvantages. 1. The light obtained is actually not so bright as that obtained by the globular concentrator. 2. The operator cannot move his head to either side without removing the light from the fauces and laryngoscope; nor nearer to or further from the object he is looking at without diminishing the intensity of the illumination. 3. The operator's eye is necessarily at a greater distance from the laryngoscope, than is suited for distinct vision; and instead of having it uncovered, except by such spectacles as may be necessary to assist any defect in his own sight, the operator is compelled to look through a small orifice covered by glass.* In fact, complications are added in this mode of illuminating the fauces, which render the successful examination of the larynx comparatively difficult.

D. *For Examination of the Posterior Nares, Eustachian Tubes, and Upper Part of the Pharynx.*

Either of the modes of illumination described above may be adopted; and the first rules as to the position of the patient will vary accordingly. The light being so arranged as to fall on the mouth of your patient, proceed as follows.

1. His head being inclined back somewhat, let your patient, without protruding his tongue, open his mouth as widely as possible; if he be able to keep the tongue lying quietly at the bottom of his mouth, so that the fauces are freely exposed, the depressor is not required; but when the back of the tongue fills up the mouth too much, let the patient hold an ordinary tongue-depressor so as forcibly to depress the unruly member.

2. Now adjust the light so that it falls well on to the fauces, the shadow of the lower teeth falling lower than that of the tongue when this is drawn forward in examining the larynx.

3. Direct your patient to let all the muscles of the throat rest in an absolutely passive state. Any attempt on his part to open up the fauces will cause the elevation of the soft palate against the posterior wall of the pharynx, and will effectually prevent your seeing the parts situated in the upper part of the pharynx. The uvula and soft palate must hang passively forward; and if there is any tendency on the part of a patient to hold them otherwise, it is absolutely essential for the success of the examination that this tendency should be corrected. Make your patient, therefore, clearly understand what you wish him to avoid doing; and let him, watching the movements of his throat in a looking-glass, persevere until he has learned to control them.

4. Now, with the left hand, introduce the palate-spatula, previously warmed in a spirit lamp, and its temperature tested on your own skin; and with the broad blade gently and steadily raise the uvula and velum, at the same time drawing them forward, and keeping them steadily in their altered position by resting the little and ring fingers of the hand holding the spatula against the patient's cheek. The contact of the spatula with the posterior border and upper surface of the soft palate always produces a disagreeable sensation, and may cause the involuntary raising of the velum against the posterior wall of the pharynx; if so, the patient must be allowed to observe in a looking-glass the introduction of the instrument, and must endeavour to bring this reflex action under control.

5. The soft palate and uvula being raised and drawn forward, and the tongue either lying passive at the bottom of the mouth, or being held there with a tongue-depressor by the patient, introduce the small laryngoscope (the mirror should be bent, so as to be nearer a right angle with the stalk than it is when used for the examination of the larynx), previously warmed, into the

* Dr. G. Johnson has adopted the plan of placing the concave reflector on the forehead instead of in front of the eye of the operator, which is thus left uncovered. Dr. Johnson's reflector, though greatly inferior to the globular concentrator, is, I think, to be recommended before Semeleder's, or any other reflecting apparatus.

pharynx, with its reflecting surface turned upward; hold it immediately below the level of the soft palate, close upon, but not in actual contact with the back of the pharynx, and depress the handle until the plane of the mirror is much nearer the vertical than the horizontal position.

6. Some part of the posterior nares—probably the superior portion of the vomer and the middle spongy bones—should now be seen; if the upper part of the pharynx appear dark, the inclination of the speculum must be altered until it throws the light upon the nares; if we cannot see the cavity of the upper part of the pharynx at all, the view is probably obstructed by the velum being in contact with the posterior wall of the pharynx, and thus shutting off the whole of its upper part in the manner to which I have already alluded: even should the soft palate, in the first instance, be drawn well forward by the spatula, it is apt to be involuntarily raised by the patient while the attention of the operator is directed to the introduction of the speculum; and this involuntary occlusion of the upper part of the pharynx will frequently prove an obstacle to successful rhinoscopy altogether insurmountable.

7. The vomer and middle turbinated processes being brought into view, alter the inclination of the mirror, and direct its face to either side, so as to bring the orifices of the Eustachian tubes, the lower spongy bone, and other parts, into view.

As no rhinoscope—that is, an instrument combining the palate-spatula and the mirror in such a way that they may be managed with one hand—has at present been constructed of a sufficiently perfect form to be practically useful, I give no directions as to the mode of using this instrument; but it is evident that, both hands being occupied in the management of the mirror and the spatula, in the usual mode of examining the posterior nares, we cannot, while the parts are in view in the mirror, apply caustic, or adopt any other measure towards the treatment of the malady we are observing. This does not, however, render the use of the palate-spatula and speculum as above directed of no practical value; for the information gained by an ocular examination of this region may guide our general treatment, and also enable us to apply local means with more certainty than where we have never seen the part.

Although an expert in the use of the laryngoscope will rarely fail, if he follow the rules I have given, to gain satisfactory information as to the state of the larynx; a novice, having no experience of the small difficulties which may prevent a successful examination, will probably require to make several attempts before he acquires the dexterity in the manipulation of the instrument and the management of the patient, which he must possess in order to obtain such a clear and satisfactory view of the parts as will enable him to recognise them distinctly, and to determine their healthy or morbid condition. It is but fair to his patients that a practitioner should acquire this experience upon his own person and not upon theirs; and this he may readily do, either with or without the use of a special apparatus for self-observation. Of these special instruments, I have already alluded to the autolaryngoscope of Czermak and the pharyngoscope of Moura-Bourouillou.

In using the former, the apparatus is placed upon a table, opposite to which the practitioner is seated, with the small plane mirror fixed at a convenient distance from the face, at such an inclination that when his head is in position the observer can readily see the soft palate. The concave reflector should be about eighteen inches from the face, and placed at a lower level than the plane mirror, so that the reflected and concentrated light may pass unobstructed below this to the pharynx. The lamp is placed on one or other side, between the observer and the reflector, with one side of the chimney darkened or shaded by a screen, so that the direct light may be shut off from the face and eyes of the person placing himself under examination. The illuminating apparatus being thus arranged, the practitioner will proceed with the examination of his own larynx, according to the rules given under the heading A, for examination of the larynx of another by unconcentrated sunlight.

It is, however, quite possible to make observations on one's own larynx without any additional apparatus to that required for the examination of others, beyond a small plane mirror two or three inches square, which is held in the left hand in such a position that, while it does not obscure the free access of light to the fauces, the operator can see in it the face of the laryngoscope introduced into the mouth by his right hand. For self-examination in this method, we may use either the light of the sun, which was the source of illumination employed by Garcia, in the series of observations, the publication of which gave the first impulse to the study of laryngoscopy; or artificial light concentrated by the globe condenser; or even unconcentrated artificial light. The latter will, however, be found very inconvenient.

For Self-Examination by the Sunlight. I should give the following rule. Place yourself and your reflecting mirror, or let an assistant place you, in the relative positions recommended for your patient and the mirror in the rules given under Section A; then, having your left elbow supported on a book or other convenient prop, placed on a table immediately in front of you, hold in the left hand a small plane mirror at such a height that the light passes beneath it to your fauces, and at such an angle that you have a good view of the face of the laryngoscope when placed in your throat. In the introduction of the laryngoscope, you follow the same rules as those given for its use on others; although, of course, the instrument must be held differently, and the fingers of the right hand cannot be steadied against the cheek.

For Self-Examination by Artificial Light and the Globe Condenser. Place yourself opposite the lamp in the position recommended for your patient under Section B, and let an assistant adjust the light until the fauces are brightly illuminated, the left elbow resting upon the table; in your left hand, hold the small mirror over the lower part of the globe, so that the light passes to the throat above it, and incline it, with its face directed a little upwards, so that by turning the eyes down you may see the fauces and the laryngoscope. This will be found the most convenient method of observing one's own larynx and demonstrating it to others when we do not possess the apparatus of Czermak or Moura-Bourouillou; of the latter I can say nothing from personal experience, and I, therefore, add nothing to what I said of its use, when describing it in Part III of these papers.

All the above rules I have myself constantly tested by practically applying them, and I have demonstrated their efficiency to others on more than one occasion. In order to carry out with success the directions given, a certain amount of tact and neatness of hand is requisite, but not more than every well qualified practitioner should possess; certainly not more than he will acquire by a little perseverance in the use of the instrument, and by careful attention to the minute practical points which I have endeavoured to embody in my rules.

§ I do not hesitate to recommend the methods of examination which I have placed first in order, in preference to that by artificial light concentrated by reflection, which I have placed third; but I have given rules for examination by the reflector equally distinct with those for illumination by direct light, as I would recommend any one of my readers who expects to have to use the laryngoscope constantly, and does not mind the additional expense of another instrument, to obtain Dr. Johnson's reflecting concentrator, and to accustom himself to examining the larynx, etc., by each of the three methods of illumination.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

The following cases occurring in the female wards of the Hanwell Asylum have been under my care at various dates during the last nine years. The number of patients daily under observation has varied from six hundred to a thousand. This large number, while it affords a wide scope for a selection of cases, unfortunately occupies so much time in treating as to leave but little opportunity for keeping up a rigorous record of the details of each case; but the narratives will be here given almost exclusively from notes made at the bedside; and should any fact have to be recorded from memory, the circumstance will be distinctly stated.

The first cases will be of *Melancholia*, for the following reason. A state of melancholy is usually the first indication of mental disease. It precedes the majority of the cases of mania; and it is met with in other forms of insanity. Melancholia, in the opinion of several good authorities, must not be considered as a disease, a *morbus per se*; but only a condition or state of mind, or a group of symptoms included in a general term. In this sense, the word melancholia is here used.

A state of mental depression or melancholy, in its mildest and most transient form, is probably due to some slight mal-assimilation—or nutrition-change, as the Germans call it; perhaps dependent on some state of the blood conveyed to the cerebral organs, or on some condition of the circulation. It is certain, at all events, that a state of depression follows often upon a state of mental elation, or a prolonged mental exertion. It also succeeds the mental exaltation produced by inebriating fluids, etc. In these instances, while the immediate or proximate cause must still be considered to be in the molecular organism of the brain; the remote or the determining cause is probably a state of the blood circulating in the cerebral organ. The slighter effects, as simple depression of spirits, or the feeling melancholy in its lighter form, are not usually included under the term of insanity; but this is rather a legal necessity than a pathological truth. We usually separate these transient cases from others in which the effect is more permanent; and we call the latter only mental disease.

Constipation, long continued and habitual, would appear, in some of my cases, to have acted as the cause of the attack of melancholia. The following is an illustration.

Case I. A. B., a female, aged 27, and married to a groom and gardener, was admitted in November. She was of weakly general health, and lived in a close and unhealthy part of London; and the present was the first attack of insanity. She had borne children rapidly; which were feeble and rickety, two being unable to run alone. The husband being employed away early and late, she was much alone. She was originally of lively disposition. For the last two years, she had quite altered in this respect, and had seemed absent and depressed, as though the care of the family was too much for her. She had for the same period become forgetful; would go to the shop and purchase the same article twice over in a single day. Twelve months before admission, one of the children died. She had been much worse since. Forgetfulness had increased; abstraction became more frequent; and she began to neglect her house. Six months after the loss of this child, she gave birth to another. She suckled it six weeks, and then appeared to take no more interest in it; nor in the other children. She did not provide food for them, nor dress them, nor speak to them. She began to pace the room; walked about all night; would not go to bed. For about the last three months prior to admission, she took to reading the Bible constantly. One month ago, she began to apply various passages to herself. She accused herself of all the sins mentioned in it. Of late she had said she could never die; "if they cut her to pieces it would not kill her." For the last fortnight she had refused to eat. She became greatly emaciated, and was taken to the workhouse.

The progress of the symptoms, therefore, prior to admission, was: simple depression; abstraction; forgetfulness; alteration of affection to her children; selfishness; restlessness; religious dreads; delusion; alteration of instinct of hunger.

Predisposing Cause. There was no hereditary predisposition; she was of a somewhat excitable disposition, fond of company and pleasure. The exciting cause was family cares, etc.

On admission, she was pale and delicate in appearance; and was reported to have refused food. While in the workhouse, she took only a little gruel once during nearly a week. In conversation, she did not appear depressed, but was rather talkative. She said she went into the hospital and fancied all manner of things. Her conversation was coherent, but irrational. She said she had not eaten for a long while; "that she don't eat"—meaning that she did not require to eat. She was deaf. The conjunctivæ were pallid; but there was some capillary injection here and there visible. The pupils were equal and acted readily. She appeared to have some difficulty in swallowing saliva. She said she had no sore throat; the fauces were bright red. The tongue was furred; clean at the edges. Her bowels had not been open since admission. She had taken only a little wine, which she swallowed with difficulty, and some tea. There was no cough nor dyspnœa. Pulse 80, feeble.

Third Day after Admission. She had partaken sparingly of nourishment. Her bowels had not been open since admission. Three drachms of castor oil were ordered.

Fifth Day. She would not take the oil on the third day, but took it yesterday. She had taken some beef-tea—half a pint or rather more; and one glass of wine only since yesterday. The bowels had not acted. The dysphagia continued. Two blisters were applied to the throat; and five grains of calomel were prescribed.

Ninth Day. She refused the calomel when ordered. It had, however, been since given, and the bowels had acted freely. The stools were much confined, and very dark. She had not taken food well since. Pulse 90.

Tenth Day. She was slightly excited; appeared elated or astonished at her own improvement. She wanted to relate to me all the circumstances that had occurred. She said she thought she was dead. She continued to take food freely.

Twelfth to the Twentieth Days. The improvement continued. The bowels, however, were inclined to get confined. She has been to work in the Bazaar (this is a department for fine and fancy needlework, reading, music, etc). She worked daily there, and appeared in pretty good spirits. On the twentieth day, she complained to her nurse that some one had been accusing her of something, and appeared in great grief about it. Whether there was any foundation for the complaint could not be ascertained. Her health appeared so much improved, that she was removed from the infirmary ward.

Thirtieth Day. She had a slight relapse. She appeared diffident on removal to the fresh ward, and gradually seemed to decline. At first she fell off her appetite; and for the last two days refused food altogether. She was more listless and dull; appeared confused when spoken to. The state of her bowels was not known;

she was nevertheless ordered to have cathartic pills, and to go back to her former ward. On the following day, she took her food again, but continued rather excited and talkative.

The notes from this date show gradual improvement. At first the mind seemed feeble. The memory remained treacherous up to the eighty-fourth day. She had slight variations in spirits and occasional depression to the ninety-first day. The bowels continued to show great disposition to constipation; and the constipation was several times accompanied with alteration in spirits. She took from the sixtieth day a pill composed of equal parts of aloes and mastick daily an hour before dinner, which regulated the bowels. She was discharged cured ten months after admission; and was heard of ten months afterwards, and continued quite well. The deafness has gradually left.

In this case, the depression was probably passing off at the time of admission. There had never been any suicidal propensity beyond a refusal of food, which was probably due to the state of the digestive organs. The affection was not hereditary.

The next case, very briefly narrated, is an illustration of the occurrence of violence and excitement, which is frequently exhibited in some stage of cases of melancholia. It also is another example of the effect of purgatives.

Case II. A. C., female, aged 43, was admitted in September. She was a domestic servant, the daughter of a butcher. The following account was gleaned from an aunt. The patient had been in a very desponding way all the summer. Her only sister had decided on going to New Zealand, and had since gone. Soon after her sister's decision, the patient left her situation, and went into lodgings. At this time, the cause of her throwing up her place was put down to a quarrel with her fellow-servants. About the time when she quitted her place, she began to have various fancies about her health; said she had the yellow jaundice and the black jaundice; that she was going to be buried alive; she was full of fancies of what was going to happen to her. Latterly, she said her aunt was an evil spirit who filled her mind with all sorts of things; she imagined that everybody was going to injure her; screamed when she saw a knife in any one's hand, and said they were going to cut her throat.

She had been violent towards the aunt, and attacked her under the delusion that the aunt was "a walking devil." She was taken to the workhouse on account of her violence; where, it is reported, she was very excitable, talked at random and incoherently, frequently refusing her food; declared she could not swallow; and other times she swallowed without difficulty; said that the people over in that room (pointing to a blank wall) treated her shamefully, and prevented her from sleeping.

Besides the distinct evidence of depression, there was, therefore, that concentration of the attention on herself and her bodily health which at first was approaching to a state of hypochondriasis. This condition, with the exception of some false perceptions about the power of swallowing, had, however, nearly passed away prior to admission. Whether the calling of her aunt a "walking devil" was mere abuse, or whether the patient actually entertained the belief, which would make it a delusion, is a little uncertain. Her previous health had always been delicate, but she had never had any prolonged indisposition. Her natural disposition was retiring, her temper quick. She retained her situations in service for short periods only, perhaps two years at most. She had always been steady, well conducted, and temperate.

Predisposing Cause. Her father died a lunatic. His disease was said to have been induced by drink. The *exciting* cause was as above.

State Two Days after Admission, or about the ninetieth of the disease. She was emaciated, feeble, and pallid. She had several slight bruises about the body. Her hair and irides were dark; her features hard and angular. There was an expression of irritability or acerbity. On first admission, she was dull and taciturn, but became, after a few hours, restless, fidgety, and fretful. She would answer questions put to her, and answered coherently, though with obvious reluctance. The tongue was moist and furred. The bowels had not acted for several days. She had no appetite. The belly was retracted and hard. She had only taken since admission (two days) fluids in small quantity. She said she had no cough now, but used to have it, and violent perspirations. There was some expectoration, which was purulent; and she said it rose in her throat. There were no abnormal physical chest-signs. Pulse 80, regular. She was ordered to have meat diet, and two glasses of wine daily; and to get up, if she preferred it.

Third Day of Treatment, or 93rd Day of Disease. She was up. She said she did not eat, but did. She persisted that she could not swallow. She was depressed, fretful, and peevish, and very feeble. The state of the bowels was doubtful.

95th Day. She refused to eat. Tongue red. She said the bowels did not act. The nurse had reason to believe they did. She was more feeble.

100th Day. She complained that she could not swallow; that the bowels did not act. She ate but little. A common enema was ordered.

101st Day. The enema acted slightly only. She complained of a stoppage in the throat; was restless and querulous, and greatly depressed. Every trifle was aggravated into a grievance. The tongue was moist. She refused all solid food, and said she had not taken any. She had no pain, but had a sense of heat at the back of the head. The enema was repeated.

102nd Day. The bowels acted scantily, a few scybala only being expelled. The appetite was indifferent. She complained of the light. The enema was repeated.

105th Day. The bowels were slightly relieved; scybala were discharged. The enema was repeated.

106th Day. The enema acted very freely. She said it did not. She ate her dinner voluntarily. The enema was again ordered.

108th Day. The bowels were again freely opened. She looked clearer; said she was no better, but ate a good meat dinner.

110th Day. She complained still of the throat. She was ordered to take aloes and gentian mixture three times a day.

121st Day. She had taken the medicine irregularly. She still said the bowels did not act, and that the gullet was stopped up. She was still fretful and peevish, and cried. The aloetic mixture was continued.

128th Day. There was slight and gradual improvement generally. She had begun to occupy herself.

133rd Day. The bowels were still disposed to be confined. The mixture was continued.

143rd Day. She had gradually improved; had lost her fancies; ate regularly and well; and was gaining flesh. She continued daily to recover strength; became active, cheerful, and industrious; was discharged "on trial" on the 150th day, and finally on the 178th day of the disease.

The discharge of patients "on trial" means that permission is given to them to be absent from the asylum and reside with their friends, usually for one month. Should relapse occur, the friends are directed to bring them back to the asylum, and they are received without the necessity of fresh certificates; or, should they continue well on their return at the expiration of the time named, their ultimate discharge is signed by the magistrates, on the certificate of recovery from the medical officers.

Reviews and Notices.

A Manual of Ophthalmic Surgery; being a Practical Treatise on the Use of the Ophthalmoscope in Diseases of the Eye. By Jabez Hogg, Senior Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital, etc. Third Edition, rewritten and enlarged. Pp. 296. London: 1863.

The introduction of the ophthalmoscope as an instrument of diagnosis in diseases of the eye has, within the last ten years, almost revolutionised ophthalmic surgery. So great has been the increase in our power, not only of ascertaining the presence of morbid states in the eye, but of determining their true character instead of being obliged to class under one name diseases of different character, and so great, consequently, has been the improvement in our methods of treatment, that it is not surprising that ophthalmic surgeons should be induced to write special treatises on the application of the ophthalmoscope. The author of the present work has, from an early period after the introduction of the instrument into England, made it the subject of study; and his position as one of the surgical officers of a large ophthalmic hospital has given him ample opportunities of testing its value. In the successive editions of the work before us, he has systematised and published the knowledge which he has acquired, filling up deficiencies by materials gathered from the study of British and foreign writers.

The fact that the book has reached a third edition would indicate that it must be too well known to surgeons to demand from us an account of its contents. It will, therefore, be sufficient merely to say that the author begins by noticing the Practical Advantages and the Invention of the Ophthalmoscope, describes various forms of the instrument, and gives an account of the optical apparatus of the eye. He then goes on to describe the ophthalmoscopic appearances of the eye in health and in disease; and gives an account, in succession, of the diseases of the cornea, lens, vitreous body, retina, choroid, and optic nerve, as observed with this instrument.

The book is illustrated by many coloured engravings and woodcuts; and at the end are specimens of Jäger's "test-types", and of the horizontal, vertical, and oblique lines proposed by Mr. Wharton Jones for testing the presence of "astigmatism", or the loss of power to perceive upright and horizontal lines with equal distinctness.

Mr. Hogg's book is one of those which ought to be in the possession of every surgeon who is interested in the treatment of diseases of the eye.

On the Diseases, Injuries, and Malformations of the Rectum and Anus: with Remarks on Habitual Constipation. By T. J. Ashton. Fourth Edition. Pp. 411. London: 1863.

This edition of a valuable practical work has, the author informs us, undergone careful revision; and some portions have been rewritten. The book is too well known to require us to say anything about it, beyond expressing our commendation of it as the production of a man experienced in the observation of the diseases of which he treats.

British Medical Journal.

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THE DISCUSSION ON VIVISECTIONS.

Our readers are aware that the French Minister of Commerce, etc., submitted to the Academy of Medicine documents supplied to him by a London society, and, at the same time, addressed to it the following questions:—

"1. Is there any foundation for the complaints made by the members of the Protection Society, as regards the practice of vivisections in France?

"2. Are there grounds for taking them into consideration?

"3. Can anything be done, and in what degree?"

A Committee of the Academy examined these questions, and issued a report; but it did not answer the simple questions put to it. A discussion on the report has naturally taken place in the Academy itself: and has given rise to some very interesting remarks. M. Dubois, who was himself one of the Committee, refused to draw up the report, though requested to do so, because he differed somewhat in opinion on the subject of vivisections from many of his associates in Committee. He, therefore, reserved for himself the liberty of speaking his mind freely on the subject before the Academy. His conclusions are well worthy serious attention. They seem to us to contain all that can be rightly said in favour of vivisections, and to put the matter on its true and proper footing. The greatest praise is due to M. Dubois for having had the courage to express his opinion so boldly and openly. We may add that, however intemperate may have been the language of the Society for the Protection of Animals, it is manifest, from M. Dubois's remarks, that its interference was not uncalled for in the name of humanity.

In the first part of his speech, M. Dubois demolished the work of the reporter, showing that it did not answer the questions of the Government, and left things exactly in their previous state. He then proceeded to give his opinion as to what reforms should be made in the practice of vivisection. The greatest physiologists, he remarked, such as Harvey, Pecquet, Aselli, Haller, were parsimonious and discreet in their use of vivisection. To-day we have before our eyes a very different spectacle.

"Under pretence of experimentally demonstrating physiology, the professor no longer ascends the rostrum; he places himself before a vivisecting table, has live animals brought to him, and experiments. The habitual spectators of the physiological demonstrations at the School of Medicine, the College of France, and the Faculty of Sciences, know how experiments are made on the living flesh, how the muscles are divided or cut, the nerves wrenched or dilacerated, the bones broken or methodically opened with gouge, mallet, saw, and pin-

cers. Among other tortures, there is that horrible one of the opening of the vertebral canal or of the spinal column, to lay bare the membranes and the substance of the marrow; it is the sublime of horror. One needs to have witnessed that sight thoroughly to comprehend the real sense of the word vivisection; whoever has not seen an animal under experiment (it is the term in the laboratory) cannot form an idea of the habitual practices of the vivisectors. M. Dubois drew an eloquent picture of these practices, become usual in physiological amphitheatres, in the midst of blood and of howls of pain; and he showed that, under the dominant influence of the vivisectors physiological instruction has gone out of its natural road. Himself an eminent pathologist, he treated without ceremony the unjustifiable pretensions of those innovators who, regardless at once of the principles of physiology and of those of pathology, try to transport clinical surgery to the table of vivisection."

M. Dubois, indeed, was so pungent in his censures, that some of the academicians left the hall without awaiting the end of his discourse. The veterinary part of his audience heard him to the end; and it is to be hoped, profited by the picture he drew of the sight that met his eyes on his first visit to Alfort. M. Renault, director of the establishment, took M. Dubois into a vast hall where five or six horses were thrown down, each one surrounded by a group of pupils either operating or waiting their turn to do so. Each group was of eight students, and matters were so arranged that each student could perform eight operations, so well graduated that, although the sixty-four operations lasted ten hours, a horse could endure them all before being put to death. Although unwilling to hurt the feelings of his humane host, M. Dubois could not help letting slip the word "atrocity." "Atrocities, if you please," replied M. Renault, "but they are necessary." "What!" exclaimed M. Dubois, "sixty-four operations and ten hours of suffering!" M. Renault explained to him that this was a question of finance, and that if more money were allowed the horses might be kept only three or four hours under the knife. M. Dubois stated that, it was true, fewer operations are now performed, and that horses are kept less time under the hands of experimenting students. But he declared that he never should forget the sight he witnessed at Alfort. Some of the horses were just begun upon; others were already horribly mutilated; they did not cry out, but gave utterance to hollow moans. M. Dubois, supported by the authority of many veterinary surgeons, demands that these practices should be discontinued. Dr. Parchappe, who spoke afterwards, agreed with M. Dubois. He said:

"That veterinary surgery might content itself with what suffices to human surgery. Experiments on animals are in no way indispensable to completely efficacious instruction in physiology."

M. Dubois, after showing the inconsequent character of the report, wound up by laying his amendments to it on the table.

"Your resolutions," he said, "contain the most condemnatory avowals. In recommending that vivisections should be practised with reserve, you admit that they are at present practised indiscreetly; if, again, you ask that they should only be resorted to for some distinct object, you acknowledge that they are practised unreasonably and without a clear object in view; in recommending that they should be performed only under proper surveillance, you lead all the world to suppose that they are now practised without control."

The following were the resolutions proposed by him as amendments:—

"1. The Academy, without dwelling on the injurious form of the documents that have been submitted to it, acknowledges that abuses have been introduced into the practice of vivisection.

"2. To prevent these abuses, the Academy expresses the wish that, henceforward, vivisections may be exclusively reserved to the research of new facts or the verification of doubtful ones; and that, consequently, they may be no more practised in the public or private courses (of lectures) for the demonstration of facts already established by science.

"3. The Academy equally expresses the wish that the pupils at the schools of veterinary medicine may henceforward be exercised in the practice of operations on dead bodies, and no more on living horses."

The discussion on vivisections has been concluded with the passing of a resolution proposed by M. Gosselin, which leaves the matter where it was. "The Academy declares that the complaints brought forward by the Society for the Protection of Animals are without foundation; that no notice need be taken of them; and that the performance of vivisections and of surgical operations, as practised in the veterinary schools, should be left to the discretion (*sagesse*) of men of science." Every one who has followed this debate must be aware that the resolution is what our French friends call a *non-sens;* that it is, in fact, entirely opposed to the facts elicited in the discussion. Almost every speaker except the veterinaries put in a protest, more or less strong, against the practice of surgical operations in veterinary schools; and again and again was the word "atrocious" applied to them. We learn, moreover, that "this mode of instruction" was adopted in 1761, so that for one century these "atrocious" operations have been practised on animals in French veterinary schools; and yet the Academy decides that the complaints on this score are without foundation, and that men of science in this matter need no interference! The conclusion, we admit, surprises us, and seems, indeed, more like the result of pettishness than the expression of bold and scientific sentiment. The Academy was evidently much annoyed at the language of *perfide Albion*, and annoyed that the complaints should have come from this side of the water. The French medical press has, in fact, said as much; but has properly added that, however impertinent the language, it was not the business of a great scientific body to be disturbed by words; their duty was to ascertain if there were any truth in the facts alleged. We are surprised, moreover, that in the debate no allusion

was made to the performance of surgical operations on living animals, as performed at the Ecole Pratique—the operations practised by medical students, just as at Alfort by veterinary students. At all events, we may be sure that, however much the academicians may snub the affair, the discussion cannot fail to have beneficial results. The Society for the Protection of Animals may learn a lesson from all this. Had it been reasonable in its efforts and language, it might have met with the assistance instead of the opposition of the Academy. It proposed that which was manifestly the conclusion of its own ignorance and bigotry, and did it in an insulting way; and has, therefore, been snubbed by the Academy—not much, we admit, to the credit of the Academy.

SMALL-POX.

It is satisfactory to know that the epidemic of small-pox, with which the metropolis has been visited since the commencement of the present year, appears to be on the decline. It reached its climax in the month of May, the number of deaths for the week ending May 9th being 71, and for the four weeks ending May 30th, 268. The number of deaths for each of the four weeks of August was 49, 45, 39, and 31 ; the total for the four weeks being 164. For the first two weeks of September the numbers have been only 29 and 28. It is to be observed, however, that the disease is still far above its ordinary prevalence; and that the number of deaths increased considerably after the week ending July 25th, when it was only 34, and when the Registrar-General stated that there was "reason to hope that the further spread of small-pox in the metropolis had been checked." Some idea as to the extent of the present epidemic may be gathered from the following facts. In 1861, the number of deaths from small-pox registered for the entire year was only 217 ; whereas the number for the first eight months of the present year has been no less than 1600.

From the following table, which shows the number of deaths from small-pox registered annually since 1847, it is obvious that the disease has at no time been so prevalent for at least sixteen years.

Deaths from Small-Pox in London.

Years.	No. of Deaths.	Years.	No. of Deaths.
1847	955	1855	1039
1848	1620	1856	531
1849	521	1857	156
1850	499	1858	242
1851	1062	1859	1058
1852	1159	1860	898
1853	211	1861	217
1854	694		

Our medical officers of health ought to bestir themselves, for we would have expected a different result from the great attention bestowed on sanitary matters of late years. The great prevalence of small-pox during the present year can only be attributed to the neglect of vaccination, or to the carelessness with which the operation is performed.

In connexion with some remarks which we had occasion to make on the subject of scarlet fever in our last number, it may be interesting to call attention to the much greater mortality produced by this disease than by small-pox. During the fifteen years (1847-1861), the number of deaths from small-pox in the metropolis was only 10,862, whereas that from scarlet fever was 38,890. Again, in the present year, although small-pox has been so unusually prevalent as to have created a panic, it has only destroyed 1600 lives up to the end of August; whereas scarlet fever during the same period has destroyed no fewer than 3408, and yet has attracted little notice.

DEFECTIVE VACCINATION.

The Report on Vaccination for 1862, issued by the medical officer of the Privy Council, is another tribute to the genius of Jenner—another justification of his great discovery, if one were wanting. Whoever reads this Report, however ignorant he may be of medicine, will find enough in it to show cause for the many outbreaks of small-pox which are continually occurring. The Report is founded on the results of an inquiry made by Drs. Stevens, Sanderson, and Buchanan, in different parts of England and Wales. It shows distinctly that the present machinery for performance of vaccination is an enormous failure. The registers are so kept, that it is impossible to learn the number of persons who have been vaccinated. Again, the amount of vaccination varies greatly in different districts. In some workhouses, for example, and elementary schools, unvaccinated children were found to the extent of 20 to 34 per cent. and upwards. The fault of this lies with the authorities mainly, and in part with the parents. There are no proper arrangements made for the performance of the operation. Boards of guardians are most neglectful in not having contracts made (as enjoined by law), and in seeing them carried out. Then, again, there appears to be no regular method in the mode of performing the operation, nor with regard to the choice of lymph. Vaccination is often unskilfully and defectively done, and the matter used too old and inefficacious. The *quality* of public vaccination is very defective, as well as the *quantity* of it. Only one-half of the vaccinated (so-called) are properly secured against small-pox. The result of all this inquiry is highly satisfactory in one sense; viz., as demonstrative of the power of man over the spread of small-pox. We have here the causes, or one of the chief promoting causes, of the spread of small-pox clearly brought before us; viz., our own neglect and carelessness. This prevention of diseases of a specific character is

manifestly the main treatment of them—the all-important. When once they have got possession of a man, the control which medicine has over them is comparatively *nil;* they must run their course. This Report will probably lead to a reconsideration of the subject of compulsory vaccination by the legislature; and we would suggest to those of our readers who are interested in the matter personally as vaccinators, that they should take the opportunity of bringing forward their griefs in reference to the payments made by boards of guardians for vaccination. Let them, if they can, show that one defect in the proper carrying out of vaccination lies in the too often wretched pay of those called on to do the work, and make a demand for proper remuneration. We would on this point suggest, that surely there must be some one fair and equitable sum for performance of vaccination, to which medical men are entitled. The different fees, from 1*s.* upwards, paid in different districts, indicate that the proper sum is not yet discovered. Why should not some influential public body advise the Government on this head, and recommend what is a fair remuneration. There also appears, we must confess, something degrading to the profession and wrong in the fact of payments being made for successful cases only; and for the manifest reason, that the most skilful operator is not always successful. Fancy this no cure no pay system carried out generally in the practice of medicine! But if it be right in one case, why not in another? Some of our medical brethren at Croydon distinctly stated that one cause of the defective performance of vaccination was the lowness of the sum paid for the operation. If this be really a cause, it should be explained to the legislature.

THE WEEK.

The telegram tells us that Professor Henderson of Edinburgh has been summoned to Dublin to hold a consultation with the medical attendants of his Grace the Archbishop of Dublin. That Dr. Whateley should summon to his aid homœopathic practitioners is comprehensible enough, inasmuch as he has, for the best part of his life, been the highest and most constant patron of Mesmerism, clairvoyance, and other species of quackery and delusion. We simply refer to the telegram, because it is important to the profession to know, especially in such a prominent instance, that no practitioner of medicine condescended to play a part in the consultation alluded to. Our brethren in Dublin have assumed a particularly prominent position in the denunciation of consultations with homœopaths; and we need hardly remind our readers, did, in consequence, bring down on their heads the denunciations, in no mild terms, of this very archbishop. They therefore stand committed to the profession to do their duty manfully and honestly in such a case as this. We have no reason to doubt that they will, in fact, give the profession full satisfaction in the matter; and, until we hear to the contrary, we shall assume that the professor of homœopathy met in consultation men only of his own particular way of thinking.

Our President's proceedings at Bristol are thus alluded to in the *Wiener Medizinische Zeitschrift:*

"Dr. Symonds is one of the most accomplished and learned physicians of Bristol. How happy the Association was in its election of him, was shown by the splendid and highly philosophic address delivered by him at the opening of the meeting; by the tact and energy which he displayed during his three days of presidency; by his hearty and magnificent hospitality; and by the spirited discourses with which he prefaced the toasts as chairman of the banquet."

In the last number of the *Social Science Review*, Dr. Richardson calls attention to the "Greek fire", lately brought into especial notice through the siege of Charleston.

"The construction of modern 'liquid fire'," he says, "is based on simple scientific principles. I think that it might be so formed that it would actually burn under water. The principle is this: a rapidly oxidisable substance is suspended for a time through a liquid, in which it is held innocuous so long as the two are confined together, but from which it is separated spontaneously when both are set free in the open air. The modern chemist who first brought liquid fire into notice was Mr. Wentworth Scott. Mr. Scott suggested the principle about eleven years ago, and during the Russian war he was untiring in his efforts to get it practically into use in our army and navy. An official board received Mr. Scott, heard his plans, nibbled at his idea, and then repudiated it. After tantalising Mr. Scott, our circumlocutionists became acquainted with another gentleman who proposed a liquid fire, but who, I believe, in the end was gently dropped also—I mean Captain Disney. At last, that which the English nation, or rather Government, refused to study as a means of warfare, has been turned to practical account in America."

The remarks of our learned associate are highly interesting. It is problematical, however, whether Greek fire, or any material so called, has been actually employed in the siege of Charleston. General Beauregard makes no allusion to it.

We are glad to hear that the family of the late Mr. Davies, medical publisher, of Princes Street, Leicester Square, have made arrangements with Mr. Hardwick to carry on the business. Mr. Davies' sudden death has, we need not say, been a sad and grievous loss to his family. Mr. Davies is well known to the profession as a most deserving and honourable minded man. He passed many years of his life in the service of Mr. Churchill, and a few years ago started in business on his own account. His steadiness and honourable conduct won him the esteem of

the profession, and, had he survived, would have ensured for him complete success. We sincerely trust that his family may still reap the reward due to his merits.

M. Seguin denies that marriages of consanguinity have necessarily a tendency to produce diseased offspring. He relates the results of ten marriages which have occurred between his own family and the family of Montgolfier. Eight of these marriages were between cousins-german, and two between uncles and nieces. Between 1812 and 1858, sixty-one children have issued from these unions, of whom forty-six are alive. No case of deaf-and-dumbness, of hydrocephalus, of stuttering, or of six fingers on the hand, has been observed among them. M. Seguin concludes that, when there exists any constitutional tendency to disease in a family, the tendency to its development is increased in the offspring by consanguineous marriage; but that, in alliances between members of a family endowed with a good constitution, there will be augmentation of the vital forces in the offspring. This is, in fact, just what is observed in animals whose breed is improved by man. M. Flourens remarked on the subject, that it is always well to study long before publishing, and that nothing has hitherto been advanced on the subject of consanguineous marriages worthy of serious consideration.

M. Le Verrier says that the Parisian complains unjustly of the heat of this year. It was hotter in 1857 than in 1863. The thermometer at the Observatory has not been higher this year than 35° cent., whilst in 1857 it was as high as 38° cent. What made the heat *appear* so great was the sudden rise of the thermometer in one day from 30° to 35°. The most remarkable fact is the continuation of the long drought. Every thing is so dry, says the Astronomer Imperial, that the rain cannot fall. The power of absorption is so great, that the vapours are taken up as soon as formed.

M. Berthelot tells us that the principles which give to wines their vinous flavour may be isolated by shaking the wine with ether, and evaporating the ether at a low temperature, without the contact of air. An extract is thus obtained whose weight is less than one-thousandth of that of the wines. The vinous flavour and the bouquet are concentrated in this extract, which is rapidly decomposed by exposure to the air.

Royal College of Physicians. Dr. Alderson, treasurer of the College of Physicians, acts officially for the President during his absence.

Yellow Fever. The Portuguese Board of Health have declared the port of Loanda to be considered infected with yellow fever since July 2nd.

Progress of Medical Science.

Slowness of the Pulse in the Puerperal State. M. Blot gives the following summary of his observations on this subject, in a memoir read before the Academy of Medicine in Paris. 1. In healthy parturient women, there is generally observed a more or less marked retardation of the pulse. 2. The frequency of this phenomenon varies necessarily with the state of the health. In the physiological state, the retardation of the pulse appears to bear a general relation to the uterine depletion; its degree alone varies. It does not depend on the disposition, peculiar to some females, to have ordinarily a slow pulse. In the cases which have come under M. Blot's observation, he has been enabled to ascertain, by subsequent examination, that in the non-puerperal state their pulse was of the ordinary frequency. 3. The degree of retardation varies much. In three of M. Blot's cases, the pulse fell to 35 in the minute; it most commonly varies from 44 to 60. Food has no manifest influence, as was proved in twenty-one cases observed at the Hôtel Dieu. 4. Retardation of the pulse is more frequent in multiparæ than in primiparæ; this, M. Blot thinks, may be explained by the greater frequency of puerperal accidents in the latter. 5. The duration of the retardation varies from some hours to ten or twelve days. It is generally most prolonged in cases where the amount of retardation is greatest, unless some diseased complication of the puerperal state supervene. 6. The progress of the retardation is almost always the same; it ordinarily commences within the first twenty-four hours after delivery, increases, remains stationary for a time, and then gradually disappears. It often persists, even in a very marked degree, during the period which is described (often improperly) as milk-fever. 7. The duration of labour does not appear to have any notable influence on its development or on its degree. On the other hand, the least pathological disturbance prevents its production or causes its disappearance. It occurs after abortion, and after spontaneous or artificial premature delivery, as well as after delivery at the full term. Uterine discharges, however copious, do not cause its disappearance; with hæmorrhage, the case is generally otherwise, but sometimes the retardation still persists after hæmorrhage that has not been too copious. 8. The retardation of the pulse is notably affected by the position of the patient. 9. Retardation of the pulse is a very favourable prognostic sign. It is only met with in women in good health. In hospital practice, its frequent occurrence indicates an excellent sanitary condition; while its rarity should cause the physician to dread the approach of some of those morbid conditions which so often prevail in the epidemic form. 10. The cause of the retardation of the pulse is not to be sought in a kind of nervous exhaustion. Researches with the sphygmograph, which M. Blot has made in conjunction with M. Marey, shew plainly that it is connected with an increase of the arterial tension after delivery. (*Gaz. Méd. de Paris*, 1 Août, 1863.)

Senile Dementia. At the end of an elaborate memoir on senile dementia and its difference from general paralysis of the insane, M. Marcé, of the Bicêtre, gives the following conclusions. 1. Senile dementia does not constitute a distinct morbid state. It is an *ensemble* of symptoms connected with various organic affections of the brain, and especially with apoplexy and softening. 2. It consists of two orders of symptoms; some affecting motor power, which is more or less abolished; others affecting the intellect, of which the principal lesion is gradual weakening, to which are superadded, as accidents, isolated delirious ideas, or maniacal

or melancholic delirium. 3. The disturbances of the motor function are always explained by the existence of organic lesions in the course or at the origin of the motor fibres; while to the impairment of the intellect correspond atrophy of the cerebral convolutions, fatty infiltration and more or less complete obliteration of the capillaries, and atheromatous degeneration of the nerve-cells and tubes. 4. While it offers numerous points of contact with general paralysis, senile dementia may be distinguished from it, in the majority of cases, by clinical signs. In a pathological point of view, both these diseases offer, as a common terminal result, atrophy and fatty degeneration of the nerve-tubes and cells. But, in general paralysis, this atrophy is consecutive to a plastic exudation which, poured out around the capillaries, produces adhesion of the pia mater to the cortical substance, diminishes the calibre of the vessels which it compresses, and thereby presents an obstacle to the circulation of the blood. In senile dementia, on the other hand, the obliteration is a consequence of atheromatous deposits, which are spontaneously produced as a result of advanced age and of a diminution of the assimilative power in the capillaries. These two states, then, differ widely in their nature; one is, if not inflammatory, at least exudative in its origin; the other is an arrest of nutrition. (*Gaz. Méd. de Paris*, 1 Août, 1863.)

Ophthalmia produced by "Sulphuring" Vines. In the South of France, the operation there practised of dusting the vines with sulphur has produced a large number of cases of ophthalmia; and M. Bouisson has made on this subject a communication to the Academy of Sciences in Paris. The workmen attacked with this affection have the eyes red, lacrymose, and swollen; they feel a pricking pain, especially towards the middle of the day, when the heat, and the direct and reflected light of the sun are most intense. They complain of photophobia, and of pains radiating towards the forehead. This irritation is diminished by rest at night and by washing with cold water. But the irritation is reproduced by its cause; and its repetition soon brings on more or less intense ophthalmia, which manifests itself in the following forms. 1. The most common form is inflammation of the caruncula lacrymalis and of the semilunar fold of the conjunctiva. On examination, particles of sublimated or triturated sulphur, enveloped in mucus, are found at the inner angle of the eye. 2. A more serious form of the disease is a true conjunctivitis; ordinarily acute, without, however, reaching the suppurative stage. It very rarely produces patches on the cornea or other severe disorders. In unhealthy subjects, the disease assumes a chronic form, takes the characters of tarsal ophthalmia, and produces lippitude and falling off of the eyelashes. 3. A third form is accompanied by subconjunctival ecchymoses. The treatment is preventive and curative. The preventive means consist in the choice of the form of sulphur to be used, in the use of veils or spectacles, and in the employment of hygienic measures after the operation. The curative means are those of ordinary ophthalmia. (*Bull. Gén. de Thér.*, 30 Août, 1863.)

Incomplete Hemiplegia with Hemichorea. M. Bouchut has lately had under his care in the Children's Hospital at Paris, a patient having chorea of one side of the body with incomplete hemiplegia. Chorea limited to one side is not of ordinary occurrence; and its presence always gives reason for inquiring as to the presence of brain-disease, which occurs more frequently in connection with it than with ordinary chorea. And, when the hemichorea is accompanied by hemiplegia, the presumption in favour of a material organic cause is still stronger.

The patient, a little girl aged 11, was admitted on June 10th, and discharged cured on July 6th. She ordinarily had good health, had never had convulsions, and had no hereditary predisposition to nervous affections. Three weeks before admission, while skipping with a rope, she fell; her head striking the ground violently. She was unconscious during three quarters of an hour; and had for several days a small ecchymosis on the right frontal region. From the day after the accident she had irregular choreic movements of the left side of the body; there were double vision without squinting, severe frontal headache, noises in the ears, slight deafness, and loss of memory, so that she almost immediately forgot what was said to her. Her appetite, however, was good; and she had not kept her bed for a single day. On admission, she still had pain in the head and double vision; but she had lost the deafness and regained her memory. She was lively, very intelligent, and in good condition; there were no febrile symptoms. Choreic movements existed in the upper and lower right limbs; but the face was unaffected. The hand was weak, and grasped objects feebly. The arm could not be raised towards the head higher than the eye. The patient could not stand on the right foot, nor lift the leg of that side as high as the other. In walking, the right leg dragged a little; and the skin of the entire right side was in a state of partial anæsthesia. Sulphur baths were administered daily. The improvement was rapid from the first; the diplopia and headache disappeared, and were followed by the paralysis of motion, the chorea, and the anæsthesia. On the fifth day, the child was convalescent.

In M. Bouchut's opinion, the symptoms were the result of cerebral disturbance and of partial congestion produced by the fall. He attributes the removal of the congestion to the influence of rest rather than of the sulphur baths. (*Gaz. des Hôpitaux*, 22 Août, 1863.)

A New Hæmostatic. Dr. Janssens has called the attention of the Brussels Medical Society to a new hæmostatic proposed by Professor Piazza of Bologna. Repeated experiments have shewn him that the alkaline chlorides render the clots formed by perchloride of iron much more compact, more homogeneous—in a word, more fibrinous. Hence M. Piazza has conceived the idea of mixing solutions of perchloride of iron and pure chloride of sodium, as in the following formula:—Pure chloride of sodium, 15 *grammes;* neutral solution of perchloride of iron (30 degrees), 25 *grammes;* distilled water, 60 *grammes.* The chloride of sodium is dissolved in the water; the solution is then filtered, and the perchloride of iron is added. It is said that this hæmostatic has been successfully employed in St. John's Hospital at Brussels by MM. Rossignol and Janssens. It is not liable to produce violent local irritation, the perchloride of iron being diluted, while its efficiency is not impaired. (*Bull. Général de Thér.*, 15 Août, 1863.)

New Method of Preparing Subnitrate of Bismuth. The bismuth is dissolved in nitric acid in the ordinary manner; the impurities are then separated, the mixture is warmed in a water-bath, and 80 *grammes* of alcohol are added to each 120 *grammes* of bismuth. Brisk effervescence immediately takes place; and ethereal and nitrous vapours escape. The mass is then stirred forcibly with a glass rod, until nearly dry, which takes place in a few minutes; 80 *grammes* of alcohol are again added, and effervescence again occurs, but less briskly than before. Reaction having now entirely ceased, the mass is warmed gently until it has assumed the appearance of a more or less fine powder. It is then triturated in a porcelain mortar, thrown on a filter, and washed with distilled water. According to M. Smedt, this process gives 181 *grammes* of pure white subnitrate of bismuth from 120 *grammes* of the metal. (*Bull. Gén. de Thér.*, 15 Août, 1863.)

Dressing of Wounds. M. Maisonneuve employs as a dressing to wounds, compresses soaked in glycerine either pure or holding in solution one-thousandth part by weight of phenic (carbolic acid). When a wound assumes an unhealthy aspect; or when the pus seems about to become altered in character; as well as in cancerous, atonic, or varicose ulcers, the dressing applied consists of glycerolate of phenole—*i.e.*, glycerine holding phenic acid in solution as above described. M. Maisonneuve believes this glycerolate to be a better disinfectant than permanganate of potash. (*Jour. de Méd. et de Chir. Prat.*, Août 1863.)

Sutures in the Operation for Hare-lip. M. Giraldès has for some time used, in treating cases of hare-lip, a simple suture of silver wire. The result, he says, has surpassed his expectation; and hence, whatever be the age of the child, or the amount of deformity, he uses the simple in place of the twisted suture. The advantages which he recognises are the following:—1. The silver wire suture allows of a more regular and exact coaptation of the lips of the wound; 2. Its application is easy; 3. It does not constrict the tissues as the twisted suture does; 4. It may remain for ten, twelve, or fifteen days. In some cases, he has not removed the sutures until cicatrisation has been completed. In performing the operation, he uses small fine needles. The whole thickness of the lip, from skin to mucous membrane, is traversed; and the needle is brought through the opposite side from the mucous membrane to the skin. The projecting ends of the wire are then twisted so as to bring the edges of the wound together. (*Bull. Gén. de Thér.*, 15 Août, 1863.)

Treatment of Hydrocele. M. Maisonneuve treats hydrocele by nitrate of silver in the following manner. A stick of nitrate of silver and an ordinary probe are held together in the flame of a lamp, so that the nitrate is fused, and a drop adheres to the end of the probe. The contents of the hydrocele are evacuated by means of an ordinary trocar. The probe, having been well wiped to free it of the deposits from the flame, is then introduced through the cannula into the tunica vaginalis, and rapidly moved three or four times over its surface. The nitrate of silver is dissolved, and an inflammation is set up which produces the desired result. The patient should be kept at rest for eight or ten days. The same method is applicable to small serous cysts, in the treatment of which injection with tincture of iodine is often employed. (*Journ. de Méd. et de Chir. Prat.*, Août 1863.)

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Bull Inn, Rochester, on Friday, September 25th, at 3 P.M.

Dinner tickets, 6*s.*, exclusive of wine.

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, September 15th, 1863.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Ship Hotel, Dover, on Thursday, September 24th, at 3 P.M.

Dinner will be ordered for 5 P.M.

Thomas Boycott, M.D., *Hon. Secretary.*

Canterbury, September 7th, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [Ordinary.]	Yarborough Hotel, Grimsby.	Wednesday, Sept. 23rd, 2 P.M.
Midland. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Oct. 15, 2 P.M.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Annual Meeting.

[*Held at Newcastle-on-Tyne, August* 1863.]

The Coal-Miners of Durham and Northumberland: Their Habits and Diseases. By R. Wilson, M.D. This was a very able and elaborate paper. The author commenced with some general observations, on the nature of life, disease, and death; and stated that his object was to shew what effect the exclusive habits and occupation of the coal-miner of the north of England have on his health and length of life. He then described the habitations of the miners, which, he said, were generally clean and comfortably furnished. The various subdivisions of labour in the coal-mine were then noticed; and the operation of mining, as carried on by the pitmen, was described. The habits of the men, when off duty, next came under review. The pitman never feels hungry while at work, but on coming out he becomes ravenous and takes food as soon as he enters his cottage. Many of the foreshift-men take "crowdy," which is a compound of oatmeal, hot water, and butter; others take coffee or tea, with bread and butter, and some take dinner. The backshift-men always take dinner when they come home; this usually consists of roast beef or mutton and potatoes, with boiled suet-dumpling or pudding. They eat their pudding first, and beef or mutton afterwards. They take animal food once a day only; and, considering the great muscular exertion necessary in hewing, the amount of mutton they eat is very moderate. They seldom or never drink beer at dinner. Most smoke a pipe, and then they wash. This washing process is done very effectually. A large wooden tub of hot water is set down before the fire; the man then sits down on a small stool, with a leg on each side of the tub; and, being supplied with a piece of soap, he begins by washing his hands, arms, and chest, head, neck and face, and ends with the lower extremities, the one after the other. This finished, if in the foreshift he goes to bed; his wife hands him his pipe lighted; and in a few seconds he is fast asleep. The backshift-men dress after dinner, and employ themselves as their fancy leads them. Every available piece of ground near the villages is converted into a garden; and almost every cottage has one attached to it. Some keep poultry, and most feed a pig; they cure their own bacon with great success. Their bread is home-made; two kinds are used by them—white and brown. Great excesses are still prevalent on the pay Friday and Saturday nights; ale is the liquor chiefly drunk; but no matter what excesses a man may commit, he must be at his post on the Monday following, or run the risk of being turned off; so that the habitual drunkard is certain to lose his employment. In all the author's experience, he had never known a case of dipsomania, nor had he been called upon to treat a single case of *delirium tremens* among the pitmen. By the rules of their benefit societies no one is allowed to frequent public-houses while receiving sick money; he is not to be out later than nine o'clock in the summer

and seven o'clock in winter; and he cannot go from home without the leave of his medical attendant. Men who are injured while at work in the pit get a weekly allowance of five shillings from the owners of the colliery. In the sanitary statistics relating to miners, submitted to the International Statistical Congress, a table of the aggregate number of deaths of miners, 15 years and upwards, in 19 districts of England and Wales during the five years, 1849-53, gives from all causes, 7434 deaths. Of these 81 were occasioned by small pox, 810 by cholera and diarrhœa, 434 by typhus, 101 by other zymotic diseases, 304 by diseases of the brain, 361 by heart disease and dropsy, 1663 by phthisis, 790 by diseases of the lungs, 260 by diseases of the stomach and liver, 71 by disease of the kidneys, 37 by diseases of the joints, 1813 by violent deaths, and by other causes 709. Hence violence is the most frequent cause of death. Accidental violence also incapacitates the pitman from work oftener than any special disease or ailment. Accidents, if not immediately fatal, are not often so ultimately. During the last seven years 250 men got injured at work, and were under Dr. Wilson's care for periods varying from one week to six months; and although many were very hopeless cases, all recovered but two, one of whom had organic disease, and the other went to work too soon after the receipt of the injury, and partook largely of stimulants. In all these cases, many of which were compound and comminuted fractures, there did not occur one single case of pyæmia. Phthisis stands next as the most prevalent cause of death. Dr. Wilson would say that phthisis is not prevalent amongst the miners of the north of England; and he had further to notice in this district the absence of the so-called black phthisis or carbonaceous lung. Attacks of pleuropneumonia are not unfrequent; and bronchitis is common. It is rare to find an old pitman who has moved about much from one colliery to another who is not short-winded. Not having had the opportunity of making *post mortem* examinations in such cases, the author could not say what is the pathological state of the lungs; but it could be easily conceived that the irritating nature of the gas unavoidably inhaled may give rise to spasmodic asthma, and this, with the sudden changes of temperature of the air breathed, causes the copious secretion of mucus, and ultimately emphysema. The number of 361 deaths from heart-disease seems a small proportion, when we consider that the ailment just alluded to brings on heart affection, and also that the rheumatic diathesis, which prevails amongst them, is such a great source of organic disease of the heart. Contrary to what might be expected from the violent muscular exertion necessary in hewing, frequently working in wet and damp places, and exposure to currents of air, rheumatism or rheumatic fever does not often affect the coal-hewers. Their freedom from this as well as other formidable disease, is clearly owing to the free perspiration while at work, and the daily ablutions with soap and hot water at home. The drivers and lads are more exposed to draughts of air, and they do not perspire so freely; they are, therefore, more liable to rheumatic fever, and its frequent consequence, heart-disease and dropsy. The hard work and constrained position of the mine is unsuited for the youth with an enfeebled heart; and, with the exception of epilepsy, there is no other disease so inimical to the poor young pitman. There is nothing of which a pitman complains oftener than a pain in the back; it is sometimes so severe as to unfit him for work. Dr. Wilson believed it to be a species of lumbago, induced by the great strain on the muscles of that part, and in no way connected with the kidneys. He had had occasion to treat a few cases of renal calculus; but he never saw a case of Bright's disease in a pitman. That the disease is not uncommon in the district might be known from the fact that, at the time he wrote, he had five patients under treatment for albuminuria, three of them being wives of pitmen. He failed to trace any peculiar tendency to disease of the brain, unless the stooping position may tend to produce apoplexy. Gastric and hepatic derangements are by no means uncommon, owing to excesses at the pay, irregularities in diet, and smoking tobacco; but the coal-miners are not more liable to indisposition from these causes than tradesmen or mechanics. The joints, though heavily dealt with, do not often suffer. The deaths from zymotic diseases were not great, when 810 occurring from cholera and diarrhœa, which prevailed as an epidemic during the period above referred to, were deducted. The coal-miners visit much amongst each other; and contagious epidemics are apt to spread through the villages; but owing to the construction of the cottages, and their fires kept constantly burning, the ventilation is good; and consequently the rate of mortality from infectious disorders is not large.

Nineteen mining districts being classed into four groups:—1. Cornish districts; 2. Staffordshire districts; 3. Northumberland and Durham districts; and 4. South Wales districts—it is found on examination that the South Wales districts are the most unhealthy, and the Northumberland and Durham districts the most healthy. To every 100 miners of the aggregate of the four groups of the mining districts living at fifteen years and upwards, the annual deaths are 1.811; in Durham and Northumberland they are 1.112. In Durham and Northumberland districts the deaths per cent. of males, exclusive of miners, are 1.855 per cent., whilst in the South Wales districts the numbers are for miners, 2.618; and exclusive of miners, 2.214. The after-life time of males of all classes of England and Wales at 20 is in round numbers, 39 years; from 63 healthy country districts, 43; Cornish miners, 34; Staffordshire, 33; Durham and Northumberland, 42; South Wales, 30. Within the last few days there had been taken from the registrar of the Easington union, the cause of death of every coal-miner and every coal-miner's son above 10 years of age, who died during the last 10 years. The union has an area of 34,780 acres, and a population of 26,938; eight or nine large collieries are within it, and the number of coal-hewers in considerably above 2000; the deaths from all causes have been 5365, the deaths of coal-miners and men who worked in or about collieries are 470; of these 35 were caused by small-pox, cholera, and fever; 33 by disease of the brain, including apoplexy, paralysis, and tetanus; 60 from disease of the heart and dropsy: 56 from phthisis (20 of the deaths from phthisis occurred under 20 years of age, some had not worked underground, and some were registered as screeners); 14 from disease of the lungs, including bronchitis, rheumatism, and asthma; 17 from diseases of the stomach and liver; 2 from diseases of the joints; and cancer, 11; 4 from disease of the kidneys: 45 from old age and exhaustion, and from violence (including 1 by suffocation, 2 by burning, 8 by drowning, 2 by feloniously cutting and stabbing) = 166. We notice here the large proportion of deaths from accident; the paucity of phthisis and the number of deaths from old age—13 registered as heart-disease, asthma, and bronchitis, were upwards of 70; 2 deaths from joint disease; 1 from Bright's disease; and not one from the specific diseases brought on by excessive drinking. These facts, the author thought, must show there is nothing in the habits and occupation of the coal-miner of this neighbourhood detrimental to his health; but rather that his peculiarities, however unnatural and even indecent they may appear to some, tend to his welfare. On going to work, were he to take a full meal, his digestion would either be entirely suspended or unduly hurried; and if he washed prior to taking food on his return home, this process, which more than anything else maintains his healthy vigour, would be less efficiently done, his stomach might suffer by its own secretion, and his appetite and digestive power would certainly diminish. Pitmen marry young,

and are thus freed from a host of imaginary and real diseases which embitter the existence of thousands more fortunately placed. The author would say, then, to the philanthropist—"Let well alone, and do not interfere with the physical condition of the miner in our northern coal fields." A more useful and necessary aim would be to try to improve his moral state; although even in this respect he is better than he seems, and has been grossly misrepresented. The ruffian is considered as much a ruffian in a colliery village as in any town or city, and his conduct is as much condemned as it would be in any society. Much of this is due to Methodism; and however much we must regret the lack of confidence of a community in the established religion of its country, it is to the credit of the dignataries of our Church that they recognise the good accomplished by the exercise of that means which, although they cannot approve, they do not condemn.

Voluntary Closure of the Glottis. By GEORGE D. GIBB, M.D. The author said, that independently of the act of breathing, this was accomplished by temporarily holding the breath, and voluntarily acting upon the muscles of the larynx, and opening and shutting the glottis at pleasure. This action could be seen with the laryngoscope, in a series of experiments which Dr. Gibb had performed upon himself, and they proved that the muscles of the larynx are voluntary, and wholly under the control of the will, in most, if not all individuals.

Position of the Epiglottis. By G. D. GIBB, M.D. This was a continuation of a paper brought before the Association last year at Cambridge. In the examination of six-hundred and eighty healthy persons, Dr. Gibb had found eleven in every hundred to possess a pendent epiglottis, being more or less oblique or transverse, and therefore covering up, to some extent, the opening of the larynx. This is so inconvenient in the event of disease of the throat, amongst children especially, that he recommended that every child between the ages of four and twelve years should be examined as to the position of the epiglottis, and if pendent the parents should be made acquainted with it.

Plants and Gases. By R. GARNER, ESQ. In this paper, Mr. Garner brought forward the subject of the natural inhalations and exhalations of plants, and of the effects on vegetation of certain non-natural contaminations of the atmosphere, such as occur in coal and mining districts, consisting for the most part of sulphurous and hydrochloric acids and of ammonia. Different plants have different susceptibilities for such influence; and a kind of rudimetrical table may be constructed, in which the greater or lesser impurity of the atmosphere may be shown from the effects on plants. Thus, the rhododendron, or yucca, or aucuba will flourish in an air fatal to the common laurel; wheat will luxuriate when a holly or oak will die. Annuals suffer least, evergreens much. The paper gave the result of many experiments on plants by means of gases, etc., applied to the leaves and roots. Some plants which appear naturally to luxuriate in the coal-strata, as the oak, holly, and some ferns, soon die when the mines began to be worked. Trees lose their leaves earlier than in other districts, and, as a rule, evergreens suffer much. One thing was fortunate, annuals suffer less; for instance, corn and wheat do well when nothing else could, and perhaps the exhalations in question might even tend to ripen them.

THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA. We are happy to announce that the labours of the Committee of Revision and Publication of the new *Pharmacopœia* are at length closed, and that this authorative manual is now placed before the profession. (*American Medical Times.*)

Correspondence.

INFLAMMATION OF MUCOUS MEMBRANE.

LETTER FROM JAMES ROSS, M.B.

SIR,—Permit me to call the attention of the profession to a remark made by Dr. Chambers, in his introductory lecture, "On the Formation of Mucus and Pus." "The office of mucous membrane," he says, "is not to secrete mucus. It is most active when it is not doing so, and its activity is decreased just in proportion to the copiousness of the mucus." We most heartily agree with Dr. Chambers. This is a simple and practical test of the degree of nutrition carried on in a mucous membrane, and ought to be a guide to us in the application of our remedies.

Let us apply this test to some of the abnormal conditions of the membrane. The first effect of an inflammation of the mucous membrane is to render its surface dry; and the second is to render the secretion of mucus more abundant. Apply, then, the above test, and the inference is easy, as it is logical, that the first stage of inflammation is characterised by an increased, and the second by a diminished nutrition. This idea is borne out by noticing the progress of inflammation in the other tissues, as well as in mucous membranes. Take, for instance, the function of the brain as the outward exponent of the amount of nutrition going on in it. Here, in the first stage of inflammation, all the senses are exalted, there is intolerance of light and sound, with furious delirium; while, in the second stage, the patient lies in a state of stupor, with dilated pupil, and almost insensible to light and sound. Again, an inflamed muscle becomes at first spasmodically rigid and then paralysed.

If, then, the first stage of inflammation is characterised by an increased, how does it come about that the second is characterised by a diminished nutrition? This is a question that does not concern me very much how it is answered, so long as it is granted that in inflammation there are two perfectly distinct stages, and characterised by opposite conditions of nutrition. My own idea of it is the following. I conceive that, whatever may be the exciting cause of inflammation, whether it be external irritation, or poison circulating in the blood, or an action of the nervous system, the conditioning cause is an excess of the normal action of the tissues; and that, in order to administer to their demands, there is a great influx of blood to the part. But the violent action going on in the part now produces changes in the blood and capillaries, which ultimately procure occlusion of some of the capillary vessels. Also, owing to the high action going on, there is a great amount of waste products separated from the tissues, while the absorbents are not able to meet the demands made upon them, so that these accumulate external to the vessels. Now that the capillaries are pressed upon from without by this accumulation of waste products, and some of them plugged from within, the circulation must be to a considerable extent impeded, and, as a natural consequence, the tissues cannot now be so highly nourished; and this gives rise to a diminished nutrition in the part. So that the high action in the tissues constitutes the disease; the arrest of the circulation, to a certain extent, nature's method of checking it.

Let us now apply this test to one of the remedies of inflammation, namely, counterirritation, to see what effect it has on the nutrition of the parts. Suppose, then, that in the first stage of bronchitis, when the membrane is dry, the bronchi constricted by spasm of their muscular fibres, and the patient suffering from difficulty of breathing, and a dry harassing cough; a

blister is applied; the membrane pours out mucus; the spasm becomes relaxed; the patient now breathes easily, and tells us that his cough is quite "loose". Now this is just the natural course of bronchitis; and all that the blister has done is to hurry the inflammation through the first stage, when most of the distress is experienced, on to the second stage, which is comparatively easy. It has neither "allayed" nor "controlled" the inflammation; but merely assisted it through its natural progress. Again, in the second stage, when the membrane is pouring out mucus or pus (an evidence of still lower nutrition), a blister is applied, the mucus or pus becomes less and less in quantity, until it disappears. Here, then, the blister has raised the standard of its nutrition.

In both these cases, I cannot conceive of the blister acting on any other principle than that of stimulation; and I here bid defiance to any member of the profession to bring forward one unequivocal case, where a blister has either "allayed" or "controlled" inflammation. It is merely a local stimulant, and only to be employed when a stimulant is indicated. No practical man would ever think of applying a blister in the first stage of pleurisy; and, if it be applied, is the inflammation in any way allayed? Certainly not. True, the severe lancinating pain may be at once relieved, and the patient and his friends think that the blister has been of great service; but percussion instantly reveals the *rationale* of this. The bag of the pleura is filled with fluid, the inflamed membranes are now separated from each other, and the pain ceases; but again I repeat that the inflammation has only been hurried on from the first to the second stage. During the second stage, it procures absorption of the fluid by stimulating the tissues of the pleura to increased action, and raising the standard of their nutrition.

It follows, now, that we should be curious to know how the blister produces this action; but, so long as it is granted that its therapeutic value depends on its power of stimulating the tissues to increased action, I care not much what opinions may be held regarding its *modus operandi*. I am willing to shake hands with the neuro-pathologist, who would have it act through the medium of the nerves; nor have I any great objections to the old theory of counterirritation, if it can be shewn that the abstraction of blood from the part will raise the standard of its nutrition. My own opinion is, that this action spreads along the tissues. Surrounding a blistered surface, there is a red ring of considerable depth; which shows that the irritation has spread beyond the spot with which the blister was in immediate contact. Now, we cannot suppose that the irritation has ceased when our dull senses cease to recognise a change in the outward appearance of the part; but that, beyond the red zone surrounding the blister, there is another zone, the tissues of which have been stimulated to increased action, without the increase being so great as to cause any change in the part which our unaided senses can recognise. If, then, the tissues of this external zone are in a state of lowered nutrition, the blister will tend to raise their action of the normal standard. Irritation spreads quite independently of the presence of nerves and blood-vessels (however its extension may be modified by them), as it spreads in tissues destitute of both, such as articular cartilage; so that irritation is mainly, if not wholly, propagated by an action of the parenchyma of the part, and on this extension of irritation from an inflammatory centre depends the action of a blister.

If it be granted that a blister merely acts as a local stimulant, and only to be employed where a stimulant is indicated, I feel persuaded that it will lead to very practical results; and I feel equally persuaded that the idea of counterirritation, as it has been called, allaying or having a controlling power over inflammation, has led to most dangerous errors in practice.

When I was a medical student, Mr. D——, labouring under acute tonsilitis, consulted me. It was not a severe case, and the inflammation had begun to subside. In order to expedite the recovery, as I imagined, I ordered a mustard blister to the external fauces, with the idea that it would "*allay*" the inflammation; and, at the same time, I ventured to predict that he would be much better, if not quite well, on the following day. Next morning I called, fully expecting to find my prediction verified; but, to my amazement, I found him suffering extremely, the inflammation was lighted up again, and it ended in suppuration. I accused him of having exposed himself to cold; but he assured me that such was not the case, and justly, as I now think, attributed his sufferings to the blister. There can be little doubt that such errors are frequent.

To sum up, then, inflammation consists of two stages; the one characterised by an increased, the other by a decreased, nutrition. I find, if a blister be applied in the first stage, it merely aggravates the inflammation, and hurries it on to the second stage; and, when applied in the second stage, it tends to raise its nutrition to the normal standard.

I am, etc.,

James Ross, M.B. and C.M.

Knottingley, August 1863.

SUPPORTING THE PERINÆUM.

Letter from Thos. B. Bott, M.D.

Sir,—I have been much pleased with the very sensible remarks on the subject of supporting the perinæum in labour in the letter by Mr. Russell of Bawtry, published in our last Journal; and, having proved its value during several years, I can very confidently recommend his practice.

As the head advances, I have been accustomed to prepare for it by artificially dilating the vagina—pressing on the perinæum with the index finger during a pain. The passage of the head over the perinæum is thus expedited, and the distension of that region is less sudden. In so far the tendency to rupture is obviated. But when the head or the scalp-tumour sufficiently protrudes, I commence the manipulation advocated by Mr. Russell. In so doing, the mother is, of course, compressed between the back of the child's head and the pubis; but, as the interference is only to be made during the last few pains, the pressure is only of short duration, and at intervals; and no inconvenience generally results.

It is curious that your correspondent and I should have been thinking on this subject at the same time. Last week I came to the conclusion that I had tested this plan sufficiently long to warrant my writing to you on the subject. However, I did not find an opportunity; and, when this last week's impression came out, I found that I had been saved the trouble.

I am, etc., Thos. B. Bott.

Bury, August 31st, 1863.

Edinburgh University. Sir David Baxter—who presented Dundee with a park of the value of £50,000—has funded £3,000 for the purpose of establishing two scholarships in the University of Edinburgh, of the value of £60 each *per annum*.

Bad Meat. In his last report, Dr. Letheby states that in the city of London the officers had condemned in the course of the last six weeks 43,523lbs., or rather more than 19 tons of meat, as unfit for human food. It consisted of 166 sheep, 34 calves, 53 pigs, 193 quarters of beef, and 804 joints of meat—22,516lbs., or more than half of the whole quantity was putrid, the putridity having been caused by the unusually warm weather in the early part of last month; but 9,866lbs. were diseased, and 3,211lbs. were from animals that had died from accident or disease.

Medical News.

APOTHECARIES' HALL. On September 10th, the following Licentiates were admitted:—

Becker, John Leigh, Maidstone
Miles, Thomas, Totnes, Devon
Rigg, John, Southport

At the same Court, the following passed the first examination:—

Booth, William Reuben, St. George's Hospital
Ray, Edward Reynolds, Guy's Hospital

ARMY MEDICAL SERVICE. List of the candidates who were successful at the competitive examination at Chelsea Hospital, on August 10th.

Atkins, C. J.
Barker, James
Barker, J. E.
Barry, J.
Beattie, J. T.
Bolton, R. H.
Byrne, F. A.
Collier, H. C.
Condon, E. H.
Cuffe, C., M. D.
Cunynghame, R.
Delmege, J. P.
Dick, F.
Elgee, W.
Fearon, George
Forsayeth, R. W.
Gouldsbury, V.
Greene, H. R.
Greenhill, J. R.
Haines, C.
Howard, F.
Kynsey, W. R.
Lawless, R. W.
Lyons, P. P.
Morris, H.
Preston, A. F.
Shaw, J. A.
Smith, W. P.
Thomson, A.
Troup, A. W.
Turner, A.
Weir, C. J.
White, Thomas

APPOINTMENTS.

ATKINSON, Charles S. A., Esq., appointed House-Surgeon to the West Norfolk and Lynn Hospital.
CORRIE, James J., Esq., appointed Resident Medical Officer to the Leeds Fever Hospital.
BRISTOWE, John S., M.D., elected Physician to the Asylum for Female Orphans.
HEAD, Edward, M.B., elected Assistant-Physician to the Metropolitan Free Hospital.
ORROCK, James, Esq., appointed Surgeon-Dentist to the Leicester Infirmary.
*SMITH, W. Abbotts, M.D., elected Physician to the Metropolitan Free Hospital.
TUKE, John B., M.D., appointed Assistant-Physician to the Royal Lunatic Asylum, Morningside, Edinburgh.

POOR-LAW MEDICAL SERVICE.

BATEMAN, Charles, Esq., to District No. 1 of the Nottingham Union.
BUCHANAN, Alexander, Esq., to the parish of Tyree, Argyleshire.
FITZGERALD, Alexis, Esq., to the Carrick-on-Suir District of the Carrick-on-Suir Union, co. Tipperary.
FRENCH, Edward Thomas, Esq., to the Rathdrum Dispensary District of the Rathdrum Union, co. Wicklow.
HARDING, Charles F., M.D., to the Northern District of the Whittlesey Union, Cambridgeshire.
HUTHWAITE, Charles, Esq., to District No. 2 of the Nottingham Union.
LATHAM, Alfred Wm., Esq., to the Bloxwich District of the Walsall Union.
MOORE, David Smith, Esq., to the Bloxwich District of the Walsall Union.
NICOLLS, Richard D., M.D., to the Killeen District of the Dunshaughlin Union, co. Meath.
O'HARA, M. C., M.D., to the Kilkelly District of the Swineford Union, co. Mayo.
RANSOM, Thomas Wm., Esq., to the Bloxwich District of the Walsall Union.
ROWLANDS, Isaac, Esq., to the Tregynon District of the Newtown and Llanidloes Union, Montgomeryshire.
SOMERVILLE, John H., Esq., to the Bloxwich District of the Walsall Union.
WYLLIE, Andrew, M.D., to the Borough District of the Walsall Union, Staffordshire.

ARMY.

BRAYBROOKE, Staff-Surgeon W., to be Staff-Surgeon-Major, having completed twenty years full-pay service.
HIFFERNAN, Staff-Assistant-Surgeon E. L., to be Assistant-Surgeon 5th Foot, *vice* P. Davidson, M.D.
WILES, Staff-Assistant-Surgeon J., to be Assistant-Surgeon Rifle Brigade, *vice* F. S. B. F. De Chaumont, M.D.

To be Staff-Assistant-Surgeons:—

DAVIDSON, Assistant-Surgeon P., M.D., 5th Foot.
DE CHAUMONT, Assistant-Surgeon F. S. B. F., M.D., Rifle Brigade.

ROYAL NAVY.

ANDERSON, James R., Esq., Surgeon, to the *Pelorus*.
CANN, Thomas, Esq., Assistant-Surgeon, to the *Speedwell*.
CARLETON, William, Esq., Acting Assistant-Surgeon, to the *Scylla*.
DODSWORTH, W. D., Esq., Acting Assistant-Surgeon (additional), to the *Marlborough*.
EDNEY, William, Esq., Surgeon, to the *Scylla*.
FRAZER, John, Esq., Acting Assistant-Surgeon, to the *Marlborough*.
HAY, Robert, M.D., Acting Assistant-Surgeon, to the *Pelorus*.
HENDERSON, Joseph, M.D., Staff-Surgeon, to the *Boscawen*.
M'SHANE, Charles, Esq., Surgeon, to the *Gibraltar*.
MIDDLETON, James, M.D., Assistant-Surgeon, to the *Weser*.
PRATT, Alfred S., Esq., Assistant-Surgeon, to the *Dee*.
REID, Walker, M.D., Acting Assistant-Surgeon, to the *Gibraltar*.
WALLER, Edward, M.D., Assistant-Surgeon, to the *Gibraltar*.

CRAW, John, M.D.
MACDONALD, John A., Esq.
REID, Walter, M.D.
WALSH, John, M.D.
WAY, John P., Esq.
} Acting Assistant-Surgeons (additional), to the *Victory*, for Haslar Hospital.

COMERFORD, John T., Esq.
HAY, Robert, M.D.
M'MAHON, William, M.D.
WAUGH, Isaac, Esq.
} Acting Assistant-Surgeons (additional), to the *Royal Adelaide*, for Plymouth Hospital.

BIRTH.

LANSDOWN. On September 9th, at Bristol, the wife of *F. Poole Lansdown, Esq., of a son.

DEATHS.

HODSON, John C., Esq., Surgeon, at Kilburn, aged 38, on Sept. 9.
LITCHFIELD. On September 15th, Eleanor Augusta, wife of Thomas Litchfield, M.D., of Twickenham.
SEALY. On June 24th, aged 10, Alfred C., second son of William B. Sealy, M.D., of Nelson, New Zealand.

DEATH OF MITSCHERLICK. The death of the venerable chemist, Mitscherlick, lately occurred at Berlin.

OUR DEAF AND DUMB. In England and Wales there are 19,352 persons afflicted with blindness, and 12,236 deaf and dumb.

PRICE OF WAR. Three hundred thousand lives during the past two years of the war have been sacrificed in battles and by disease—and the sacrifice is not yet ended. (*American Medical Times.*)

OAKUM. This article is now quite extensively used in many hospitals as a dressing for wounds, and has thus far proved a very excellent substitute for picked lint. It facilitates discharge, while at the same time it acts as a grateful local stimulant. (*American Med. Times.*)

EXTINCT TURTLES. Frequenters of the Mansion House dinners will, perhaps, feel an unusual interest in Professor Owen's assertion "that more species of true turtle have left their remains in the London clay at the mouth of the Thames than are now known to exist in the whole world."

THE ASYLUM AT YARMOUTH. There are now a hundred and sixty inmates of the Great Yarmouth Naval and Military Asylum, eighty having recently arrived from Haslar. The asylum was officially inspected in the course of last week by Sir J. Liddell, and was found to be in a satisfactory condition.

APOTHECARIES' HALL PRIZES IN BOTANY. At the recent examination for the prizes offered annually by the Apothecaries' Society for proficiency in the knowledge of botany (systematic, descriptive, and physiological), the successful competitors were Mr. Henry Greenway Howse, of Guy's Hospital; and Mr. Ralph Gooding, B.A., of King's College; the former of whom obtained the gold medal, and the latter the silver medal and books.

SURGEONS AND COLOURED REGIMENTS. It is reported that there is some difficulty experienced in securing surgeons and assistant-surgeons for the coloured regiments, while the line officers are in excess of the demand. Whatever may be the scruples of surgeons about joining these regiments, it is apparent that the negroes are fully demonstrating their ability to become first-class soldiers. (*American Med. Times.*)

Bouquet of Wines. M. Maumené has found that the odour of some wines can be imitated by a mixture of a few drops of œnanthic ether and essence of pears; the addition of a drop or two of butyric ether gave some resemblance to other wines. By mixtures of this sort, the author thinks that the bouquets of most wines may be imitated. The taste of the mixtures prepared is as much like the wines as the odour.

Population of England and Wales. The total number of males, according to the census of 1861, was 9,776,259, and females 10,289,965. In England, the two sexes are stated at 18,954,444; while in Wales they are only set down at 1,111,780. In England, there were 50 males and 127 females of 100 years and upwards, and in Wales, 5 males and 19 females of the like advanced age. Ladies enjoy the greatest longevity in Lancashire, where there are 18 of the sex over a hundred years old, and 6 men of the same mature age.

The Cash Value of a Soldier. "To put a soldier into the field," says Surgeon-General Hammond, "costs the government nearly four hundred dollars; should he die, or become disabled in service, a pension is given. Looking at the matter, therefore, merely in a financial point of view, we perceive that it is a subject of serious importance, that every means should be taken to preserve the lives and health of those who come forward to fight the battles of their country." Taken in a strictly economic point of view, the cash value of every soldier's life in the loyal army exceeds one thousand dollars, if that life can be preserved at full vigour during the war, or until lost in battle. Such is the simple arithmetic of war. (*American Medical Times.*)

Internal Heat of the Earth. Sir William Armstrong states the increase of temperature below the earth's surface to be one degree of Fahrenheit for every sixty feet in depth. Sir John Herschel states it to be one degree of Fahrenheit for every ninety feet, while Dr. E. Hitchcock says; "The mean rate of increase has been stated by the British Association to be one degree of Fahrenheit for every forty-five feet." Mr. Fairbairn again, stated, from experiments at Dukinfield, that a mean increase of one degree Fahrenheit for every seventy-one feet had been arrived at.

New Regulations of Apothecaries' Hall. In accordance with the recommendations of the General Council of Medical Education and Registration, the Court of Examiners of the Apothecaries' Society have recently modified their regulations, so that students will in future be admitted to the examination for the degree of L.S.A. after three (instead of four) years of professional study, irrespective of pupilage; and students being medical graduates of one of the recognised British Universities will only be required to pass a *practical* examination in the practice of medicine and midwifery.

American Army Medical Service. A change has taken place in the head of the bureau of Army Medical Inspection. Dr. Perley, the first Medical Inspector-General, has resigned; and his place is filled by Dr. Joseph K. Barnes, formerly a surgeon of the United States Army, but more recently one of the Medical Inspectors. Dr. Barnes is a native of Pennsylvania, and entered the army as assistant-surgeon from that state June 15th, 1840. He was made a full surgeon August 29th, 1856. The reasonable anticipations of important results to the service, and additions to the science of military hygiene, through this bureau, have failed of full realisation through want of a competent head. Little or no direction was given to the course of inquiry, and no use whatever was made of the accumulating materials. We believe that branch of the army medical service will find in Dr. Barnes an executive officer fully capable of developing it in all its details. (*Amer. Medical Times.*)

The Channel Fleet at Belfast. The Ulster Medical Society last week at Belfast entertained the medical officers of the fleet at a sumptuous dinner at the Society's house, High Street. The chair was occupied by the President, Dr. Patterson. The guests, officers of the fleet, present were Dr. Spier, Dr. Sharood, Dr. Sloggett, Dr. Keelan, Dr. Courtenay, Dr. Mockridge, Dr. Allan, and Dr. Alcock. There were also present Drs. Bayfield, Poppilwell, and Cunningham, army surgeons; Dr. T. Reade, Vice-President Ulster Medical Society; and a large number of other medical gentlemen. The Chairman, in proposing the toast of "The Medical Officers of the Fleet", said they should all feel proud in honouring that flag which had triumphantly braved for a thousand years the battle and the breeze. "We identify ourselves with its glory; we rejoice in its triumphs; we honour its renown; we regard it as the best defence against a foreign foe, to protect what is Great Britain's boast—happy homes and altars free. The toast was eloquently responded to by Dr. Sloggett of the *Edgar*, and Dr. Smith of the *Royal Oak*.

Test of Medical Capacity. Dr. Bauer, the Health Officer of Brooklyn, in his official capacity, denied the validity of a certificate of death which was marked by orthographical and grammatical errors, taking the ground that the writer thereby showed such a defective education that he could not be a qualified medical man. He accordingly directed the coroner to hold an inquest upon the case. The sequel proved the correctness of Dr. Bauer's conclusion. The medical attendant, though a *legally* qualified practitioner, was a quack, having graduated at a chartered eclectic school. (*American Med. Times.*)

The New Medical Bill. We are pleased to find that the United Society of Chemists and Druggists has taken up this matter most warmly. Meetings have been held at Manchester and Leeds, at which resolutions have been unanimously passed, strongly disapproving of this unparalleled interference with the interests of so exclusive a body as the chemists and druggists of this country. While on this subject of the United Society, we may mention that efforts are being made by them to procure an Act of Incorporation of the chemists and druggists of the United Kingdom. Until six months after the passing of the proposed Act, all legitimate claimants to be considered as members of the trade will be acknowledged, after which time an examination by a board of examiners will be necessary. (*Chem. News.*)

Cure for Hernia. Dr. Detmold remarked that the mere reversion of the position of the body was by no means a novel procedure, as it had long ago been advised by writers upon surgery, some of whom recommended that the patient should be tied for a time to a ladder with the head downwards. He referred to a case of femoral hernia in a female whom he was called to see in consultation. When he arrived, he found the medical attendant leisurely walking up and down the room with the patient slung over his back head downwards. In this instance, the hernia was not reduced. He had occasionally succeeded in reducing strangulations in children by suspending them by the feet. (*Amer. Medical Times.*)

The Medical Charities Act. At a meeting of the Board of Guardians of the Drogheda Union, a letter was read from the Poor-law Commission Office. Some doubt had existed as to whether a medical officer of a dispensary district had the power to call to his aid in difficult cases a second practitioner for assistance and advice; and in one case, at a neighbouring dispensary, a doctor was called in in a dangerous midwifery case, and a fee of a guinea given him. The reply of the Commissioners was to the effect that, under the circumstances, the course adopted was the correct one. Their commu-

nication concluded with the following words:—"The Commissioners desire further to state that, in all urgent cases similar to the one referred to, the medical officer should, if possible, procure additional advice through the relieving officer, who has power, under Section 7 of the Poor Relief Extension Act, to procure the services of a medical officer."

Medical Education in America. We overlook entirely the primary education of medical students, and place our diplomas within the reach of the most ignorant and incompetent. The meagre requirements for graduation which the schools have instituted invite rather than deter the poorest class of students, and those who are no students at all. As a consequence, thousands of ignorant, immoral, and incapable persons go through these prescribed forms, and are in due time invested with the rank and privileges of doctors in medicine. Every session of the medical colleges swells the number of this class of graduates, until they have reached a fearful sum total. It is not strange that the popular saying should run thus, "He is good for nothing else but to become a doctor." (*Amer. Med. Times.*)

Varieties.

Dr. Ripari. Dr. Ripari has published a *Medical History of the wound received at Aspromonte by General Garibaldi.* Pietro Ripari, a Roman by birth, distinguished alike in his profession and in literary pursuits, was a volunteer soldier and surgeon with Garibaldi at Rome in 1849, and afterwards suffered long imprisonment at Pagliano. In 1859 he was free, and again joined his chief, and went through the campaign. In 1860 he was once more to the front, and entered Naples with Garibaldi; and finally, in 1862, he was at Aspromonte, was imprisoned with his general, liberated with him, and has never left him till now that he is cured.

Cattle Diseases. In the Public Health Report, Mr. Simon calls attention to cattle diseases. He points out the leading facts in the Report of Professor Gamgee, who had been appointed by the Privy Council to investigate the matter. His evidence is, in substance, that disease prevails very extensively in the United Kingdom among horned cattle, sheep, and swine; that the diseased state of an animal not only does not commonly lead the owner to withhold it from being slaughtered for consumption as human food, but, on the contrary, in large classes of cases (especially where the disease is of an acute kind), leads him to take immediate measures with a view to this application of the diseased animal; and that, consequently, a very large proportion (Mr. Gamgee believes as much as a fifth part) of the common meat of the country—beef, veal, mutton, lamb, and pork—comes from animals which are considerably diseased. The diseases which figure behind the scenes of our dead meat market are, of course, various. The most important kinds are three; viz., first, contagious fevers; secondly, the so-called anthracic and anthracoid diseases; thirdly, parasitic diseases. Mr. Gamgee states his belief that a very large proportion of the disease prevailing in the United Kingdom might by proper measures be prevented, inasmuch as the epidemic diseases are due entirely to contagion, originally foreign; while the most destructive endemic diseases are due partly to local malaria, which improved land drainage would dispel, and partly to dietetic mismanagement.

A Physiological Study. Dr. Ripari, the physician and intimate friend of Garibaldi, gives the following sketch of him:—"General Garibaldi is in stature rather well proportioned than large. He has broad square shoulders; neck, chest, and arms very fine, and formed like a sculptor's model; the muscles strongly developed. The frame so formed that no obtrusive angle mars the harmony of the whole. This it is that renders him so apt for any bodily exertion, as his powerful thighs and legs render him an indefatigable walker. His head would be large but for his vast breadth of shoulders. A high open forehead, eyes lively and eloquent, and suiting themselves to every thought of his mind; sight intensely acute, and it is a singular fact that when he fixes his eye horizontally on space, as if in search of an idea, the iris contracts, and a very flame seems to shine from it. No living soul can read the depths of those thoughts. Menotti resembles his father in this. The General's temperament is the most enviable that nature can bestow on mortal; it is at once nervous, sanguine, and lymphatic. Hence, the three men of whom we may say Garibaldi is composed—the man of thought, the man of action, and the man of calm and secure determination. I have known and know the bravest soldiers. But the solemn calmness, the supreme bravery of Garibaldi, I have seen in no other. The sentiment which prevails in him, and which all other feelings concentrate, is love. He loves man individually and collectively; he loves humanity; he loves creation, nature, the neighing of a horse, the flight of a bird, the rise of a fish, the perfume of flowers, the growth of plants, the clearness of water, the majesty of ocean are joys to him..... Of his universal love I like to quote this proof. After a painful examination of his wound, I heard him say, 'Very devils, those Bersaglieri V!' and this not as an expression of anger but of admiration."

The German University Degree Trade. We are glad to report the trade of obtaining German degrees for Englishmen to be in a flourishing condition, the dealers are enabled to pay for their advertisements, and purchasers continue to be found. We have already published the price of Giessen, Jena, and Erlangen degrees (Giessen: Ph.D., £14: 10.: LL.D., £22: 10. Erlangen: Ph.D. £15; and Jena, Ph.D., £15), and we are now enabled to give the latest price current for Rostock, in Mecklenburg Schwerin. An individual, professing to be the correspondent of the University of Rostock (which, it may be remarked, can only boast about 250 members), now circulates, "in strict confidence," of course, a printed tariff among those who reply to his advertisements, designating the original vendors of the degrees "a distinguished and ancient Prussian German (*sic*) University, established at the commencement of the fifteenth century." We subjoin the latest prices:—Ph.D. and M.A. together, £12: 12 (entrance, £2: 2, and diploma £10: 10); LL.D., £17: 13 (entrance £3: 3, and diploma £14: 10); and M.D., £30: 3 (entrance £3: 3, and diploma £27). The D.D. is granted as an honorary distinction to clergymen who have previously been customers. Fees equal to double the entrance-fees are payable to the agent by the candidates, by way of commission, on the diploma being obtained, and if you assure the agent "that your intention is to proceed" for the degree, he will (in return, and without knowing who you are, or what are your qualifications) "assure to you the certainty of obtaining the diploma." We shall be glad to complete our list by including the prices current of any other university where degrees are granted, *in absentia*, at fixed prices. (*Mining Journal.*)

Our Troops in India. The great mortality which has been supposed to belong to India is no more necessary in India, than anywhere else, and people would die off anywhere in the world as they die off in India if they were exposed to the same dangers. It is now settled beyond dispute that it is not the heat of India which makes our soldiers and their wives and children, and the civilians from this country, and the natives themselves sicken and die. It is now proved that the heat of itself offers no obstacle to man or woman of any race living to a good

old age, and dying easily and quietly at last, in the very hottest part of the interior of India. It is only when combined with other influences that heat is perilous and fatal, and the two other conditions which, in conjunction with heat, create the tremendous mortality of India are actually within our own power. The peculiar mortality, then, is needless; the health of our troops and of our fellow-citizens there, English and native, is in our own power; and we from this moment become answerable for all destruction of life and health in India which may be prevented by means clearly pointed out to us. The two incidents which, together with heat, create the diseases which sweep away the majority of victims are moisture and decaying vegetation. The heat we cannot help. The other two mischiefs we can control; but it must be done in a comprehensive and systematic way. A bit of drainage here and a bit of sweeping there, in such stations as happen to be blessed with a wise commanding officer, will not extinguish the four great diseases—the fevers, the dysentery, the liver complaints, and the cholera—which among them make up the far-famed mortality of India. (*Once a Week.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—SEPTEMBER 12, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys .. 938 / Girls .. 985	1923	1257
Average of corresponding weeks 1853-62		1802	1158

Barometer:
Highest (Sat.) 30.030; lowest (Mon.) 29.548; mean, 29.801.

Thermometer:
Highest in sun—extremes (Mon.) 100.6 degs.; (Th.) 84.2 degs.
In shade—highest (Mon.) 66.6 degs.; lowest (Fri.) 42.3 degs.
Mean—54.5 degrees; difference from mean of 43 yrs.—3.1 degs.
Range—during week, 23.3 degrees; mean daily, 17.6 degrees.

Mean humidity of air (*saturation*=100), 76.

Mean direction of wind, S.W.—Rain in inches, 0.93.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

GOOD ADVICE.—SIR: I know not what the teaching of the schools may be at the present day; but in my time, some forty years ago, it was inculcated as a golden rule, that no ocular inspection of the female organs should be made, except in the presence of a third person. If such a rule was thought necessary in those days, how much more important must it now be when a speculum is in general use!

During a long practice, I have always adhered to this rule myself, and thereby have escaped many dangers; and were it adhered to generally, we should not be disgusted with so many lawsuits, damaging equally to medical reputation and to public decency. Moreover, the tender pressure and lascivious looks of an hysterical girl are very dangerous adjuncts to the use of the speculum; and cause a degree of temptation to both parties, which no persons, however strong their moral armour, ought willingly to incur. I would therefore most strongly urge upon my brethren the necessity of observing the rule I have mentioned, whereby our profession will be saved from public scandal, and themselves from personal annoyance. I am, etc.,

Westerham, Sept. 1863. CHAS. M. THOMPSON.

P.S.—Perhaps others may have noticed, as I have done, that hysterical girls are always desirous of having *private* consultation with their medical adviser.

MEDICAL ETHICS PUT IN PRACTICE.—SIR: Not long since, your attention was drawn to a meeting of medical men at Bedford, at which a Medical Ethical Society was formed. The Secretary of the above Society has caused to be distributed in the town large numbers of the enclosed circular. I think, for the benefit of some of the profession who may be commencing practice, the idea might be useful. The gentleman who issues the circular is a M.R.C.S. and L.S.A.

If you could find space in your valuable JOURNAL for the insertion of this list of prices, you would shew the profession the means some men resort to for practice. I am, etc.,

Bedford, Sept. 14th, 1863. CRITO.

"*Medical Club*, 5, St. Peter's Green, Bedford.—Terms per quarter for medicine and attendance: A man, wife, and family of more than two children, 2*s.* 6*d.*; Ditto, with not more than two children, 2*s.*; Man and wife, 1*s.* 6*d.*; Any single person above 16, 1*s.*; Family under 16, 1*s.*; Midwifery, if paid at time, 10*s.* 6*d.* All payments to be made in advance. Entrance may be effected at any time. Patients to attend at Mr. Carter's Surgery at nine o'clock any morning, or six in the evening. If unable, they will be visited."

MR. T. UNDERHILL.—A fuller notice of the subject to which you refer will shortly appear in the JOURNAL.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

THOMAS W. WILLIAMS, *General Secretary.*

Birmingham, September 1863.

COMMUNICATIONS have been received from:—Dr. FREDERICK J. BROWN; Dr. D. DOUGAL; Mr. DUNN; Mr. F. P. LANSDOWN; A MEMBER; Mr. C. J. EVANS; Mr. T. UNDERHILL; Mr. T. L. PRIDHAM; and Mr. P. BOLTON.

BOOKS RECEIVED.

1. Practical Hydropathy. Sixth edition. By John Smedley. London: 1863.
2. Ladies' Manual of Practical Hydropathy. Second edition. By Mrs. Smedley. London: 1863.
3. Patency of the Foramen Ovale. By B. W. Foster, M.D. Dublin: 1863.
4. The Medical Charities of Birmingham. By Scrutator. Birmingham: 1863.
5. New Views on the Cause, Prevention, and Cure of Yellow Fever. By J. W. Redfield, M.D. New York: 1863.

ADVERTISEMENTS.

Weiss's Illustrated Catalogue, containing nearly 800 engravings of Surgical Instruments, and Apparatus, classified for their various purposes. Price, 5s.
62, Strand, London

Surgical Instruments.—Arnold & SONS continue to supply Instruments of the best workmanship at moderate prices, manufactured on the premises under their own superintendence.
ARNOLD & SONS, 35 and 36, West Smithfield, E.C.
Established 1819.

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

EXCISION OF THE KNEE-JOINT: IS IT A JUSTIFIABLE OPERATION?

By W. Michell Clarke, Esq., Surgeon to the Bristol General Hospital; Clifton.

There is scarcely any subject which the surgeon can contemplate with greater satisfaction than that of excision of joints, in the great success and advantage of which is found, I think, one of the greatest improvements of modern surgery. The number of useful limbs which are now annually saved by its adoption, and which but a short period since would have been condemned to removal, is indeed a cause for the greatest congratulation and thankfulness.

This position will, I believe, without any opposition, be conceded with regard to excision of the shoulder and excision of the elbow; the small mortality of these operations, and the very useful limbs they secure for the patient, having silenced all opposition. I had said all; but there has been, not long since, one voice of considerable authority raised against these operations in general; and I mention it here, because it appears to me to express an erroneous opinion. In Mr. Travers's work, entitled *Further Observations in Several Parts of Surgery*, published in 1860, there occurs the following:—"Consequently, we find that few of the successful cases survive long, to say nothing of those who sink within ten days or a fortnight after the operation of excision. Whatever may be said to the contrary by interested witnesses, I believe it will eventually be admitted, in the face of an unvarying experience, that these docked or curtailed members are comparatively useless; in the lower extremities, certainly." That such a remark upon so important a subject should have been made so recently, seems somewhat extraordinary; but, with successful cases of excision of the elbow occurring very frequently, and of the shoulder and knee less commonly, but yet not rarely, there need be no fear of such an opinion producing any very serious or damaging change of practice.

There can be no doubt that the operation which I am discussing, so far as it concerns the shoulder and the elbow, is settled upon too secure a success to run any risk of being again given up. At once safe and simple, it is done with less shock to the system than amputation; whilst, instead of leaving the patient mutilated and deformed, with a stump either useless or only capable of having attached to it some imperfect mechanical appliance, it commonly gives him a limb scarcely less useful than that of which he was possessed before the access of his disease.

But, whilst all this may be fairly affirmed of the operation as it affects the shoulder and the elbow, the same cannot yet be said of it as regards the hip and the knee. With reference to these two joints, the question may, perhaps, be still considered to be open; at all events, there is a sufficient number of respectable opponents to make evidence upon the subject admissible, and to make it desirable that it should be kept before the profession, and that cases for which the operation is peculiarly appropriate, and which have been successful, should be brought prominently forward. No less desirable is it, on the other hand, that unfortunate cases, or cases which have not a result that tells in favour of the operation, should be candidly published.

No operation has been received with more favour and enthusiasm than excision of the knee, when it was revived by Mr. Fergusson in the year 1850. This was owing very much to the skill and authority of the operator, but especially to the success of some cases which were published by Mr. Jones of Jersey, and to the very interesting, not to say exciting papers, which were inserted by that excellent surgeon in the *Medical Times*. Between the years 1855 and 1860, it was performed very frequently; and a very great success was attributed to it. Lately, however, the tide appears to have turned; and the operation, which has never been adopted by some surgeons of very high authority, seems likely to go out of favour even with others who at one time said great things in praise of it.

There are not wanting, however, the proofs of many cases having been brought to a very successful issue. There are cases recorded in which, a sufficiently long time having elapsed to test them, the patients have retained exceedingly useful limbs; and a careful examination of the whole subject does not show that this proceeding is incapable of resulting in a great success; on the contrary, it has, as Dr. Hodges remarks, occasionally yielded brilliant results. The reason, then, that excision of the knee still remains an unsettled question, is not to be found in the fact that no useful limbs have been preserved; but rather, I think, in the circumstance that these results, compared with the frequency of the performance of the operation, have been so few, whilst the deaths and failures have been so many.

The statistics that have been furnished upon this subject are indeed so unfavourable to the operation, that unless we be prepared to forego its performance altogether, we must be ready to offer some reason for the large number of failures; and this, I imagine, is to be found chiefly in the readiness with which the operation was taken up at the period above mentioned, and that for a time there was no careful selection of appropriate cases. However sanguine and hopeful of success we might be, we could hope for no other result than death if we undertook this operation for acute abscess, or for malignant disease, or in patients already dying of tuberculosis; yet in such cases, and in how many it would be difficult to find, this proceeding has been adopted.

Another reason for the want of success, although one not so forcible, may, I think, be found in the want of proper care of the patient after the operation has been performed; for, although it be easy of performance, and producing no great immediate shock, nothing requires more careful or more tedious watching in order to bring the case to a successful issue.

The latest statistics, and the most damaging, have been published by Dr. Hodges, who has collected from various sources 208 operations. (*Brit. and For. Med.-Chir. Rev.*, July 1862, p. 225.) Of these, 69 died, 60 directly, and 9 indirectly—*i. e.*, after amputation had been performed. In 33 more cases, amputation was done; and in 14 others, the limb thus saved was more or less useless. Thus the failures amounted to 116, or more than half of the whole number; whilst this unfavourable view of the case is still further increased by the fact that a considerable number of the remainder are not properly accounted for.

In an article in the *British and Foreign Medico-Chirurgical Review*, from which the above figures are taken, Mr. Holmes has given a short account of 95 cases

collected from the London hospitals. Of these, 27 died, 8 underwent amputation, in 2 the limb was reported useless, and of 10 the accounts of the result are unsatisfactory. If these numbers be further examined, they will be found to give a product a little more favourable than the statistics of Dr. Hodges, but not so much so as materially to alter the position of the operation. If we compare them with the most unfavourable that have been recorded of amputations of the thigh, they will still show a high mortality; whereas, if they be compared with the more favourable returns of those operations for disease of the knee-joint, with which only, indeed, they ought to be compared, they show a very poor proportion of recoveries indeed. Teale has given, in his work *On Amputation* (p. 6), a table arranged from the *Medical Times and Gazette*. Of these, 169, performed in London hospitals, were for disease; and 1 in 4½ died. Of 134 performed in provincial hospitals, 1 in 4 died. But more to the purpose are 85 cases published by Mr. Bryant in the *Medico-Chirurgical Transactions*, and 35 by Messrs. Cooper and Holmes in the *Medical Times and Gazette* (vol. i, 1861). Of these, 1 patient in 7 died. These give a much more favourable mortality than the statistics of excision of the knee above quoted; whilst others, published by Mr. James of Exeter in the *Transactions of the Provincial Medical Association*, give a still more favourable view of the recoveries after amputation for disease of the knee.

I need not go into the statistics that have been published by Mr. Butcher and Mr. Price; for these, although showing a more favourable result than those of Dr. Hodges and Mr. Holmes, give still a higher mortality than the return of amputations given by Mr. Bryant. My object now is rather to bring before you such an account of the operation as performed during the years 1860, 1861, 1862, as I have been able to collect; which, I thought, from the selection of cases having been better made, and the operation and after treatment having been better understood, might show an improving result. I was also especially desirous, considering the circumstances under which we meet, to give a short statement of the cases that have been operated upon in this city; and, lastly, to show you a patient of my own whose knee I excised nineteen months since.

I have gone carefully through the journals and papers to which I have had access for the three years just mentioned; viz., *Medical Times and Gazette; Lancet;* BRITISH MEDICAL JOURNAL; *Edinburgh Medical Journal*; *Dublin Quarterly Journal of Medical Science*; and *British and Foreign Medico-Chirurgical Review*; except the *Dublin Quarterly Journal* for Nov. 1862. I have found a record of 54 cases. Of these, only 6 died, or 1 in 9. Of these 6, 1 had undergone amputation previously to death; and, besides this one, 5 others suffered amputation, but recovered. The immediate result of these 54 operations is easily arrived at, and appears to be highly encouraging; but I think that statistics of this sort, although of the same kind as those which have told so much against the operation, are altogether unsatisfactory. The publication of the cases in the periodicals seems to be quite a haphazard kind of thing; no choice of time or circumstance having been made by the reporters, so as to show the true bearing of the operation in its ultimate effects.

EXCISIONS OF THE KNEE-JOINT.

Bristol Royal Infirmary.

No.	Name of Operator.	Age.	Date of Excision.	Immediate Result.			Date when last seen.	Condition of Limb, and capability of using it, when last seen.
				Recov.	Ampt.	Died.		
1	Mr. Harrison	A young man	No note	Yes	..	..	No note	When last seen, Mr. Harrison says he was carrying on a flourishing business in the sale of eggs about the streets, walking (as he asserted) twenty miles a day without inconvenience.
2	Mr. Prichard	28	1858, Nov. 9	Yes	..	..	A year since	That is, four years after the operation; and afterwards, Mr. Prichard wrote me that he had heard of him on Aug. 3, 1863, and he was then in full work as a farm-labourer.
3	Do.	37	1859, May 10	Yes	..	..	No note	Knee became quite sound in ten weeks. Not quite straight. Went into Wales, and has not been heard of since his discharge.
4	Do.	21	1859, May 26	Yes	..	..	6 mos. ago, Aug. 1863	He was walking well. Could bear the whole weight of the body on the leg. The knee was stiff, and very straight. This patient was operated upon three times.
5	Do.	22	1861, Mar. 15	Yes	..	..	6 mos. ago, Aug. 1863	Sent out with knee quite sound. Seen six months ago. The knee sound, and able to walk well. Not much shortening. Health perfectly restored.
6	Mr. Hore	8	1862, Feb. 21	Yes	..	..	3 mos. ago, Aug. 1863	Could walk without a stick, but generally used one. He walked down stairs, the height of two flats of the Infirmary, without a stick.

Bristol General Hospital.

No.	Name of Operator.	Age.	Date of Operation.	Immediate Result.			Date when last seen.	Condition of Limb, and capability of using it, when last seen.
				Recov.	Ampt.	Died.		
1	Mr. Lansdown	12	1854, Sept. 26	Yes	..	..	Dec. 1862, or Jan 1863	She was then walking without any stick.
2	Mr. Coe	Little boy	No note	Yes	..	..	No note	He left the Hospital with a very good limb; but afterwards met with a fall and injured it, though to what extent I do not know.
3	The same	Abt. 15	No note	..	Yes	..	No note	Amputation was done on account of a painful and œdematous condition of the integuments of the foot. The knee was admirably restored.
4	The same	Abt. 40	No note	..	..	Yes	..	He died from exhaustion, about a week or ten days after the operation.
5	Mr. Clarke	62	1862, Jan. 2	Yes	..	..	1863, August 3	Limb quite sound. Walks upon it well and firmly. Union very firm. Can walk ten miles with considerable ease.
6	The same	7	1863, April 26	Yes	..	..	1863, August 4	Sufficient time has not yet elapsed for proper report; but the boy is doing well, and promises to recover with a good limb.

Medical Times and Gazette, 1860, 1861, 1862.

No.	Source of Information.	Age.	Name of Operator.	Date of Excision.	Immediate Result.			Date when last seen.	Condition of Limb, and capability of using it, when last seen.
					Recov.	Amp.	Died.		
	1860.								
1	Vol. i, p. 366	16	Dr. King, Hull Infirmary	Dec. 6, 1859	..	Yes	..	Apl. 2, 1860.	A small part of the wound remained unhealed. There appeared to be fibrous union between the bones, not very firm. Splint still retained. Girl in very greatly improved health.
2	„ „ 459	11½	Mr. C. Heath	1858	Yes	..	..	Specimen shewn Pathological Society, Apl. 17, 1860	Boy had been able for months to get about most satisfactorily. Limb shortened 2½ inches. Sinuses still wept occasionally.
3	„ „ 523-4	14	Mr. Fergusson	Mar. 3, 1860	Yes	..	..	May 9, 1860	No note of condition; but on May 1st, a gutta percha splint was still kept to the back of the leg.
4	„ „ 550	14	Mr. Symonds, Radcliffe Infirmary	Oct. 10, 1859	..	..	Nov. 5 Yes	..	Bony union was so firm that on forcibly separating the bones, *post mortem*, the break went partly through old bone. Liver enlarged and fatty.
5	Vol. ii, p. 109	15	Mr. Cadge, Norfolk & Norwich Hosp.	May 28, 1858	..	Sept. 24	Yes	..	Amputation was done on account of declining strength. Bone remaining much enlarged, and discharge profuse. There was no attempt at union.
6	„ „ 240	abt. 14	Mr. Curling	3 months since	Yes	..	..	Sept. 1860	Limb in good position; but still considerable discharge, with probable disease of bone remaining.
7	„ „ 240	10	Mr. Critchett	12 mos. since	Yes	..	..	„ „	Able to walk on the limb, though with a considerable limp. Anchylosis fibrous. Some motion. Tibia and femur joined at an obtuse angle.
8	„ „ 456	9	Mr. Tapp, Dorset County Hospital	May 15, 1860	Yes	..	..	Sept. 13, 1860	Limb quite firm. Able to walk without crutch or stick, and with but a slight limp. Six months afterwards limbs nearly of equal length. Report accompanied by engraving, which shews a fair limb.
9	„ „ 479	12	Mr. Curling	June 21, 1860	..	Oct. 11	..	..	Probably same case as No. 6; but this not stated. The knee at the time of amputation was intensely painful. The old sinuses had reopened, and a new one formed. No bony union. Child's health failing.
10	„ „ 595	25	Mr. Gant	7 months since	..	Amp.	..	..	Bones found in apposition anteriorly, and welded together by osseous matter. There were also small nodules of cartilage. In the head of the tibia, a piece of necrosed bone. This probably had kept up the discharge.
	1861.								
11	Vol. i, p. 601	A young wom.	Mr. Fergusson	Mar. 1, 1856	Yes	..	..	May 18, 1861	Considerable mobility. Had been able to attend to her household duties; to run up stairs; to jump off a chair. Came under notice now on account of disease in the neighbourhood of the new joint; but quite unconnected with it.
12	„ „ 630	abt. 6	Mr. Price	May 2, 1861	Yes	..	..	No note	At the time of the report, she went out of doors daily; probably in a perambulator. No record of condition of limb.
13	„ „ 630	14	The same	May 23, 1861	?	..	..	No note	Child doing well; but record made too soon after operation.
14	„ „ 630	6	The same	..	?	..	..	No note	Ditto.
15	„ „ 518	19	Dr. Crompton, Birmingham	Dec. 26, 1860	Yes	..	..	Apl. 5, 1861	Able to walk easily with a stick. Wound not quite closed. Limb ½ to ¾ inch short. Patella loose, and plays naturally over the end of the femur. This was a primary operation for a gun-shot wound of the joint.
16	„ „ 519	17	The same	No note	..	..	Yes	..	Death from phlebitis. Crude tubercle in apex of each lung.
17	„ „ 11	7	Mr. H. Smith	6 years since	Yes	..	..	1861	Limb firmly set by bony anchylosis; 5 inches short. Tibia somewhat drawn upwards and backwards. Limb said to be most serviceable. He walks from London to Hampstead Heath.
18	„ „ 182	10	Dr. Brotherston of Alloa	Jan. 1855	Yes	..	..	1858	Able to walk well, with a scarcely perceptible limp; 1¾ inch shorter.
19	„ „ 182	9	Mr. Edwards	Feb. 20, 1857	Yes	..	..	Feb. 5, 1861	The limb has grown as much in proportion to the other limb as could reasonably be expected; 1 inch short.
20	Vol. ii, p. 218	18	Mr. Fergusson	April 7, 1861	Yes	..	..	Aug. 14	Limb quite firm. Position good. Muscles of the calf well developed. Shortening inconsiderable. Can walk well without crutches, but still uses them.
21	„ „ 58	13	Mr. Frith	July 10, 1857	Yes	..	..	June 3, 1861	Union solid, and bony. Considerable displacement. Shortening 1½ inches. The boy stated that the limb was very serviceable to him. Could walk a considerable distance.
	1862.								
22	Vol. i, p. 59	29	Mr. Hulke	Sept. 22, 1861	Yes	..	..	Dec. 12, 1861	A slight hinge-movement. A somewhat forward projection of the femur. With a light leather splint, she gets about the house comfortably. When she goes from home, she uses a crutch or stick.
23	„ „ 557	14	No record	Aug. 1861	..	Yes	..	..	The failure appears to have been from the limb getting into bad position, and from the patient being highly strumous. Mr. Lawson amputated.
24	Vol. ii, p. 34 & 276	26	Mr. Fergusson	June 14, 1862	Yes	..	..	No note	Before he was discharged, there was firm bony union, and he was able to bear a little weight on his leg. This operation was for deformity from anchylosis.
25	„ „ „	18	The same	May 7, 1861	Yes	..	..	..	This was for deformity resulting from anchylosis. A wedge-shaped piece was taken out, including femur, tibia, and patella. The wound healed well; and the patient, when last seen, was able to walk firmly and well. About 2 inches short.

Lancet, 1860, 1861, 1862.

No.	Source of Information.	Age.	Name of Operator.	Date of Operation.	Immediate Result.			When last seen.	Condition of Limb, and capability of using it, when last seen.
					Recov.	Amp.	Died.		
1	1860. Vol. ii, p. 108	37	Mr. South	Nov. 5, 1859	..	..	Yes	No record	There had been no union. He died after leaving the hospital.
2	„ „ 108	6	Mr. Solly	Nov. 9, 1859	Yes	..	..	Do.	Left the hospital with scarcely any perceptible shortening of the limb, being able to walk with ease and comfort.
3	„ „ 108	8	The same	Mar. 12, 1859	Yes	..	..	Do.	Left the hospital well. Limb half an inch short. He could walk with ease and rapidity.
4	„ „ 108	12	Mr. Le Gros Clark	Same	Yes	..	..	Do.	When he left the hospital there was firm bony union. Only a small portion of the wound uncicatrised. The limb was but slightly shortened.
5	„ „ 108	6	Mr. Simon	Nov. 12, 1859	Yes	..	..	Do.	Sent from St. Thomas's to Margate. There was firm bony union, and only a slight amount of ulceration in the line of the incision.
6	„ „ 109	23	The same	Nov. 19, 1859	Yes	..	..	Do.	When he left the hospital there was firm union of the bones; he was able to get about, and was in very fair health.
7	„ „ 109	18	Mr. Gant	Oct. 31, 1859	Yes	..	..	Do.	Left the hospital with a sound and useful limb. Went to the Margate Infirmary to thoroughly re-establish his health.
8	„ „ 109	33	The same	Oct. 19, 1859	Yes	..	..	Do.	Could rest her whole weight on the limb.
9	1861. Vol. i, p. 482	17	Mr. Fergusson	Nov. 17, 1859 and 1860	Yes	..	..	April 25, 1861	This was really an operation for an ununited fracture. The knee had been previously excised, but united in bad position. Ultimately the leg was 5 ins. short; she could walk half the length of the ward without splint or crutches. Union very firm.
10	Vol. ii, p. 332	11	Mr. Price	Aug. 8, 1861	Yes	..	..	Oct. 1861	No definite report.
11	1862. Vol. i, p. 382	25	Mr. Fergusson	About 1856	..	Amp.	..	..	In this case, the patient had a good and useful limb for five years after the excision. She then fell down stairs and injured the excised knee. Upon attempting to resect the ends of the bones, the popliteal artery was wounded, and amputation was then performed at once.
12	„ „ 383	3½	Mr. Skey	Dec. 17, 1861	Yes	..	..	Uncertain	He could walk about the ward with great ease and freedom. Length but little abridged.
13	„ „ 383	14	Mr. Paget	Feb. 1, 1862	Yes	..	..	No record	The patient was able to leave his bed. 2½ ins. short. The lower end of the femur projects forwards and outwards.
14	„ „ 406	13	Mr. Holmes	Aug. 9, 1861	Yes	..	..	1861? or Nov. 9, 1862	Limb quite straight and firm. He could tread upon it easily and without pain.
15	„ „ 407	Young wom.	Mr. Critchett	Jan. 9, 1861	..	..	Yes	..	Suffered from prolonged sickness. Never rallied. Sunk after the lapse of ten days.
16	„ „ 407	9	The same	2 yrs. since	Yes	..	..	1862	Reported as a successful case. No details.
17	„ „ 407	16	The same	4 mos. since	Yes	..	..	1862	Said to have every prospect of an useful limb. No details.
18	„ „ 407	6	The same	Mar. 13, 1862	..	..	..	Apl. 1862	Condition said not to be very promising. Reported too soon.
19	„ „ 408	11	Mr. Prescott Hewett	July 28, 1861	Yes	..	..	Aug. 29, 1861	Said to have been discharged three months after the operation. Two sinuses, apparently connected with carious bone, remained open. Union good. 1½ inch short. (There is a mistake in the dates, evidently.)
20	Vol. ii, p. 36	A boy	Mr. Canton	Jan. 11, 1862	Yes	..	..	July 1862?	Able to move about the ward on crutches. 1 in. short.

British Medical Journal, 1860, 1861, 1862.

No.	Source of Information.	Age.	Name of Operator.	Date of Operation.	Immediate Result.			When last seen.	Condition of Limb, and capability of using it, when last seen.
					Recov.	Amp.	Died.		
1	1860, p. 240	12	Mr. Quain	July 26, 1859	Yes	..	..	Nov. 30, 1859	By the help of a wooden clog to his foot, could get about, bearing on the limb.
2	1861. Vol. i, p. 370	11?	Mr. Baker	Sept. 1860	Yes	..	..	Apl. 1862?	Reported nearly well. No details.
3	Vol. ii, p. 171	17	Mr. Sympson	April 29, 1858	Yes	..	..	May 21, 1861	Limb 1½ ins. shorter. Scarcely smaller. Leg flexed at a very obtuse angle on the thigh. Union firm. Wound firm. The patient, with a somewhat thicker sole, walked about the house without a stick; but when out of doors used one.

Edinburgh Medical Journal, 1860, 1861, 1862.

No.	Source of Information.	Age.	Name of Operator.	Date of Operation.	Immediate Result.			When last seen.	Condition of Limb, and capability of using it, when last seen.
					Recov.	Amp.	Died.		
1	Jan. 1861, p. 600	26	Mr. Spence	No note	..	..	Yes	..	Died from pyæmia.
2	June 1862, p. 1161	13	Mr. Edwards	No note	Yes	..	..	8 wks. after operation	Wound healed. Patient could walk across the room
3	Same	22	The same	No note	Yes	..	..	3 wks. after operation.	Said to be recovering.

Dublin Quarterly Journal of Medical Science, 1860, 1861, 1862.

No.	Source of Information.	Age.	Name of Operator.	Date of Operation.	Immediate Result.			When last seen.	Condition of Limb, and capability of using it, when last seen.
					Recov.	Amp.	Died.		
1	Feb. 1861, p. 74	15	Mr. Canton	Nov. 3, 1859	Yes	..	..	12 mos. after operation.	After the lapse of several months, the patient walked out of the hospital cured. The excision was performed on account of forcible separation of the lower epiphysis from the shaft of the femur. Twelve months after the operation, the tibia and femur were firmly incorporated. The patient experienced no inconvenience, and had walked twelve miles without fatigue.
2	Same	8	The same	No note	..	Yes	..	..	Boy very restless; limb could not be kept in good position.
3	May 1861, p. 458	20	Mr. Tanner	Mar. 26, 1860	Yes	..	..	June 22, 1860	Limb straight; very little shorter than the other He could walk very well.

If we try to further analyse the tables that I have made, we shall find that there are only nine instances in which a report of the condition of the limb is given at the end of twelve months or more after the operation; and of these I have thought it well to bring out the following particulars.

1. In one case (No. 17 of those from *Med. Times and Gazette*), the patient was a child 7 years old at the time of the operation, which, at the date of the report, had been done six years. The limb was firmly set by bony anchylosis, five inches short. The tibia was somewhat drawn upwards and backwards; but the limb was said to be very serviceable. The patient was able to walk from London to Hampstead Heath.

2. (No. 18 from *Med. Times and Gazette.*) The operation had been done more than two years. The patient, whose age was 10 years, was able to walk well, with a scarcely perceptible limp. The limb was an inch and three-quarters short.

3. (No. 19 from *Med. Times and Gazette.*) The operation had been done nearly four years. The child's age was 9; and the limb had grown as much in proportion to the other as could reasonably have been expected. It was only one inch shorter than the other.

4. (No. 21 of same table.) The age was 13. The time that had elapsed since the excision was nearly four years. The union was solid and bony. The shortening was four inches and a half; but the boy stated that the limb was very serviceable to him. He could walk a considerable distance.

5. (No. 7 of same table.) Age 10 years. Excision was performed twelve months since. He was able to walk on the limb, though with a considerable limp. Anchylosis was fibrous. There was some motion. The tibia and femur were fixed at an obtuse angle.

6. (No. 11 of same table.) The operation had been performed upon a young woman five years previously. There was considerable mobility. She had been able to attend to her household duties; to run up stairs; to jump off a chair. The case, however, came under notice at the time of this note on account of disease in the neighbourhood of the joint, but quite unconnected with it. I think, but cannot be quite certain, that this is the same case (No. 11 from *Lancet*) in which, upon an attempt being made, subsequently to the above note, to re-excise, the popliteal artery was wounded, and amputation compelled.

7. (No. 16 from the *Lancet.*) The operation was done two years before. Age 9. The case is reported as successful, but without details.

8. (No. 1 from *Dublin Journal of Med. Science.*) The case was examined twelve months after the operation. Age 15. The tibia and femur were firmly incorporated. The patient experienced no inconvenience, and had walked twelve miles without fatigue.

9. (No. 3 from British Medical Journal.) Age 17. Three years after the excision, the limb was an inch and a half shorter than the other, but scarcely smaller. The leg was flexed at a very obtuse angle. Union was firm. The patient, with a somewhat thicker sole, walked about the house without a stick, but when out of doors used one.

In two other cases, the report seems to have been made more than twelve months after the operation, but the date is not quite clear; and, in one of these, it is said that the boy had been able to get about for months most satisfactorily. The limb was shortened two inches and a half; but the sinuses still wept occasionally. The other is reported nearly well; but no details are given.

The report of the remainder has been made at periods varying from six months to one month from the time of the operation; or the last note was made at the time of the patient's leaving the hospital, or whilst he was still in the hospital—at times evidently too recent to be of much value as to the final result of the operation. But it may be said of all these, or of almost all, that they promised well; and it is probable that many or most of them recovered with useful limbs.

This is all the information that I have been able to gather from a careful investigation of the reports of this operation for a period of three years; and, although it gives a more favourable view of the case than the figures that have been previously published, I do not think, as I have said before, that such reports are of very much value. They do, however, I think, serve to show that a certain proportion of useful limbs are preserved; and they also show that, from some cause, the mortality appears to be much diminished.*

I shall show, in the next place, that in this respect the cases that I have gathered correspond with the experience that we have had of the operation in this city; whilst, with regard to good recoveries, the result of the operation has been exceedingly satisfactory.

I have trustworthy particulars of twelve excisions of the knee that have been done in this city—six at the Infirmary, and six at the General Hospital. Of those that were performed at the General Hospital, I can write of my own knowledge. For the account of the Infirmary cases I am indebted to the kindness of Mr. Harrison, Mr. Prichard, and Mr. Hore. I believe that seven cases have been operated on at the Bristol General Hospital; but of the seventh case I have no sufficient information. The result of these our local operations tells very much in favour of the proceeding; and this is probably owing to the care which has been taken in the selection of the cases, and in the treatment subsequent to the operation.

There has been only one death. This occurred at the General Hospital; and it happened from exhaustion, after the patient appeared to have been rallying from the effects of the operation, and promised to do well. Of the remaining eleven, one underwent amputation. The knee in this case had perfectly recovered, and it ought to have been a very successful case; but a peculiar hyperæsthetic condition of the integuments of the

* For details of all these cases, see tables published with this paper.

foot came on; the boy was very impatient, and begged hard to have his limb removed. I am very loath to place this case on the side of the failures; because, after a good deal of care had been expended on the boy, the bones had united in admirable position; and, but for the condition of the foot, he had an excellent limb.

Of another case I must speak doubtfully. The patient, a little boy, left the hospital well cured, and with a good limb; but at some time subsequently, I do not know how long, he accidentally injured the limb that had been operated upon. This, again, is a case that I do not like setting down as against the operation, because the boy might by a misfortune have spoiled a sound leg.

We have now left nine cases; and of these, eight went away from treatment with recovered and useful legs. It is very important to notice that six were seen at long periods after the excision was performed; and that they continued well, and their leg remained sound and useful. These periods range from eighteen months to eight years after the operation. The remaining case is still under my care in the General Hospital, and promises to make a good recovery.

This case, as showing the effect of the operation upon a patient dying exhausted by disease, is a very valuable one. The patient, a little boy, aged 7, was admitted into the hospital for necrosis of the inner condyle of the left femur. There was a sequestrum lying in a considerable cavity; and a probe passed into the latter entered readily the knee-joint, which was full of matter. The boy was hectic, at the last point of exhaustion; and it was agreed, in consultation, that his leg must be removed to save his life. With the consent of my colleagues, I made, however, a preliminary exploration; and finding that, by gouging out the inner condyle of the femur, I could remove all the disease without sawing the bone very deeply, I substituted the operation of excision. The boy rallied immediately after the operation; better, certainly, than I should have expected him to have done after amputation; and up to this time, although he has had two slight attacks of erysipelas, he has gone on very well indeed. I cannot yet place him amongst the successful cases, because the bones are not firm; and, although it does not appear to be essential to the success of the operation that they should become so, yet I think it a result greatly to be desired.

The man that I propose to show you to-day I operated upon nineteen months ago; and I have not published his case before, because it is worse than useless to thrust these patients into print before a sufficient time has elapsed to test the limb that has been saved.

Except the man's age, which was 62 at the time of the excision, everything was very favourable. The disease from which he was suffering was ulceration of the cartilages, with a thickened and degenerated condition of the synovial membrane. He had endured intense pain, by night and day, for two years; and every sort of treatment had been tried in vain, including three applications of the cauterising iron and very long confinement upon a splint. He had often implored me to remove his leg, but was willing that I should adopt any other measure that would promise him a cure.

From the time of the excision he lost his pain, and slept well. He rallied from the operation; the wound healed right up by the first intention; and his progress to recovery, although very slow, was uninterrupted. The only point about which I had any difficulty was in securing the union of the bones; and this, I believe, is the most critical point of this operation. The shock is not greater, and the immediate injury to the parts is certainly less, than in amputation—a position which, I believe, will be fully upheld by experience when the cases for operation have been properly selected.

I have set myself only one question in this paper, because it would be impossible to enter into all the interesting details connected with this subject on an occasion like the present. My investigation of the matter has afforded, I believe, a satisfactory answer.

Supposing an operation for disease of the knee-joint to be imperative, and that all treatment has been exhausted, the question must arise whether amputation shall be resorted to, or whether, by the substitution of excision, the surgeon shall attempt to preserve the limb of his patient. This position, whilst it will involve an anxious investigation of the subject, and long, and perhaps weary, watching after the operation has been done, will yet bring its comfort in the satisfaction that will arise from sparing a patient an unnecessary mutilation. There is no duty which we are called upon to perform that is more full of horror than the removal of the leg for disease of the knee, especially when the patient is a child. The stress of a terrible accident, or the value of an adult life, may do much to mitigate the painful feeling with which we proceed to amputate a limb; but when we have to deliberate quietly over a case of disease, or to deal with the limbs and lives of children, it is a great comfort to feel that, in appropriate cases, we have a less damaging and not more dangerous way of recovery.

I have always held the propriety of performing this operation—not lately so strongly, perhaps, as in its more early history; but I think that the evidence I have now adduced in its favour (and there is more forthcoming, if it were needed; as, *e.g.*, that Mr. Butcher, who has written the most and the best upon this subject, has done this excision four times, and every time has secured his patient an useful limb)—especially our own experience in this city—not only justifies the operation, but calls upon the surgeon who is about to amputate for disease of the knee-joint, first to show that the case is unfitted for the better operation of excision.

Transactions of Branches.

MIDLAND BRANCH.

AMPUTATION AT THE HIP-JOINT FOR FIBRO-PLASTIC TUMOUR OF THE THIGH: RECOVERY.

By C. H. Marriott, M.B.Lond., F.R.C.S.(by Exam.), Surgeon to the Leicester Infirmary.

[*Read July 2nd*, 1863.]

Edward Lewin, aged 13 years, residing in Leicester, was admitted into the Infirmary on December 9th, 1862. His parents are living, healthy; he has one sister, also healthy. His relatives on both sides have good health; there is no tendency to cancer, or tumours of any kind, amongst them. The patient had had no illness before this, except those of childhood.

Six or seven months before admission, he felt pain on the outer side of the left thigh; it began regularly every morning on first awaking, and usually lasted till 12 or 1 P.M. in the day. There was nothing visible at that time; no swelling nor redness. He had no injury of any kind. About three or four months before admission, he first noticed a swelling of about the size of a hen's egg on the outer side of the left thigh, at the junction of the lower with the middle third. It was hard, and immovably fixed in its position; it was painful, but handling it and pressing it did not increase the pain.

Six weeks before admission (Oct. 29), he applied to the hospital as an out-patient. There was then a swelling of about the size of the palm of the hand, firm, and tender on pressure; the skin over it was of natural colour. I thought it probable that it was subacute periostitis; and treated it with a few leeches, cold lotions, and iodide of potassium internally.

About a fortnight before admission, he called on me

in intense pain; it was then larger, and the skin over it was bright red. I fully expected that an abscess was forming, and recommended him to come into the hospital.

Soon after this, I was unable, through illness, to go to the hospital for some weeks; and, therefore, did not note the progress of the case.

Jan. 5th, 1863. He was extremely emaciated; his appetite was very bad. Pulse 108. He took beef-tea, eggs, and six ounces of wine. He suffered a great deal of pain on first awaking, about 5 or 6 A.M. He had been taking iodide of potassium with tincture of opium; and was ordered to take it now every morning. The tumour reached nine inches above the patella; and at five inches and a half above it, the limb measured fifteen inches and three-quarters in circumference.

Jan. 12th. Pulse 112, small, feeble. His appetite was much improved; tongue moist, slightly furred. He perspired moderately in night. The tumour measured, five inches and a half above the patella, sixteen inches and five-eighths; the sound limb, at the same height, nine inches. The surface of the tumour was undulatory, being most prominent at the outer side. The skin was dusky, and mottled with lurid red patches of dilated capillaries and small arteries; large dark veins ramified here and there over the surface. Above the tumour, the femur was felt to be thicker up to the great trochanter than on the right side. There was no enlargement of inguinal glands, longitudinal or transverse, nor of the iliac or lumbar glands, to be felt. The heart and lungs were healthy.

Jan. 15th. The tumour at the above-mentioned spot measured seventeen inches and three-eighths in circumference.

Amputation at the Hip-joint was performed by an anterior long flap and a posterior short one. Pressure by a key was made above the brim of the pelvis. The anterior flap was grasped tightly in both hands, and held till the arteries in the posterior flap, three in number, were tied. In the anterior flap, the femoral and profunda, with four others of large size, were ligatured. Occasionally an artery spurted from the anterior flap, and the blood lost was estimated at from half to three-quarters of a pint. The femoral artery was cut at the lower margin of the flap. Four sutures were put in; and the stump left open for three hours. The flaps were then brought together by the sutures and strips of adhesive plaster; a fold of dry lint was applied; and a bandage over all. There was no oozing of blood.

Immediately after the disarticulation, he became very faint, and nearly pulseless; his lips turned blue. Brandy and ammonia were given as soon as he could swallow; he vomited several times. After lying on the table about three-quarters of an hour, he was placed in bed in a small ward with no other patient in it.

3 P.M. Pulse 144. He vomited once since the operation. His skin was warm; lips less pallid. He was in great pain. He was ordered to take at once fifteen minims of tincture of opium and fifteen minims of chloric ether in a draught; and to have calves' feet jelly.

10 P.M. Pulse 152. He was pallid; but the skin was very hot. He had no vomiting, and expressed himself as more comfortable.

Jan. 16, 9 A.M. Pulse 152; respiration 28. He slept at intervals through the night, and was in very little pain. The tongue was coated yellowish brown. He had taken the jelly, etc., fairly well. He was ordered to have three ounces of brandy; and an effervescing draught with thirty minims of aromatic spirit of ammonia every four hours.

3 P.M. Pulse 132.

9 P.M. Pulse 160. He felt comfortable. The bowels had acted spontaneously. The urine was perfectly clear, and normal in quality. He was ordered two pints of extra strong beef-tea, and a pint and a half of milk.

Jan. 17th, 10 A.M. He slept quietly for single hours during the night; he was in no pain. The tongue was cleaning at the tip and edges. He took his food very well. Pulse 144; respirations 24.

10 P.M. There was no pain. Pulse 136.

Jan. 18th, 9 A.M. Pulse 132. He slept well. The bowels acted slightly in the night. He had some pain in the stump this morning. There was slight swelling and redness in the groin, and in the upper part of the scrotum. He was ordered to have boiled sole for dinner.

9 P.M. The bowels had acted again. He was slightly restless. Pulse 116. The dressings were ordered to be wetted. He was directed to take eight minims of tincture of opium immediately, and to omit the effervescing draught.

Jan. 19th, 10 A.M. Pulse 128. He slept well. The blush was fading, and entirely confined to the scrotum. The bandage and lint were removed; the stump was very healthy. It had united by the first intention at both angles; thick healthy pus exuded from the centre. The plaster and sutures were undisturbed. Warm water dressing was applied. He was ordered to take, three times a day, seven minims of dilute nitro-muriatic acid and fifteen minims of compound tincture of gentian in an ounce of water.

Jan. 20th, 10 A.M. Pulse 128. He was restless till 11 P.M.; he then took an opium draught, and slept well afterwards. The bowels acted slightly in the night. The sutures and one strip of plaster were removed. The discharge was thin from some parts, and slightly tinged with blood.

Jan. 21st, 10 A.M. He slept well without an opiate. The bowels acted twice. A large quantity of dark grumous discharge, broken down blood, came from the centre of the stump where most of the ligatures were. Pulse 120. He was ordered to have a grain of disulphate of quina added to each dose of his medicine; and to have boiled fowl, and four ounces of brandy instead of three

8 P.M. Pulse 120. The discharge was very offensive. Chloride of lime lotion was ordered.

Jan. 22nd, 10 A.M. Pulse 120. The first ligature was taken away.

8 P.M. The pulse was 112.

Jan. 24th, 10 A.M. Pulse 124. Three ligatures were taken away. A small spot of skin over the sacrum, dark red; collodion was applied, and the patient turned over on to the right side.

Jan. 25th. Pulse 124. Two more ligatures were removed. The sacrum was less red. He was ordered three pints of strong beef-tea.

Jan. 26th. Pulse 128. There was slight excoriation over the sacrum, only skin deep. The brandy was increased to five ounces; and he was ordered a mutton chop daily.

Jan. 27th. Pulse 112. The bowels were regular. He slept well. Two more ligatures were taken away.

Jan. 28th. Pulse 132. The femoral ligature and the last remaining were taken away (13th day). Red wash and water (equal parts) were applied to the stump.

Jan. 29th. There was a small cutaneous slough over the sacrum.

Feb. 1st. The slough had separated; the sore was granulating healthily.

Feb. 26th. From the last date, he rapidly improved in his general health; and the stump healed, except two sinuses which discharged thin watery fluid on pressure (six weeks after amputation). His pulse had been counted at various hours nearly every day; but up to this date, it had never been under 120 in the lying posture.

March 1st. He was allowed to get up, but was extremely weak and helpless. Pulse 100 in the lying posture.

March 21st. There were still two sinuses; one at the

internal angle, the other in the centre of the stump; they discharged watery fluid with flakes in it. They were ordered to be injected with red-wash. They communicated freely; as shown by the lotion injected into one escaping by the other. His weight was 3 stone 10½ lbs. His appetite had been failing last ten days.

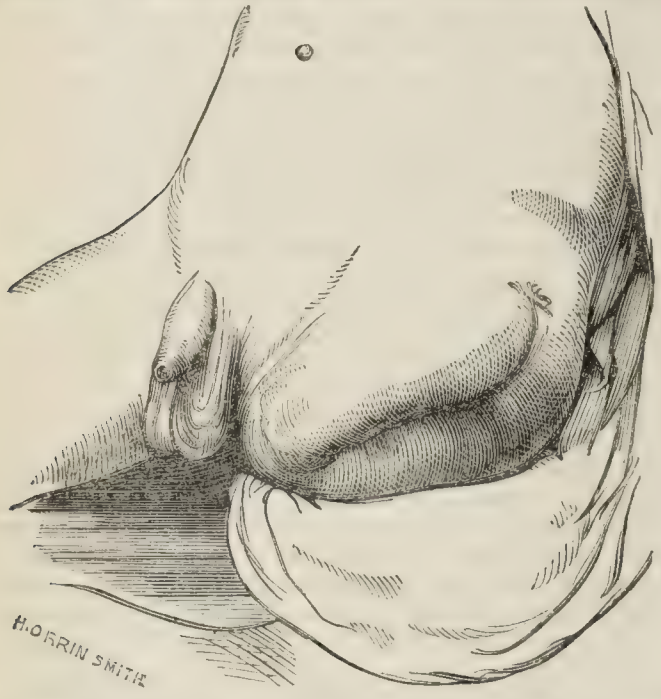
March 28th. Weight, 3 stone 13 lbs. The sinuses still discharged considerably. They were ordered to be injected with solution of sulphate of copper (two grains to one ounce).

April 4th. Weight, 4 stone 0 lb. 8 oz.

April 11th. Weight, 4 stone 0 lb. 10 oz.

April 18th. Weight, 4 stone 3 lbs. 8 oz.

April 21st. The sinuses finally closed four days ago (17th). The cicatrix was perfect. His bowels were regular; his appetite good. He was in high spirits, and could walk out well on his crutches. The pulse was 84 in the sitting posture. He was discharged from the hospital to-day cured.



May 25th. He had been in the country for nearly a month, and was much stronger and stouter. His weight now was 4 stone 12 lbs.

On July 8th, he weighed 5 stone ½ lb; and was perfectly well.

Description of Tumour. On section through the most prominent part, it was soft, elastic, and almost gelatinous, for about an inch and a half from the surface; it then became firmer; and here and there bony spicula were interspersed, so as to give a grating sensation to the knife cutting through it. In one part, close to the surface on its outer side, was an ill-formed cavity, of the size of a cob-nut, containing pulpy matter in a semi-fluid state. There was no lining membrane bounding it. The colour of the section was grayish, with numerous streaks of blood-vessels running through it, and the soft matter was intersected largely by white fibrous bands. When squeezed, it broke down under the pressure, but no juice exuded. The femur was not thickened; but the periosteum was thickened up to the neck.

Microscopic Appearances. The soft matter was composed of large spherical, oblong cells, containing large nuclei and nucleoli, and filled with granules; a few large oval myeloid cells, containing generally two nuclei, numbers of elongated nucleated cells, fusiform and caudate; numerous spherical cells, with large nuclei almost filling the whole cell. There were great numbers of free nuclei; and a large quantity of granular particles, for the most part made up of fat, as shown by their appearance and their solubility in ether. A few nucleated fibres and some fibres of yellow elastic tissue were present. The whitish bands were made up of well-marked wavy fibres. The spicula showed no true bony structure; and dissolved in acetic acid.

Remarks. The mortality in this operation, as might be expected, is considerably greater when done for severe accidents, as railway crushes, musketry wounds, etc., than for the removal of disease. Mr. S. Cox, in 1845, published a table of 84 cases; of these 58 died, giving a mortality of 69 per cent. In 1852, Dr. S. Smith collected a number of cases, and others since have been added by Mr. Lane, in all 139 cases; of these 91 died, giving a mortality of 65.46 per cent. In 102 out of the 139, the causes for the operation were stated: 62 were for injury—of these 47 died, giving a percentage of 75.8 deaths; 40 were for disease—of these 21 died, giving a percentage of 52.5 deaths. In the Crimean war, the operation was performed on twelve patients, and all died.

In the present case, the nature of the disease was most probably fibro-plastic, undergoing fatty and calcareous degeneration. Before the operation, this was extremely uncertain; but one point against its being encephaloid, and, therefore, in favour of the operation, was the freedom of the lymphatic glands from any implication in the disease. The great extent of the tumour, reaching to within four inches and a half of the groin, and the periosteum being thickened up to the neck of the bone, necessitated the removal of the limb at the hip-joint; for any operation short of this would not have removed the whole of the diseased structures, and if it had been attempted there would not have been room to make the necessary flaps.

Again, the internal organs were healthy; and the tumour growing as it did (viz., one inch in circumference in four days), in his exhausted state, must have rapidly destroyed him.

The key on the artery over the brim of the pelvis entirely controlled the flow of blood through the femoral; and, with the compression of the anterior flap by the hands, formed a very efficient means of arresting the hæmorrhage.

NORTH WALES BRANCH.

ON NÆVUS.

By T. T. Griffith, Esq., Wrexham.

[*Read July 7th*, 1863.]

In the following imperfect *résumé* of the different modes of treating nævus, illustrated by a few cases, I prefer using this simple designation to the more complicated and less handy terms of telangiectasis, aneurism by anastomosis, erectile tissue, and cirsoid aneurism.

Excision. The subject was a delicate girl, about 5 years old, with a nævus spreading across the bridge of the nose. The incisions were too limited; and in a year or two the disease returned, requiring a second operation. On both occasions, the bleeding was violent; and on the last so much so, that the little patient fainted before I could pass the ligature for closing the wound. The operation succeeded; and, at the end of twenty years, a mere line marks the spot.

On this account, excision commends itself where the nævus is on the face, is not very extensive, and the bleeding can be quickly controlled.

Pressure. The next subject was a healthy boy, aged 12, in whom the nævus was fixed on the frontal bone. Two or three recurrences of severe hæmorrhage made interference necessary. As there was good counter-pressure, I applied firm pressure as recommended by Mr. Abernethy, with complete success.

Vaccination. This I employed in the case of a young lady with a nævus on the bridge of the nose, increasing in size. It answered perfectly; but has left the ordinary mark of vaccination.

Strangulation. The ligature was employed in three cases in which the nævi were formed, on the forehead, on the scalp close to the edge of the anterior fontanelle, and on the chest, respectively. The ages were 12 years, 21 weeks, and 15 months. In the last case, the nævus was of the size of a half-crown, situated a little above the nipple, and was rapidly spreading. In each of these cases, a needle with a double ligature was drawn beneath the tumour and cut off. Two sewing-needles were then passed at right angles to each other underneath, and at a sufficient distance from the extreme edges of the nævus. In the case of the largest nævus, a groove for the ligature was cut through the sound skin, and the threads, drawn under the free ends of the two needles, were so tied and tightened as to produce complete strangulation. Sloughing soon followed. No untoward symptom occurred; and a sufficient time has elapsed to show that the disease will not return. In the last case, chloroform was used; and the tumour was injected with tincture of sesquichloride of iron, which effectually prevented any loss of blood. An unsightly cicatrix makes this procedure objectionable in the exposed parts of the face and neck.

A case will sometimes present itself in which a congenital nævus will increase; then become stationary; and ultimately disappear, or nearly so. Such a one is now under observation; and it is the more remarkable as the child (aged 4) suffered severely in the last winter from hooping-cough; and it is since its cessation that the favourable change in the nævus has taken place.

In the following case the tumour was entirely subcutaneous.

Case. *Removal of Erectile (?) Tumour from the Cheek.* On September 11th, 1841, a healthy woman, aged 35, was admitted into the Infirmary on account of a tumour occupying the right cheek. She first perceived it twelve years previously; and as it has for some time been increasing in size, it was decided, after a consultation with my colleagues, to remove it.

It extended from the zygomatic arch nearly to the lower edge of the lower jaw, and immediately in front of the parotid gland. It had a firm lobular feel, excepting a central projecting point, which was slightly elastic. It hung by a thick pedicle from the under part of the zygoma; it was moveable. It lay immediately under the skin, which was healthy in appearance; there were no enlarged glands. An exploratory puncture was made, but no fluid followed.

The removal was effected by a semilunar incision with its convexity towards the mouth, and near its angle, so as to avoid the parotid duct, if lying (as proved to be the case) over the tumour. A small artery requiring a ligature was divided; and the separation of the tumour was afterwards chiefly effected with my fingers and the back of the scalpel. The parotid duct ran horizontally across the tumour, and was raised by a Pellier's speculum till the tumour was removed. The pedicle was ligatured and divided near its origin from the zygoma. There was, at one point, slight adhesion to the buccinator muscle. The edges of the wound were brought together, and united by adhesion; and in eleven days, the patient left the Infirmary with only a linear scar. I saw her some time afterwards, but there was no return of the disease.

On cutting into the tumour directly after its removal, blood of different shades of colour flowed from it, leaving nothing but a beautiful reticular structure of vessels and condensed cellular tissue, the whole enclosed in a firm, smooth cyst of fibrous texture. It was partially lobular; its most projecting part had a purplish hue. In its character, it seemed most nearly to resemble "erectile tissue," as described by Dupuytren. The history of its growth gave no reason for supposing that it was congenital.

Reviews and Notices.

Special Therapeutics: an Investigation into the Treatment of Acute and Chronic Diseases by the Application of Water, the Hot Air Bath, and Inhalation. By J. C. Lory Marsh, M.D.; Member of the Royal College of Physicians, etc. Pp. 132. London: 1863.

It is a subject of great interest, that which Dr. Marsh treats in this work; and his remarks are worthy of the most attentive consideration from every practitioner of medicine. We have been so much accustomed to look on medicinal treatment as consisting in the application of agencies ordinarily foreign to the body, that many of us have all but lost sight of the great influence which is exerted on the system by certain agents always at hand, and forming, indeed, a part of the accessories of life. Again, as Dr. Marsh points out, the internal surfaces of the body (especially the stomach) have been regarded as *the* medium through which our treatment is to be effected, and one of our principal objects habitually is to call forth the activity of some one or other of the internal secreting or eliminating organs, or to seek to act on the skin by the internal administration of medicines; while the means of acting directly on the large extent of eliminating, if not of absorbing surface, of the skin, have been comparatively neglected.

But it were impossible that a physiological agency of such power as is afforded by the cutaneous surface could altogether escape notice. Hence, in opposition to the neglect to which allusion has just been made, there has been a violent reaction; and men of limited ideas in science, but with an acute perception of the advantageous position to be gained by taking under their special protection the neglected skin, and the equally neglected means of acting directly on it, have cried up the use of water and the hot air bath as panaceas for all diseases, with results that have shown the absurdity of their pretensions. This, in its turn, has caused many practitioners of regular medicine to look on these therapeutical agencies almost as inventions of the evil one himself, and to eschew any practice having an approach to that of the disciples of the "hydropathic" and such like dogmata.

But, here as everywhere, to derive an argument against the legitimate use of a thing from its abuse is altogether mischievous. The data which we have, incomplete though they be as yet, are sufficient for forming a tolerably legitimate conclusion, which shall hold the judicious middle course between the two extremes. Here is the position of the case.

The skin is an important secreting organ, and performs an important part in relieving the system during the course of many diseases.

The functional activity of the skin is capable of being increased by the application of certain agencies; viz., water and hot air.

Experience has shown that use may be made of these agencies with benefit in the treatment of some diseases; and therefore—

The application of these agencies is one of the proper and legitimate means which should be used in the treatment of disease; under proper indications, and with the same care and discrimination

that we exhibit in the choice of any of the remedies which we administer internally.

This is what the author of the book before us aims to point out to the notice of the profession. He treats in succession of Hydro-therapeutics; the Hot Air Bath; and Inhalation.

After some remarks on the extreme views to which we have already alluded, Dr. Marsh states his object, in regard to the use of water, as follows:

"As regards the use of cold water, we shall treat chiefly of its value in acute disease, especially in those diseases which fall principally upon the skin, and also in some chronic skin-diseases; and for such use of water, applied in the treatment of those disorders for which its use is more generally indicated, and to which in particular it is capable of being applied, we would employ the term Hydro-therapeutics, as distinguished from that indiscriminate and empirical use of water in all diseases, real and imaginary, to which the professors of the art, for science it can scarcely" (not at at all, we would say) "be called, have chosen to fix the name of hydropathy."

The indications for acting on the skin in disease are, Dr. Marsh points out: the hot, harsh, dry condition of the skin accompanying high fever and rapid pulse; the presence of symptoms of oppression in the nervous centres through deficient aëration of the blood; the existence of "a correlation between any affection of the skin and of some internal organ more intimately connected with life, the affection of the one increasing as the other decreases"; and the manifestation, in chronic disease, of a disorder on the skin, apparently acting as a safety-valve. The first three of these indications are specially marked in scarlatina.

Whether Dr. Marsh's explanation of the mode in which the application of water acts in acute disease —that it relaxes spasmodic constriction of the sudoriferous ducts, etc.—be correct or incorrect, he makes out a good case in favour of the practice. He does not, however, attempt to claim originality; but very honourably disinters from its unmerited oblivion the memory of the late Dr. Currie of Liverpool, who, at the end of the last century, employed with great success cold affusion in febrile diseases, and laid down rules for its application which, if carefully carried out, would probably have gained for this mode of treatment a more extensive acceptation than it has hitherto enjoyed. We must refer our readers to Dr. Marsh's book for an excellent outline of the course of practice followed by Dr. Currie. That physician employed the application of water in typhus and intermittent fevers, in influenza, and in scarlatina, and even in traumatic tetanus. His use of it, however, was fitted to the stage of the disease and the state of the patient; and a perusal of his works, or of Dr. Marsh's abstract of them, will shew that he exercised, with evident benefit to his patients, as judicious a discrimination in regard to the use of water as any modern rational practitioner would exercise in the administration of tartar emetic, mercury, or stimulants.

If, indeed, here as in other cases, proper precautions be not attended to, the remedy may prove only the gate of death.

"Dr. Currie mentions that, in two cases of scarlatina, of the most malignant nature, the patients were taken out of bed under the low delirium, with the skin cool and moist and the pulse scarcely perceptible, in which state several gallons of cold water were poured over them on the supposed authority of his book, and, as might be expected, with an almost immediately fatal result. Such a powerful mode of treatment is not to be entrusted to other hands than those of a careful and skilful medical adviser."

Dr. Marsh refers, among the personal observations which he has made on the effects of the water treatment, to the results which he derived from it in 1842, while in medical charge of a pauper establishment for children at Tooting, in which "a most malignant epidemic of scarlatina" broke out.

"Every treatment appeared equally unavailing, until the application of immersion in cold water, or sponging the body with the same, was adopted: afterwards, every case in which the treatment by free application of cold water was used recovered, and but one case presented any subsequent sequelæ of the disease."

The notes of eight specimen cases are given by Dr. Marsh; their characters being: 1, Sore-throat and constitutional symptoms; rash not developed, but brought out by the cold bath; 2, Throat-symptoms malignant, rash imperfectly developed, but brought out by cold sponging; 3-6, Throat-symptoms prevented (would it not be more correct to say arrested?) by cold affusion; 7 and 8, Delirium subdued by cold sponging. The beneficial effect of a judicious application of cold water in scarlatina and other febrile diseases has been confirmed in the subsequent practice of the author, as well as in the particular instances just now mentioned.

From this subject he turns to the use of warm water in the treatment of pulmonary and other internal diseases. His plan is, to wrap the patient (divested, of course, of all other covering) in a blanket wrung out of hot water; and to place him in bed between hot dry blankets, pretty much in the same manner as they use the wet cold sheet in hydropathic establishments in what is technically called the "pack". Sometimes it is useful, where it is wished to keep up a continuous action on the skin, to apply a casing of oiled silk over the blanket. As instances of the successful application of this mode of treatment, he relates cases of acute laryngitis, acute bronchitis, acute double pneumonia, and acute rheumatism with endocarditis.

With the application of water, in all cases, Dr. Marsh employs the ordinary appropriate internal remedies; his object being to stimulate the skin to perform its function, by means of the direct application to it of such agencies as are likely to call that function into activity.

The Hot Air Bath, and Inhalation, have been tested by Dr. Marsh in a similarly judicious manner to that in which he has employed the application of water in the treatment of disease. For his remarks on these important agents, we must refer the reader to his work.

In conclusion, we have to thank Dr. Marsh for calling the attention of the profession to those simple yet powerful remedial agencies of which he has treated. They have been for the most part the objects of extravagant laudation or of unjust neglect. It is, however, but fair to allude to the attempts that have been made by some of our hospital physicians—such as Dr. Risdon Bennett and Dr. Goolden —to demonstrate their proper therapeutical value. But the profession at large requires to be enlightened as to their safety and their efficacy, when em-

ployed under proper conditions; and great credit is due to Dr. Marsh for the attempt which he has made in this direction.

Outlines of a New Theory of Muscular Action; being a Thesis read for the Degree of Doctor in Medicine, before the University of Dublin, December 17th, 1862. By the Rev. Samuel Haughton, M.D., F.R.S., Fellow of Trinity College, Dublin. Pp. 23. London: 1862.

The title of this book scarcely leads one to expect what are its contents; although, in dedicating it to Dr. Stokes, the author describes it as "an attempt to determine some of the numerical laws of Muscular Action." It affords, however, evidence of the possession by its author of a kind of knowledge which does not ordinarily fall in any great quantity to the share of medical men, and which he is desirous of turning to account in the elucidation of physiological problems; as has already been shown by his researches on the urine, published in the *Dublin Journal of Medical Science*.

This book is divided into three parts. In the first, Dr. Haughton treats of the Rate of Muscular Action; or, rather, of the susurrus or murmur first described by the late Dr. Wollaston as being audible during muscular contraction. He has endeavoured to ascertain the equivalent of this susurrus on the musical scale; and has found it to be two octaves below the bass notes C or D of the piano; corresponding, in the former case with 32, and the latter with 36, vibrations in a second.

In the second part, Dr. Haughton speaks of the Amount of Work stored up in Human Muscles. This he has attempted to determine by raising the arms horizontally, and noting how long they can be kept in this position without falling. The results at which he arrived can scarcely be stated in an abridged form, so as to be intelligible.

In the third part, he has endeavoured to calculate the Work done in a Day by the Human Heart. From calculations which he has made, he finds that the average muscular force of a man is capable of lifting 340 tons through one foot in the course of the day; while the force of the heart is calculated to be equal to a power which should lift 124 tons in a similar manner. Hence "the work of the heart is more than one-third of the daily labouring force of the whole body."

An interesting note is added to this part, describing the manner in which the author was enabled to supplement a deficiency in his knowledge of the hydrostatics of the human heart—his data on this point having been derived from the experiments of the Rev. Dr. Hales on lower animals. During the removal of a tumour from the groin of a patient in the Meath Hospital, the external epigastric artery was wounded, and, before it could be tied, strong jets of blood were thrown in various directions, varying in their range according to the angle of elevation of the orifice of the artery. Dr. Haughton immediately saw in this accident the solution of the problem which had puzzled him—that of the real hydraulic work of the human heart; and, by a series of measurements of the distances of the jets of blood from the orifice of the artery, and calculations founded thereon, he found the hydraulic work of the heart to be apparently capable of raising 121.8 tons through a foot in the course of the day—a result which closely approaches the calculated muscular work of the organ, which, as has been already observed, he has estimated on other grounds at 124.6 tons.

Physiological science has to express its obligations to Dr. Haughton for his valuable contributions to its improvement; and we hope to meet with more of his researches on vital dynamics; a subject regarding which he shows a zeal and ability, that remind one of another clergyman whose name is inseparably connected with physiology—the Rev. Dr. Hales.

The Medical Charities of Birmingham; being Letters on Hospital Management and Administration. By Scrutator. (Reprinted from the *Birmingham Daily Gazette*.) Birmingham and London: 1863.

These letters have occasioned considerable sensation in Birmingham, as might be expected, and are worthy of general consideration. Though not from the pen of one in the profession, they bear strongly the impress of an active, earnest, and intelligent mind. But in them we have looked in vain, we regret, for an expression of opinion *on the gratuitous public services of medical men*, while the author openly asserts,

"I do not hesitate to say, that one-third, at least, of the patients who receive hospital relief in this town have no right whatever to that which they receive. This want of discrimination not only tends to divert public charity from proper objects, but it is injurious to social interests, and is a great and scandalous wrong to the great body of medical practitioners. The authorities of a properly managed hospital have never to ask in vain for the gratuitous services of medical men; but they too often show their appreciation of those services, by allowing persons to receive the benefit of them, who are as competent to pay for medical advice as the hospital authorities themselves."

He dwells very strongly and properly on the importance and necessity of increasing the medical staff of hospitals to meet the requirements of an increased population.

"Eighty years ago," he says, "the general hospital of Birmingham admitted in twelve months 373 in-patients and 411 out-patients. The medical staff consisted of four physicians and four surgeons. Last year, 2,612 in-patients were admitted into the wards, and 25,902 out-patients received relief. Is it credible (he asks), or rather is it not humiliating, that during all those years, when patient has been added to patient, bed to bed, and ward to ward—when the population of the town has increased eight-fold—*there has been no increase whatever in the medical staff?*"

Again, he remarks, justly,

"Hospitals should secure the services of medical officers at a time when bodily energy and enthusiasm for work—when quickness of observation and hard study are combined, and are approaching their culminating points. When men retain hospital appointments for twenty or thirty years, is there no forgetfulness of their own dignity or of the rights and welfare of others?"

"It is a woeful sight," says an eminent writer, "when the young usurp the place or despise the wisdom of the aged; but there is a sight more despicable still, and that is, the old age which has learnt neither judgment

nor gentleness, which is weak without charity, and cold without discretion."

In Birmingham, the publication of these letters must produce good fruits, and lead to improved local government. The author asks for no indulgence from readers, no consideration from critics, friendly or unfriendly. He does not write without knowledge; and we recommend his timely *exposé* and critical strictures on hospital administration both to professional and public attention.

MENTONE IN ITS MEDICAL ASPECT; being Letters addressed to a Medical Friend. By JAMES LEWIS SIORDET, M.B.Lond., Member of the Royal College of Physicians of London; etc. Pp. 112. London: 1863.

THIS is an interesting and instructive account of Mentone and its hygienic merits, by a practitioner who has, we believe, like several others, made that place his residence in order to the recovery of impaired health.

In his first letter, Dr. SIORDET gives a general account of Mentone; in the second, he speaks of its Climatology; in the third, of its Prevailing Diseases; in the fourth and fifth, he gives his Practical Experience of the Climate; and in the sixth, he offers some Hints as to travelling, etc., which may prove useful to invalids about to winter in the place. Eighteen pages at the end of the book are occupied with tables of Meteorological Observations made by M. Jerome de Monleon, M. de Brea, and the author.

Dr. Siordet appears to have written impartially; and, while he has endeavoured to describe the good to be derived from a visit to Mentone, he has not concealed its drawbacks, nor neglected to show under what circumstances a sojourn in the place is not likely to be beneficial. We can, therefore, recommend his book as one among those on the climate of Mentone from which practitioners, having it in contemplation to send any of their patients thither, may expect to receive useful instruction.

THE CAUSES AND TREATMENT OF IMPERFECT DIGESTION. By ARTHUR LEARED, M.D., M.R.I.A., Physician to the Great Northern Hospital, etc. Third Edition. Pp. 222. London: 1863.

THIS edition of Dr. LEARED's well-known book has, we are informed in the preface, been carefully revised; and, while condensation has been kept in view, the chapter on Diet has received such practical additions as appeared desirable.

NATIONAL SOCIETY AND ASYLUM FOR THE PREVENTION OF INFANTICIDE. Under this title a society was inaugurated on the 3rd instant, at 16, Craven Street, Strand. The promoters urge that the crime of infanticide has prevailed so long without any attempt being made to check it by any adequate or organised means, that it is scarcely a matter for wonder that the offence so nationally degrading in its various phases, and so revolting to every natural and social feeling, should be on the increase, whilst so many elements exist in society which conduce, directly or indirectly, to the negation of healthy moral principles amongst all classes in a greater or less degree. (*Social Science Review.*)

British Medical Journal.

SATURDAY, SEPTEMBER 26TH, 1863.

VACCINATION IN 1862.

THE Medical Officer of the Privy Council has just issued a Report on Vaccination for 1862. The report is founded upon statements made by Drs. Seaton, Sanderson, Stevens, and Buchanan, who have visited different districts—in fact, more than half England and Wales. The picture they present of the system established by the legislature as the national protection against small-pox is very unsatisfactory.

Owing to the general failure of the registers, it is impossible to ascertain precisely what proportion of the population has been vaccinated; but the inquiries of the inspectors have led them to the conclusion that the intentions of the legislature are but very imperfectly fulfilled, and that the public defences against small-pox are in a great part insufficient and delusive. Among the elementary schools visited by the inspectors, there were many in which the proportion of unvaccinated scholars was from 20 to 30 per cent., and in not a few cases it was from 30 to 40 per cent.; in that of Penn, in Buckinghamshire, it was as high as 55½ per cent. In thirty-eight workhouses inspected by Dr. Seaton, there were eight in which the proportion of unvaccinated children ranged from 20 to 38 per cent.; and in seventy-four in Dr. Stevens's district, there were twenty in which it reached from 20 to 34 per cent. In at least a third of the unions inspected in Wales, and in many other districts, not one-half of the children are vaccinated within a year of their birth. An outbreak of small-pox induces a temporary compliance with the provisions of the Act; but when the alarm ceases, old habits of neglect immediately revive.

The responsibility for this dangerous state of affairs must be divided between parents and the authorities, and officers who have been charged by the legislature with the duty of carrying the law into effect. The fault of the people does not generally extend further than to indifference and neglect. As a rule, the vaccinators meet with no active opposition. In Abingdon, however, the inhabitants entertain the greatest antipathy to vaccination, and their aversion has increased of late years.

In many districts, parents believe that mischief will result to their children from the taking of lymph from their arms; and, to avoid this, they not only refuse to present them for inspection on the eighth day, but frequently hide them, to prevent the vaccinator from getting at them. This feeling is, fortunately, on the decline.

The chief blame for the defective state of vaccin-

ation rests with the authorities. The want of proper arrangements for the performance of vaccination is the great reason why so large a number of children remain unvaccinated. The law requires that boards of guardians shall contract for the regular performance of vaccination; but the inspectors com plain, either that no contracts have been entered into with the vaccinators so as to bind them to the performance of their duties; or that, if such contracts exist, their terms are not adhered to.

Another respect in which guardians have very generally failed in the performance of their duty, is with regard to the giving notice of the means provided for obtaining vaccination. The people are not informed of the vaccinating stations, or of the days and hours at which the vaccinators attend, and do not resort to them at the proper times; consequently, after a few fruitless attendances, the operator naturally ceases to go any more.

Supervision over the vaccinators appears, in most instances, to have been reduced to a *minimum*. The duties of the contractors are, "to attend at the stations at the times specified by the contracts, there and then to vaccinate those who come, and to inspect the results on the eighth day; to register the vaccination and the result of the inspection, and to give a certificate, if successful, to the parent or person in charge of the child, and to send a duplicate to the registrar of the sub-district in which the operation was performed." In very few districts indeed are their duties strictly performed.

Vaccination at the stations, when carried out efficiently, reaches the largest number of children. The worst plan is that according to which the operation is performed at the surgery of the vaccinator, without the appointment of definite times for the attendance of patients; but the practice of vaccinating at the residence of each patient is also strongly condemned. Domiciliary visits are seldom carried on systematically; parents cannot understand why the doctor should be so anxious to vaccinate their children except on account of some advantage which he is to get out of it; and "in order that he shall have a bit of trouble for his money," they make him repeat his visit two or three times, till, at last, perhaps, he gets tired, and the operation is never performed. Preserved lymph is constantly employed; and this system is, besides, usually associated with general carelessness in the discharge of the contractor's obligations, as evidenced by long periods of neglect, the vaccination of persons far above the age that is most advantageous for the purpose, and the employment of unqualified assistants. The evils attending it may be, and often are, diminished by the holding of cottage meetings, in which a number of children are assembled at the residence of one of the patients, and vaccinated from arm to arm.

As to the quality of the vaccination obtained, we have no great reason to be satisfied with the state of things revealed by the inspectors. There is undoubtedly much good vaccination; but it is unfortunately true that too often vaccination is so carelessly or unskilfully performed as to be of little or no value. Dr. Seaton states that, of 15,950 vaccinated children whom he examined, not more than one-half could be considered really well protected. Dr. Stevens asserts that "they lay patent the fact that but a very small proportion of the supposed-to-be-vaccinated population has received such protection from death by small-pox as efficient vaccination is known to give." In Dr. Sanderson's district, among 14,385 children having marks of vaccination, the protection was good in only 40.070 per cent. In the fifteen unions inspected by Dr. Buchanan, out of 8,443 children vaccinated, 4,461, or 52.8 per cent., were well protected against small-pox; 2,424, or 28.7 per cent., were moderately protected; and 1,558, or 18.5 per cent., were badly protected. It results that only about one-half of those who are nominally vaccinated are well secured against the ravages of small-pox. The principal cause of this imperfection of the quality as of the deficiency in the quantity of vaccination is the want of a proper system, and of constant and adequate supervision to see that that system is strictly adhered to. The abandonment of stations and the adoption of house-to-house vaccination have exercised an injurious influence upon the character as well as upon the number of the operations performed. Operators who visit the patients at their homes must use stored lymph, which produces by no means so good an effect as that which is taken directly from the arm. The efficacy of the lymph naturally diminishes with the period during which it is preserved.

The imperfect manner in which the registers of vaccination are generally kept renders it difficult to ascertain with precision the relative degrees of success of different vaccinators, or to arrive at any definite conclusion as to the best mode of operating.

Legal proceedings for the enforcement of vaccination have not to any large extent been resorted to. The inspectors do not consider such proceedings, as a rule, desirable; but they all bear testimony to the necessity for a power of compulsion. In some districts, it has been found necessary to prosecute in a couple of cases or so, "simply that the people might understand that the law was not to be trifled with"; but so moderate an enforcement of the law as this will usually be found sufficient to prevent any further resistance to its provisions.

The general results of the reports upon vaccination for last year show that we are still far from attaining the first object of the legislature, "that every infant (its health permitting) shall be vaccinated within the first few months of its life"; and

they appear to justify Mr. Simon in the conclusion "that the laws now in force for the purpose of extirpating small-pox are not likely to accomplish their object, and that the system established by law for public vaccination works in an unsatisfactory manner."

THE HORSE GUARDS AND BRANDING.

The Horse Guards have determined that medical officers of the army shall superintend the work of the hangman as well as perform their own special duties; that they shall be ministers of torture and punishment as well as ministers of mercy. By a memorandum of August 1862, it is ruled that the branding of soldiers sentenced to be discharged from the service with ignominy, and to be marked with the letters B. C., shall be done by the hospital sergeant at the regimental hospital, under the direction of a medical officer.

For the proper way—the "present mode"—of doing this business, "you are referred to the regulations relating to the letter D."

Under these regulations, it is directed, that the infirmary warder of a military prison shall mark the D, under the superintendence and instruction of a medical officer.

The result of this is, first, that the medical officer has to suffer the degradation of applying for the implements of torture; and secondly, that the punishment is inflicted in a way that can scarcely fail to leave an impression on the mind of the soldier that the hospital is not only a refuge in suffering, but also a place for the infliction of punishment, and the medical officer, with the hospital subordinates, agents of its infliction.

The medical officer is, in truth, incapacitated for the business of punishing; sentence can only be properly inflicted by persons armed with municipal or military authority, and the medical officer is armed with neither. But the proper duties of the medical officer render him especially unfitted for this disgusting business. Professional men are, in no way whatever, qualified to "direct"—much less instruct and superintend—a non-commissioned officer in the process of branding. It is manifestly inconsistent with the exercise of his professional functions, as well as derogatory to the position of a member of the medical profession, that he should have to direct an attendant on the sick in the infliction of punishment at the place designed for the treatment of the sick.

In the infliction of corporal punishment, the prisoner is on a parade commanded by a combatant officer, and a medical man is present to see that no unnecessary injury accrues to the individual; but in this case of branding, he has, as a member of the medical department, to furnish the punishing implement, and also to superintend the branding; and, moreover, is called upon to furnish a certificate that the "branding" is indelible.

What would be thought if, in the matter of flogging, the surgeon were ordered to furnish the "cat" and to direct a hospital sergeant in its application within the walls of a hospital?

There can be no objection, of course, to the authorities inflicting this punishment, if they choose—that is matter with which medical men, as such, have nothing to do—provided it be done upon a parade, commanded by a combatant officer, in the presence of a surgeon.

No better proof could be given of the kind of estimation in which the Horse Guards hold their medical officers than this order, issued in 1862. It is outrageous that the performance of such a disgusting business—such hangman's work—should be delegated to the educated members of our profession, whose right business is, above all and especially, a work of mercy and healing, and not of injuring and punishing. What is the use of our having army medical directors if they are patient under such orders as these, and enter no protest with the authorities against the infliction of such work as this upon their medical subordinates in the army? If the head medical manager in the Army Department is unable to get such an order rescinded, let us at all events have the satisfaction of knowing that he entered his protest against it, and that it was issued contrary to his wishes and opinions; and that he has done his duty to the profession.

SOCIAL SCIENCE ASSOCIATION.

The arrangements for the seventh annual meeting of the National Association for the Promotion of Social Science, commencing at Edinburgh on the 7th of October, are rapidly approaching completion. The President of the Public Health Department is Professor Christison; Vice-Presidents, Dr. Craigie, President of the College of Physicians; Dr. Newbigging, President of the College of Surgeons; and Mr. Lindsay, Provost of Leith. The Secretaries of the Department are Dr. Markham and Mr. R. Rawlinson, C.E.; in conjunction with Dr. Littlejohn, Dr. Scoresby-Jackson, and Dr. Stevenson Macadam, who act as local secretaries. Among the papers sent in to be read in this department, the following are of special interest:—The Sanitary Statistics of Colonial Native Schools and Hospitals, and another paper on the Army in India, by Miss Florence Nightingale; The Changes which have occurred in the Type of Disease in Edinburgh during the last Fifty Years, by Professor Christison; Diseases in Cattle, by Professor Gamgee; The Sanitary Arrangements of Edinburgh as compared with other Large Towns, by Dr. Littlejohn; On the Necessity for Prospective Legis-

lation to prevent Dwelling Houses being Built in Disregard of the Conditions of Health, by Colonel Oldfield. Various other important subjects will be brought forward; as the Sickness and Mortality of Merchant-Seamen; the Contamination of Water by Sewage and by Public Works; etc.

The meeting will be opened by Lord Brougham (the President), who will deliver an address in the Free Church Assembly Hall, on Wednesday evening, Oct. 7th. The business of each of the six following days will be opened by addresses from the presidents of the departments in rotation, delivered in the Free Church Assembly Hall; and, after the addresses, the departmental meetings will be held in the Law Courts and Free Assembly Hall. The concluding general meeting will take place in the Church of Scotland Assembly Hall, on Wednesday the 14th October. The Council will meet in the library of the Writers of the Signet, and the Parliament House will be open as a reception room; the College and Law Libraries, and other public buildings and places of exhibition, will be open to members during the week. Conversaziones will be held in the University, in the Museum and Hall of the Royal College of Surgeons, and in the National Gallery, on the evenings of the 8th, 9th, and 12th. A working men's meeting will be held in the Corn Exchange on the evening of the 9th, at which Lord Brougham will preside; and on the 13th the Association dinner will take place in the Music Hall. The Royal Scottish Academy intend to hold an exhibition of the works of deceased and living artists of Scotland, collected for the occasion, during the meeting of the Association. There is to be a great *réunion* of the Bars of the three kingdoms, which will be represented by many distinguished members of the English and Irish Bars. The Scotch railways generally have agreed to give return tickets to members and Associates; and the leading English lines will afford facilities to visitors through their tourists' tickets. A Reception Committee, of which Lord Ardmillan is convener, and Mr. C. Lawson, jun., subconvener, has been engaged for some time in arranging for the hospitable reception of the large and distinguished circle of visitors who will be present. It is expected that Prince Alfred and one of the Danish Princes will be present at one of the concluding meetings of the Association.

IRIDECTOMY.

There is doubtless, to a certain extent, a fashion in surgical operations, just as there is a fashion in drugs; and we have no doubt that the fashion rules in ophthalmic as in all other branches of surgery. Our opinion is asked of iridectomy. We can only speak of it from what is reported of it; but certainly, unless report be a very false guide, iridectomy must be considered as of the fashionable sort of operations.

In proof of this, if we are rightly informed, for example, it is an operation which is much more rarely performed now than it was when first introduced amongst us. Some first-rate ophthalmic surgeons have, we believe, never performed it at all; and others, again, who have done so, now no longer resort to it or admit it into their practice. Again, we have heard one celebrated eye-surgeon say, that he believed that twenty years hence the operation will be a mere matter of history. Of course it is, on the other side, difficult not to accept as a fact, that great benefits sometimes result from the operation; otherwise it would not be so highly praised by great authorities.

In this dissonance of opinion, as impartial observers, we can only say, that we think the real value and purposes of the operation have yet to be clearly laid down and more definitely described. There is, apparently, some mystery still enveloping the *rationale* of iridectomy. Every one knows and understands why an opaque lens is extracted or broken-up; but the benefits of iridectomy are not so patent and comprehensible to the general observer.

We must suppose, that a difficulty sometimes occurs in surgery as well as in medicine respecting the relation of the antecedent to the sequence. It may be, in this matter of iridectomy, that the operation (though the antecedent) is not always the cause of the beneficial results which follow its performance. However, we can only suggest, that materials must surely be now sufficiently abundant to afford surgeons an opportunity of coming to something like a consistent opinion on this important point. We regard the operation as we should a drug; and if we find that one set of qualified observers see no virtue in it, and that another set of equally qualified see it full of excellence, we reasonably conclude that the actual and real value of the article has yet to be determined.

THE ANCIENT AND MODERN DOCTOR.

A critic in *Gazette des Hôpitaux*, speaking of the recent work of M. Raynaud, *Physicians in the Time of Molière*, contrasts the difference between the studies required of the student of medicine of those and of the present days.

"What an abyss separates these studies! Compare the student, already master of arts or philosophy—the possessor, consequently, of profound and extensive knowledge—kept constantly at work, obtaining his grades only after long and difficult trial, ... with the student of to-day, and then ask in whose favour is the comparison? The baccalaureat of this day, as we well know, is not a serious examination. The preparation for it is very like that of certain plants in a hothouse, and the product too often the same. And then, what are the stupid examinations, half an hour long, of our Faculty,

by the side of those athletic combats and trials which were prolonged during the greater part of the day, and in which the candidate was tested at every intellectual point? Now-a-days, each professor examines for ten minutes, unless, like good old Desgenettes, he prefer talking himself all the time. In these ten minutes he satisfies himself that the student is perfect in his medicine, anatomy, pathology, etc. In those other days, four years were required of the student to be passed in the study of a very limited programme of subjects; but now, notwithstanding the formidable increase of subjects of study, the number of years is the same. And new chairs are being created! Medical studies are, in truth, very weak, and the greatest number of those who are received as doctors ill educated."

The remedy recommended by the critic for this deplorable state of things is this:

"You have," he says, "already too many doctors by half in France—in fact, one doctor to every 1500 persons. It would be to the interest of every one if the number were diminished. And how could this be better done than by increasing the length of the student's years of study and the severity of his examination? In the seventeenth century, the candidate for the baccalaureat in medicine was obliged to be twenty-five years of age, and consequently could not receive his license to practise before he was about twenty-eight years old. Now a man may, in fact, be a doctor at twenty. As a rule, he is so at twenty-three and twenty-four. Why not fix the date at twenty-six or twenty-seven?"

THE WEEK.

Much misconception, we believe, exists in reference to the sum of money which has been left by the late Lord Henry Seymour to the *Hospices de Londres*. The real sum is, we understand, £25,000. The course which the different medical charities—claimants for a share of the legacy—should pursue, in the interests of all of them, is evident enough. Each category of such charities, whether hospital, almshouse, lunatic asylum, dispensary, etc., should have its particular claim argued separately. Thus the hospitals proper should all have one spokesman; so also the dispensaries, and so on. By pursuing this simple course, large expenses, which must otherwise be incurred, will be saved to these charities. We happen to know that this is the opinion of excellent legal authority. It may be added, that the will of the late lord was made by himself, and, though written in French, was not drawn up by a French lawyer; consequently, there will be less difficulty in arriving at the conclusion that, when his lordship wrote the word *hospice*, he meant thereby to infer the medical hospitals of London. Had a French lawyer dictated such a term, a very different value might be attached to the word.

Professor Lucca of Naples has laid before the Academy of Sciences a piece of bread from Pompeii, eighteen hundred years old. It had the appearance of charcoal; and contained 2 per cent. of nitrogen and about 23 per cent of water. Incineration produced 17 per cent. of its weight of ash.

M. Dumas has much occupied himself with the "bouquet" of wines. He agrees with M. Berthelot that the "bouquet" depends upon the ethers. He would not, however, enter into details, because there were too many *falsificateurs* on the look out who would make use of the information for their own benefit and to the detriment of MM. *les gourmets*.

FRENCH ACADEMY OF SCIENCES.

THALLIUM AND ITS POISONING PROPERTIES.

M. Lamy, in a paper addressed to the Academy of Sciences, announces a property of that metal, the discovery of which belongs to him, viz., its deleterious power. Having experienced certain pains, especially in his lower limbs, while pursuing his studies on thallium, he was induced to attribute them to a noxious influence of the metal; and in order to ascertain whether such was the fact, he dissolved five *grammes* of sulphate of thallium in milk and offered it to two puppies, each about two months old. But after tasting the liquid they left it, and could not be induced to take any more. On the following day the milk, which had been left in the yard, had disappeared, and it soon turned out that it had been partaken of by a dog, two hens, and six ducks; for a few hours after ingestion the dog became sad and refused to eat. During the night it was seized with violent gripes, which caused it to utter piercing cries. Its features had undergone a change; its back was bent up through the effect of pain, the seat of which was evidently in the intestines. Its hind legs, after a continuance of convulsive motions, became paralysed, and it died sixty-four hours after taking the poison. On the day before its death a hen and six ducks died, and in those which were watched in time, the paralysis of the legs was remarked. The two puppies which had scarcely touched the milk had meanwhile shown symptoms of fatigue; by degrees they were seized with convulsive trembling, and could hardly stand; then came the acute pains which ended in death, although every precaution had been taken, apparently in good time, to save their lives. All these animals being subjected to dissection, there could not be found the slightest corrosion or even inflammation of any consequence; only the gall-bladder of the dog was found considerably extended, and in some of the ducks various serous membranes, that of the liver especially, had assumed a whitish and granulous appearance. As to the nature of the poison, if there could have been any doubt about it, it would have been at once dispelled by the characteristic green band peculiar to thallium in the spectral analysis of the organs of the dead animals. Eight days later another hen was taken ill. Its wings hung down, it could hardly walk, and when it wanted to peck its food, its neck seemed to have lost the power of bending down sufficiently, so that its beak did not reach the food. The hen was killed, and thallium found in the intestines, but in a very small dose indeed, and the other organs did not contain any. M. Lamy next administered a *decigramme* (a grain and a half) of the sulphate to a dog two months old, and it died forty hours after taking it. Hence M. Lamy infers that sulphate of thallium is a powerful poison, producing pain in the intestines and paralysis of the lower members. This poison and the nitrate have but little taste, and might therefore be used for criminal purposes; but fortunately there is not a poison that can be traced with more certainty through spectral analysis than this. This new method of analysis bids fair to render excellent service in cases relating to forensic medicine.

FOSSIL REMAINS.

At a late meeting, a paper was received from M. Husson on the drift of the environs of Toul, where there are certain grottoes, called Troncs de Saint Reine, opposite Pierre-la-Treiche. They form the termination of the inferior oolitic formation, and are immediately covered with a stratum of fullers' earth, above which begins the great oolitic, and then the siliceous lime deposit, with fragments of flint. The fossil bones contained in the drift consist of jaw-bones, femora, ribs, and vertebræ of the bear, teeth and other bones of the hyena, stag, and boar, and various coproliths. In the modern deposit a curious lump was found, containing a fine fossil jaw-bone and two vertebræ of a bear enclosed in a thick stalagmite, with a bone of recent origin. To explain this anomaly, M. Husson supposes that a hole had first been formed by some animal in the immediate vicinity of the jaw-bone, and that after the casual introduction of the new bone a new stalagmite was formed over it.

SUGAR FROM SERPENTS' SKINS.

In 1861, M. de Luca made some experiments, from which it appeared that the skins cast off by silkworms might be transformed into sugar. The same chemist lately sent in a paper to the Academy of Sciences, in which he describes a similar process for changing serpents' skins into sugar. These skins contain a small quantity of a substance resembling the cellulose of plants, soluble in ammoniuret of copper, and transformable into glucuse, which reduces the tartrate of copper and potash, and ferments under the influence of yeast, yielding thereby carbonic acid and alcohol. Concentrated sulphuric acid and a solution of potash are the best reagents for depriving serpents' skins of their nitrogenous matter; the residue, although very refractory to chemical agents, may nevertheless be transformed into fermentable glucose, recognisable from its property of reducing the tartrate of copper and potash. Thus, M. de Luca boiled fifty *grammes* of serpents' skin in a litre of water containing forty *grammes* of caustic potash, the skins having been previously treated with concentrated sulphuric acid. The liquid having been allowed to cool, a great deal of water was added, and the undissolved residue was several times washed by decantation, and then treated with ammoniuret of copper, whereby an alkaline solution was obtained, which, on being neutralised by hydrochloric acid, yielded a white precipitate; this, heated in slightly acidulated water, reduced the tartrate of copper and potash, thereby showing that it was glucose, or the base of sugar. In another somewhat similar operation glucose was obtained which fermented in contact with yeast, producing carbonic acid and alcohol. The former was completely absorbed by caustic potash; the alcohol extracted from the solution by distillation, and insulated by means of crystallised carbonate of potash, was nearly pure, since it would burn without leaving any residue; rubbed between the hands it evaporated, emitting an agreeable smell, though still partaking of that of animal matter. From all this it may be concluded that serpents' skins contain a very small quantity of sugary matter or glucose. (*Galignani.*)

THE EFFECTS OF CONGELATION UPON WATER.

Dr. Robinet has given an account of experiments made to test the effects of congelation upon drinking-water. It is well known that the ice which is formed in the sea yields nothing but fresh water, all the salt having been eliminated by congelation. In the northern parts of Europe this property is turned to account for the extraction of salt from sea water; for a large sheet of the latter having been left to freeze, the ice is afterwards cut away, and the unfrozen water left below it so rich in salt as to require very little evaporation to yield it in a solid state. This property will also serve to analyse wine. Suppose it was required to determine the quantity of water fraudulently added to a certain wine; by exposing it to the action of artificial refrigeration, all the water would be alone, and the wine left in its purity. By a similar process, ships at sea, being short of water, might be supplied with this necessary article. Dr. Robinet has added a new fact to this theory by showing that the water of springs and rivers loses all its salts by congelation. These salts are chiefly those of lime and magnesia.

DIFFUSION OF GASES THROUGH CERTAIN POROUS BODIES.

On repeating Deville's experiments, M. Matteucci could not obtain the same results with a long piece of intestine; but when he employed a well dried tube of plaster of Paris, his results agreed very well with Deville's. He has shown that diffusion takes place much more slowly through moist fresh membranes and wet tubes. Pea and bean-pods, which he found to contain from six to ten per cent. of carbonic acid, sometimes required entire days for the carbonic acid to pass out and be replaced by pure atmospheric air. The following remarks on diffusion through moist membrane have particular interest. When capillary columns of water intervene, the nature of the phenomena changes, and acquires a great analogy to endosmose. It is then necessary to consider the two gases as separated by a more or less continuous stratum of water, with which these two gases enter into solution, but with very unequal affinities. Once dissolved in water, they each pass out into a different medium, as if it were a vacuum. In this way we see differences appear which must depend upon the unequal solubility of the two gases. Thus, a large vessel containing hydrogen, but not full, suspended under a bell glass filled with carbonic acid quickly begins to swell from the large quantity of carbonic acid which passes in, and the small amount of hydrogen escaping. Analogous phenomena must happen in the act of pulmonary respiration.

JAPANESE SILKWORMS.

At a late sitting, M. Rufz de Lavison, director of the Jardin d'Acclimatation, read a paper on the *Yama-Mi*, the Japanese silkworm that feeds on the leaves of the oak. M. Eugène Simon had sent over five *grammes* weight of eggs of this species. These eggs were hatched between April 16th and May 22nd last; the insects were fed with the leaves of the common oak (*Quercus pedunculata*) that grows in the Bois de Boulogne; the cocoons were spun between the 1st and 25th of June. The number of insects was 83; the cocoons obtained 77. Twelve of the latter subjected to the process of winding produced two *grammes* of raw silk, inferior in gloss to that of the mulberry insect, but much stronger and somewhat thicker. The winding is effected with as much ease as in the case of the common silkworm; the yield also is much the same, fourteen *kilogrammes* of cocoons producing one of silk. The rearing of these silkworms takes about sixty days; they are about a week spinning their cocoon, and the butterfly emerges about thirty-five days after; the laying of eggs takes place four days later. Marshall Vaillant, who had some of the worms under his care, has communicated several important observations to the Société d'Acclimatation on the subject.

THE ANTIQUITY OF MAN.

A letter was lately read from M. Eugène Robert, on certain deposits of bones and stone implements, said to exist in the environs of Nancy. He states that having, in 1830, found the remains of a young *elephas primigenius* on the heights of Toul, opposite Nancy, he visited the spot again a few weeks ago, but found nothing, limestone quarries having in the interval been opened on the spot; but thereby numerous crevices, filled with a reddish earth and pebbles, had been brought to light, showing that the matter constituting the drift of the heights of Toul had been transported thither by rains and other meteorological agents. In one of these

crevices, at Maxeville, human bones had been found, together with the fossil remains of the aurochs and gigantic stag, and hatchets rudely fashioned out of the trap or green stone of Vosges. Nevertheless, after a careful search, in the presence of the gentlemen who had actually formed a collection from the remains above alluded to, M. Eugène Robert could not find the slightest trace of such fossils. He accordingly expresses some doubts as to the authenticity of the stone hatchets, and the high antiquity of the bones. Another letter was read, from the Abbé Chevalier, on the superficial strata of Touraine, in which the writer states that M. Elie de Beaumont's "moveable deposits on declivities" are very frequently met with in Touraine, and that flint hatchets have nowhere been found in the real drift, though many have been discovered in those moveable deposits. He adds that he has discovered five "workshops" of flint hatchets (meaning places where primæval men used to manufacture them) on the banks of the Creuse and the Claise—viz., at La Petite Querche, Chambon, Barzou, Pressigny-le-Grand, and Paulmy, where flint implements may be found in every stage of manufacture. Many specimens of these the Abbé has sent to the Museum of the Archæological Society of Touraine. Among the implements found there is one which was used for polishing hatchets; it is a hard flint, with deep furrows on its surface, and on rubbing a flint hatchet up and down one of these grooves, it takes a fine polish.

CUTANEOUS ABSORPTION.

M. Parisot has presented memoirs of some physiological and therapeutical interest. By a series of experiments with the corpses of infants, he has proved that water is only absorbed into the body at the palms of the hands and the soles of the feet. When these were covered with Venice turpentine, a corpse immersed in water acquired no additional weight. The reason is obvious: these parts are unprovided with sebaceous follicles, the secretion of which forms a protecting varnish for the rest of the body. Alcohol, ether, and chloroform, which more or less dissolve the sebaceous matter, penetrate the skin easily. A solution of atropine in chloroform applied to the forehead produced dilatation of the pupil in three minutes. A solution of the same strength in alcohol only produced dilatation in thirty minutes. A solution in water slightly acidulated with acetic acid did not dilate the pupil at all. These facts, the author says, are likely to alter our ideas upon absorption, and the substances to be employed for external applications.

THE MOULIN-QUIGNON JAWBONE.

M. de Beaumont has communicated to the Academy of Sciences a few observations in reply to a letter from M. Boucher de Perthes, in which he quotes, it would seem, an opinion expressed by M. de Beaumont about twenty years ago, touching the nature of the ground of Moulin-Quignon, where the famous jawbone was found last spring. M. de Beaumont declares that he still holds that same opinion—viz., that certain gravel deposits, like that of Moulin-Quignon, must be distinguished from the Alpine drift or *diluvium* properly so called, and the origin of which is owing to causes which have ceased to operate, whereas the deposit of Moulin-Quignon is owing to actual causes—that is, to those which we still see in operation. That deposit has been attributed either to the action of the Polar ice which may have floated on the bay of Somme, or to various successive changes of level in the general mass of the adjacent land. Whether it be justifiable or not, M. Elie de Beaumont remarks, to ascribe so small an effect to such gigantic causes, the latter would, after all, still lie within the range of actual causes. And if the gravel-bank of Moulin-Quignon is the result of a later mixture of grey and red drift—it certainly does not belong to the grey, which is the real Alpine drift, considered by our author, as well as by Cuvier, as representing the end of the period of fossil elephants, and as anterior to the appearance of man. In support of his opinion that the gravel deposit in question is owing to the most common among the actual causes —viz., storms, frost, snow, etc.—M. Elie de Beaumont observes that the gravel-bank of Moulin-Quignon is situated at an altitude of 30 *mètres* above the Somme at Abbeville, and consequently at 30 *mètres* above the level of the sea. It is overlooked at a distance of less than two *kilomètres* by points the altitudes of which are respectively 61, 65, and 67 *mètres*; at less than three *kilomètres* by another point 80 *mètres* above the level of the sea; and at less than five *kilomètres* by points marking 100 *mètres*. The gradients of the lines going from Moulin-Quignon to those points all exceed the proportion of one in 100, or more than tenfold the *maximum* inclination of the beds of navigable rivers, and greater than those of the Arve, Isère, etc., near their sources, where their waters, even when but slightly swollen, flow with immense rapidity, and will sometimes commit the greatest ravages. Now, to produce similar ravages on the undulated plains of Picardy, a single heavy snow storm would be quite sufficient; and who would venture to guess the *maximum* effect of this kind which may have taken place in the environs of Abbeville since the age of stone? The deposit of Moulin-Quignon may, therefore, be very well owing to such a cause, though anterior to the turf deposits of the north of France, many of which are posterior to the Roman roads. Such deposits, which M. de Beaumont calls moveable deposits on declivities, are peculiarly abundant in the north of France, owing to the want of coherence of the eocene, miocene, and pliocene deposits which cover the chalk formation, and are essentially contemporaneous with the alluvial beds of valleys—those along the coasts and turf deposits.

ALCOHOLIC METAMORPHOSIS.

In opposition to M. Pasteur, M. Millon shows that when sugar is fermented in contact with tartrate of ammonia, the ammonia is carried away by the carbonic acid evolved, and not assimilated by the ferment. In the course of his experiments, M. Millon has made a discovery of great importance; namely, that under some circumstances the contact of yeast will produce alcohol from sugar, without the formation of carbonic acid. What these circumstances are the author keeps to himself for the present. He states, however, that the production of alcohol under such conditions is attended by the formation of a compound of carbonic acid and sugar, analogous to the compounds sulphuric, tartaric, and citric acids form with glucose. (*Chemical News.*)

THE RIPENING OF WINES.

M. Berthelot, in a *Note on the Proportion of Ethers in Wines*, shows, that in a wine of fermented liquor in which all the sugar has been changed and no mycoderms are left, a reciprocal action of the acids and alcohols contained goes on until a certain equilibrium is reached, the amount of ether produced being in proportion to the weight of acid in the wine or liquor, the coefficient of the proportionality depending on the relation existing between the alcohol and the water. The results of the author's experiments have an evident bearing on the ripening of wines, and the time in which it is accomplished. In experimenting with a mixture of alcohol and acetic acid in equal equivalents, M. Berthelot found that two-thirds of the possible quantity of ether was formed in five or six months, and five-sixths at the end of a year. Two years were not enough to complete the reaction, but as much as fifteenth-sixteenths of the quantity of ether possible was found. With polybasic acids, such as exist in wine, the reaction is a little more rapid; and the author adds that warmth promotes, and cold retards, etherification. According to M. Berthelot's

notion, the acidity of wine goes on diminishing, so that an ordinary wine, according to its richness in alcohols, loses from one-eighth to one-sixth of its acid by the formation of ether alone. (*Chemical News.*)

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Tuesday, the 29th of September, 1863, at half past One o'clock P.M.

Business:—To appoint the readers of the Addresses in Medicine and Surgery at the next annual meeting.

To consider and decide upon the best means of collecting the annual subscriptions.

Any other business which may be brought forward.

T. WATKIN WILLIAMS, *Gen. Sec.*

13, Newhall Street, Birmingham, Sept. 17th, 1863.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Oct. 15, 2 P.M.
SOUTH MIDLAND. [Autumnal.]	Infirmary, Northampton.	Thurs., Oct. 22, 1 P.M.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Newcastle-on-Tyne, August* 1863.]

Life in the Atmosphere. By JAMES SAMUELSON, ESQ. No subject in natural history, Mr. Samuelson remarked, except the allied one, the origin of species, had of late excited greater interest in the scientific world than the origin of the lowest types of living beings on the globe; and although the problem was far from being solved, yet the investigations which had accompanied the discussion had already served the useful purpose of throwing new light on the anatomy and life history of the mysterious little forms of which it treated. He had taken rags imported from various countries, and shaken the dust from them into distilled water, which he then exposed to the atmosphere; and, after describing generally the character of the living forms he had discovered in this pure water, he stated in detail the forms of life found in each kind of dust; among these were some new species of *rhizopoda* and *infusoria*, and an interesting ciliated worm-shaped form, which he believed to be a collection of the larvæ of some other infusoria. The general results of the microscopical examinations of these fluids, between July the 27th and August 15th, was as follows:—In dust from Egypt, Japan, Melbourne, and Trieste, life was the most abundant, and the development of the different forms was rapid. In conclusion, he observed, that if he was correct in supposing the germs of the living forms that he had described to be present in the dust conveyed by the atmosphere, and in distilled water, it was worthy of notice that these germs retain vitality for a long period, of which he could not pretend to define the limit. In his experiments they outlived the heat of a tropical sun, and the dryness of a warm room during the whole winter; but in Dr. Pouchet's case they retained their life two thousand years, for he obtained his from the interior of the pyramids of Egypt, and they survived in an oil-bath of four hundred degrees of heat. A main purpose which Mr. Samuelson had in view was to discuss the theory of spontaneous generation; and he suggested whether the great rapidity with which these germs are multiplied might not account for the spread of epidemic diseases. He did not profess to have any acquaintance with such diseases; but might it not be desirable to subject the atmosphere of hospitals to the microscopic test?

Effect of Digestion on the Stomach. By F. W. PAVY, M.D. The author, after relating many experiments, said that the problem as to why the stomach is not susceptible of attack during life as it is after death, still remains open for solution; and the view that he had to offer referred the immunity observed to the circulation, within the walls of the organ, of an alkaline current of blood. It would not be disputed that the presence of acidity was one of the necessary circumstances for the accomplishment of gastric digestion. Now, alkalinity was a constant character of the blood, and, as during life the walls of the stomach were everywhere permeated by a current of this alkaline blood, there was here an opposing influence, the effect of which would be to destroy, by neutralising its acidity, the solvent properties of the digestive fluid, and to prevent it from acting on and penetrating the texture of the organ. The blood being stagnant after death, the opposing influence offered by the circulating current was lost. Should life happen to be cut short at a period of digestion, there was only the neutralising power of the blood actually contained in the vessels of the stomach, to impede the progress of attack upon the organ itself; and the consequence was, that digestion of its parietes proceeded, as long as the temperature remained favourable for the process, and the solvent power of the digestive liquid was unexhausted. The author found, experimentally, that by arresting the flow of blood through the stomach during life, the organ was placed in the same condition as after death; its protecting influence being lost, digestion of its texture now proceeded.

Cranial Deformities: the Scaphocephalic Skull. By W. TURNER, M.B. The author commenced by stating that deformities of the skull might be occasioned by artificial means, by posthumous changes, by pathological changes, and by developmental irregularities and deficiencies. He in a great measure restricted himself to the consideration of the influence, which premature or retarded synostosis may exercise in the production of abnormal cranial forms. He arranged the sections of the skull-cap into a vertical-transverse group, a median-longitudinal and two lateral-longitudinal; and, carrying out the important proposition first clearly enunciated by Professor Virchow, he pointed out that if a premature ossification takes place in one or more than one of the whole or a part of the sutures, then, necessarily, the growth of the skull corresponding to and in a direction perpendicular to the line of synostosis will occur, and diminished length or breadth, or height, as the case may be, will be occasioned. He illustrated this proposition by describing the peculiarly elongated and laterally compressed form of skull to which Professor Von Baer, of St. Petersburg, has given the name of Scaphocephalus. The whole of these crania agreed in possessing the following characters: Absence of the sagittal suture and consequent blending of the two parietal bones; absence of parietal eminences; lateral compression; great elongation. He then described at length the theories which had been advanced in explanation of these characters. The first, proposed by Minchin, and adopted by Von Baer, supposes that the biparietal bone is developed from a single median-vertical centre. The second, proposed by Virchow, and concurred in by the author, supposes that the two bones were formed in the

usual way, each from its own centre, but that at a very early period they coalesced along the sagittal line so as to form but a single bone. The author then directed attention to the importance of attending to the above proposition in ethnological inquiry, and suggested that various aberrant forms of skull, occurring in individuals of any given nationality, possessing a shape quite different from that of the race to which they belong, might be thus explained. He pointed out, moreover, that obliteration of the sutures was not unfrequently met with in the skulls of the Flathead Indians which had been artificially flattened. He was of opinion that premature synostosis did not necessarily occasion any disorder of the faculties of the mind, or any tendency to cerebral disease. Persons possessing crania of this form did not belong to any particular race, neither did they exhibit any special tendency to cerebral disease or mental incapacity.

Report on the Bromide of Ammonium. By GEORGE D. GIBB, M.D. The author offered the following conclusions as the results of his experiments as to the medicinal value of the bromide of ammonium. 1. In small doses, more or less continued, bromide of ammonium acts as a tonic and absorbent, and exerts its peculiar properties upon the skin and the mucous membrane. 2. It diminishes the weight of the body, causing the absorption of fat, when continued with a regulated diet. 3. It improves the intellectual powers, increases the bodily capacity, and promotes healthy function. 4. Locally, it possesses a soothing influence on the mucous membrane; and, according to the strength and mode of its application, so does it diminish the sensibility. 5. In large, frequently repeated doses, or given at intervals, it influences the entire mucous tract, affects all the special senses, and produces impaired sensibility of the various mucous outlets. 6. All the poisonous effects are produced by very large doses, as from the bromide of potassium; but in smaller doses it is more certain and reliable, causes no diarrhœa nor diuresis; while its special properties are exerted sooner and with less inconvenience.

The Nitrite of Amyle. By B. W. RICHARDSON, M.D. After describing the character of this clear amber-coloured fluid, Dr. Richardson said that the nitrite, when inhaled, produced an immediate action on the heart, increasing the action of the organ more powerfully than any other known agent. As the action of the heart rose, the surface of the skin became red, and the face assumed a bright crimson colour. (A little of the nitrite was here placed on a piece of bibulous paper, and passed round to show the effect on the face, and the effect was most remarkable, causing the faces of the persons who smelt the vapour to become instantaneously flushed.) Carried to an excessive degree, the nitrite excited the breathing, and produced a breathlessness like that caused by sharp running or rowing. In animals, when the agent was given in large quantities, death was produced. The author at first thought that the nitrite, like chloroform, would cause anæsthesia; but experiments had shown that this view was not borne out. Animals would, it is true, lose consciousness; but when such a stage was reached, great danger resulted, owing to the slowness by which the poison was removed from the body after its absorption. On the blood the nitrite produced darkness of colour, but did not materially interfere with coagulation in the body. In the lungs it excited congestion, and in the brain slight congestion. It caused no severe spasm, and no sickness. In the lower animals—frogs for instance—the nitrite of amyle led to suspended animation, which could be maintained for so long as nine days with perfect after-recovery. This fact was of curious historical interest. The ancients, especially Paracelsus, had stated that there was a poison which, when taken one day, would not take effect until some future day. This statement, long considered as a myth, had within the present year been shown to be true by Dr. Letheby, who had discovered a poison which really produced this phenomenon. In like manner the ancients had an idea that there were medicines which would for a time suspend life. The proceeding of Friar Lawrence in giving the distilled liquid to Juliet, was based on this old fiction, or should we not say fact? The next point discussed, had reference to the mode of action of this poison. Were the effects produced through the blood or directly by the nerves. He had been led to the conclusion from previous experiments, that all poisons were brought into action through the blood; but this very commonly accepted theory did not explain the immediate and powerful action which followed the exhibition of the minutest dose of the nitrite amyle. He thought, therefore, that the action was immediately on the nervous system; and that such action, transferred to the filaments of nerves surrounding the arteries, paralysed the vessels, on which the heart immediately injected them, causing the peculiar redness of the skin and the other phenomena that had been narrated. Dr. Richardson, in conclusion, said that nitrite of amyle, like chloroform twenty years ago, was only to be considered as a physiological curiosity. It might by its action suggest the cause of trance, and of what was called hysterical unconsciousness, and it might explain the mode by which certain analogous substances produced their effects on the organism. It had been naturally suggested, that in fainting, as from loss of blood or fear, the inhalation of the nitrite of amyle might be of service. He (the author) did not at the present moment recommend its use in medicine, because of the intensity of its action. This last point was at the present time under his inquiry, and he would report further results at the next meeting of the Association.

Correspondence.

THE ARMY AS A MEDICAL SERVICE.

SIR,—I am occasionally asked by students for my opinion and guidance in the selection of a sphere for their future labours as medical men.

There are a great many reasons why the public services fail to attract the best men of our schools, such as the expatriation entailed, the chances of loss of health in a hot climate, the long continuance in a subordinate position, the defective remuneration, and the peculiar character of the life and duties imposed upon medical officers, as well as the small chances of success held out to an ambitious and energetic man; but the unpopularity of the Army Medical Department has lately exceeded these limits. While the avenues to every public competitive examination are crowded with candidates, the vacancies in the above department are said to exceed greatly the number of applicants. This defect in quantity implies a still worse one in the quality of the men entering the army, which can only be very lamentable for the interests of any public service, and still more so for the unfortunate soldiers individually.

The inducements offered by Government to members of our profession have not been very many at any time; still I have hitherto been content to balance these against the chances of failure in private life, and I have not dissuaded good men from entering the services. At the present time, however, I presume very few teachers counsel their pupils to enter the army. Putting aside its grievous unpopularity, how can I advise a man with any self-respect to enter a service wherein he may be called upon to superintend an official in branding a soldier at the hospital? Anything bearing the semblance of inflicting punishment should never be the duty of a medical man. If the letters of your correspondents ex-

press the truth, then it is time for us to protest against this kind of thing; for, if we do not protect ourselves against the indignities offered by government bodies, it is futile to expect that proper estimation and respect due to us as a profession at the hands of the general public. I am, etc.,

F.R.C.S. and Hospital Surgeon.

London, September 19th, 1863.

POISONING BY ARSENIC.

Letter from Daniel Dougal, M.D.

Sir,—As the subject of accidental poisoning is one that deservedly is of considerable interest to the profession, I beg to report the following case, as it occurred within my knowledge a week ago.

A man who trains sporting dogs had been using Fowler's solution of arsenic in the treatment of mange affecting some of his canine pets; and one morning had poured out a little, and gone to the kennel to administer it, leaving the phial standing on a table. A child of twenty months old was in the room, and got hold of the bottle and swallowed, as was afterwards ascertained, at least three drachms (equal to a grain and a half of arsenious acid) before it could be prevented. The child was at once brought to me; and, as the stomach-pump was not at hand, I administered twelve grains of sulphate of zinc, which caused immediate and free vomiting. The pulse was very feeble and rapid, the skin cold and clammy, and the face sunk; and there was drowsiness. With a good deal of difficulty, owing to the resistance of the child, I gave repeated doses of the hydrated sesquioxide of iron, prepared by adding liquor ammoniæ to tincture of sesquichloride of iron, and persevered with the use of it for an hour and a half at intervals. The child vomited repeatedly, and complained of burning over the stomach; but there was no purging. I then administered another emetic of sulphate of copper, with diluent drinks, which acted well. After this, the pulse increased in volume, the skin got warmer, and the symptoms gradually abated; and in a day or two he was almost well.

This case was a very favourable one for a fair trial of the sesquioxide as an antidote, as it was administered within half an hour of the time the poison was swallowed, and before, therefore, it had time to produce very violent symptoms. I may mention, that the child vomited in less than ten minutes after the poison was swallowed. I am, etc., Daniel Dougal.

Strathaven, Lanarkshire, September 15th, 1863.

SUGGESTIONS FOR VACCINATION.

Sir,—If the Report on Vaccination for 1862 shows that the machinery for performance of that operation is an enormous failure, let us earnestly hope a wise revision of the existing system will take place. Very often proper arrangements *are* made for the performance of the operation; but I will tell you where the system breaks down. The public vaccinator at the time appointed attends at the station, which is situate perhaps four miles from his surgery. And what happens? Why, often enough, not a single candidate applies for vaccination. Is it his business, for a paltry half-crown, to drive round a scattered parish and beat up some insolent dame (who entertains him with a long history of skin-diseases, past, present, and to come), and wrangle with her over the right to vaccinate the morsel of humanity she carries in her arms? I trow not. The whole affair is managed under the admirable regulations of persons whose system "how not to do it" finds so much favour with all public boards.

A few business men would regulate the whole affair at one sitting. Given a time and place for vaccination; a proper yearly honorarium to a medical man for his attendance at his post in each parish for a set time each day whilst vaccination is going on, abolishing the present trumpery fee, depending on each spot, or pimple, or pustule; a strict list to be sent into the board-room at the end of the public vaccinator's attendance; a comparison instituted between it and the list of births in the parish; followed by the issue of *printed warnings* to all who have shirked entering an appearance, and an occasional summons if required;—and then parents and the public generally would really believe that compulsory vaccination was a good thing and a necessary, and no longer a bugbear and farce, as it surely now vastly resembles. I am, etc.,

A Country Union Surgeon and Public Vaccinator.

September 1863.

P.S. I have often wondered that Government has not issued a pamphlet for the poor—"Plain Facts on Vaccination"—and circulated it widely. I would write them one gratis with pleasure.

Medical News.

Apothecaries' Hall. On September 17th, the following Licentiates were admitted:—

Henson, Sidney Rossell, Hull
Wall, George, Stourbridge

At the same Court, the following passed the first examination:—

Cowen, Philip, St. Thomas's Hospital
Pearse, George E. Legge, Westminster Hospital

APPOINTMENTS.

Army.

Bell, Staff-Surgeon J. N., M.D., to be Surgeon 5th Foot, *vice* Surgeon-Major F. Reid, M.D.

Bleckley, Assistant-Surgeon T. M., M.B., 14th Foot, to be Staff-Surgeon.

Crerar, Surgeon J., 60th Foot, to be Staff-Surgeon, *vice* R. C. Todd.

Gibaut, Assistant-Surgeon W. M., 17th Foot, to be Staff-Surgeon.

Hare, Staff-Assistant-Surgeon R. W., M.B., to be Assistant-Surgeon 80th Foot, *vice* J. B. Baker.

Reid, Surgeon-Major F., M.D., 5th Foot, to be Staff-Surgeon-Major, *vice* J. N. Bell, M.D.

Sainter, Staff-Assistant-Surgeon J. D., to be Assistant-Surgeon 94th Foot, *vice* E. M'Grath.

Todd, Staff-Surgeon R. C., to be Surgeon 60th Foot, *vice* J. Crerar.

Tothill, Staff-Assistant-Surgeon J. H. H., to be Assistant-Surgeon 17th Foot, *vice* W. M. Gibaut.

Venning, E., Esq., to be Assistant-Surgeon 1st Life Guards, *vice* O. W. George, M.D.

To be Staff-Assistant-Surgeons:—

Baker, Assistant-Surgeon J. B., 80th Foot.
Ligertwood, Assistant-Surgeon W., M.D., from half-pay.
McGrath, Assistant-Surgeon E., 94th Foot.

Bredner, A., M.B.	McNalty, G. W., Esq.
Chandler, E., Esq.	Martin, H. A., Esq.
Creyke, W., M.B.	Martin, W. T., Esq.
Davis, J. N., Esq.	Nash, W., M.D.
Doig, A., Esq.	Page, W. J., Esq.
Dudley, W. E., Esq.	Quinton, W. W., M.B.
Ferguson, F., M.D.	Segrave, R. G., Esq.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Castle, W. H., Esq., to be Surgeon 5th Hampshire R.V.

DEATHS.

*Coldstream, John, M.D., of Edinburgh, at Gilsland, Cumberland, on September 7th. Friends will please accept of this intimation.

Crompton. On September 6th, at Upper Walmer, Kent, aged 6, Samuel Molesworth, only son of *Samuel Crompton, M.D., of Manchester.

Cullinan. On September 20th, at Great Malvern, aged 16, Rachel Florence, only daughter of Patrick M. Cullinan, M.D., of Ennis, Ireland.

*Harris, Lewis, Esq., at Totnes, aged 28, on September 13.

Henderson, Alexander, M.D., of Caskieben, Aberdeenshire, and Curzon Street, aged 83, on September 16.

Moor, Wm. H., M.D., at Buntingford, Herts, aged 33, on Sept. 19.

Muirhead, Alexander, M.D., Deputy Inspector-General R.N., at Orcadia Villa, Isle of Bute, on September 18.

Thallium. The Emperor of the French has conferred on M. Lamy the Cross of the Legion of Honour and a gold medal, the latter on the recommendation of the committee of the Congrés des Sociétés Savantes. (*Chemical News.*)

Young Italy. We have had here in Naples a congress of the medical men of Italy, which has just terminated its sittings, and though its avowed objects were medical, still the social and political consequences must have been considerable. The simple fact, too, of such a meeting attests that new existence on which the Italians are entering.

Cure for Hydrophobia. A woman supposed to have been bitten by a mad dog falls into the hands of a secret curer, who treats her thus: The twenty-five letters of the alphabet are written on twenty-five bits of paper, made into a ball, and swallowed after being well soaked in butter, whilst the curer pronounces certain cabalistic words. Unfortunately, in this case, the cure was ineffectual; for fifteen days later the woman died of hydrophobia.

Capital Punishment. The Association for the Promotion of Social Science, lately holding its second session at Ghent, has discussed at great length the subject of punishment of death. The abolition was finally voted by a great majority. In the course of the debate, a member read a list of 167 convicts sentenced to death, of whom 161 had been present at capital executions; and he concluded from this fact that the witnessing capital punishment is not efficacious in the suppression of crime.

A Cause of Bronchitis. It has been found, in France, that the use of threshing and winnowing machines has produced an immense amount of bronchitis and disease of the throat and chest among the labourers employed, who are exposed to an atmosphere charged with dust, which affects them so powerfully, that in some parishes there are whole families of confirmed invalids. To such an extent has the evil gone, that the *maires* have issued an order that the labourers employed near this machinery must work in veils.

A Castor Oil Omelette. To those who ask how castor oil may be disguised, the following receipt for an *omelette au huile du ricin* may be interesting. The author is not Francatelli, but a M. Martin. Put the quantity of castor oil required into an earthen pan, and break an egg upon it. Then let the pan be heated, and the oil and egg be shaken up together so as to produce an *œuf brouillé*. A little salt must then be added. A person would eat an omelette of this sort without finding out the presence of castor oil. Perhaps he might; but to make it more probable, we fancy some *fines herbes* might be added without objection. (*Chemical News.*)

Testimonial. A handsome electro-plated candelabrum or epergne was presented by the members of the Norwich Pathological Society to their honorary secretary, Mr. T. W. Crosse, at the anniversary dinner which followed the annual meeting of the society, held on the 10th instant. After the usual loyal toasts, the chairman, (Dr. Lombe), in introducing the toast of the evening took occasion, in an eloquent and appropriate speech, to refer to the very efficient services which Mr. Crosse had so freely given to the society from its very commencement—a period now of fifteen years' duration; and in presenting him with the testimonial, expressed, on the part of the subscribers, a hope that he would accept it as a token of the feeling of regard which they entertained for him personally, as well as of their thanks for his long continued and valuable services, with the addition of a hope that those services would still continue to be available to the society. The candelabrum bore the following inscription on its base:—"Presented to Thos. William Crosse, Esq., by the members of the Norwich Pathological Society, to mark their sense of his long and valuable services as their honorary secretary. Sept. 10th, 1863."

Contraband Opinions at Rome. "The slightest tinge of liberal opinions is visited by the most odious and vexatious tyranny. Dr. Maggiorani has the highest reputation in physic among the native practitioners. Not long ago he was Professor of Medicine in the University, an office in the gift of the government. He was so persecuted by the government on account of his opinions, that he was driven from his chair. His sons, sharing the opinions of their father, have been banished, regardless of how they are to find their daily bread. Lately the father has been again so harassed and persecuted, that he has at length demanded his passport and prayed for exile. Whether the government has yet complied with his request I cannot say. Signor Feliciani has the same relative superiority in local surgery that Maggiorani has in physic, and he stands in the same predicament from the same cause. Now, all this is persecution for *opinion*, and nothing beyond."

Vipers in France. The large increase of these reptiles in France renders the report presented to the Society of Acclimatisation on the subject by M. Léon Soubeiran of interest. The vipers known in France are, the *Vipera pelias*, the *Vipera aspis*, and the *Vipera ammodytes*. Vipers are extremely irascible; and although they usually take to flight at the approach of man, they sometimes attack him. They sometimes penetrate into houses, and especially dairies, whither they are attracted by the milk. They will visit the sheds where sheep and other cattle are kept, and also baking-ovens, on account of the warmth; but most frequently they are introduced into houses in the faggots used for lighting fires. They remain in a state of torpor during the winter, and make their appearance again in spring, when they are most dangerous. In the morning, they do not creep out of their nests until after the dew has disappeared; hence, the country people take good care to cut the grass for their cattle at an early hour. But those most exposed to danger are reapers, since vipers get into the sheaves in order to lie in wait for rats. When a person has been bit by a viper, a ligature should immediately be made above the wound. The wound should then be sucked, either by the patient himself, or by another person whose mouth is free from any solution of continuity. Then, if the two minute wounds inflicted by the fangs be perceptible, they should be cauterised with a red-hot iron; and if not, the place should be rubbed with ammonia, or else butter of antimony may be applied. Internally, a glass of brandy may be taken, and even repeated, with good effect. All further treatment must be left to the physician. The viper has many enemies, chiefly crows, storks, hedgehogs, and pigs. The park of Chateau-Vilain (Haute Marne) being infested with vipers, the proprietor put some wild boars into it, and in a very short time there was scarcely a viper to be seen. But after the destruction of the reptiles, the boars turned their gastronomic talents to the investigation of the rich truffle-beds for which the park was celebrated, and committed such havoc therein, that the proprietor had all the boars hunted down. Immediately afterwards, vipers re-appeared in such fearful numbers that wild boars had again to be introduced. In some departments, sums have been granted for the destruction of vipers. The destruction of this reptile, however, is best effected by favouring the multiplication of crows and pigs.

Suicide of a Druggist. An inquest was lately held at Sheffield on a woman named Squires, who died in childbirth, and a druggist and accoucheur named Harvey Oakes, who committed suicide to avoid a charge arising out of grossly improper treatment of the woman. Mrs. Squires was seized with labour pains, and was de-

livered by a midwife named Charlton of a child. The midwife ascertained that there were twins. The labour pains ceased after the birth of the first child; and the midwife allowed the woman to remain for twelve hours without making any attempt to deliver her of the second child. At the end of that time, she sent for Oakes, who was a druggist, and who also practised as an accoucheur. He gave the woman two powders to bring on the labour-pains, instead of altering the position of the child. After putting the poor woman in excruciating pain, he tried to deliver her, but only succeeded in mutilating the child. He was then dismissed, and a surgeon (Mr. Shaw) was sent for, and delivered the woman in five minutes. Her system had sustained such a shock that she could not rally, and died. Oakes seemed much agitated at the prospect of the inquest, and poisoned himself with prussic acid. The jury returned a verdict to the effect that the woman died from the effects of the improper treatment by Oakes and Charlton; and also that Oakes committed suicide during temporary insanity.

Naval Courts-Martial. A court-martial was opened at Sheerness on the 17th instant, on board the flag-ship *Formidable*, to try Mr. Charles Foster Williams, the assistant-surgeon of her Majesty's ship *Wrangler*, for being in a state of intoxication, on or about January 27th last, at the house of Captain Webb of the Royal Marines, at Ascension Island. Commander H. H. Beamish of the *Wrangler*, said that on January 27th he was at the house of Captain Webb, when the prisoner came suddenly into the house. He was drunk, and shouted, and was unable to walk steadily. The prisoner put in a written defence, and handed into court twenty-one certificates of character from officers under whom he had served for the last seventeen years with assiduity, attention, and sobriety. The court said that the charge was proved, and that he was to be severely admonished and reprimanded, which was accordingly done.—Another court-martial assembled on board the *Victory*, on the 19th instant, for the trial of Mr. J. A. Leicester, assistant-surgeon of the first class on board the *Pioneer*, on a charge of having lent certain sums of money to seamen belonging to the *Pioneer*, the said sums being made repayable to his (the prisoner's) son with usurious interest. The trial lasted the whole day; a number of witnesses were examined; and the evidence was of a very voluminous character. The court found the charge proved; and sentenced the prisoner to be reduced to second class assistant, and put at the bottom of the list.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Friday. Western Medical and Surgical Society.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—September 19, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys .. 946 / Girls .. 984	1930	1186
Average of corresponding weeks 1853-62		1846	1147

Barometer:
Highest (Mon.) 30.178; lowest (Sat.) 29.584; mean, 29.950.

Thermometer:
Highest in sun—extremes (Sat.) 104.6 degs.; (Mon.) 74 degs.

In shade—highest (Sat.) 71.8 degs.; lowest (Th.) 43.8 degs.

Mean—56.1 degrees; difference from mean of 43 yrs.—0.4 deg.

Range—during week, 28 degrees; mean daily, 16.9 degrees.

Mean humidity of air (*saturation* = 100), 75.

Mean direction of wind, S.W.—Rain in inches, 0.00.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 p.m.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 p.m.—Samaritan, 2.30 p.m.

Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.

Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—London, 2 p.m.

Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.—Royal Orthopædic, 2 p.m.

Friday..... Westminster Ophthalmic, 1·30 p.m.

Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.—Lock, Clinical Demonstration and Operations, 1 p.m.—Royal Free, 1.30 p.m.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Erratum.—In Dr. Bott's letter, at page 332 of last week's Journal, for "the *mother* is compressed", read "the *urethra* is compressed."

The names of the individuals who have been removed from the *Medical Register* are—Evan Thomas; R. Wrixon; Samuel La'Mert; R. Jordan. To prevent any person whose name has been removed from the *Register* from finding his way again into that book, the Medical Council have requested all Examining Boards not to admit any such person to examination, without communicating with the General Council.

Apothecaries' Hall and the Medical Council.—The following part of an advertisement, from our professional brother Mr. Lacey, is interesting and amusing. Apothecaries' Hall and the Medical Council deserve well of the profession for introducing the gentleman among us.

"Mr. Lacey, Licentiate of the Society of Apothecaries of London, Medical Herbalist, and registered a legally qualified practitioner of medicine, begs to acquaint his numerous friends and the public generally that his five and a half years of persecution by a portion of the medical faculty of Shrewsbury, was brought to a close on the 10th ult., by the Medical Council of England ordering him to be registered a Licentiate of the Society of Apothecaries of London, thus constituting him a member of the medical profession of the United Kingdom; he having proved to the satisfaction of the said Council that the statements of the above persons to them regarding the manner in which he (Mr. Lacey) had obtained his certificate from the Apothecaries' Hall, London, was entirely false, and that it had been obtained by him in a perfectly honourable manner by examination, he having complied with all the requirements of the Court of Examiners, prior to examination by them at their Hall in London.

"Mr. Lacey is very sorry there should have been so much ill-feeling displayed towards him merely on account of his superior success in his practice; he having, in the short space of a few years, fully restored to a perfect state of health forty-nine persons, whom other medical practitioners, and, in many of the cases, the most popular men of all in this and the adjoining counties, had given up and left to die, without any hope whatever. Forty-five of them are, to the best of his knowledge, alive and well at the present time. Most of them are living *in* or a few miles *from* Shrewsbury, and will at any time testify to the truth of what he here asserts. This is the source of all the envy and ill-feeling with which he has had to contend.

"Mr. Lacey considers the public ought to be made acquainted with the real facts of the case; viz., that he *is* a Licentiate of the Society of Apothecaries of London, a registered legally qualified practitioner of medicine, and that he of course still continues to practice; trusting, by the blessing of God, to be as successful in his future medical engagements as he has been in the past.

"The Wyle Cop, Shrewsbury, Sept. 7th, 1863."

Communications have been received from:—Mr. W. Michell Clarke; Mr. C. H. Marriott; Mr. T. T. Griffith; Mr. Haynes Walton; Mr. T. Watkin Williams; Dr. Acland; Mr. William Cadge; Dr. James Williams; Mr. G. W. Hastings; The Secretary of the Royal National Life-Boat Institution.

THE ORIGINAL CHLORODYNE,

INVENTED AND MANUFACTURED, IN 1844, BY RICHARD FREEMAN.

(Extract from Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery Lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S.Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. & L. M. etc., etc., Albert Terrace, London Road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and in all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S.Eng., etc., etc., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating, that after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, etc., etc.

"Having been in the habit of using Mr. Freeman's Chlorodyne for some time past, I have much pleasure in stating *that it has never failed to have the desired effect* in whatever case it has been administered."

Manufactured by RICHARD FREEMAN Pharmaceutist, Kennington Road, London, S.;
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz., 8s. 6d.

Pulvis Jacobi ver, Newbery

Is the ORIGINAL & GENUINE, was ESTABLISHED A.D. 1746,
And is Preſcribed, "by the higheſt authorities, for Fevers, Ague, Rheumatiſm, Colds, Influenza, &c. &c.

FRAS. NEWBERY & SONS, 45, *ST. PAUL'S CHURCHYARD.*

Prices for Diſpenſing—1 oz., 9s.; ¼ oz., 3s. 4d.

TOWLE'S CHLORODYNE. Dose, 5 to 20 Drops.

CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS. the Profession is directed to the following component parts in his preparation:—

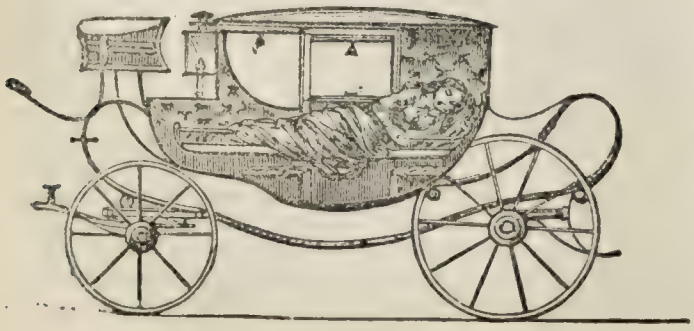
CHLOROFORMYL	ACID. PERCHLOR.	TINCT. CAPSICI.
ÆTHER.	TINCT. CANNABIS INDICÆ.	MORPHIA.
OL MENTH. PIP.	ACID. HYDROCYAN.	THERIACA.

The proportion of Morphia—⅔ gr. in f. ʒi. Dose—Five to twenty Drops.

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

Sold in bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; 4 oz. and 8 oz., 1s. per fluid oz. Sole Manufacturer and Proprietor, A. P. TOWLE, Chemist, etc., Ardwick, Manchester. May be had from Barclay and Son, Farringdon Street; or through any Wholesale House.

READING'S IMPROVED INVALID CARRIAGES.



The greatest Luxury and Comfort ever introduced for removing Invalids, being fitted with the
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COACHBUILDERS,
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Also, a good assortment of New and Second-hand Broughams and other Carriages for Sale or Hire.

Clinical Records.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO ST. GEORGE'S HOSPITAL.

XI.—Excision of Knee-Joint.

Benjamin Bennett, aged 8, admitted into St. George's Hospital, on April 14th, 1863. Three years previously, he had been thrown out of a wheelbarrow, and hurt his knee, which, six weeks afterwards, was found to be enlarged. Various plans of treatment were adopted. The joint was enveloped in Scott's bandage for six weeks; and he was sent for eight months to Margate.

On his admission into the Hospital, the leg was fixed at nearly a right angle. The lower extremity of the femur was very considerably enlarged; and there was a sinus, discharging a thin matter, situated about four inches above the joint on the outer side.

No plan of treatment having produced any benefit, and being apparently useless, it was determined to perform excision of the joint. Accordingly, on April 23rd, the boy having been placed under the influence of chloroform, a single transverse incision was made across the front of the knee on a level with the lower extremity of the patella. This incision was carried into the joint, the skin was then dissected off the patella, and another incision was then made above the patella, which was then removed without the loss of any portion of the skin. The attachments of the femur and tibia having been separated, the articular surfaces of the two bones were sawn off. But, owing to the thickening of the lower extremity of the femur, it was found that the leg could not be straightened, a further portion of the femur was now therefore removed. This was wedge-shaped, the thick edge forward. No bleeding occurred, and no vessel was tied. The divided edges of the skin were brought together by four sutures. The leg was placed on a straight splint, and swung in one of Salter's cradles.

April 24th. He had passed a restless night. There had been a very slight oozing of blood. He was sick after his breakfast. Pulse 100. The tongue was coated with a white fur. His cheeks were flushed. He had much pain in the situation of the knee.

On the 25th and 26th, he appeared tolerably comfortable, but the tongue became more coated.

May 1st. He was sick after his dinner. Pulse 140.

May 2nd. He passed a tolerably good night; had no pain in the knee. He was sick last evening. Pulse 120.

May 4th. Pulse 128. Tongue cleaner. He had no headache. The skin was cool and comfortable; appetite improved.

May 9th. Had had little sleep during the night. Pulse 120. He was sick yesterday. The skin was cool, and the countenance free from anxiety.

May 14th. A considerable collection of matter had taken place on the outer and lower part of the thigh. The matter partially escaped through the sinus in this situation.

May 20th. Pulse 115. He slept tolerably well; and was free from pain.

May 23rd. The incision made by the operation had nearly united; but a considerable quantity of matter discharged from the sinus in the thigh. Pulse 120; skin cool; appetite good.

May 31st. The cicatrix of the wound was becoming firm. There was less discharge from the sinus. There was general improvement.

June 19th. Pulse 120. The sinus still discharged; but the wound made by the operation was firmly healed.

June 22nd. A straight splint was applied behind the joint, and the swing was dispensed with.

June 27th. All splints were discontinued. The discharge from the sinus was very slight.

July 4th. He was dressed lying outside his bed. He could put his leg to the ground without pain.

July 14th. He could get about easily with his crutches, and was beginning to bear the weight of his body on his leg.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HULL GENERAL INFIRMARY.

REPORTS OF CASES.

Reported, with Remarks, by C. J. Evans, Esq., House-Surgeon.

Case 1. *Acute Pericarditis; Death; Autopsy.* G. S., aged 20, steward's mate on board H.M.S. *Cornwallis*, was admitted into the infirmary on May 3rd, 1858, under the care of Mr. Huntington. He had been under treatment one week. He was suffering much from dyspnœa; the respiration was short and hurried; the face pallid; and the expression anxious. On auscultation, a pericardial friction-sound was audible; respiration was puerile at the upper part of the right lung, very feeble on the left side, which scarcely expanded at all. The breathing was chiefly abdominal. He had no cough. There was the mark of a mustard plaster on the chest. There was no history of rheumatism. Four leeches were ordered to be at once applied to the region of the heart, and to be followed by a blister; and two grains of calomel and half a grain of opium to be taken every four hours, with a dose of saline effervescent mixture, containing some spirits of nitric ether.

May 4th. He passed a tolerable night. The breathing was a little easier, but he sat propped up in bed.

May 5th. The pericardial friction-sound was somewhat less distinct, and there was no extended dulness in the region of the heart. The bowels became much relaxed, and he was ordered to omit the pills.

May 8th. The friction-sound was now much louder, and the heart's action very rapid; orthopnœa was extreme. He was ordered two and a half grains of blue pill and a grain of opium in a pill every four hours; and five minims of tincture of digitalis to be added to each dose of the mixture.

May 9th. He passed a very bad night, and was evidently worse. Countenance more anxious and sunken. A blister was ordered to be applied to the chest. He died at eleven the same morning.

Autopsy, the following day. There was about a pint of serum in the right pleural cavity, and toughish adhesions of some standing throughout the left. Both lungs were congested. On opening the pericardium, a small quantity of fluid escaped; but the heart was found to be adherent to it on almost every part of its surface, requiring the aid of the finger to effect its separation. The entire surface of the heart presented an uniform roughness, in some parts having a distinct honeycomb appearance, while in others there were complete ridges of lymph; and an exactly corresponding appearance was seen on the inner surface of the pericardium. The heart itself was somewhat hypertrophied; and there was thickening of the mitral valve, with some warty vegetations on the aortic valves. No endocardial murmur was

audible during life. If there had been one, it was probably masked by the loudness of the pericardial friction-sound.

Case II. *Spurious Croup, following Hooping-cough and Scarlet Fever; Recovery.* W. S., aged 4 years, was admitted under the care of Dr. Sandwith on June 22nd, 1858, with symptoms of croup. He had been supplied with medicine at the surgery the previous day; but, not being so well, he was taken into the house. He had had cough and shortness of breath for about a fortnight, during which time he had been a patient at the Hull Dispensary. Before that, he had been suffering from a severe attack of scarlatina, which came on during his convalescence from a previous attack of hooping-cough. This latter had commenced about four months before his admission, and he was at that time an out-patient under Dr. Sandwith's care. He had made a good recovery from the scarlatina, when the symptoms of croup showed themselves. He had never had measles. He had a slight discharge from the right ear, which his mother stated had existed ever since he was four months old. He was ordered to take every two hours a teaspoonful of a mixture of grs. xvi of ipecacuanha in an ounce of water, together with a powder containing one-sixth of a grain of tartar emetic and half a grain of calomel. A small blister was applied to the sternum; and he was also ordered a warm bath.

June 23rd. The symptoms had somewhat abated; the respiration was less noisy. He was ordered to continue the medicines every four hours, and to take two teaspoonfuls of castor oil at once.

July 1st. He was gradually improving; he only coughed a little at times. The powders were ordered to be taken three times a day only.

℞ Vini ipecac. ℥j; spiritûs ætheris nit. ℥iss; aquæ ad ℥iij. M. Capiat cochleare minimum unum ter die.

He was discharged well on July 7th.

Remarks. The symptoms were not those of genuine croup, but partook of the character of those of bronchitis. The sputa did not contain portions of lymph thrown off from the trachea and bronchial tubes, but were muco-purulent. The cough and respiration, however, were indicative of croup.

Case III. *Polypus Uteri; Ligature; Recovery.* F. J., aged 43, a widow, and without family, was admitted under the care of Dr. Sandwith on September 10th, 1858. She had suffered much at different times for more than a year from pain in the loins and abdomen, of a bearing down character; and had had a vaginal discharge, almost always sanguineous, for a long time. It existed at the time of her admission; and her face was pallid and anæmic. She frequently was troubled also with bilious vomiting. She was ordered at first eight grains of gallic acid three times a day, and nourishing diet, with porter.

The hæmorrhage gradually subsided to a great degree, but did not entirely cease; and she was ordered ten drops of the muriated tincture of iron three times a day. An examination *per vaginam* was afterwards made, and the finger detected a polypus projecting through the os uteri, which could be felt encircling the neck of the polypus. It was about the size of a ripe fig, and bled a little on being handled much.

On consultation, it was decided to remove the growth: but the operation was deferred on account of a severe attack of influenza, which lasted some time. The operation was performed by Dr. Lunn, on November 11th; the polypus being drawn down by a vulsellum, and a ligature of copper wire placed around its neck by means of Gooch's double cannula. The ligature was drawn away, together with the growth, on the 15th, four days after the operation. Warm water was injected into the vagina daily, and afterwards a solution of sulphate of zinc.

She improved rapidly after the operation, had no more hæmorrhage, and was discharged cured at the end of the month.

Case IV. *Ovarian Dropsy; Paracentesis; Recovery from the Operation; Death Five Months afterwards, consequent on Increase of the Disease and Exhaustion.* E. B., aged 58, married, the mother of four children, was admitted under the care of Dr. Sandwith on January 13th, 1859, suffering from ovarian dropsy. The disease had commenced six years before with a swelling on the left side of the abdomen. She had been in the infirmary, under Dr. Sandwith's care, for some time during the spring of 1858; but she left at her own request, being unwilling to submit to the operation of tapping. She received some benefit, however, from the use of diuretics and anodyne liniments. She continued pretty well for some time after leaving; but of late the swelling had increased, so that at the time of admission the circumference of the abdomen measured 47½ inches. There was extreme tension of the integument of the abdomen, and œdema of the lower limbs, dyspnœa and troublesome cough, and she could not hold her urine perfectly. The slightest percussion on one side the abdomen was instantaneously conveyed to the opposite, leading to the inference that there was one large ovarian cyst. There was dulness on percussion over the whole of the front of the abdomen, and resonance in the lumbar regions. She was ordered a mixture for the cough, a sedative at night, and nourishing diet, with three ounces of wine daily.

Her strength being recruited a little, it was thought advisable to delay the operation of paracentesis no longer; and it was performed by Dr. Lunn on the 28th, a full sized trocar being used. The fluid which escaped at first was of a dark greenish-brown colour, and very thick; after this had continued to flow for some time, a gush of a thinner and more watery fluid took place, and continued to escape through the wound when the cannula was removed. A portion of thin membrane also presented itself at the wound, and was withdrawn; it was of most delicate structure, admitted of being inflated and dried, and was doubtless a portion of cyst-wall. In all, three gallons of fluid were evacuated, the mixed fluid having a specific gravity of 1025, and coagulating to a solid mass on boiling. The thinner fluid which escaped at last most probably was the contents of another cyst. When all the fluid was drawn off, the abdomen presented a hard and lobulated feel to the hand, as of an irregularly shaped tumour deeply seated close to the spine. The woman was put to bed in a comfortable state, having borne the operation well. Half a drachm of sedative liquor of opium was given at once, and repeated at bedtime.

Jan. 29th. She had a very fair night. She now breathed with much greater freedom. Pulse 80, of moderate volume.

Jan. 30th. She expressed herself as feeling greatly relieved. She had vomited a quantity of greenish bilious fluid in the night, but the sickness had now ceased. She was ordered to have three ounces of brandy daily.

Jan. 31st. The abdomen now measured six inches less in circumference than before tapping; viz., 41½ inches. The urine was not very free. She was ordered two ounces of gin daily, instead of brandy.

Feb. 7th. She complained of some little pain in the abdomen, which now measured 40 inches in circumference. The urine was more copious, and she slept well; but the cough was troublesome at times. She was ordered to rub a volatile liniment on the abdomen night and morning, and to have half a pint of porter daily.

March 14th. She had remained much in the same state since the last date. The abdomen now measured 41 inches. The umbilicus had always been rather prominent, but was much more so now; and it was evident there was a hernial protrusion at that part. A graduated compress and bandage were applied.

She left the hospital on April 2nd, at her own request, having considerably recruited her strength.

She was readmitted on June 15th, in an extremely exhausted and feeble condition; and she had become much emaciated. The abdomen was still greatly enlarged, measuring 39 inches in circumference; and the superficial veins very prominent. She stated that, some little time before her admission, a good deal of fluid (two or three pints?) had flowed from her navel. There was some excoriation of the mouth, and she got no sleep at night. The following medicines were ordered.

℞ Decocti cinchonæ ℥xj; tinct. cinchonæ comp. ℥i. M. Capiat ℥i bis die.

℞ Sodæ bicarbonatis ℥ij; tincturæ myrrhæ ℥ss; aquæ ad ℥vi̇j. M. Fiat lotio ori applicanda.

She was ordered to take half a grain of muriate of morphia in a pill every night; and to have four ounces of wine, with milk and beef-tea, as diet.

June 17th. She was ordered to have three ounces of brandy in addition. She was much weaker. She could keep nothing upon her stomach; and she gradually sank, and died late at night on the 19th, four days after admission.

Autopsy, twelve hours after death. Emaciation was extreme. There was some œdema of the right lower extremity. On making an incision along the abdomen, the peritoneal lining, which was much thickened, was found to be adherent, firmly in front, to the tumour, which occupied the whole of the abdominal and pelvic cavities. There was a large quantity of recent lymph on the tumour and in the abdominal cavity, as well as some fluid. The tumour was without difficulty turned out of the abdomen, the adhesions to the structures behind being very slight, and, when fully exposed, was found to be more distinctly multilocular, a large cyst, of the size of a child's head, occupying each lumbar region; and in front one cyst of larger size, with several partitions in it; besides several other smaller distinct cysts. The pedicle was apparently attached to the side of the uterus. The right ovary could not be found, its place being occupied by a gelatinous-looking mass. The abdominal viscera were pushed up under the ribs, and covered in by a complete coating of lymph. The tumour, when removed, weighed between seventeen and eighteen pounds.

Remarks. The slight adhesion of the tumour to the back of the abdomen would have been very favourable for the operation of ovariotomy; but the much firmer and older adhesions to the peritoneum over the entire front of the abdomen would have rendered it very difficult, and doubtful as to the result. At the time of the woman's admission on the second occasion, however, any idea of operative proceedings was entirely out of the question, on account of her exhausted condition. Percussion of the abdomen gave results so delicate, that the cyst was supposed to be unilocular; but the result of the tapping and manipulation of the abdomen afterwards pointed to its multilocular character. The whole front of the tumour was, however, as before said, apparently formed of one entire cyst, slightly lobulated, or containing partitions; and this circumstance doubtless contributed to produce that physical sign on which, among others, the diagnosis was based.

Cure for Gibbosity. There is a saint at Bergamo whose speciality, it seems, is to cure "gibbosity." The other day a person afflicted with a hump, after praying for some time, went up a ladder to the niche of the saint, "in the presence of countless witnesses." To their amazement, as he ascended the hump gradually diminished, and finally altogether disappeared. A sceptical French paper, however, asserts that on examination it was found that the hump was a block of ice the man had under his clothes, and which melted away under the influence of the natural heat of his body.

Original Communications.

RETINO-CHOROIDITIS, WITH SUBRETINAL EFFUSION: EVACUATION OF THE FLUID AND ARREST OF THE DISEASE.

Under the care of Haynes Walton, Esq., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic.

The following case occurred to me in private practice during this year; but I could not publish it with accuracy, except for the notes taken at the time for me by Mr. C. J. Aldridge, who has long rendered me much service at my Ophthalmic Hospital.

A somewhat stout man, about 50 years of age, applied to me, complaining of much loss of vision in the left eye, unattended by any pain, but accompanied by floating streaks and spots. It was a couple of weeks before that the defective state was suddenly discovered. The exterior of the eye appeared perfectly normal, the pupil acting naturally. He was able to see a finger held to the temporal side of the eye, but could not see it at all when held on the nasal side, or in front. Vision with the right eye was perfect.

On examining the left eye, previously prepared with atropine, by the ophthalmoscope, the optic disc was observed to be considerably congested, with the margin somewhat hazy towards the external side, and the surrounding fundus generally congested. Externally to the nerve, there was an extensive detachment of the retina, involving the yellow spot, and as much as would be included in a circle, having for its radius a line drawn from the yellow spot to the edge of the optic disc. The detachment presented a dull grey appearance in the area of the pupil; and here and there retinal vessels could be imperfectly distinguished lying upon it. Small doses of grey powder were ordered; and, after five pills were taken, slight salivation ensued. The pills were then discontinued; the patient's condition remaining much the same.

I now decided to evacuate the retinal fluid by puncturing the sclerotica at the seat of the detachment. The eye having been inverted to its utmost extent by Mr. Aldridge, I punctured near to the insertion of the optic nerve. The fluid rushed out, and rapidly filled the meshes of the connecting tissue between the sclerotic and optic capsule, forming a large swelling, and proving, by its escape, the correctness of the diagnosis and accuracy as to the situation of the effusion.

The eye was examined with the ophthalmoscope ten days after the operation; the disc still remained a good deal injected, though less so than before; the retina over the yellow spot, and at the seat of the effusion, appeared to have resumed its proper position. It had a somewhat milky appearance, and the retinal vessels were distinctly seen ramifying over it; and the red choroid shining through the opalescent membrane. On the external side of the optic disc was a white semilunar patch, its concave edge being continuous with the disc, and the choroid bordering its convex margin was denuded of the superficial pigmental layer, and the vessels were undergoing atrophy. This change was, of course, in the choroid. Two or three of the retinal vessels were seen to cross the white patch. The rest of the fundus was somewhat hyperæmic. The vision was in much the same condition as before the operation, being neither better, nor worse.

So far as I know, the operation done here, was originally suggested by Mr. Bowman; and I have thought sufficiently well of it to adopt it, although I regret that

the originator has not published his views on the matter. It was not undertaken by me to restore sight—there could be no reestablishment of the function of a detached portion of the retina, as it is for ever lost—but to avert further effusion, and other mischief.

There is a great tendency for this sub-retinal dropsy to continue, till the whole retina is detached. This state would seem to be the result, or end of inflammation at the fundus of the eye, and most likely in this instance, of a subacute form.

Much labour and pains, and long observation are needed to enable me to speak with authority on the curative or beneficial effects of the operation, but I think there may be reasonable expectation of its arresting effusion, and by that, saving any undetached part of the retina. It is something, too, to remove the floating image that troubles the person.

By checking, too, further disorganisation, it is possible that much may be saved indirectly in some cases, in preventing sympathetic implication of the sound eye. This effect is not produced except the unhealthy eye pass into a state which is productive of pain, perhaps in paroxysms, but for the most part constant pain.

If we desire to improve surgery, any practical hints with any shew of reason should be worked out by those who have the opportunity, especially when no risk of untoward circumstances is involved. It is hardly possible to imagine any drawback to this mode of tapping the eye, or anything more than might attend a like operation on the front of the organ; I mean the puncture of the cornea with a needle to evacuate the aqueous fluid.

REMARKS ON THE USE OF DIGITALIS IN THE TREATMENT OF INSANITY.

By C. L. Robertson, M.B.Cantab., Medical Superintendent of the Sussex Lunatic Asylum, Hayward's Heath; Editor of the *Journal of Mental Science*.*

Dr. Thomas Mayo, late President of the College of Physicians, in his Essay on the *Elements of the Pathology of the Human Mind* (London, 1838), has the following observation bearing on the subject which I am permitted to-day to bring before this Association. "The intention of sedatives", he writes, "is in every stage of the disease a wise one. By soothing the insane patient, we at once give him wholesome strength and reduce morbid action. Of all the medicines which possess this virtue, opium has been, in my experience, the least valuable, and digitalis the most so."

The experience of the last eighteen months of the use of digitalis in the treatment of mania, leads me to endorse Dr. Mayo's statement of its great efficacy as a sedative, as contrasted with the drug most relied on in our English practice—opium. In saying so, of course I do not impugn the great value of opium in the treatment of melancholia: I only say, with Dr. Mayo, that, as a general sedative, I prefer digitalis to opium in the various forms of mania.

Professor Garrod of King's College directed my attention, about eighteen months ago, to the probable advantage which might follow the use of digitalis in cases of cerebral excitement: and I have since then used several quarts of the tincture in my practice at Hayward's Heath.

I shall divide the few remarks which I am about to make to-day, on the use of this drug in the treatment of insanity, under the three heads of—

I. The History of the Use of Digitalis in the Treatment of Insanity.
II. The Physiological Action of Digitalis on the Cerebro-spinal System.
III. The Medicinal Use of Digitalis in the Treatment of Insanity.

I. *History of the Use of Digitalis in the Treatment of Insanity.* So far as I know, digitalis is not at present in favour, or much employed in the English asylums as a medicinal agent in the treatment of mania.

In Dr. Bucknill and Tuke's *Manual of Psychological Medicine* (second edition) the use of this drug is not mentioned.

In the *Lettsomian Lectures on Insanity*, the author observes that "in some forms of acute mania, as a substitute for depletion (*a substitute, by the way, for a remedy which is never required*), nauseating doses of tartrate of antimony may serviceably be combined with the tinctures of digitalis and hyoscyamus. .... The tincture of digitalis", he adds, "was formerly in great repute as an anti-maniacal remedy; the experience of late years has not encouraged us in administering it in the doses prescribed by the old writers; nevertheless, it is an useful agent, and occasionally proves a valuable auxiliary in the hands of the practitioner who carefully observes its therapeutic operation."

Dr. Noble, in his *Psychological Medicine*, does not refer to the use of this drug in the treatment of mania.

On the other hand, I might fill many pages with extracts from the English writers of the earlier part of this century, on the value of digitalis as a remedial agent in the treatment of insanity. I believe Dr. Halloran, physician to the Cork Asylum, who published his work on insanity in 1818, was the first to direct attention to the value of this remedy. Dr. Burrows, in his *Commentaries on Insanity*, published in 1828, speaks favourably of its use. "In reference to the use and effects of digitalis in mania", he writes, "it will be seen that I have drawn copiously from the observations of Dr. Halloran. I confess, however, that I have not had such surprising success with it, in the cure of insanity, as he and his correspondents describe. I may not always have observed so strictly the essential and preliminary rules. At the same time, I have seen sufficient of its powers to have much confidence in them."

It is not a very profitable study, this search after the views of our predecessors in the treatment of insanity. The broad gulf of the restraint system lies between us and them; and I, for one, do not care to cross it. Moreover, their whole medicinal treatment was based on the theory of the inflammatory origin of insanity, and, worse still, on the value of the antiphlogistic treatment in this and other inflammations, and thus it is labour lost to follow them in their moral and medicinal empiricism, by the light of which they strove to treat the varied manifestations of the morbid mind. Indeed, the revelations of the state of Bethlehem in 1814, disclosed by the Parliamentary committee of 1815, of the treatment of acute mania by cold, hunger, blows, chains, and straw, effectually extinguish any remaining interest in the pharmaceutical means which the physicians of that hospital then brought to the aid of these moral agents.

It is only within the last twenty-five years—since the publication in 1839 of Dr. Conolly's first Hanwell Report—that medical science can be said to have had such a direct control of the treatment of insanity as to make the results of any value as guides for the future; and the fruit of the labour of these twenty five years is worthily enshrined in our English *Manual of Psychology* by Drs. Bucknill and Tuke.

Again, the notices of recent French and German

* This paper was placed on *the agenda* to be read at the late annual meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane, held at the Royal College of Physicians, July 9th, 1863. The important discussion which took place on the Reform of Bethlehem Hospital, prevented the reading both of Dr. Maudsley's paper "On Homicidal Insanity", and of these "Remarks on the Use of Digitalis in the Treatment of Insanity." I now print them here in the form in which I intended to have read them.

writers on mental science of the use of digitalis are slight and vague. Thus, I find that M. Marcé, in his *Traité Pratique des Maladies Mentales* (reviewed in the July number of the *Journal of Mental Science*) merely alludes to digitalis, saying that "by its special action on the heart, it moderates the activity of the circulation, and so may aid in reducing acute excitement"; and M. Dagonet, in his compilation (noticed in the same place), has a similar observation.

Griesinger simply mentions digitalis, with leeches and other sedatives, as of value in the treatment of recent mania.

In similar terms writes Dr. Maximilian Leidesdorf, the Lecturer on Psychology in the University of Vienna, in his recent work on the *Pathology and Therapeutics of Mental Disease*:—

"Opium and its preparations, which I have stated to be so valuable in certain forms of melancholia, is rarely serviceable, but often most injurious, in cases of maniacal excitement.

"Of the narcotics" (continues Dr. Leidesdorf) "which act directly on the nervous centres, digitalis is the one most to be relied on. It has this advantage, that its action can be kept up for a long period without danger, and that the pulse forms an accurate measure of the quantity to be given."

Dr. Erlenmeyer, in his *Essay on the Treatment of Recent Mental Disease*, merely says of digitalis that it is of value when there is increased action of the heart and cerebral vessels.

II. *Physiological Action of Digitalis on the Cerebro-spinal System.* The physiological action of digitalis is still undecided. The generally received opinion that it exercises a depressing influence over the action of the heart, and therefore leads to accumulation and coagulation of the blood in its cavities, has been questioned by Dr. Fuller, who, on the contrary, thus sums up his experience of the action of this medicine on the heart:—

"1. During many years, I have observed, that the cases of heart-disease most benefited by digitalis have been those in which the heart has been weak and dilated, and the pulse feeble and irregular. In these the pulse has become stronger, and steadier, and less frequent, under its action.

"2. In the only cases in which I have known death to occur suddenly during the administration of digitalis, the heart has been hypertrophied and firmly contracted. This may have been a coincidence; but, viewed in connection with the results of experiments to which I shall presently refer, it is, at least, a suspicious fact.

"3. Dr. Dickenson has pointed out (*Med.-Chir. Trans.*, vol. xxxix.), and I have repeatedly verified his observation, that digitalis, if given in full doses, induces violent uterine contraction, and checks uterine hæmorrhage; and, inasmuch as its action in staying menorrhagia and uterine hæmorrhage is permanent, it seems fair to conclude that it gives tone to the capillaries, and increases their contractility.

"4. This view is borne out by what I have long since observed relative to its action in arresting hæmoptysis; viz., that, whilst effecting the object required, it does not weaken, but rather increases. the force of the pulse, though it lessens its frequency.

"5. When patients die of delirium tremens, the pulse is usually rapid and fluttering before death, and the heart is found weak, flaccid, and distended with blood afterwards. These are just the cases in which, on the commonly received doctrines as to the action of digitalis, the drug ought necessarily to prove fatal, and yet modern experience has shown that in these cases it is tolerated, even in excessive doses. My impression is, that its remedial action in these cases depends on its stimulating the heart, subduing its irritability, and increasing the tonicity and contractility of the heart and capillaries, so that the brain is better supplied with blood, and the effusion of its more fluid parts, which gives rise to the "wet brains" of habitual drunkards, is avoided.

"6. It has been proved by experiments on animals (Dr. H. Jones) that when death is induced by digitalis, the heart is not flaccid and distended with blood, as is commonly supposed, but, on the contrary, empty, contracted to the utmost, and in a state of tonic spasm. All these facts confirm my view as to the action of digitalis; and if it is correct, its practical importance in relation to the treatment of cardiac dilatation can hardly be overestimated."

Dr. Arlidge, in his Report on Foreign Psychology (*Journal of Mental Science*, July 1863), gives the following summary of Professor Albers's researches on the therapeutical action of digitalis:—

"1. It reduces the pulse in frequency, but at the same time does not disturb the rate of breathing. Even when the heart is empty and brought to a standstill, the regularity of the respiration proceeds. 2. Alterations in the urinary secretion; an increased quantity of urine in the healthy, and a still greater augmentation when the drug is given in inflammatory dropsy accompanied by inflammatory irritation of the serous membranes of the chest and abdomen. It subdues the inflamed state of the kidneys, and restores them to their normal functional activity. In mental disturbance dependent on cerebral inflammation, especially of the serous membrane, digitalis exerts a remarkably curative effect when given after preliminary abstraction of blood and the use of antiphlogistics. 3. The solid constituents of the urine are increased in amount, and particularly the urea, as shown both by chemical examination and by an increase of specific gravity. This alteration in the urine becomes manifest, when the digitalis has reduced the frequency of the pulse and produced a feeling of lassitude. 4. Reduction of the temperature of the body, and its equalisation. 5. Vertigo, lassitude, debility, and moroseness, accompany the reduction of the pulse by the drug. The last-named condition is a remarkable symptom associated with the operation of digitalis on the system. 6. This medicine is applicable only to those cases of madness dependent on some inflammatory lesion."

The physiological action of digitalis is a subject which would well repay a carefully conducted series of experiments. Unfortunately, I am unable to contribute to our information on this part of the question. With neither the skill, leisure, nor opportunity, to conduct such observations, like most other physicians engaged in active practice, I am content either to apply to the cure of disease, the results obtained by the scientific research of others, or, as at present, to follow the teaching of empirical experience. So far is the art of medicine yet removed from the certainty and exactness of science. The following remarks by Dr. Pereira state, I suspect, all that is yet known of the physiological action of digitalis in the presence of cerebral disease:—

"Foxglove may prove occasionally serviceable by repressing excessive vascular excitement which sometimes accompanies cerebral affections. *Furthermore, the specific influence of this remedy over the cerebro-spinal system may now and then contribute to the beneficial operation of foxglove. But the precise nature of this influence not having as yet been accurately ascertained, while the pathology of the above-mentioned diseases is involved in considerable obscurity, it follows that the therapeutic value of this influence can only be ascertained empirically.*"

II. *Medicinal Use of Digitalis in the Treatment o Insanity.* I wish now briefly to state the practical results of my experience in the use of digitalis in the treatment of insanity.

a. Dose and Method of Administration. With a wholesome fear of a coroner's inquest, I have not ventured on

half-ounce doses, and I can report nothing as to their effect. I believe they would be too much for the average stamina of our patients. I have never given more than drachm doses; and I have usually found two or three days of such doses three or four times a day brought on the poisonous symptoms of the drug, with intermittent pulse, great reduction in frequency, and oppressive nausea. The respirations were also reduced in number; and the specific gravity of the urine lowered, and, so far as I know, the quantity increased by the use, in drachm doses, of the tincture. Thus, in a case of general paresis, in the second stage of mental alienation, on which I made some observation last November, the following results were shown:—

	Hour and dose.	Pulse.	Urine.	Respiration.
November 15.	9 A.M. ℥j	81	1022	28
	12 NOON ℥j	67		26
	3.30 P.M. ℥j	76		28
	8 P.M. ℥j	69		26
November 16.	9 A.M. ℥j	81 intermit.	1009	26
	12 NOON. Patient complained of headache and pain at cardiac region. No medicine.			
	2.30 P.M. ℥j	94 intermit.		30
	6.30 „ ℥j	80 „		26
November 17.	9 A.M. ℥j	80 regular	1017	29
	7 P.M. ℥j	72 regular		27

Under this treatment, all the maniacal symptoms present had yielded. The treatment was kept up with half-drachm doses twice or thrice a day for two or three weeks to the entire and permanent relief of all cerebral excitement.

This and similar experiments led me to fix my average dose of the tincture at half a drachm, although I often for the first few days of treatment give drachm doses. I have never given larger doses. I have always given it simply in water; and I have not complicated my observations by the admixture of any other drug.* The tincture has been supplied to me by Messrs. Taylor, of Vere Street, Oxford Street.

b. Forms of Insanity in which Digitalis has been employed. I have, during the last year and a half, exhibited digitalis in the form of the tincture in twenty to thirty cases of maniacal excitement, recent and chronic, with varying results.

First, as to the failures. In three recent cases of mania depending on uterine excitement, two in young girls and one at the change of life, I steadily pressed the use of the drug until its poisonous effects, as shown in sickness and vomiting and intermittent pulse, were produced. The dose given was, in each case, half a drachm of the tincture three times a day. The result was simply that the patients when very sick were quiet, and that so soon as the nausea passed off the excitement returned. Again, in two severe cases of recurrent mania, I only produced sickness and depression of the pulse and no amendment of the mental symptoms followed this physiological action of the remedy.

On the other hand, my success with this drug in cases of general paresis, in the second stage, that of mental alienation with symptoms of maniacal excitement (and in which so often in private practice aid is sought pending the patient's removal to an asylum), leads me to regard its action in controlling cerebral excitement as quite specific. I have, of course, had my share at Hayward's Heath of these troublesome cases—and how noisy and wearing they are every asylum physician knows to his cost—and they have ceased to give any trouble under the calming action of digitalis.

It is with these cases of general paresis, in the stage of mental alienation with maniacal excitement, that the assaults and injuries in asylums (which from time to time unfortunately occur) arise. There is such a reckless violence present, on which no moral or physical obstacles make the slightest impression, and this stage lasts so many weeks, if not months, that any remedy at all capable of controlling this state of things deserves a most careful trial. And such a remedy I believe we possess in digitalis, continued steadily day by day, while the tendency to excitement lasts, in half-drachm doses two or three times a day, or oftener.

It acts in every case of the kind in which I have given it as a specific, calming the excitement, and enabling the patient to pass without wear or irritation through this stage of the malady. Its action has been to steady the pulse, and thus apparently to supply the brain better with blood, and so to obviate the tendency then existing to effusion of serum, consequent on the inflammatory process going on, as we believe, in this stage of the disease in the arachnoid and pia mater. The researches of Wedl, quoted by Dr. Salomon* in his able paper on general paresis, are conclusive as to the inflammatory process present in this stage of the disease.

In such circumstances the only visible result is mental quiet, and the action of the drug appears to be that of a cerebro-spinal narcotic. The functions of the stomach and bowels are not affected by its use; the appetite rather seems to improve. The pulse often remains unaffected for weeks under the use of half-drachm doses, and the only result is the specific action on the cerebral excitement. I have often found one day's intermission of the medicine bring on all previous symptoms of excitement. I have prepared a detailed history of six cases of general paresis which I have thus successfully treated. The limits of my present communication necessarily prevent my inflicting their detail on you; moreover, every member of this Association has such opportunity of testing the results of my experience, that it is sufficient for my present purpose thus generally to indicate the forms of insanity in which I advise the use of this drug.

I have also continued for many weeks with benefit to administer half-drachm doses of the tincture of digitalis in cases of chronic mania, with noisy and destructive habits. I have at this moment two such cases under treatment. In one the irritation is evidently depending on impending paralysis.

There is a third form of insanity—mania with phthisis

* In many cases of chronic mania, with sleepless noisy nights, I have found the following sedative mixture of value.

℞. Tincturæ digitalis, tincturæ cannabis Indicæ, liquoris opii (Taylor), etheris chlorici, singulorum uncias tres.

Dose—half a drachm, repeated at intervals of three hours.

* K. Wedl has in every case of general paresis demonstrated an hypertrophy of connective tissue in the small arteries and veins in the pia mater and cortical portion of the brain. On the outer wall of the vessel is a hyaline, imperfect layer of connective tissue studded with partly scattered, partly grouped oblong or rounded nuclei. This layer of connective tissue, projecting over a greater or less extent of the vessel, undergoes, with the nuclei occurring in it, in the direction from without inwards (from the periphery of the vessel towards its centre) a fibrillar change. The veins of capillary structure cannot resist the pressure, but are also drawn into this process, and are completely obliterated, and changed to corresponding bundles of fibres. The abnormal layer of connective tissue not unfrequently serves as a seat of deposit for finely divided olein and amorphous calcareous salts, while in other places calcareous depositions take place in the inner elastic and muscular layer. The small and slender cerebral vessels thus calcified can, on section, be observed in the cortical substance as a number of needle points. Wedl endeavours to explain the adhesion of the superficial layer of the cortical substance to the pia mater by the penetration of the grouped nuclei in the adventitious membrane of the pia mater to a certain depth into the cortical substance. When the pia mater is separated, a layer of the softened cortical substance often accompanies it, corresponding to the depth to which the nuclei have penetrated. The complete obliteration of the calibre of the small veins caused by this degenerative process, demonstrated by Wedl, must give rise to a considerable obstruction to the circulation, both in the pia mater, and subsequently in the cortical substance of the brain, with consequent ischæmia; to stasis, pressure, irritation, and inflammation. All this produces a progressive aggravation of the cerebral symptoms, and disturbs the nutrition of the cortical substance. (Dr. Ernest Salomon, "On the Pathological Elements of General Paresis".—*Journal of Mental Science*, October 1862.)

(not unfrequent in private practice also), in which I have found the occasional use of the tincture of digitalis of great benefit. This form of mania has been so exhaustively treated by Dr. Clouston in the *Journal of Mental Science* for April 1863, that this reference to its treatment will for my present purpose suffice. Time, moreover, warns me to bring my present remarks to an end.

[Since preparing this communication for the annual meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane, my attention has been directed to a paper read at the thirteenth annual meeting of the British Medical Association in 1862, by Dr. Handfield Jones, and published in the British Medical Journal, August 23rd, 1862, "Some Remarks upon Remedies and on the Study of their Actions." I find some interesting remarks there on the several actions of digitalis in disease, worthy of note by any one interested in the use of this medicine. I believe there is also a paper by Dr. Christison on the action of digitalis, in some former number of the *Edinburgh Monthly Journal*. I have unfortunately not yet had an opportunity of consulting it.]

CASE OF PHTHISIS COMPLICATED WITH PNEUMOTHORAX AND ABSCESS, DESTROYING THE COSTAL CARTILAGES.

By W. G. Gimson, M.D., Witham, Essex.

Phthisis; Pneumothorax on Right Side; Cavity in Right Lung, communicating with Right Pleura, and also with an Abscess formed to the Left of the Sternum, which burst, destroying the Cartilages and Portions of the Osseous Structure of the Second, Third, and Fourth Ribs. J. B., aged 23, in February 1861 laboured under an attack of typhoid fever complicated with pneumonia of both lungs. From this he partially recovered; the pneumonic symptoms were relieved; but he remained in a weak cachectic state, with signs of tubercular deposits in the apices of both lungs.

In August of the same year, after several pleuritic attacks upon the right side, with some pneumonia, the tubercles began to soften; and he expectorated a considerable quantity of thick purulent matter. Under good nourishment and medicines, his health improved, and he regained to a great extent his ordinary appearance as to flesh, etc.; still he gained little strength, and suffered from frequent attacks of pleurisy on the right side.

In the early part of January 1862, while labouring under an attack of pain in the right side, during the act of coughing, his breathing became very difficult; and, upon examination, signs of pneumothorax of the right pleura presented themselves. In the course of a day or two, a circumscribed red spot (of about the size of a shilling) appeared on the left side of the sternum, and rather to the upper edge of the fourth costal cartilage: this, however, gradually disappeared, and was succeeded by considerable swelling immediately over the costal cartilage of the third rib, and about an inch and a half to the left of the sternum. In the centre of this swelling was a red spot of about the size of a florin, with fluctuation beneath, a considerable amount of pulsation, and emphysema of the surrounding subcutaneous areolar tissue. Under the application of poultices, the skin gradually gave way. The tumour burst; and a quantity of dark, grumous, offensive pus, mingled with bubbles of air, was discharged with some relief to the dyspnœa, and followed by the cessation of violent vomiting, which had been of frequent occurrence since the appearance of the spot over the fourth costal cartilage. There were signs of lateral tubercle in the left lung, but no active mischief in that organ.

The patient continued in a state of hectic, and gradually sank exhausted on June 19th, 1862.

Post Mortem Examination. The body was much emaciated. On the left side of the sternum there was a hole in the integument exposing the costal cartilage of the second rib. A probe introduced passed but a very short distance in a direction from the sternum; but, upon passing the probe rather beneath the left side of the sternum, it readily entered a sinus leading towards the right side of that bone.

On making an incision along the sternum, and reflecting the integument on each side, the muscles on the right side were hardly perceptible, partly owing to their wasted condition, and partly to loss of colour in the muscular fibre. The muscles on the left side, although wasted, were of good colour. Beneath and immediately around the opening in the integument above mentioned, there was an abscess involving the costal cartilages of the second, third, and fourth ribs. The cartilage of the second rib was only slightly implicated; but the portion of rib immediate to it was denuded of periosteum and carious to the extent of an inch and a half to two inches. The cartilage of the third rib was much destroyed, and a considerable portion of the rib was entirely gone. The entire cartilage of the fourth rib and about two inches of the osseous structure were destroyed and gone. The sternum in the vicinity of each of the above named cartilages was more or less implicated.

The abscess, apparently about three inches laterally by four inches longitudinally, contained a quantity of offensive, dark coloured, purulent matter; and, upon examination, was found to be external to the pleura of the left lung, the wall being formed by a dense unyielding tissue, save at a part about the junction of the third costal cartilage with the sternum, where the probe passed readily in a direction upwards, beneath and towards the right side of the sternum.

On reflecting the sternum carefully, it was found that a thin flap of the right lung was very firmly adherent to its posterior surface. The portion of lung was riddled with softened tubercle, and the probe was found to have passed along a sinus leading to a cavity which communicated with the right pleura.

The upper portion (about two-thirds) of the right lung was destroyed by softened tubercle, adherent to the costal pleura, and riddled with cavities; while the lower portion was collapsed and lying close to the spine. The pleura, on its pneumonic and costal surfaces, was covered with a thick, yellowish brown, purulent matter. The upper part of the left lung was thickly studded with tubercle in a latent state.

Death from Chloroform. At the London Hospital on Saturday last, an inquest was held on John Savage, aged 41 years, a mariner, who died from inhalation of chloroform. The deceased had a compound fracture of the right arm, not connected with the joint; and the joint was to be excised. Two drachms of chloroform were administered to Savage, who took it very well at first; then his pulse became feeble. Galvanism and other remedies were applied for half an hour, but with a negative result, and deceased died. Mr. Spence said that the *post mortem* examination showed the heart was fatty and weak in structure, but no examination during life would have discovered that fact. The jury returned a verdict that the deceased died from the administration of chloroform, and that it was properly administered.

European Troops in Burmah. It has been decided that in future, European troops may be safely sent to Rangoon without any previous sojourn in India.

Alleged Unhealthiness of Madras. The mortuary returns show, that for some reason or other, Madras is yearly becoming a more unhealthy residence.

Transactions of Branches.

EAST ANGLIAN BRANCH.

REMARKS ON TRAUMATIC GANGRENE.

By William Cadge, Esq., Surgeon to the Norfolk and Norwich Hospital, Norwich.

[*Read at Yarmouth, June 26th*, 1863.]

In the communication I am about to make to the Association it is by no means intended to enter fully on the subject of Traumatic Gangrene, but simply to ventilate the question of amputation in mortification of a limb from injury.

The subject is perhaps more particularly interesting to the hospital surgeon; but as it may, and occasionally does, happen in private practice, that a simple or compound fracture, a gunshot or other wound, or even a far less injury in certain states of the constitution, may end in loss of vitality of the limb, it is desirable to ascertain what is, and what should be, the course adopted in such an event.

The teaching of modern surgery on this important subject is by no means clear and definite; but I think I shall not be far from the truth in asserting that the present rule of practice is to remove the limb as soon as mortification has clearly manifested itself.

Thus, Mr. Erichsen says, and his work is one of the last and best on systematic surgery: "In traumatic gangrene, amputation should be performed as soon as the gangrene has manifested itself, without waiting for the line of demarcation."

In like manner, Brodie says: "In cases of mortification of a limb from local injury you may amputate, but the operation must be done at once though the mortification be still spreading." Mr. Guthrie also says: "The proper practice is to amputate as soon as the extent of the injury can be ascertained"; he enumerates, however, several exceptions to this rule.

In the article on traumatic gangrene in Holmes's *System of Surgery*, it is said: "The indications for immediate amputation are so clear and generally acknowledged, that he who shrinks from the responsibility of the operation stands exposed to just reproof."

Lawrence also, and most others, give similar advice; but to Baron Larrey, more than to any other surgeon, the present practice is more particularly due. Before his time it was the custom in this, as in every other form of mortification, not to amputate until the cessation of the gangrene; but he was led by vast experience during the wars of Napoleon, to adopt and recommend the present plan; and here I desire to say, that my remarks apply to civil and not to military surgery, for I can well understand that very different treatment may be required in the hurry, confusion, and crowd of a field hospital, from that which should obtain in a civil hospital where every care and good nursing may be had.

It appears, then, from what I have quoted, that in mortification of a limb from injury, it is plainly and peremptorily urged that immediate amputation should be the rule.

Before, however, proceeding further, I wish to draw attention to that form of traumatic gangrene called "spreading" gangrene.

In simple traumatic gangrene, the mortification may be expected to be arrested at the point of injury, but in spreading gangrene, the loss of vitality oversteps this boundary, extends rapidly up the limb, and usually in thirty-six hours reaches the trunk, or proves fatal. In the former, the injury itself is the principal cause; in the latter, the injury may be slight, but the constitution of the patient is chiefly at fault; the blood or bloodvessels are probably so disordered and unhealthy as to predispose to the spread of gangrene; but how are we to know when the spreading form of mortification has really attacked a part? what are the appearances of the limb affected by it?

Erichsen thus describes it: "By the injured limb becoming cold, being often greatly swollen and readily pitting, afterwards by much tension and œdema of the subcutaneous cellular tissue, causing the part to assume a brawny hardness; there is sometimes crackling from the generation of gas. The skin may at first be of a dull tallowy-white or bluish colour, mottled or marbled by bluish-green streaks in the course of the veins, but it speedily assumes a yellowish hue, bullæ containing dark fluid often rising upon it. In other cases, the integument at first assumes a red or reddish-purple appearance, as if erysipelatous, but very speedily becomes of a bluish-green or dark purple colour, soft, and horribly offensive."

"It assumes the colour of a tallow candle, and soon the appearance of mottled soap," is Guthrie's description.

When this state of things has really commenced in the foot, we are urged, if we are to have a chance of saving the patient's life, to amputate immediately, while the mortification is extending, and to select a spot well above all suspicious appearance, and therefore well above the seat of injury.

But I affirm, and I speak from very considerable experience, that the description I have given above of the "spreading" form, is exactly suited to cases of common traumatic gangrene, in which, in nineteen instances out of twenty, an arrest will take place at the seat of injury; there is no difference in appearance between the two forms, as the cases I shall presently relate will shew; and therefore, the only means of knowing when we have the more rare and fatal form to treat, is when we see it extending above the injury, and when the vital power rapidly fails; but then, according to the rule of practice now in vogue, we should not allow matters to get to this; the limb should be removed the moment the morbid appearances present themselves, and before we have any means of knowing which form we have to deal with; whether the simple form, which will stop at the point of injury, or below it, or whether that fatal spreading form which, although it be excited by the injury, is really a constitutional disease or gangrene from internal causes, and which, therefore, spreads independently of the injury.

This I conceive to be a most important distinction, and one not easy to make; but little doubt exists that limbs have been removed high above the seat of injury, high above the point to which the mortification would have extended, and therefore high above the point at which the amputation might have been done, if a little delay were permitted.

The object I have in view is to oppose the rule of practice now so generally inculcated; to amputate a limb merely because gangrene has set in, is to ignore other and very important considerations, especially the strength and precise condition of the patient; it adds another and a very grievous shock to a system already and very recently enfeebled by the accident, and probably by loss of blood; at a time when the system is in a state of great excitement attending on the occurrence, and spreading of the gangrene; and lastly, the operation is done at a part, to the right selection of which we have no means to guide us; we may cut in doomed parts, or remove more of the limb than is required; and I may add that the results of the practice are most disastrous and fatal.

The plan of treatment which I would advocate, and have of late adopted, *is to wait until the cessation of the gangrene; to support the patient's strength until this occurs; to watch the process of separation, and to seize the most favourable moment, and amputate either close above the line of demarcation, or through the granu-*

lations. The reasons which have guided me will be best stated by recounting briefly the few cases which have occurred in my practice within the last year or two.

First, however, let me mention one instance in which I adopted the customary proceeding.

Case I. A few years ago, a strong healthy middle-aged man, was admitted into the Norfolk and Norwich Hospital, with a simple fracture of the lower third of the femur; there was considerable ecchymosis and extravasation above and below the fracture. The house-surgeon applied the long splint in the usual manner. Two days after, the limb lost its warmth, and the toes became blue and cold; mortification of the part was evident; the patient was in a state of active febrile excitement; there was no line of demarcation, and the mortification was extending up the leg. The thigh was immediately amputated high up; there was no real reaction; no attempt at healing of the stump, and the man died apparently of shock and exhaustion in a few days. Both popliteal artery and vein were found divided by the edge of the broken bone. It is probable that it was not in the power of surgery to save this man, but I have little doubt now, that it would have been better to play a waiting game, in the hope of a more favourable opportunity for operating.

Case II. The next case illustrates well the mode of treatment I advocate. A middle-aged man was wounded in the harvest-field; the point of a scythe entered the popliteal space; brisk hæmorrhage took place, but it stopped before the surgeon's arrival. The little wound was closed and healed soundly, but about a week after the accident, the foot turned blue and cold; mortification extended above the ankle, and when I was called, the whole calf of the leg was dark red in colour; there was considerable swelling and emphysematous crackling; there was no distinct line of demarcation. There could be no doubt that the popliteal artery had been wounded; the popliteal space was filled by a clot, but there was no pulsation; no aneurism.

The rule of surgery, as I have before said, quoting from Erichsen, was "in mortification of a limb following ligature of an artery, amputation should be had recourse to at once, as the only chance of saving life"; and the same rule applies, I presume, to the occlusion of the vessel from wound, but I preferred to wait; it could not be ascertained how high the gangrene would extend, and if amputation were done at once, it must be done in the thigh above or on a level with the wound in the vessel. Incisions were made in the calf, and pus and air escaped freely; this seemed to prevent any considerable spread of gangrene; it stopped, and a line of demarcation formed about the middle of the leg. The point of election had next to be decided, and surgical authority demanded that it should be in the lower part of the thigh; but it seemed to me that, if nature could preserve the vitality of the limb to the middle of the leg, that a stump below the knee ought readily to heal, and so it proved; a circular amputation was done close below the knee; no tourniquet was needed, for we knew that the main artery was wounded; the lower part of the clot in the ham even came into view at the operation, but the stump healed kindly, and this labouring man had the inestimable advantage of having preserved the knee-joint, which forms the most useful of all stumps.

Another case I have to record, which, although less fortunate in its result, has still some points of vivid interest.

Case III. A young man was brought to the hospital from a considerable distance, with a gunshot wound in the lower part of the thigh; the larger part of the inner hamstring was carried away. The wound was black with gunpowder, dry, and large enough to admit three or four fingers in breadth. There had been considerable hæmorrhage; and the patient was pale, collapsed, and almost pulseless on admission. It was not ascertained that the popliteal vessels had been injured; and the limb was placed in an easy position, and enveloped in flannel. In two days, the foot was in a state of mortification; and the whole leg was discoloured up to the knee, where a faint red line seemed to limit the gangrene. The whole thigh up to the groin was swelled and distended with gas; it was resonant on percussion, and emphysematous crackling was felt everywhere; but it was natural in colour and temperature.

Such being the state of the limb, what were the indications for treatment? It seemed to me that this emphysema of the thigh could not be due either to commencing gangrene or to sloughing cellular tissue; for the skin in either case would not have preserved its ordinary colour and appearance. Most probably the gas was the product of decomposition in the dead parts below the knee, and had forced its way upwards along the cellular interstices of the limb. The man's depressed condition was such that an amputation would, in my opinion, inevitably have proved fatal. I, therefore, decided to wait; but I did two things which seemed to be of service. I made large and deep cuts into the leg in various parts, and notably a circular one close to the living part, thus affording free escape for all noxious gas. I also made an incision of about an inch at the upper part of the thigh, from which air bubbled freely, and could be so readily pressed out as sensibly to diminish the size of the limb. The patient was liberally fed; the mortification did not extend; the line of separation close to the knee became more distinct. There was still air in the thigh; but no other mischief manifested itself.

At the end of a week, he had improved in strength. To remove the offensive smell of decomposition, I clipped through the mortified soft parts close below the knee, sawed through the tibia and fibula high up, and took away the leg, to the great relief of the patient.

At the end of a fortnight, his general condition was quite as good or better; the separation of the dead parts was nearly complete; the remaining portions of tibia and fibula had come away at the joint; the lower end of the femur projected; and a large mass of healthy granulations surrounded the lower part of the thigh; the skin having considerably retracted.

At the end of three weeks, the patient having begun to be hectic, and the discharge being profuse, I amputated through the granulations, without touching the skin, and was able to fashion a very good-looking stump about the middle of the thigh.

For some days he went on well, when fever set in, attended by daily rigors and profuse sweating—symptoms, apparently, of a pyæmic nature. He had acute pain of the opposite hip, but no swelling. He became gradually weaker; lost the power of taking food; the abdomen became distended; and he died ten days after the amputation.

This case shows that the presence of a mortified limb does not interfere injuriously with the improvement in the patient's health; for he steadily gained strength during the process of separation. At the outset of the gangrene his symptoms were very grave, consisting of fever and exhaustion; and I feel sure that the additional shock of amputation would have proved fatal. I incline to the opinion that there was too much delay, that it would have been better to have removed the limb a week earlier; but this shows what a choice of time the delay afforded. The case also shows that in a limb, part of which is in a state of mortification, the healthy part may be distended with noxious gas and yet no mischief may follow.

The next case, which I will relate as briefly as possible, demonstrates the value of delay, notwithstanding that the delay allowed of the occurrence of an accident which well-nigh proved fatal.

Case IV. A farm-labourer, aged 54, was brought to

the hospital, having sustained a simple fracture of tibia and fibula in the lower third of the leg. A cart-wheel had passed over the limb while the knee was bent; and besides the fracture of the leg, there was a good deal of bruise of the inner and lower part of the thigh, and a large soft swelling of extravasated blood there. He had travelled some distance, and was excessively faint and collapsed on admission.

In two days, it was evident that the foot had sunk into mortification, and there was no line of separation. I was urged to amputate the thigh at once, but declined, for these reasons: I could not ascertain which vessel was injured, whether the femoral or the tibials opposite the fracture, nor how far the gangrene would extend; possibly by waiting the knee could be saved; whereas to amputate then, in the faint and exhausted condition of the patient, would, almost to a certainty, have proved fatal. Moreover, any point of amputation would find the parts in a very unfit state for healing, so great was the extravasation. The limb was laid on its outer side supported by splints and covered in flannel; and the patient was fed as well and fully as he could bear.

For some days, little alteration manifested itself in the limb. The foot was cold and purple; large bullæ formed over the seat of fracture; but the knee was warm and sensitive; and so also was the leg to about its middle. The man looked pale and feeble, and there was some low delirium at times; but he took food and stimulants freely. His pulse averaged about 100; his tongue was dry and white. I made free and deep cuts into the leg where the gangrene was obvious, and let out foul air and dark blood.

In about fourteen days, a line of demarcation formed at the upper part of the leg; the dead tissues began to be offensive; and I, therefore, removed the limb opposite the fracture of tibia, clipping through the fibula on the same level. By taking away the mortified parts as soon as possible, and as near the line of demarcation as is practicable, great good is done. All the gas produced by putrefaction escapes, instead of forcing itself along the cellular tissue into the sound part of the limb, as we have seen it, until the entire limb is tympanitic; all bloody and effused fluid readily escapes, and the living and adjacent tissues are thereby relieved; an offensive smell is removed; and the patient experiences great comfort.

The stump thus left was enveloped in a large charcoal poultice. At every change of dressing, a considerable quantity of bloody fluid was found in the poultice, shewing how important it is to secure an outlet free and always ready.

By the nineteenth day, the stump had become nearly clean. Sloughs had been daily clipped away, and red granulations were everywhere visible; the bones projected three or four inches; but the skin was so left that a good stump could easily have been made below the knee by amputating through the granulations. This, however, was prevented by the occurrence of secondary hæmorrhage from the thigh. The quagmire of blood which was caused by the passage of the wheel over the lower and inner part of the thigh did not become absorbed. On the contrary, it bulged more and more, and became hot, red, and inflamed, but did not pulsate.

Fourteen days after the accident, I punctured it, and let out about half a pint of semifluid, black blood, and a little pus. It went on discharging a little bloody fluid for some days, and attracting but little notice, until the twenty-first day after the accident, when secondary hæmorrhage took place; it was sudden, brisk, and arterial, but ceased before the house-surgeon saw him. This was repeated four or five times in two or three days; and it became clear that any further loss would cause death.

Forsaking the leg where I was about to operate, I amputated the thigh above the wound. The pulse, which hardly perceptible before the operation, rallied afterwards.

For a week or ten days, there seemed but little chance of his living. He was constantly wandering. Pulse 120 to 140; face and skin generally very pale and bloodless. Notwithstanding every precaution, bed-sores formed over the sacrum, hip, and outer surface of leg; and the face of the stump sloughed.

The one favourable point was that he was able to take nourishment freely; for some time, his daily allowance was sixteen ounces of wine, six ounces of brandy, six eggs, one pint of porter, one pint of beef-tea, and meat twice. Gradually he mended; the stump healed soundly; he left the hospital, and remains well; a grateful example of how a life may be preserved by assiduous nursing and good feeding. On examining the limb, the femoral artery was found to be wounded.

The last case I have to notice occurred a few weeks ago, and shows well the difficulty I have mentioned, of distinguishing between "spreading" and common traumatic gangrene.

Case v. The patient was a farm-labourer, aged 46; of low organisation, thin, with a mottled red face, yellow conjunctivæ, and an appearance of premature age. He customarily ate but little meat, and was habitually temperate. He fell off the shafts of a waggon, and sustained a simple fracture of the tibia, and a compound of the fibula at the lower third. The wound was not large, and there was no great bruising of the soft parts. The limb was put on a swing splint.

On the third day, the skin to a considerable extent around the fracture was in a state of slough. The edges of the wound were sloughy and everted.

On the fourth day, the whole foot was blue, cold, and covered with blebs. Above the fracture, the leg was swelled, of a dark red or mahogany colour, and streaked with the bluish tint of the superficial veins. It was tympanitic up to the knee; and emphysematous crackling was everywhere felt. Above the knee, the inner and outer borders of the thigh had the same appearance for some distance.

Now, this description very nearly resembles that which is given of "spreading" gangrene. The part of the limb below the injury was already dead; that above was in the state I have mentioned, and might be supposed to be about to sink into the same condition, and to extend rapidly up to the trunk. I feel certain that I have seen amputation done high up in such cases as this repeatedly under the impression that, without it, the patient would die in thirty-six hours, or less.

To have operated at this time, I must have gone above the middle of the thigh, in order to avoid parts having a suspicious appearance; it would have found the man in a most unfavourable condition for such an operation. He was in a state of fever and great feebleness; with a quick, weak pulse, parched tongue, frequent hiccough, and constant vomiting, with high coloured urine and a yellow skin. In my opinion, he would not have lived twenty-four hours. But, in reality, the leg above the fracture was not mortified in its entirety; the sub cutaneous cellular tissue was in a state of slough, and the skin was about to follow. I made several free incisions in various parts, and let out a quantity of foul air and thin pus; covered the leg with a warm linseed-poultice; and attended to the state of his health. No further gangrene took place.

In a few days, sloughs projected from the wounds and were removed; the swelling subsided; pus of a healthy character was discharged; the hiccough and sickness abated; and he could take food.

On the sixteenth day after the accident, I amputated close below the knee joint. He was still very weak; but his system was quiet, and he seemed better than ever the day following the operation.

On the second day, there was a smart arterial hæmor-

rhage. The stump was opened and a vessel tied; but the pain and loss of blood did great harm. In the evening, I found him low, sweating, and excited; pulse 120.

After this he had rigors day after day, the certain forerunner of pyæmia. He was able to take but little food; the abdomen became distended; bed-sores formed, and a large abscess around the hip. He died about a fortnight after the amputation.

I will not detain the meeting by any more remarks on these or similar cases. Permit me, in conclusion, briefly to offer some propositions on the subject.

1. In traumatic gangrene of a limb, it is safer (in civil practice) to wait for the cessation of the mortification before amputating.

2. Death seldom occurs during the spreading of the gangrene.

3. The patient will, in all probability, be in a more favourable condition for an operation after the arrest of mortification than at its commencement or during its extension.

4. Amputation should be done through the granulations at the line of demarcation, or immediately above it.

5. Free incisions should be made into the mortified parts during the extension of the gangrene; and as soon as the line of demarcation is formed, the gangrenous part of the limb should be taken away close to the living tissues.

6. When the gangrene has ceased the time chosen for amputation must depend on the condition of the patient.

Lastly. That in the so-called "spreading" or constitutional form of traumatic gangrene it is especially incumbent on the surgeon to wait for the arrest of the mortification, a practice which has the sanction of such surgeons as Mr. Fergusson and Mr. Syme.

Reviews and Notices.

On the Influence of the Weather upon Disease and Mortality. By R. E. Scoresby-Jackson, M.D., F.R.S.E., etc. With Coloured Illustrations. Pp. 54. Edinburgh: 1863.

We are much indebted to the able author of *Medical Climatology*, for the further researches he has been making on a kindred subject. In his introduction to the present work, while noticing the great attention now paid to the influence of change of climate upon the cure of special diseases, he truly says that change of climate often means simply change of weather: at the same time, the weather-statistics hitherto published have been few, and the literature on the subject is meagre. He has, therefore, endeavoured to discover in what way the weather, its persistent condition as observed in certain localities, viz., in Scotland, and especially in its eight larger towns, whose climatic state he has chosen as an example of that of the country in general, its variations, etc., may be found to affect the health, the sick-rate, and the death-rate (these two not being always co-existent) of the inhabitants. Notwithstanding some objections that have been raised, he considers that the climatic conditions of the larger towns afford a fair average for all Scotland, as it is in them that "the mass of disease and the multiplied mortality are met with" more particularly.

No subject has excited more attention than weather in all ages, and most so among the uneducated; none has given rise more often to "wise saws and modern instances"; and yet on no subject have opinions been more conflicting, and even the ordinary descriptive terms have given rise to totally different ideas in men's minds. As our author says, the terms bitter, raw cold, bleak, bracing, etc., may be "used by different persons with reference to the weather of one and the same place and point of time." It is, then, a matter of the greatest consequence to obtain accurate data, on which may be founded scientific laws: a vast mass of meteorological facts are now becoming accessible to us, from the great number of observers that are at work in different parts of the world; but the science of Climate, or Weather, in its relations to health, is still in its infancy. This work constitutes, however, a valuable contribution; and may be trusted all the more, because the author's aim has been to divest himself of all foregone theory, and to make the facts which he has collated speak for themselves.

The theories which may be deduced from these facts have a very sensible bearing upon the question, whither should the sufferers from particular diseases resort for recovery? In estimating the value of health-resorts, we must depend less upon a comparison of the meteorological data of the several places, than upon the relations subsisting between those data and the prevalent diseases, the (sick and) death-rates, of one and the same locality. To compare different places, much more than mere meteorological analogy is requisite to discover the comparative sick- and death-rate; but still it is of the greatest consequence to ascertain whether the atmosphere a patient lives in is likely to prove a "foe or an ally in the treatment of his malady." It will be long before correct theories of climate will be elicited; but these facts here collected speak for themselves, "sometimes making positive, sometimes negative assertions, often enough hovering between the two, leaving us as much in doubt as before, but with a stimulus to deeper research into the influence of those numerous external agencies, which are under the immediate control of the Great First Cause of all."

Our author does not ignore the influences of the various hygienic conditions of supply of food, ventilation, etc., nor of geological formation upon localities; but his efforts on this occasion are restricted to the collating the meteorological conditions of the several localities. The chief sources from which he has drawn out his facts with so much labour, are the Returns from the Stations of the Meteorological Society of Scotland, and the Returns of the Registrar-General; his investigations extending over six years, from 1857 to 1862, inclusive. From these sources, mainly, we find a series of tables constructed in a most elaborate manner, and some most valuable and suggestive illustrative diagrams As may be expected, the results of his inquiries on some points harmonise with those of several observers in other countries, while on other points they are diametrically opposed to them. It is impossible for us to enumerate many of his conclusions: in fact, he regards them not so much as proving anything, as pointing to certain general laws, as, viz., that "during the cold months of the year, the relationship between the height of the barometer and the death-rate from zymotic diseases is inverse, whilst during the warm months it is direct," etc. Thus he says (p. 22), tables "point to this, that for three-quarters of the year the relationship of monthly range of tempera-

ture and the death-rate from all causes is inverse—the greater the range, the lower the mortality; but that during the months of July, August, and September, the relationship is direct—the greater the range, the greater the mortality." Again, he says, "if the foregoing tables are to be trusted, it would seem" (p. 48) "that the north, the north-east, and east winds decidedly tend to increase the death-rate from bronchitis." At p. 51, a table "corroborates the suggestion . . . . that a low winter temperature increases the mortality from phthisis, but only to a remarkable extent when the mean temperature is very low, and continuously so; and that a high summer temperature does not increase the fatality of phthisis." At p. 54, the table "suggests a direct relationship between the rain-fall and the death-rate from all causes in winter and spring, but an inverse relationship in summer and autumn—a suggestion which the previous results tend to support."

On some points our author seems to have more confidence that he has established somewhat more definite conclusions; as at p. 20, "mean temperature and mortality from all causes have an inverse relationship below 50° (Fahr.), a direct relationship above 50°"; "aggravating influence of continued cold", and "of a continued high temperature"; the greater mortality with a low reading of the barometer, and greater mortality with greater *range* of barometer. Again, some of his conclusions apparently conflict with one another; as when, at p. 35, he speaks of the greater mortality in proportion to the amount of rain-fall during the whole year, while his tables "tend to corroborate" (p. 36) "a previous suggestion that *dry cold* is more fatal than humid cold." Again, "following the rain-fall as our guide to the hygrometric condition of the atmosphere, we conclude that a dry atmosphere promotes mortality; if we refer the humidity present in the atmosphere to the standard calculated by Mr. Glaisher, we are forced to an opposite opinion." It seems that opposite causes may produce a similar effect, as when a great force of wind (p. 37) kills by exhausting the weak and by the casualties it occasions; a small force of wind kills by the diseases, zymotic and others, produced by a stagnant and damp atmosphere. Our author has his tables constructed to show, 1. The Influence of Weather upon Mortality from All Causes. 2. Its Influence, etc., from Special Causes.

In addition to several tables calculated to throw light upon the effects of the various conditions, as temperature, force of wind, humidity, etc., upon the general mortality, and also upon the sickness and mortality from the principal groups of diseases, the author has appended several most valuable diagrams illustrative of the several meteorological conditions, and their effects upon the general mortality. Those who have had experience in collecting, comparing, and analysing meteorological data, will agree with us in our opinion that a vast amount of labour must have been expended by the author. We think that the profession is much indebted to him for the facts he has brought before us, and the conclusions bearing upon public health which he seems to have already established or confirmed; but still more for the impetus his researches must give to the accurate and scientific investigation into the action of the weather upon the human system, by numbers of competent observers in different parts of the world. It is by means of such investigations, mainly, that we may look for a solution of the great medical problem of our day—the prevention of disease.

British Medical Journal.

SATURDAY, OCTOBER 3RD, 1863.

PSEUDO-CURES FOR A SOCIAL EVIL.

An attempt has been made of late to introduce into this country the system generally prevailing on the continent, of governmental supervision of prostitution. The chief object proposed to be thereby gained is, the restriction and diminution of the spread of syphilitic diseases. We are told, that at no time in the history of the nation have these diseases been so prevalent and widely spread through all ranks of society as they are at this present moment, and that they are sapping the very constitution of the people. To believe all that has been seriously said and written of late on this subject, we shall be forced to conclude that, in the course of another generation, Englishmen will have undergone a thorough process of physical degeneration, and, we suppose, if the same state of things be permitted to last, will in a few more generations be reduced to the lowest state of moral and physical decrepitude compatible with existence.

Now, we will not, on the present occasion, stop to inquire whether there be or be not any truth in the bold and reckless assertions made concerning this modern spread of an old-existing disease. This only we will say for the consideration of those reasonable persons who do not at once deliver up their judgment to the opinion of sentimentalists and demi-scientifics: first, that the proof of the modern spread of these diseases has not been given, for the plainest of all reasons; viz., because it is most difficult, if not impossible, to compare the history of the syphilitic constitutional affections of the last generation with those of the present. Our knowledge of syphilitic disease of this day is quite another thing from the knowledge which men had of it not many years ago. Recent scientific investigations have enabled us to follow and trace out the disease, in directions in which a few years ago no one thought of looking for it. We might, indeed, say of many syphilitic affections what has been often popularly said of many other diseases of the day; viz., that they are quite modern inventions. We need hardly say, for example, that if diseases of the heart are so frequently met with now-a-days in our mortuary records, it is not that they are more frequent now than they were formerly; it is simply because modern diagnosis has revealed their existence in cases in which

they would have been overlooked under the ancient methods of diagnosis.

Most fairly may we assume that the same is true of these syphilitic diseases; viz., not that they are more widely spread now than formerly, but that our improved diagnosis enables us to trace them where the lesser knowledge of the disease and the more defective diagnosis of other days could not see them. Let any candid and unprejudiced mind look into our hospital museums, and search the history of this disease as recorded in our medical literature; and we will venture to say, that they will find evidence enough to satisfy them that the disease has been just as prevalent in the past as it is in the present. More than this, the evidence is unmistakable, that, at all events, the immediate and manifest effects of the disease are far milder in their form now than they were a generation ago. Our pathological museums and the historical records of the disease demonstrate this fact also to us.

Arguments, therefore, in favour of this governmental superintendence of prostitutes, drawn from a presumed extension of the physical evils resulting from it, in these latter days, are worthless.

But even if the evils referred to be not more prevalent now than they were in former times, this, of course, is no reason why we should not endeavour to scotch them, for Heaven knows they abound greatly enough. Let us then see whether a calm investigation of facts justifies us in supposing that this governmental superintending remedy is likely to prove a cure for the disease. It is, indeed, surprising to witness the ignorance and haste displayed by many writers in the public press—even by members of our own profession—on this subject. They start off with the assumption, that the benefits accruing to society from this licensing system are positive and undoubted. They accept the custom as perfect—as we islanders are often accustomed to accept continental practices, without examination—not taking the trouble to inquire whether it really fulfils the intentions of its promoters.

Now, we will say at once, that a long and careful examination of the subject has forcibly impressed the conclusion upon us; that the governmental supervision of prostitution of foreign countries is completely inefficacious in preventing the wide and general spread of syphilitic diseases, and is most injurious to public morality.

As regards the moral side of the matter, we may remark, that even the most strenuous admirers of the "licensing system" admit, or at least do not deny, that there is something opposed or repulsive to morality in its adoption. It is plainly and positively an indirect patronage of prostitution by the Government. It makes of prostitution a state institution. It is a public declaration to the people, that, in the opinion of their rulers, prostitution is a necessary part of the state properties, and must be provided for the people, like theatres, circuses, and other necessaries of life—*panem et circenses.*

The moral evil, then, attending the licensing system is admitted as a transparent fact. Instead of curbing, it plainly encourages men and women in the commission of the sin that flesh is heir to. Those who practise the vice, find in the fact an argument to quiet their consciences: they argue that there can be no great sin in using those things which a paternal government provides for its people. And the woman, seeking to inscribe her name on the rolls of prostitution, may argue, and naturally enough, that the government, the supreme authority, would hardly have consented to be a party to assist her in entering into and carrying out a business which was really infamous.

The evil, then, of the system is admitted; but the evil is got over by the help of the doctrine of expediency. Expediency, it is argued, requires this sacrifice to immorality. We must do this evil for the sake of the good that comes out of it. Now, we are ready to admit that the utilitarian would have something to say in favour of his expedient system—though certainly not derived from any Christian inspiration—if he could demonstrate the benefits resulting in a physical sense to humanity from this immoral sacrifice. But we are ready to meet him even on this rather low ground, and, in fact, to deny that the licensing system, as practised on the continent, has been the means of reducing the physical evils—the spread of syphilitic diseases in those countries where it is adopted.

Those gentlemen and journalists who preach so loudly of the benefits of this system, and who exclaim against the squeamishness, etc., as they call it, of England, should have something distinct in their hands whereby to prove the benefits of this admittedly intrinsically immoral system; but they have, in truth, nothing to show beyond the general conclusions derived from their own idea of what ought to be or what is the result of the system. We look in vain for any proofs. Not only do we find no proofs, but the investigation which we have made into the subject has satisfied us that the system, in the respect of its being a controller of the spread of syphilitic diseases, is simply an enormous failure. For example, will any medical man, whose opinion is worth a straw on the subject, venture to assert that syphilitic diseases are more common in London than they are in Paris? There is, on the contrary, every reason to believe that the disease is just as common in Paris and other continental cities as it is in London. The hospitals, for example, in Paris, are filled with the disease. Syphilis is one of the most fertile subjects of medical literature; every Parisian journal is covered with quack advertisements of remedies for the cure of syphilitic diseases.

And what is there published of their experience by medical men in that city which would warrant the conclusion that Paris has more immunity than London from the affection? What said Parent Duchatelet himself on this very point? Why, he asserted that the system was useless, as carried out. "Clandestine prostitution," he writes, "that which is exercised in secret and unknown to the police, is of far greater importance than public prostitution." By the same means, he tells us, syphilitic diseases are spread, and the wise (?) measures of the administration rendered all but useless. And what was Parent Duchatelet's proposal for meeting the evil? Why, it was the multiplication of houses of prostitution! There were, he reckoned, 40,000 prostitutes in Paris, and of these only 4,000 inscribed on the police list.

Again, we are told that in India the authorities allow "each regiment to retain a certain number of women in the bazaar under the care of a woman, paid and made responsible; they are periodically inspected by the native hospital compounder." Nevertheless, it appears that syphilitic diseases rage in India. The same difficulty which Duchatelet could not meet, arises again here.

But what is it which the government is now called upon to do? Not, it appears, to license prostitutes; but to make such enactments as shall allow of the prostitutes being subjected to governmental supervision! The fact is, that the flippant writers of the day—the *Saturday Reviewers*, and some of those who echo their sentiments in the medical press—carefully avoid any distinct grappling with the subject. They do not tell us how that which they propose is practically to be carried out. The vilest prostitute in this country will, we venture to prophesy, never be subjected by the legislature to a treatment which would be a distinct violation of the Habeas Corpus Act. We shall never see a woman here taken up by the police on suspicion of being "diseased". But this is what these gentlemen demand, if they mean anything at all. They propose to throw the responsibility of providing what Miss Nightingale has so well referred to under the title of "War Office prostitutes" and "Admiralty prostitutes" for our soldiers and sailors of the country. They would insist that women with clean bills of health should be provided for our soldiers and sailors. But if for our soldiers and sailors, of course also for the whole country. In other words, they demand a governmental licensing of prostitution.

Such are the wild and impracticable views held by many writers in the press. Instead of wisely pointing out what may be done practically to reduce the sad effects of this dreadful scourge, they run off into the singing of praises of these Utopian follies.

We shall again recur to the subject, and will then point out the direction in which common sense tells us that we may labour to some purpose in the attempt of reducing the spread of syphilitic diseases.

SPIRITUALISM AS A CAUSE OF INSANITY.

M. Burlet of Lyons, we learn from the *Medical Critic*, writes as follows on this subject:—

"Lyons, for its part, has already furnished a fine contingent of madmen from spiritualism. This city, where intellectual and other juggleries have always obtained a very happy success, has become, as it were, the stronghold of the sect. According to the avowal of a medium of Brottreux, the number of his adherents has within eighteen months been prodigiously augmented. 'Lyon' (says M. Figuier), 'with its heights, the ridge of the Croix-Rousse and the summits of the Fourbières, represents admirably what the spiritualists call a fatidical place.' Thus, it is not surprising that this city, which, at the end of the last century, built a temple to the great thaumaturgist Cagliostro, accepts readily the celestial words with which the spirits daily favour it. The partisans of spiritualistic ideas maintain, without proof, that their doctrine is incapable of producing mental alienation. Nay, one of them even pretends that spiritualism is a sure preservative against insanity.

"My object is to prove that spiritual practices act as a direct and efficient cause of insanity, and, consequently, that spiritualism ought to have a place among the causes of mental maladies. For several years, the Hospice of Antiquaille, Lyon, and other special establishments of the department of the Rhone have given refuge to a great number of unfortunates become mad from having sought for *mediumnity*. From among these I derive my observations.

"These cases are not all that could be brought forward to prove the danger of spiritualism. Other special establishments of the department have received a good number of lunatics whose lunacy admitted of no other explanation than frequenting mediums. Dr. Carrier, within a short space of time, has treated, and seen recover, among his patients three females who had been rendered insane by spiritualism. I would reply here to a remark which might be made, that I have only met with spiritualistic lunatics among the more humble classes of society. This is true, because those patients received at Antiquaille, in the immense majority of cases, if not always, are the poor and indigent. But, independently of the names cited towards the close of this paper, I know, from trustworthy sources, that the gates of a well-known *maison de santé*, principally resorted to by the rich, have admitted within its walls victims of spiritualism from among the aristocracy. It may be said that, having regard to the number of those who study and practise intercourse with mediums, the number of lunatics is very restricted. This opinion is not well grounded; the lunatics from spiritualism are not solely those whom it is found necessary to confine in an asylum. There are many, and of these I know many, who, although they have not reached the same condition as those whose histories I have related, still give proofs daily of being more or less stricken in their intellectual faculties.

"In America, the country which gave birth to this delusion, and where it is in great favour, the number of cases of mental alienation occasioned by it is prodigious. An United States' journal declared in 1852, 'The majority of the mediums become haggard, idiots, mad, or stupid; and it is the same with many of their auditors. Not a week passes in which we do not hear that some of these unfortunates destroy themselves by suicide, or are removed to a lunatic asylum.'

"In France, individuals belonging to the upper classes of society also become victims to the destructive

power of spiritualism? An advocate of Paris, Victor Hennequin, who placed himself in relation with the soul of the earth by means of tables; and who, under the influence of spiritualism, wrote the opuscule entitled *Sauvons le Genre Humain*, died in a lunatic asylum, after having placed his wife, who became lunatic from the same cause, in another asylum. A distinguished man of science, Girard de Caudemberg, a civil engineer, died also lunatic in 1858, after having published a spiritualistic book, entitled *Le Monde Spirituel*. Among all classes of society spiritualism has found adepts and victims, and, unhappily, the prediction of the journal just quoted has been fully realised.

"The causes of the propagation of spiritualism are the same, modified by the manners and knowledge of our time, as those under the influence of which grew and were propagated in former ages many analogous intellectual epidemics, such as the demonolatry in Lombardy in 1504, in Lorraine in 1580, in the Jura in 1598, in Spain in 1630; and the vampirism in Poland, Hungary, and Moravia, from 1700 to 1740. Scarcely three years have elapsed (1859) since an epidemic of hystero-demonomania was observed at Morzine (Haute-Savoie), as reported in the *Gazette Médicale de Lyon*, by Dr. Arthaud.

"'This love of the marvellous,' says M. Figuier, 'is not peculiar to our epoch; it is of all times, and of every country, because it appertains to the human mind. By an instinctive and unjust distrust of his own powers, man is led to place above himself invisible powers, exercising themselves in an inaccessible sphere. This natural disposition has existed at every period of the history of humanity, and invested, according to the period, the place, and the manners, with different aspects, it has given birth to manifestations variable in their form, but at the bottom identical in principle.'

"If, in other parts of France, cases of insanity induced by the doctrines of the mediums, are as frequent as in the department I dwell in, no reason to the contrary existing, it seems to me that there can be no doubt that spiritualism should rank among the most fruitful causes of mental alienation."

THE PUFF PROFESSIONAL: NEW CURES.

Whenever we hear members of the profession imploring Jupiter Olympius, in the shape of the legislature, to give them relief from the "slings and arrows" of the multifarious quackeries which swarm around us, we are always inclined to ask: But how about the quackeries *within* the profession itself? How will you deal with them? How can you expect assistance from those elevated and powerful regions, when you present your petition with soiled fingers? Indeed, it is only very reasonable that we should have our professional house thoroughly well in order before we begin to cry out against the disorders created in it by the Dulcamaras outside.

And are there not irregularities rampant within the profession, as well as outside of it? Alas! we only too well know, all of us, that such is the fact. The word quackery, it must be remembered, is a very distensible and comprehensive term, embracing a large variety of untenable performances; and these performances may be honest, as well as dishonest; and they may be practised, as we have said, by the legitimate man, as well as by the irregular quacksalve or bone-setting empiric. There are, in truth, breaches of professional etiquette which are the products of ignorance and of a defective condition of the reasoning powers, and these may be of the honest sort; and there are breaches, again, which are the products of tricking minds—the doings of persons who knowingly make profit of the infirmities and ignorance of the public.

ROYAL COLLEGE OF PHYSICIANS.

The College possesses more riches than it is aware of. It possesses not only a most valuable and in some respects unique library, but it has also many first-rate paintings within its walls. The value of these paintings, and their authors' names, are in some cases unknown. Some of the pictures themselves also have been allowed to fall into a bad state. The College, therefore, has determined to appoint a Committee to examine its paintings; to find out their authors' names, if possible; and also to call in an expert from the Academy opposite, to advise with them in the matter of refurbishing the canvass. We have no doubt that the Committee appointed will take care not to allow any experimental genius to try his hand at "retouching", etc., the pictures in such a way as to annihilate the hand-marks of the original artificer—a thing which we were once told was done in the National Gallery.

The College has also made a most important addition to its library in the shape of a catalogue, which has just been completed, under the auspices of Dr. Munk, its talented and indefatigable librarian. The labour and expense of this catalogue have been already well rewarded by the discovery of a real literary nugget—of, in fact, a good sized volume which is at least worth its weight in gold. How the volume found its way into the library does not appear. It is a translation (by Caxton himself, in 1471) of Lefevre's *History of Troy*, and is a copy of the first work printed in this country by Caxton. There are, we believe, six copies of the book extant; one of them was some years ago sold at the Duke of Roxburgh's sale for £1060. The volume is very nearly perfect. The title-page and half a page or so, which are missing, can, it appears, be readily made good from the British Museum. The College has determined to go to charges to make the volume complete; and we then trust that they will allow it to find its way into the hands of some more suitable guardians of such a valuable work. Five or six hundred pounds in the Three Per Cents. would, we venture to think, be of much more service, and a much more appropriate property to our modernised College, than the dead-weight possession of a perishable curiosity of this kind. The day for the possession of such recondite luxuries as this by the College has gone by. *Troja fuit.*

THE WEEK.

It is pleasant to recognise any spontaneous expression of kindly feeling to a member of our profession on the part of the public and the profession. It proves that the object of it is a worthy man. The instance of this to which we now refer is the case of Dr. Lingen of Hereford. Our readers may remember that this gentleman has been lately, through no fault of his own—in fact, through doing what he believed to be a benevolent act—brought as defendant into a court of law. True, he there gained the cause; but, as usual, the victory cost him very dearly. Many of his friends, non-professional as well as professional, sympathising with him as the bearer of this hardship, have resolved to express their sympathy with him, and to present to him a testimonial, of such a nature as may be decided upon when it is ascertained to what amount the subscriptions have been received. We believe that this movement has taken place, not through any notion of Dr. Lingen, but rather contrary to his wishes. So numerous, however, have been the expressions of his friends, that it was resolved, at a meeting held in London, at the house of Mr. Clover, Charles Hawkins, Esq., in the chair, to open a subscription for the purpose indicated. It is only fair to Dr. Lingen that these facts should be known to the profession.

The London College of Physicians has consented to receive certificates of attendance on lectures of chemistry delivered at the Pharmaceutical Society.

Special hospitals alone, and only a few of them, exercise the speciality of advertising the names of their medical functionaries. A correspondent asks whether the proceeding is in accordance with medical ethics. To this we must answer, that it certainly is not in accordance with the general practice; and that the medical men of one special hospital a few years ago cried "peccavi" on this very score, and gave up the practice as contrary to propriety. In the meantime, we must suppose that the gentlemen who lend their names for the purpose do so out of the pure spirit of philanthropy; viz., to advance the interests of the charity they serve. Of course, the last thing they think of is of any collateral advantages which may thereby accrue to themselves. The Cancer Hospital and the Skin Diseases Hospital are prominent examples in this way. We lately gave an extract from the advertisement of the Cancer Hospital; we now supplement it with an extract from the Skin Diseases Hospital.

"Hospital for Diseases of the Skin. President—Samuel Gurney, Esq., M.P. Surgeon—Mr. Startin. Assistant-Surgeon—Mr. McWhinnie;" etc.

The practice of advertising their names, qualities, offices, and excellencies, by medical men, and especially by hospital medical functionaries, through the aid of their book-publishers, has become so general, that we would recommend to the notice of members of the profession the above method of performing the same thing. Why should not general hospital men do as these special hospital men, and have their names and qualities appended to the begging petitions which daily appear in the advertising columns of the daily journals? Their celebrity would shed a lustre on the petition, and so benefit their hospital; and, on the other hand, they themselves would make a great economy; for, as everybody knows, the advertising process through a publisher is a very expensive luxury, however, profitable the returns may be.

Village Hospitals will, we have no doubt, gradually rise up in all parts of the country. We have already given an opinion of the great services which they may render to the poor sick and wounded; and that they will do it in the most useful, humane, and economical manner. But we have not closed our eyes to the enormous abuses which they are likely, we fear, to engender—which, in fact, they must inevitably engender—unless they be established on a just and equitable system. We do not hesitate to say, that if in every village in this country a hospital arise, and the work of it is done gratuitously by members of the profession, an enormous system of professional demoralisation will be established throughout the country. We would seriously ask those gentlemen who are disposed to do the medical work of the parish gratuitously, calmly to consider the grounds upon which they undertake it? We would ask them to justify the proceeding in the face of the profession; and, if they can, to give us the reasons why it is right and proper that this work should be done without pay or reward. No doubt, we shall be told, that this is just what is done in our large hospitals. And we admit that it is. But why should that enormous evil be extended through the country? Everyone knows that hospitals and dispensaries are often forced into a hotbed existence simply as a kind of advertisement to their medical promoters, who, whilst engaged in the "glorious cause of humanity," do not forget their own personal advantages. To prevent a further development of this great evil, we would ask those gentlemen who are raising these village hospitals to tell us what are the grounds upon which they propose to do the work of them gratuitously?

We have received from the Secretary of the Royal National Life-Boat Institution a letter, stating that the subjoined circular is being issued to the principal hospitals and medical societies throughout the United Kingdom; and asking our aid in assisting the officers of the above-named institution to elicit

the best opinions of the medical profession on the important subject to which the circular refers.

"14, John Street, Adelphi, London, Sept. 1863.

"Sir,—I am instructed to acquaint you that until the year 1857, the rules of the Royal Humane Society of London, for the restoration of the apparently drowned, were circulated by this Institution at its life-boat stations on the coasts of the United Kingdom; but in that year, the eminent physiologist, the late Dr. Marshall Hall having pronounced the rules to be wrong, the Committee of the Royal National Life-boat Institution obtained, as far as they were able, the opinions of the chief medical authorities in this country, and of some on the continent, on the relative merits of the two systems.

"Those opinions were so generally, indeed almost exclusively, in favour of Dr. M. Hall's plan, that the Committee felt they had no option but to modify the rules, for the circulation of which they were responsible, in accordance with it.

"Since that period, Dr. Henry Robert Silvester, of London, has proposed a modification of the rules of Dr. Marshall Hall, which, although synonymous in principle, uses a different mode of promoting artificial respiration, which he alleges to be more convenient, and to more effectually perform the same.

"Dr. Silvester's plan has been carefully considered and favourably reported on by the Royal Medical and Chirurgical Society of London, and has been recently adopted by the Royal Humane Society in lieu of their previous rules.

"The Committee of the Royal National Life-boat Institution, not being a medical body, and feeling the serious inconvenience of there being two different plans in circulation, which might lead to hesitation and delay, where decision and promptness of treatment are all-important, are desirous once more to have the advantage of the opinions of the chief medical authorities in this country on the subject.

"I am, therefore, directed to solicit the favour of your opinion on the relative suitableness of the two systems of Dr. M. Hall and Dr. Silvester, as embodied in the rules of this Institution and of the Royal Humane Society, copies of which are herewith annexed, in order that the present rules of this Institution, founded on Dr. M. Hall's plan, should, if necessary, be modified, or those of the Royal Humane Society be adopted in lieu of them.

"I am, sir,

"Richard Lewis,

"Secretary, Royal National Life-boat Institution."

Subjoined to the letter are copies of the rules advocated by Dr. M. Hall and Dr. Silvester. We have readily given insertion to the circular of the Life-Boat Institution, being assured that those of our readers who have had experience in cases of asphyxia, will render every help in their power to the Institution in arriving at a correct conclusion on so important a matter.

M. Batailhé has been lately engaged in experiments relative to purulent infection. Abscesses in the lungs, and in one case purulent pleurisy, were found in dogs into whose veins pus had been injected—provided the animals were not poisoned in a few hours after the injection of the pus. Very minute quantities of putrefied pus were injected at intervals; and the author concludes "that putrefied pus mixed with the blood in very small doses produces metastatic abscesses—provided the pus be injected in small quantities, so as not to kill the animals at once, and to allow of their living long enough for the formation of the abscesses." It is in this way, he says, that purulent abscesses are formed in cases where putrefied fluids are collected on the surface of recent wounds. The way to prevent all chance of infection is simple. The wound must be dressed with alcoholic liquids, so as to prevent the putrefaction of the discharge, and to close the mouth of open veins and lymphatics. In some rare cases, caustics must be used, and even the actual cautery, to close up the mouth of large veins. M. Batailhé runs his theory out consistently into practice. "In puerperal fever the same treatment must be adopted; the uterus of the recently delivered woman must be treated like a recent wound. In this way, we shall save from 15,000 to 20,000 women who yearly die in France of puerperal fever." According to the author's treatment of external wounds, the accoucheur should run the actual cautery over the internal surface of the uterus in cases of puerperal fever, in order to close up its large gaping vessels. Dr. Batailhé, however, is contented in this case with alcoholic injections.

L'Union Médicale tells us that at the present moment several medical men in France are giving their daughters in marriage; but in no case to a medical man. "This is a sad and serious professional symptom. What does it mean, but that the fathers do not care to trust the happiness of their daughters to doctors? And who can blame them? At the present moment, the difficulty doctors have in getting a living is increased a hundredfold. We are, moreover, assured that the number of students of medicine, who are sons of doctors, diminishes every year."

M. Maisonneuve presented to the Academy a young man, nineteen years old, from whom he received, in August last, an ivory exostosis, situated in the orbit, and implanted on the ethmoid bone. Instead of attempting to remove by pieces the tumour, which would have turned the edge of any instrument, he removed it by means of the gouge and the mallet, breaking it off from the bone to which it was attached, and thus extracting it *en masse*. The tumour weighed ninety grammes, was of compact tissue, and harder than ivory. The movements of the eye have returned, all deformity has disappeared, and the youth may be considered as perfectly cured. He had been suffering for eighteen months.

M. Geoffroy St. Hilaire has placed at the disposal of the Museum two living specimens of Lepidosirenes. These curious animals are supplied with a bronchial apparatus as well as with lungs; some naturalists have classed them among reptiles. Owen classes them among fishes.

Progress of Medical Science.

Syphilitic Disease of the Mouth. Professor Sigmund of Vienna, one of the most eminent syphilologists of the present day, has for some time past been publishing, in the *Wiener Medizinische Wochenschrift*, a series of articles on syphilitic disease affecting the mucous membrane of the lips and mouth. He has been led to this by having lately met with, both in hospital and in private practice, an unusually large number of cases of this kind; and a similar occurrence took place in 1850, when the patients attributed the disease—erroneously, as Dr. Sigmund has been led to think—to the use of cigars. He treats first of primary and afterwards of secondary syphilitic disease of the mouth. On the present occasion, we give a somewhat condensed translation of his remarks on the primary syphilitic affection of this part.

Primary Syphilis affecting the Lips. Most of the cases that came under Dr. Sigmund's notice were in males. The most frequent seat of the disease was the upper lip; and here, as well as on the lower lip, the centre was usually affected, the disease being more frequent and more extensive on the exposed red surface than on the surface next the gums. Primary chancres were rarely seen at the angles of the mouth, and were always confined to one angle. As on the genital organs, the disease first appeared as a simple infiltration of the skin and cellular tissue, with or without the formation of an ulcer.

The indurated chancre, unattended with ulceration and suppuration, appears first as a mere abrasion of the epithelium, with slight swelling of the corium, which presents also fissures of greater or less extent, that sometimes bleed. At a later period, a dead white, yellowish, or brownish, generally firmly adherent scab, is formed of the epithelial *débris*, serum, and blood. The infiltration frequently extends inwards beyond the denudated part: the diseased portion of integument, however, acquires the appearance of having been burned or scalded by a cautery. The edges and base of the infiltration are at first moderately hard; but the hardness increases in the course of the disease, as may be proved by comparison with the healthy surrounding parts. The hardness extends itself either superficially into the skin and upper layer of areolar tissue, or deeply in the form of a roundish knob. In the further progress of the disease, the scab becomes separated, and the corium projects and is observed to be overlaid with epithelial *débris* and pus. A well defined, sometimes channeled, border denotes the limit of the epithelial abrasion. New epithelium is gradually formed at the edge of the abraded part; it has a pale white appearance, and gradually covers the part, so that a new integument is in time formed. The new skin is smooth, very tender, is easily torn, often desquamates anew, and is not safe from lesion until the induration has disappeared, and the ordinary softness and elasticity of the mucous membrane have been regained. The characters of the normal tissue of the part become so perfectly restored, that not even the practised eye can discern a trace of the chancre. The extent of the disease varies from the breadth of a lentil-seed to that of a finger-nail; the infiltration is almost always confined to one spot. The disease is never produced in the sound lip by the contact of the diseased one.

Indurated chancre with ulceration is developed in a different manner. If the infection be accompanied by a wound or fissure in the part, or if this occur at a later period in the infiltrated part, a portion of the affected tissue becomes purulent: this may be produced through the destruction of the tissue by the chemical action of fluids, or by other irritating articles, such as tobacco and caustics, and by decomposed animal fluids, such as blood and pus. While several of these causes operate on the genital organs so as to produce frequent and great destruction of tissue, it is only through great neglect of cleanliness that any great mischief can be produced by their action on the lips; and when they act, it is most frequently at the angles of the mouth. The observation so often made in regard to the genital organs, that the disease commences with a purulent ulcer within the first twenty-four or forty-eight hours after infection, while the induration is not observed until the second or third week, can very seldom be made in regard to the lips. If the disease occur in an anæmic or cachectic constitution, and the patient be exposed to deleterious influences, such as cold, damp, impure air, or have improper diet, those well known obstinate ulcerations occur which are frequently enough met with on the genital organs, but seldom on the lips. The process of repair of the lost tissue in such cases is always imperfect, and even for years the cicatrix is distinctly visible. The edges and base of these ulcers remain long indurated; and it is only gradually that the extensibility and pliability of the tissue of the lips is able to obliterate any observable traces of the disease.

Venereal non-indurated sores appear so very seldom on the lips, that up to a recent time their occurrence here (or on any part of the head) has been denied. But Dr. Sigmund has no doubt of their occasional occurrence, although it be very rare.

The communication of infection from the diseased to the healthy may be either direct or indirect.

The direct communication of syphilis takes place most frequently through the contact of the lips of a diseased person. The infectious matter is furnished from the mucous membrane of the cheeks, palate, throat, and tongue, mixed with mucus, saliva, pus, and serum. The inoculation of blood alone is sufficient. The infecting matter, however, does not affect the healthy person unless it rest on a surface denuded of skin. The knowledge of this fact, in combination with that of the long incubation and mode of development of syphilis, explains those occurrences for which very exceptional explanations have been offered, and which often have appeared to admit of none; it especially explains the fact, not unfrequently observed, that an individual may communicate a perfectly characteristic chancre to another, and yet may present no appearance of syphilis on the part with which he has touched him. It explains also how the communication of syphilis by the mouth is comparatively so infrequent, although the custom of kissing is so very common even among men; for the infecting material takes effect only when it comes into contact with parts denuded of skin. Infection sometimes occurs through contact of the genital organs with the lips, through a disgusting practice (coitus viri cum labiis oris feminæ). No case has occurred to Dr. Sigmund in which the communication of syphilis could be referred to the sucking of the wound made in circumcision. Doubtful instances of this kind have been frequently related to him; but it has not been proved either that the children were syphilitic, or that the circumciser may not have become infected from some other source. On the other hand, the communication of syphilis to the finger, and thence to the lips, has been repeatedly noticed. A case of this kind, which Dr. Sigmund has observed lately, was that of a midwife who was supposed to have a whitlow on the right forefinger, but in whom the appearance of secondary symptoms (the genital organs and other parts of the body exhibiting no trace of primary disease) showed that the finger was affected with primary syphilis. The skin of the ungual phalanx around the nail was infiltrated, of a deep red colour, and peeled off; and there were bleeding fissures at the fold of the nail. The child under her care contracted a chancre at the right angle of the mouth, and

afterwards had constitutional syphilis. The midwife had nine weeks previously attended in confinement a woman who had papular syphilitic eruption.

Indirect infection most frequently occurs in persons who use instruments which may have been introduced between the lips of patients affected with syphilis of the mouth. Musicians who play on wind-instruments, and workmen who use blowpipes (as glassblowers) are most frequently affected in this way. A very interesting case of this kind occurred in two chemists, who were accustomed frequently to work in their laboratory with the blowpipe. One of them had secondary syphilis and desquamated papules on the mucous membranes of the lips, mouth, and tongue. One blowpipe was in common use with them. His colleague contracted a chancre on the upper lip, without showing any other primary symptom, and without having been in contact with any other source of infection. A similar case was also observed six years ago in a chemical laboratory, where two healthy persons were affected in rapid succession by the same diseased individual. Communication of syphilis through smoking takes place most frequently where pipes are more used than cigars. Dr. Sigmund has observed very few cases of this kind; and the idea entertained in 1850 and 1851, that the syphilitic affections of the lips then prevalent were due to the use of infected cigars, was proved incorrect by an accurate inquiry into the source of the disease in twenty-seven cases. Examination of the persons employed in cigar-manufactories—almost all women and girls—proves the comparatively great rarity of syphilis among them; and the exemplary cleanliness observed in the manufacture renders it almost incredible that the cigars can be charged with infecting matter.

The experience of Dr. Sigmund has afforded him an opportunity of observing an unusually great number of ways in which syphilis may be indirectly transmitted. Many of the data of such cases fall to the ground on unprejudiced consideration, and still more on continued observation of the alleged facts; and hence some deny altogether the mediate communication of syphilis. Unprejudiced and sufficiently extensive and accurate observation must, however, establish more certainly the extent and frequency of mediate transmission. If traces of primary infection be not found on the genital organs or anus, the mucous membrane of the lips, mouth, and fauces should be the more carefully examined. Whenever many men, collected together, use in their common occupation instruments by which infection may be conveyed, especially such as are applied to the mouth, careful attention should be directed to this source of infection; and the diagnosis and etiology should not be grounded merely on the history given by the patient, but on what has been observed by the medical man himself.

Dr. Sigmund believes it very probable that many cases of syphilis in children, which are attributed to other causes, are traceable both to suckling and to artificial feeding, as from a bottle. He refers to a case in which vaccination was blamed as the cause, although nothing abnormal was observed in the development of the vaccine pustule, and it was not until three months afterwards that a chancre appeared at the angle of the mouth. The wet-nurse and a servant in the house both had syphilis; the child was suckled by the first, and was artificially fed by both.

Primary syphilis has never been observed by Dr. Sigmund on the inner surface of the lips and cheeks, on the gums, or on the hard palate; while secondary disease is not unfrequently met with on these parts, especially on the lips, cheeks, and tongue; the same observation is applicable to the soft palate and tonsils. He has, however, observed cases in which limited circular infiltrations with epithelial desquamation were met with on the tongue, tonsils, and soft palate, without any syphilitic disease being discoverable on the lips, genital organs, or any other parts of the body. It was extremely probable that the infecting matter had been applied directly to the parts affected; and this view was confirmed by the observation of the further extension of the disease from these points.

It is most frequently in sucking children and in those fed artificially, that several infected spots are observed in the mucous membrane of the mouth. From the often imperfect observation made by those who have the care of such children, it is not strange that the first manifestations of the disease should be overlooked; since, as is frequently the case, they consist of simple infiltration with more or less desquamation and fissures in the mucous membrane, and gradually heal without proceeding further; giving place, however, to a host of constitutional symptoms, the primary source of which is often traced with great difficulty, frequently not at all.

The course of chancre on the lips does not differ essentially from that on the genital organs. Abrasions and local destruction of the integument are favoured by friction, bruising, biting, and by the action of the fluids of the mouth; if it be protected from these influences, the diseased part becomes gradually skinned over, and remains indurated for a longer or shorter time, according to the constitution and habits of the patient, and the treatment to which he is subjected. Even during the continuance of very moderate induration or thickening, new desquamations or destructions of tissue are very easily produced, as is observed also on the genital organs. The lymphatic glands in immediate connection with the diseased parts are at the same time infiltrated, and gradually those which are more distant; first the glands beneath the lower jaw, then the upper and posterior cervical glands, and then the axillary and remaining cervical glands; even the inguinal glands may become involved. Blotches are formed on the external skin; but, being usually of short duration, are not always observed; and accompanying and following these appear scattered papules, usually in small numbers, partly on the face and hairy scalp, partly on the neck, to which they gradually extend from the head. In a number of cases, however, all these appearances affecting the external skin are not produced, or are very scanty and limited in extent; while the palate and tonsils, both together or in succession, more frequently the latter, are the seat of sharply defined swelling, redness, and infiltration, which is soon followed by desquamation of the epithelium and follicular inflammation of the tonsils. The secretion from these, united with the mucopus from neighbouring parts, forms often a more or less copious yellowish discharge. All the patients do not suffer from dryness, heat, burning, or difficulty in swallowing, breathing, speaking, and coughing, which might be assumed to be the necessary results of such disease; on the other hand, changes in the voice, even amounting to its loss, are constantly observed; and in persons whose voice was known to Dr. Sigmund before they become diseased, he has observed this change to be produced in the slightest cases. The disease of the palate and tonsils appears first after the chancre of the lips has lasted some time, and simultaneously with the affection of the glands. That the infiltration of the cervical glands is not a mere consequence of the disease of the palate and fauces, is proved by the fact that in some patients these parts remain unaffected, and yet the glands become infiltrated. Certainly, the swelling is increased in several, as the anterior cervical and submaxillary lymphatic glands, as soon as the mucous membrane between the jaws and on the palatine arches and tonsils becomes affected.

The time within which secondary or constitutional symptoms are developed from the local or primary disease, is the same here as in the genital organs. Two or three weeks, seldom later, after the first appearance of

the disease on the lips, the glands become diseased; *i.e.*, from the sixth to the seventh week after the first inoculation, as the incubation-period of syphilis is of two or three weeks' duration. An apparent exception occurs when the contagion is imparted at the same time from a soft venereal ulcer (chancroid). An ulcer then generally appears in from twenty-four to forty-eight hours, the edges and base of which become indurated at a later period, even in the second or third week. Even here, also, the induration which occurs from the second to the third week, with the gradually developed affection of the lymphatic glands, is characteristic of syphilis; and we observe the same course followed as in "mixed" chancre of the genital organs, and the usual results of this. Acute inflammation of the nearest submaxillary lymphatic glands sometimes even appears, leading to suppuration, as in the soft contagious sore of the genital organs. This combination of the contagious ulcer with the infectious infiltration affords an opportunity for the extension of the disease to neighbouring parts, and gives rise to the production of numerous and extensive purulent discharges followed by slow cicatrisation; while the syphilitic infiltration (induration) once developed, does not allow the transmission of the disease in the same individual, even to the adjacent parts or to those with which it comes into contact.

The treatment of chancre of the lips differs from that of the genital organs only in the adaptation of the remedies to the special condition of the part. As local applications, Dr. Sigmund recommends corrosive sublimate (one part in eight of spirit); sulphate of copper and nitrate of silver (in substance, or one part in six of water). Solutions of caustics in glycerine are useful, on account of their not drying too rapidly. Calomel, corrosive sublimate, sulphate of copper, or white precipitate, may also be advantageously combined with diachylon plaster in cases where it has been the custom to use Vigo's plaster. In the application of the remedies, the surgeon should take care to carefully cleanse and dry the diseased spots, and to apply the remedy in very small quantity—in the fluid state, with a brush, is preferable; this is to be repeated daily until the spots are perfectly covered with skin. If considerable reaction follow the use of the stimulant applications, the surgeon must withhold them for thirty-six or forty-eight hours. If firmly adherent scabs be formed, an attempt should be made to remove them without injuring the skin, after first oiling them. If the scabs adhere firmly, and no fluid be concealed beneath them, the formation of skin goes on, and the scabs gradually scale off and leave the new epidermis, somewhat thinner and paler than that in the vicinity. The induration, however, remains for a long time; in some otherwise unhealthy persons, from six to nine months. The formation of new skin and the removal of the induration and of the secondary symptoms are hastened by the combination of local with general treatment. The object is soonest gained by inunction with blue ointment; other mercurial preparations, as corrosive sublimate, calomel, protiodide of mercury, etc., are more tedious in their action. The most thorough cleansing of the mouth and fauces is always necessary. From the commencement of the treatment, lotions and gargles, consisting of solution of chlorate of potassa, borax, alum, sulphate of zinc, tannin, etc., according to the individual state of the mucous membrane, must be frequently used. The teeth and gums must be kept clean by means of charcoal; and if the tonsils be swollen, some of the above-named solutions may be inhaled through the nose or injected on them by the mouth.

Deep-seated Abscess of the Neck opening into the Trachea: Tracheotomy: Recovery. A man, aged 47, exposed to irritating vapours in the manufacture of nitrate of iron, was seized on September 7th, 1862, with pain in the throat and hoarseness of voice. Two days afterwards, there was complete aphonia; leeches were applied. On the 13th, there was enormous swelling of the neck, with erysipelatous redness and pulsatile pains. Respiration was difficult; deglutition was impossible. Ointments of mercury and belladonna, and poultices, were applied. The patient, after a fresh application of leeches, spat up for three days thick sanguinolent extremely fœtid pus, in such quantities that he thought he vomited it. On September 20th, fluctuation was distinct externally, and was accompanied by a splashing sound produced by the mixture of air with the pus. The abscess burrowed from the larynx to the sternum. In order to prevent the pus from escaping behind this bone, a small counter-opening was made with a lancet; pus escaped with a hissing noise. A plug was introduced and renewed until October 1st, when the sinus was found to be healed. A cicatrix formed a *centimètre* above the cricoid cartilage. Iodine ointment was substituted for the mercurial, to relieve slight engorgement of the neck, which still remained. Soon, however, the purulent expectoration reappeared; and on December 25th, the patient was in a state of asphyxia. Without knowing the cause of this, M. Binaut of Lille, in whose care the patient was, plunged a bistoury into the trachea in the situation of the cicatrix. A sharp hissing sound was immediately heard, and a quantity of blood and air spurted out. The incision was enlarged by means of a probe-pointed bistoury, and a cannula was introduced into the trachea. The patient did not recover sensation until artificial respiration had been employed for some time. Expiration was much more impeded than inspiration; and the cause of this was discovered to be the presence of vegetations lying at the upper part of the wound in the trachea, and obstructing the instrument. Insufflation of alum (which had been used from the first) was persisted in for several days. At the end of March, the patient was able to keep the cannula closed during half an hour, without much inconvenience. It was finally removed on April 16th, and the wound cicatrised completely. Slight oppression alone remained. (*Bull. Méd. du Nord;* and *Bull. Génér. de Thér.*, 15 Sept. 1863.)

Expulsion of Uterine Polypus promoted by Ergot. M. Duclos has, in a case of fibrous polypus inclosed within the uterus, successfully aided its expulsion by means of ergot, taken in doses of two *grammes* (half a drachm) daily, for two days in succession. After an interval of eight days, five *grammes* were again given in two days. During the use of the medicine, the os uteri gradually dilated, the tumour descended more and more into the vagina, and the troublesome hæmorrhage which attended the polypus was arrested. The tumour, however, did not appear at the vulva until six weeks after the use of the ergot, when it was removed by ligature. M. Duclos believes that ergot is capable of affording great aid in the expulsion of uterine polypi; that it has at least the advantage of arresting the hæmorrhage, and thereby of giving time for the womb to unload itself of the foreign body. Sometimes, indeed, as happened in a case under the care of M. Dubreuilh, junior, this treatment fails even in dilating the os uteri; but this has probably been because the medicine has not been given at proper time. The period which seems best for the administration of the medicine is that at which nature seems ready to expel the polypus; that is to say, when the cervix uteri is partially open, thinned at its edges, and dilatable, as in the first stage of normal labour. (*Bull. Général de Thérap.*, 15 Sept. 1863.)

Influence of Ergotism on the Secretion of Milk. Dr. Poyet describes suppression of the lacteal secretion as a result of the use of bread containing a notable quantity of ergot. This he has noticed in six nursing women who were subjected to the conditions here re-

ferred to. A similar phenomenon has been at the same time observed independently by Dr. Comarmond of St. Galmier. The substitution of good bread for the ergoted bread was sufficient for the restoration of the suspended secretion. (*Bulletin Général de Thér.*, 15 Sept. 1863.)

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Oct. 15, 2 P.M.
SOUTH MIDLAND. [Autumnal.]	Infirmary, Northampton.	Thurs., Oct. 22, 1 P.M.

SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

THE Annual Meeting of the Shropshire Ethical Branch was held at the Lion Hotel, Shrewsbury, on Monday, September 21st, 1863, at 2 o'clock; JAMES BRATTON, Esq., in the Chair. Nineteen members and visitors were also present. Communications were received from numerous other practitioners, expressing their intention to have been present at the meeting and dinner, but were unavoidably prevented.

The following resolutions were passed unanimously.

Vote of Thanks. "That the cordial thanks of the meeting be given to the late President, Vice-Presidents, Council, Treasurer, and Honorary Secretary, for their valuable services during the past year."

Report of Treasurer. "That the Treasurer's Report for the past financial year, now submitted to the meeting (a copy of which was transmitted to each member on the 12th inst.), be approved and adopted."

Election of Officers. "That S. B. Gwynn, Esq., be elected President; J. R. Humphreys, Esq., and J. H. Sutton, Esq., Vice-Presidents; and the following gentlemen members of the Council for the ensuing year, in the place of those who retire by rotation and otherwise:—J. Y. Arrowsmith, Esq.; James Bratton, Esq.; P. Cartwright, Esq.; A. H. Godby, M.D.; and T. Haslehust, Esq."

Representation of Branch in General Council. "That, in accordance with the eighth general law of the British Medical Association, James Bratton, Esq. (President), P. Cartwright, Esq., S. B. Gwynn, Esq., and the Honorary Secretary, be the representatives of the Branch in the General Council for the ensuing year."

New Members. J. Edmunds, Esq., of Chirk; J. F. Eyeley, Esq., of Llanymynech; G. H. Griffiths, M.D., of Church Stretton; T. Morgan, Esq., of Madeley Market; J. M. Morris, Esq., of Market Drayton; and G. F. B. Willing, L.R.C.P.Ed.,—have been admitted members of the Branch during the current year.

Memorials to the Admiralty and War Office. "That the memorials now submitted to the meeting, praying for an inquiry into and redress of the grievances complained of by the army and naval medical officers, be signed by the President and Honorary Secretary on behalf of the Branch, and forwarded to the First Lord of the Admiralty and to the Secretary of State for War."

Papers and Cases. "That the thanks of the meeting be presented to the gentlemen who have kindly furnished papers and cases."

Vote of Thanks to the President. "That the best thanks of the members be given to the President, James Bratton, Esq., for the courtesy and ability with which he has conducted the business of the meeting, and for his uniform efforts to promote the honour and interests of the profession."

The Dinner. Nearly all the members present at the general meeting, with several others, reassembled at 3½ P.M., and partook of a sumptuous dinner, under the presidency of James Bratton, Esq. (who presented the members with a dozen of champagne); the vice-chair being filled by S. B. Gwynn, Esq., President-elect. During the evening, various vocal and instrumental solo and concerted pieces were executed by a select band of musicians from Birmingham and Liverpool, and which contributed greatly to the pleasures of the party; indeed, it was remarked by several old associates, that they had never attended a more agreeable and harmonious meeting.

EAST YORK AND NORTH LINCOLN BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held at the Yarborough Hotel, Grimsby, on Wednesday, September 23rd, 1863, at 2 o'clock P.M.; F. B. ANDERSON, Esq., of Hessle, President, in the Chair. Fifteen members and one visitor were present.

Papers. The following papers were read.

1. Preternatural Labour: Rare Presentation. By H. Munroe, M.D., F.L.S.
2. Case of Excision of the Superior Maxillary and Malar Bones. By R. Craven, Esq.
3. Case of Fatal Obstruction of the Bowels, in the person of our late lamented associate, Mr. Land. By H. Sandwith, M.D.
4. Cases of Lithotomy. By J. Dix, Esq.

Mr. Craven's paper was made very interesting by the presentation to the meeting of the patient upon whom the operation has been successfully performed. It has lately been the custom of the members of this Branch to illustrate their papers, when practicable, by the production of the patients themselves; which adds much to the interest of these meetings.

The papers read at the meeting will be forwarded for publication in the JOURNAL.

The reading and discussion of the foregoing papers, occupying so much time, prevented Sir H. Cooper, M.D., from delivering a paper on a Case of Pyelitis and Purulent Infection.

Dinner. At half-past four o'clock, an excellent dinner was provided. F. B. Anderson, Esq., the President, occupied the chair; and Dr. Daly, the President-elect, the vice-chair. A very pleasant evening was spent.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE first meeting for the session 1863-4 (seventh) was held at Rochester, on September 25th, 1863; Dr. ARMSTRONG, President of the Branch, in the Chair. There were present ten members and visitors.

New Member. Charles Strickland, Esq., Royal Navy, serving in H.M.S. *Wellesley* at Chatham, was elected (subject to approval at the annual meeting of the Branch).

Communications. Dr. FREDERICK J. BROWN read the following papers.

1. Treatment of Bronchitis after Measles.
2. Fatal Case of Varicella.
3. Case of Phthisis, masked in its last Stage by Præcordial Distress.
4. Interment of Still-born Children.

The discussion of the last paper was adjourned to the next meeting, in consequence of the importance of the

subject, and the attention bestowed upon it by the public at the present time.

After the usual thanks, the members and visitors adjourned to dinner.

Correspondence.

THE VACCINATION ACT.

SIR,—In your number for Saturday, September 20th, I read some remarks on the reasons alleged as the causes of the failure in the working of the now existing Compulsory Vaccination Act. As I have lately had considerable experience in the working of public vaccination under contract, perhaps a few words from me may not be out of place.

Without attempting to say a word on the subject of remuneration, which is the chief point urged in the remarks I read, I will simply state what seems to me to be *one* reason why it does not work as it should do. As far as I can learn from inquiry, there does not seem to be any one whose business it is to enforce the fine on those who do not obey the law. We have to return a duplicate certificate to the registrar of the district where the birth took place, and he has to mark them off in his books as successfully vaccinated. I think that if he or some one else were to be paid a certain sum per case for each instance of neglect of compliance with the Act which he informed against, and the fine were *really* enforced, we should arrive as nearly as possible at general vaccination; but, until the fine is enforced, vaccination cannot be general, as there is still a great prejudice against it with some people. I am, etc., M.R.C.S.

October 1863.

HEMIPLEGIA AND HEMICHOREA.

LETTER FROM STEPHEN MONCKTON, M.D.

SIR,—In the JOURNAL of September 19th is noticed a case of hemiplegia and hemichorea occurring in a child under M. Bouchut at the Children's Hospital at Paris. As such examples are not common, it may be worth noticing that an instance precisely similar is now to be found among the out-patients of the West Kent General Hospital. The patient is a boy, Joseph S., aged 9, of rather dirty and ill nourished appearance. Early in December 1861, he had a thrashing at school, which seems to have preyed upon his mind, and led to some little terror about going thither afterwards; still the shock was not great, and disappeared in a week or two. After being pretty well for a fortnight, he began on Christmas Eve to manifest choreic movements; these grew worse and worse, and were soon observed to affect the right side only. In ten or fourteen days, the involuntary twitchings became really vehement, and the voluntary power over the same side very much reduced; there being at the same time dulness of perception and oddness of manner, amounting now and then to delirium. He became an out-patient at the West Kent General Hospital, and was discharged cured in nine weeks—*i. e.*, early in March 1862. He remained well fifteen months, and was brought again on June 27th, 1863, with the same train of symptoms; decided chorea; decided, though not absolute, hemiplegia—both limited, as in the first attack, to the right side. Under cod-liver oil and steel wine, improvement took place; and he is now almost well enough to be discharged. There was no sign of rheumatism, scarlatina, or heart-disease, in connexion with either illness; and the absence of any organic brain-lesion may also be fairly inferred from the incomplete, unsteady, and recoverable character of the paralysis. I am, etc., STEPHEN MONCKTON.

Maidstone, September 26th, 1863.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Wednesday, Sept. 30th, 1863, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Fenwick, Samuel, M.D.St. Andrew's, 74, Harley Street
Fussell, Edward Francis, M.B.Aberdeen, Brighton
Moore, William Withers, M.D.Edin., Brighton
Mushet, William Boyd, M.B.Lond., Upper Norwood
Sutton, Henry Gowen, M.B.Lond., 5, Warlter's Bdgs., Holloway
Thorowgood, John Charles, M.D.Lond., 10, Finsbury Circus

At this meeting, the following gentlemen were reported by the Examiners to have passed the examination in the subjects of General Education:—

Barry, James W., Ramsgate
Edwards, Edward N., Chatham
Evans, David, Wrexham
Howard, James, Dukinfield
Hurlstone, M. de Galway, Great Russell Street, Bloomsbury
McDonald, John C. F., Denbigh Street, Belgrave Road
McGregor, Alex., Acton, Northwich
Parkinson, Edmund W., Red Hill
Parr, Charles, 16, Ashley Place, Westminster
Parr, George, 16, Ashley Place, Westminster
Rhodes, Charles J., Pontefract
Strange, Frederick W., Beenham, Reading
Ward, John L. W., Cardiff

APOTHECARIES' HALL. On September 24th, the following Licentiates were admitted:—

Richards, Joseph Peeke, Oxford Terrace, Islington
Serjeant, David Maurice, Queen's Road, St. John's Wood
Tuxford, Arthur, Boston, Lincolnshire
Vallance, Edmund, Brighton

At the same Court, the following passed the first examination:—

M'Mahon, James Thomas, Charing Cross Hospital

APPOINTMENTS.

HAMILTON, Robert, M.D., has been appointed Keeper of the Rolls, etc., of the Parish of St. Andrew's, Jamaica, by the Lieutenant-Governor.

OSMOND, Thomas, Esq., appointed Resident Surgeon to the Birmingham Lying-in Hospital.

ORTIZ, E. M., M.D., appointed Resident Surgeon to the Birmingham Lying-in Hospital.

POOR-LAW MEDICAL SERVICE.

ANDREW, T., L.R.C.P.Ed., to the parish of Kilmadock, Perthshire.

DEWAR, William H., Esq., to the parish of Kinross.

TEMPLE, Alfred R., Esq., to the Cambridge Union Workhouse.

BIRTH.

DAVIS. On September 20th, at St. George's, Wellington, Shropshire, the wife of W. Davis, Esq., of a son.

DEATH.

WEBB, Allan, M.D., Surgeon-Major Bengal Medical Staff, at Clevedon, aged 55, on September 15.

THE NEW HOSPITAL AT CHATHAM. In the new hospital at Chatham, a Lock Ward is to be established and sustained at the expense of the government.

OBSTETRICAL SOCIETY OF LONDON. The first meeting of the Society, after the recess, will take place next Wednesday, October 7th, at 53, Berners Street.

ANOTHER NEW METAL. Another new metal has been announced by MM. Reich and Richter. They call it Indium. It was found by them in some Freiberg arsenical ores.

THE "MISS NIGHTINGALE" NURSES. Twelve nurses are now in training at St. Thomas's Hospital. Of those who have already been educated there, twenty are employed in different hospitals in the country. A plan for training midwifery nurses at King's College is also in progress.

Death from Chloroform. On the 23rd ult., a man died under chloroform in the London Hospital; and on the following day another under the same influence in St. George's

The Channel Fleet. The medical officers of the fleet were entertained at dinner on the 29th ult., by Dr. Corrigan, the President of the Royal College of Physicians of Ireland.

Social Evils. In last week's mortuary returns for London, we find that four deaths were ascribed directly to intemperance, besides four to *delirium tremens*. Seven infants died of syphilitic disease.

Plymouth Dispensary. It is, we learn, the intention of Dr. Cookworthy to resign the office of physician to the above dispensary, which he has held for the long period of forty-eight years.

Foreigners in England. According to the census of 1851, there were in England 278 foreigners belonging to the medical profession, including 105 druggists under that description.

Civil Surgeons in Charge of Troops. An amended scale of rates and allowances to be paid to civil surgeons placed in charge of troops at foreign stations, or who may have embarked in charge of troops, has been issued by the Secretary of State for War, and all previous orders on the subject are cancelled.

Cottages for the Labouring Classes. Two prizes of £25 each have been placed in the hands of the Council of the Society for the Encouragement of Arts, by J. Bailey Denton, Esq., to which is added the society's medal, to be offered for the most approved designs for cottages, with three bedrooms in each, to be built singly or in pairs, at a cost not exceeding £100 each.

Pure Water from Lead Pipes. A patent has just been taken out in this country for a method of rendering lead pipes unacted upon by water. The discovery is due to Dr. Schwartz, of Breslau; he proposes to fill the pipes with a strong solution of an alkaline sulphide, and allow them to remain in contact for ten or fifteen minutes. A coating of insoluble sulphide of lead is thus formed, which is said to act as a perfect protecting varnish, preventing further action between the water and lead.

A Narrow Escape. A woman, supposed to be dead, was a few days back removed to the hospital of Blidah, in Algeria, for the purpose of being subjected to a *post mortem* examination, her disease having appeared inexplicable to the medical men who had attended her. As the surgeon was about to make use of the scalpel and commence her dissection, the supposed corpse uttered a loud shriek and sat up. She had been in a state of lethargy and awoke just in time. It will be remembered that Abbé Prevost, the author of *Manon Lescaut*, was less fortunate; it is known that he died from wounds inflicted by the dissecting knife under similar circumstances. (*Galignani.*)

Ozone. Mr. Burder of Clifton, referring to eight years' observations with Schönbein's test-papers made by him, says: "The fact to which I wish to call particular attention is that the wind which has recently come over the sea invariably or almost invariably brings with it a large amount of ozone, while a land breeze usually yields but a small amount. A strong W.S.W. wind here is always charged with a large quantity of ozone, while other winds are generally but slightly charged with it, and such as have passed directly over the city of Bristol are altogether free from it. A recent visit to Sidmouth, on the south coast, has quite confirmed my previous notions in regard to sea breezes and ozone, and I may mention that a correspondent in New Zealand to whom I sent some test papers, assures me that he has obtained similar results in that island. Facts such as these, now satisfactorily proved, may help us in our endeavours to ascertain the truth in reference to this rather mysterious agent, which, in addition to its interesting nature in a meteorological point of view, is generally considered as of importance in regard to health."

Drunkards. In the year ending at Michaelmas last, 94,908 persons—260 a day—were proceeded against before justices in England for drunkenness, or for being drunk and disorderly, and 63,255 of them were convicted. The great majority were only fined, but above 7,000 were committed to prison. The returns show a great increase over the previous year, for only 82,196 were then charged with drunkenness, and only 54,123 convicted. Of the persons thus charged in the last year 22,560 were females, and more than 10,000 women were convicted for being drunk. Coroners' inquests in the year 1862 found 211 verdicts of death from excessive drinking, 145 men and 66 women thus ended their days.

Charge against a Homœopathic Practitioner. This was a complaint brought by a medical man against the defendant, under the Medical Practitioners' Act, sec. 7, for assuming the style and title of "doctor," without being registered according to the Act, and therefore unlicensed to act as a medical man. Mr. Walsh stated the case. He produced the list of legally qualified medical men, issued by the Registrar-General. The defendant denied that he called himself a doctor. William Macfarlane deposed that he knew the defendant; he had a sign over the door with "Dr. Hickson" on it. He had a signboard in the hall of the Mechanics' Institute also with "Dr. Hickson" on it. The defendant's name did not appear in the medical register as issued by the Registrar General. The defendant's name did not appear in the supplementary list. Cross-examined: On your signboard I saw "Dr. Hickson." The word doctor was contracted. It would stand as contracted for other words. It would stand for debtor. The defendant having addressed the bench in defence, Mr. Clissold said the case was quite clear. There was an appeal, and the defendant could, if he chose, take an appeal to a higher court. If the defendant chose, the bench would increase the fine from what it intended it to be. The bench would fine the defendant one shilling. (*Ballarat Star.*)

A Female Impostor. A young woman, with three *aliases*, who had been remanded on a charge of imposture, was again brought up before the Wolverhampton borough magistrates. It was established that she was the daughter of respectable working people of Burslem, which place she left of her own accord. Since that time she has been travelling in many parts of England, and obtaining a livelihood, in prison and out, by bringing serious charges against imaginary men. At one time she is found on the roadside, lying dishonoured by three ruffians; at others she is in the streets at midnight, throwing off her clothing and preparing to drown herself; again she is taken up partially insensible in the street, also at midnight muttering about poison and seduction. On other occasions she is found in a fit at a railway station, and is removed to the hospital of the town; whilst on others, as in Wolverhampton, she alleges that she is about to become a mother, and that her seducer has forced her to take a poisonous drug. So successful were her poison tricks at Eccleshall, in Staffordshire, that two surgeons advised that her deposition should be taken, and two magistrates were called out of church on a Sunday, and were present whilst their clerk took her statement. She had been taken to the hopitals of Chester and Wolverhampton, and had become so notorious to the Cheshire constabulary, that they had her photographed, and labelled the likeness as that of an incorrigible impostor. The magistrates committed her for trial.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Mr. Hardey (Hull), "On Retroflexion of the Uterus"; Dr. Madge, "On Hydrocephalus"; Dr. Pritchard (Glasgow), "On Abortion procured by Tents of Sea Tangle".

POPULATION STATISTICS AND METEOROLOGY OF LONDON—SEPTEMBER 26, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys.. 948 / Girls.. 853	1801	1233
Average of corresponding weeks 1853-62		1880	1240

Barometer:
Highest (Sat.) 29.935; lowest (Tu.) 28.801; mean, 29.274.

Thermometer:
Highest in sun—extremes (Mon.) 101 degs.; (Th.) 34.5 degs.
In shade—highest (Sat.) 63.2 degs.; lowest (Wed.) 40.8 degs.
Mean—50.4 degrees; difference from mean of 43 yrs.—4.9 degs.
Range—during week, 22.4 degrees; mean daily, 17.2 degrees.

Mean humidity of air (*saturation*=100), 80.

Mean direction of wind, S.W.—Rain in inches, 0.97.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—In the advertisement of *Guy's Hospital Reports*, in last week's JOURNAL, the articles 3 and 4 should have been announced as "On the Stereoscope", and "On the Stereoscopic Test", instead of "Stethoscope", and "Stethoscopic Test".

THE MEDICAL COUNCIL *v.* APOTHECARIES' HALL.—We were wrong, it appears, in attributing to the Medical Council any credit for having introduced Mr. Lacey, of the Wyle Cop, to the profession. The whole glory of the thing belongs solely to Apothecaries' Hall, so they shall not be robbed of it. They examined the gentleman, found him a proper and fit individual, took his money, and admitted him a Licentiate of their Honourable Company. The Medical Council has, it appears, no option but to accept all presents of this kind legally forwarded to them from the Hall. Even if they had been most anxious in this case to refuse registration, they had legally no power to do so. The Medical Council is, unfortunately, continually discovering the limits of its legal powers—what it cannot do. It is to be hoped that when the lesson is complete, the profession will aid it in going to Parliament for more extended powers.

P. F.—We can give our correspondent no information as to the composition of "Greek fire". The use of any article of this kind at Charleston, as far as we can make out up to the present time, is purely mythical. Neither General Gilmore nor General Beauregard speak of this "Greek fire". We suspect it to be a newspaper invention, or a wishful expression of the Yankees' destructive tendency of mind at this moment.

REMEDY-PUFFING.—We believe that the puffing to which our correspondent alludes, going on within the profession, is as hurtful as the extra-professional puff. He objects to our using the term; but we consider that under the word may most fairly be brought any unreasonable laudation of a reputed remedy. The practice has always been a frequent one in past days, in and out of the profession; and is not uncommon at the present day within the profession. The best of motives or the very lowest of motives impel individuals of weak or of dishonest minds to the practice of this bad thing. And, unfortunately, whatever be the motive, whether ignorant goodness or lucre-seeking badness, the injury is in both cases alike, and falls heavily both upon the public at large, and upon the character of the profession itself.

BAD MEAT AND CARBUNCLE.—SIR: I send you the following police report; and would beg to ask you for the grounds upon which Dr. Gibbon founds his statement, that the eating of bad meat renders persons liable to "carbuncle", etc.

"*Clerkenwell.*—John Jarvis, a carrier of Northampton, was summoned before Mr. Barker for bringing two diseased carcases of beef to London, prepared for London food.

"Mr. Hopwood, solicitor to the Sanitary Board for the parish of St. Andrew's, attended for the prosecution.

"Dr. Septimus Gibbon, the Medical Officer of Health, proved that the meat was quite unfit for human food. Persons partaking of it would be liable to carbuncle and derangement of the system.

"Mr. Barker ordered the defendant to pay a fine of £10."

I am, etc., U. V.

[We really cannot answer our correspondent's question; but no doubt Dr. Gibbon has satisfactory grounds for his statement.]

ONLY A FLEA-BITE.—SIR: A common expression, when speaking of any trivial circumstance, is, "Oh, it's a mere flea-bite"; but many people who make use of that expression do not imagine what a frequent cause of annoyance and disgust these creatures cause to medical practitioners, and particularly to those whose practice calls them to the houses of pauper, dispensary, or club-patients.

My motive in writing this letter, is to ask my medical brethren, through your columns, if any of them know of any effectual precaution which can be taken, or any drug which can be used (not offensive to society or injurious to ourselves), so as to prevent the too kind attentions of these irritating creatures and their still more disgusting cousins.

I should feel grateful to any one whose experience could suggest to me some effectual preventive against such annoyances (for they are such, though trivial); we should then visit our poorer patients with the agreeable assurance of not bringing home any such uninvited company. I am, etc., M.R.C.S.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

THOMAS W. WILLIAMS, *General Secretary.*

Birmingham, September 1863.

COMMUNICATIONS have been received from:—Dr. LIONEL BEALE; Dr. DURRANT; Dr. ROBERTSON; F.R.C.S.; Mr. WILLIAM COPNEY; Mr. PADDON; Dr. T. W. BOTT; M.R.C.S.E.; Mr. SYDNEY JONES; Mr. J. SPROULE; M.R.C.S.; Mr. CRAIG; Dr. FREDERICK J. BROWN; Dr. FOX; Dr. STYRAP; Dr. S. MONCKTON; Dr. HENRY MUNROE; Dr. MARLEY; Mr. C. J. EVANS; Mr. JOHN C. WORDSWORTH; and Dr. GRAILY HEWITT.

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ON "DEFICIENCY OF VITAL POWER" IN DISEASE, AND ON "SUPPORT":

WITH OBSERVATIONS UPON THE ACTION OF ALCOHOL IN SERIOUS CASES OF ACUTE DISEASE.

By Lionel S. Beale, M.B., F.R.S., Physician to King's College Hospital.

From the earliest ages, those who have devoted themselves to the study of disease have invariably attributed the highest importance to the condition of the blood. To a bad state of this fluid many ailments were attributed. To alter this state was the main object of the treatment to which the patient was subjected. Modern research has not failed to confirm the opinion so long and so generally entertained with reference to the high importance of a healthy state of blood; and modern practice is eminently conservative of this fluid. The very principles upon which the removal of large quantities of blood was advocated and carried out at various periods in the history of medicine have been overthrown, and the theories of inflammation which are even yet maintained by some, have been completely destroyed by observation and experiment. The blood, which used to be drawn for the purpose of reducing an excess of action, is now considered, in cases of the very same nature, to be absolutely necessary to the recovery of the patient; and it has been proved most conclusively—1. That morbid changes, which were supposed to be checked by bleeding, really continue in spite of it; and 2. That by violent bleeding the general condition of the patient is rendered much more serious. Formerly, a patient was bled to *cut short the disease;* now, he is bled only for the purpose of relieving the tension of over-distended capillaries.

The blood has been, and still continues to be, regarded as a living fluid which carries life to all the tissues. Vital power is said to be reduced by abstraction of blood. Vital power is said to be restored or "renewed" by those remedies which increase the quantity of blood or improve its quality.

That the blood is the medium by which nutrient matter is distributed to all the tissues of the body, is beyond question. That its qualities are altered in disease, and that in many instances the blood is as it were the starting-point of certain morbid changes, is undoubtedly true. That remedial measures adopted with the view of altering the character and modifying the changes taking place in the blood in disease, are really efforts pursued in the right direction, seems to accord with the results of observation and experiment. But that the blood transmits *vital power* to the body generally, to the tissues of the body individually—that vital power is diminished by its abstraction, or increased by any alteration occurring in the blood—seems to me utterly untenable, and there is no reason whatever for assuming that what we call *vital power* can be carried from one place to another by any fluid or solid, and distributed to structures in a distant part of the body. Nor is it probable that this wonderful vital power can be added to or taken from any tissue at all. The blood may be called a *vital fluid*, but the term is not correct; for the soluble albuminous constituents, and probably even the red blood-corpuscles, are as inanimate while circulating in the vessels of the living body as they are after the blood has been withdrawn from the vessels.* And it would be as unreasonable to assert that the simplest vegetable and animal organisms derive their nutriment from *living matter* in the medium that surrounds them, as to consider every fluid and every particle of matter which contributes to the nutrition of a living tissue in a state of active vitality.

On the contrary, every kind of pabulum is inanimate. Everything which contributes to nutrition is lifeless. Living matter never lives upon *living matter*. The pabulum of the tissues, especially in the case of man and the higher animals, results, no doubt, entirely from the death of living matter; but, as pabulum, it is inanimate. The blood, then, is not a living fluid. Although it contains masses of living matter (white corpuscles), it contains many corpuscles which are not living (fully formed red corpuscles). Neither is the fluid part of the blood living. Nor can blood, lymph, or chyle, or cod-liver oil, or alcohol, or any nutritive fluid whatever, be correctly spoken of as *life-giving*. And it is most important that I should express myself clearly upon this point; for undoubtedly many in their writings, perhaps unconsciously, exhibit a leaning towards the notion that certain lifeless organic or inorganic particles may come together under certain conditions, and afterwards exhibit *vital properties*, without any matter actually living being present. Now the evidence is most conclusive that particles of living matter exist smaller than any that we can see by the aid of the highest powers we possess—that is, three thousand diameters, or a power which would make one inch appear to occupy a length of 250 feet; and yet we have reason to believe that such minute particles have sprung from preëxisting living matter, because, when they grow large enough to be seen by us, they assume the parental characters; and, when one of the visible particles is divided into smaller portions, each portion grows and may extend itself, as from a centre, infinitely. Each separate particle increases, not by particles already existing being applied to it or coalescing with it, but by the passage of soluble matters into its very substance, and their conversion into matter of the same kind. I have brought forward many arguments which seem to me to amount to proof that "*every living particle comes from a preëxisting living particle*"; and I am convinced that it is as impossible for the smallest living particle to arise in these days in any other way than this, as it is for one of the higher forms of life to be produced spontaneously. Nothing gives life but that which is living; and it is as impossible for a living cell to spring up in a lifeless exudation, as it is for a living organism to arise in a chemical solution. Spontaneous generation in any form must be utterly abandoned, and we are now fully justified in condemning it absolutely. Neither even do certain conditions call forth "*vital energy*", or act as "*vital stimuli*", or increase vital power which already exists. Heat, various external conditions, and excitants or irritants, as they are termed, act simply by diminishing to some extent the restrictions under which life is ordinarily carried on.† Thus pabulum comes more readily and more quickly into contact with matter that already lives.

* The matter of which each red blood-corpuscle is composed, tends to assume the crystalline form when its movement ceases. This is well seen in Guinea-pig's blood, where each red corpuscle becomes a tetrahedral crystal. This fact is conclusive against the notion that red blood-corpuscles are in an active state of vitality. Living matter does not crystallise.

† This question of stimuli, excitants, and irritants, is discussed in a short paper published in the *Lancet* for December 6th, 1862.

The blood does not transmit life to the tissues; for every tissue contains in its substance matter in a state of active vitality. The inanimate pabulum merely passes from the vessels and permeates the lifeless tissue. It comes into contact with the living matter; and certain of its constituents acquire at once vital properties, powers, or endowments. There is no reason to suppose that living matter (for instance, the so-called "nucleus" of a cell) exerts any influence upon matter at a distance from it; but it appears probable that in all cases the changes which occur in nutrition are simply these:—

1. The inanimate pabulum permeates the inanimate tissue (cell-wall, intercellular substance), and comes into contact with the living or germinal matter (usually termed "nucleus").

2. Certain of the inanimate constituents become living or germinal matter.

3. Particles of the living or germinal matter after a time undergo change—in fact die, and become gradually converted into inanimate "cell-contents", "cell-wall", or "intercellular substance".

4. These inanimate *formed substances* may accumulate and undergo condensation and other physical and chemical changes, or they may be resolved by the action of water, oxygen, and the like, into new substances as fast as they are produced. The substances produced, being carried off, constitute a secretion.

See diagrams illustrating these conclusions.

I have endeavoured to show that every tissue and every living organism is composed of elementary parts (cells); and that each of these consists of matter that is living and matter that was once alive—of germinal matter and formed material: and that vital changes go on in the first, while physical and chemical changes alone proceed in the last. For instance, of a cuticular cell, the so-called "nucleus" alone lives, while the hard cuticular matter upon which the properties of the cell depend is not alive; but this was *once* in the condition of the germinal matter.

I have also advanced many facts which justify this simple inference: that the rate at which this living matter grows, and is reproduced, is determined solely by the facility of access of the proper pabulum; so that, if nutrient matter comes into contact with the living matter readily, the living matter increases rapidly. In short, the more it is fed, the faster it grows. The *power* of growth of living matter remains the same, but growth always occurs under certain restrictions. The restrictions or impediments to the access of nutrient matter vary in different cells, and in the same cell at different periods of its existence.

Now we can tell at once, by the characters of a cell, whether it grows quickly or slowly. Wherever the outer part of the cell (formed material) is firm and hard, and not very permeable to nutrient matters, the growth must have been slow. Where the envelope is very thin, and where there is no envelope or cell-wall at all, the greatest facilities for rapid growth exist. For example, contrast the pus-corpuscle, consisting almost entirely of germinal matter, with a fully formed cuticular cell, in which the germinal matter is surrounded by a very thick layer of slightly permeable cuticular substance. (See figures.) The restrictions to the growth of the last are far greater than the restrictions to the growth of the first.

Anything which renders the wall of such cuticular cell more permeable will facilitate the access of pabulum, and the germinal matter will increase more rapidly; so that rapidly-growing cells may come from slowly-growing cells. (See figures.) Pus may result from the rapid growth of the germinal matter of epithelium, fibrous tissue, nerve, or other tissue. Cancer grows faster than healthy epithelium or other normal tissue, but not so fast as pus; hence epithelial cancer is less permanent as a tissue than the normal epithelium, but more lasting than pus. In the normal state, the living matter of the cuticular cells, which gradually advance layer after layer towards the surface, dies very slowly and regularly; and the quantity of nutrient matter taken up becomes less and less as the cell advances in age. In epithelial cancer, the cuticular cells grow more quickly than the normal cells, because the outer part is softer and more permeable to nutrient pabulum.

In the formation of pus from cuticular epithelium, the pabulum comes into contact with the living matter; the corpuscles multiply, and at last so rapidly that there is not time for gradual conversion of the living or germinal matter into cuticular substance. The living cells, after accumulating for a time, escape from the surface, and are killed; or, the supply of nutrient matter ceasing, they die and become liquefied. If upon the surface the matter resulting forms a scab, beneath which the cells grow less rapidly, and time is allowed for the gradual formation of the external cell-wall or cuticular matter; if, in the substance of a tissue, the cells grow at the expense of the tissue, and increase in the cavity or space thus formed (abscess), at last they will make their way through that part where resistance is the least; or, if deprived of pabulum, they may die, and the products resulting may be almost entirely absorbed, with the exception of a little fatty, saline, and insoluble albuminous matters, which remain, and form a thick matter of cheesy consistence, which undergoes very slow change. It will be said: "True; but pus and the cells of lymph and cancer are not *lasting structures*, and therefore do not evince the 'high state of vitality' characteristic of normal tissues." But, upon this view, *persistence*, *slow* growth, *slow* change, and the conversion of very *little nutrient matter* into living matter, are considered to be indications of a "high state of vitality". If we are to regard these characters, which exist in many healthy tissues, as evidence of an increased or high degree of vitality, as compared with pus, cancer, and other active and rapidly growing cells, then an old dry cell of cuticle is in a more vital state than a young and actively growing one; a dry hair is more vital than the soft cells of an intestinal villus; the hard dry cells of a cocoa-nut shell, or a walnut shell, or a peach stone, which have ceased to change, exhibit "vitality" in a more remarkable degree than the rapidly growing cells of a young leaf, than the rapidly multiplying cells of many fungi, and the soft moist cells of all growing and changing vegetable tissues. If this view be true, an old tissue is in a higher state of vitality than a young one. Still following out the same line of argument, we are forced to admit that that which has ceased to grow and has ceased to change—that which cannot form, or change, or modify—that which has no inherent power of motion, conversion, or formation—that which is, in short, *dead*—exhibits a higher degree of "vital activity" than the soft, ever-changing matter which possesses all these wonderful powers—which, in short, lives.

If, on the other hand, rapid growth—the appropriation of a large quantity of nutrient matter—rapid change—rapid increase of bulk—are evidences of a *high degree of vitality*, then a pus-cell and a cancer-cell, so far from manifesting a deficiency of vital power, exhibit unmistakable evidence of vital activity, and agree in this with all young tissues, and with the rapidly growing "cells" of the adult organism. If "increased vital activity" means anything, it means that, in a given time, a greater quantity of inanimate pabulum becomes living matter; and it follows that pus and cancer and the granular cells, growing so fast in many morbid conditions, manifest *increased*, not *deficient vitality* as compared with epithelium. But it is more correct to say that, in the former, "the restrictions under which growth occurs are greatly diminished, as compared with the latter," than to speak of *varying degrees* or *excess* or *deficiency* of vital power.

In health, there are tissues exhibiting every degree of slow and rapid change (vital activity), from the scarcely altering enamel and dentine to the so-called cells (masses of germinal matter) which are found in such numbers in every villus, many of which pass through perhaps every phase of existence during the absorption of a single meal.

We very often find that tissues which grow very slowly in the normal state, in disease exhibit remarkably increased activity; and in this *more rapid growth* and change alone, does the morbid, oftentimes differ from the normal state.

It will be observed that, in these conclusions, I differ materially, and in fundamental principles, from the views generally entertained. It is impossible, in a communication like the present, to advance all the arguments in favour of the inferences deduced; and to attempt this would be making this paper more tedious than it must of necessity be. But, unquestionably, good practice has been so frequently supported by thoroughly unsound reasoning, that it sometimes happens that, when the argument has been proved to be false, the practice is abandoned as useless; and thus from period to period we vacillate almost from one extreme to the other, and from year to year we work in recurring circles. Earnest men become sceptics; and, in the course of years, most valuable practical conclusions, arrived at from actual experience, are forgotten, because the theory upon which these conclusions were based has been proved to be unsound. May we not retain in practice what in the depleting process has been proved to be true, although the principles upon which depletion was carried to extremes have been proved to be erroneous? Why may we not retain what is good in the system of support, although it may be true that stimulants neither support life, nor give life, nor nourish tissues, nor supply the place of food, nor directly affect the disintegration of tissues?

By violent bleeding, the blood that remains becomes weaker, and the watery parts necessarily permeate tissues more readily. Thus rapidly growing cells, such as exist in the air-cells in pneumonia, grow still faster, because they are supplied more freely with nutrient pabulum; while alcohol in several ways probably interferes with the growth of these cells, and thus tends to put a stop to the "inflammatory process". The results of practice support this theory: that in low conditions of the system, and by profuse bleedings, the growth of adventitious products is *accelerated;* while it is retarded by alcohol, acids, and some other substances.

Of all the dogmas ever insisted upon in the history of medicine, it is doubtful if any one has received more general support in one form or another, or has been adopted more generally, than the dogma that, in some way or other, disease is a *deficiency of action;* and that support is required to counteract this tendency to depression of the vital powers. Something extra must be added to make up for the loss occasioned by the diseased state. And, although we see structures in disease growing so fast that difference in bulk is perceptible from day to day, still we cry "*deficiency of action*", "*defective vital power*", "*diminished vitality*". The surgeon "*stimulates*" the wound with caustics, and "increases" the "*vitality*" of the surface just below; the physician pours in brandy, and "*increases the vitality*" of the affected tissues; yet, after both applications, many cells that were alive are undoubtedly *killed*, and those that escape death live and *grow more slowly than before.* And this *diminished rate of growth and life* is just what is required—is the very condition which approaches to the healthy state. But is it not, as compared with the morbid state, the very reverse of "*increased vitality*"?

Now every one would argue that there was deficiency of vital power in a case of low pneumonia; and yet what evidence is there of such deficiency? It is true, the patient is weak and cannot move; he may be delirious; all his muscles may be relaxed; his heart's action may be weak; and he may be dying of exhaustion; but it has not been shown that weakness, or inability to move, or delirium, or relaxed muscles, or weak heart's action, or what we call "exhaustion", are due to depression of *vital power.* It is very well to say that in this particular morbid change there is "excess of action", and in that one there is deficiency, or in all disease there is deficiency of action; in this condition, "the vital powers are depressed, and we must give support"; and in another, "the vital powers are too active, and must be restrained;"—but these are, after all, merely dogmatic assertions, which have not been supported by observed facts.

We do not know what vital power is, although we are talking of it constantly as if it varied in quantity and intensity, and we were capable of adding to or taking from it. It is, therefore, much better to say that a patient is low or weak, than to say that he is suffering from a depressed state of the *vital powers.* The former asserts a fact; the latter enunciates a theory. We talk of excess of action, and diminished action, before we have agreed as to what we mean by the terms.

"Vital actions" and "physical actions" are, without doubt, constantly occurring in living bodies; and yet our knowledge of these two classes of actions is so very imperfect, that a very large number of philosophers in the present day maintain that the changes occurring in living beings do not differ in their essential nature from changes taking place in inorganic matter. But we, who are daily watching the changes occurring in the highest of living beings in health and in disease, feel quite convinced of the existence and activity of some power different in its essential nature from ordinary force. Life is not mere "direction" or "guidance"; nor will the view that the elements of matter arrange themselves in certain forms and compounds by accident, or according to the conditions under which they are placed, explain the phenomena. We feel compelled to acknowledge a peculiar power in living matter distinct from any forces in the inorganic world. Of this power we see the results; and we are content to call it *vital power*, in contradistinction to the purely chemical and physical actions which also occur in living beings.

In cases of exhausting disease, we all talk very freely in these days of the importance of support; and many physicians would regard alcohol as the most valuable of all kinds of support given. Yet in these very cases the patient, in spite of all the sustenance, loses many pounds in weight in the course of a few weeks or even days; nor is it possible by any known means to prevent this result. And it is a fact that, in many of the worst cases I have seen, although the stomach seemed to do its work perfectly, and the quantities of "nutrient matter" and alcohol consumed by the patient were very great, the emaciation was extreme. The patient, under these circumstances, lives long enough to become extremely emaciated. Such emaciation would not exist if the patient were left to nature, because death would occur before matters had proceeded to this extremity. Now, in many of these cases, I feel confident that the stimulant is really the agent which has kept the patient alive; for it sometimes happens that patients will not take any form of nutriment; and not unfrequently the stomach will bear whiskey or brandy, and in large quantity, where it instantly rejects beef-tea, milk, and other "nutritious substances". From what I have observed, I think it possible that a patient suffering from low pneumonia, or from a very severe form of continued fever, or acute rheumatism complicated with pericarditis and pneumonia, might be kept alive until the disease subsided by alcohol alone. The alcohol does not nourish the tissues; and it is very questionable if it diminishes the waste of the tissues in these cases, for in some the waste is indeed extreme. But the patient lives; and we

account for the result by concluding at once that the alcohol must be a "*supporter of life*". But alcohol, administered in the very same quantities in the healthy state, might destroy life.

There is not a more important question in medicine than the action of alcohol in disease; for, while it has been conclusively proved that it is not a food and does not directly nourish the tissues, there cannot be the slightest difference of opinion among practical men as to its value as a remedy. We differ widely in our views as to the extent to which alcoholic treatment should be carried in a given case, but every one agrees as to its importance. This question of quantity will be considered in the sequel.

I propose now to discuss the mode of action of the alcohol in these cases of low disease. It seems to me impossible to ignore the chemical action of this substance. It is not possible to conceive that the large quantity of alcohol taken by many of the patients does not produce some change in the permeating properties of the fluid part of the blood, or some chemical alteration upon the soluble constituents belonging to the albuminous class, besides exerting a local influence upon soft and rapidly growing cells. It probably produces other changes besides these. Undoubtedly, in the normal state, alcohol affects the nervous system; but, in extreme cases of low disease, the nervous phenomena appear precisely as in health; and, in many cases, so little is the ordinary action of alcohol manifested, that a patient may be taking an ounce of brandy every hour, and a bystander would not believe he was taking alcohol at all. That alcohol will produce delirium in health, and remove or prevent the occurrence of delirium in an exhausted state of the system, is perfectly true; but the fact is not to be fully explained in the present imperfect state of our knowledge of the action of nerve-centres and nerves.

Before I consider the action of alcohol when introduced into the blood through the stomach, it is important to refer to its action upon morbid changes taking place upon the surface of the body, and its influence upon the vessels of the part; for I feel sure that the mode of action is essentially the same in both cases.

If there be a little abrasion of the cuticle, around which the skin looks red and angry, the neighbouring tissue being hot, swollen, and painful, the capillaries so distended as to produce bright redness, it will be found that the occasional application of a drop of alcohol to the affected part will in the course of a single hour produce great changes. In and around such a spot, it is quite clear we have, not diminished, but increased action. Numerous small granular "cells" are multiplying rapidly in the deep layers of the cuticle. The "nuclei" of the nerves, capillaries, and connective tissue of the cutis, are larger than they were in the healthy state; the living matter is growing, dividing and subdividing into smaller portions, which will grow and again divide and subdivide. In the capillaries, and just external to them, are numerous white blood-corpuscles, varying in size from small points to the ordinary dimensions. These, like the living matter of the tissue, are rapidly increasing in number. The capillaries are gorged with blood, and their thin walls stretched to the utmost.

Now what happens when a drop of alcohol is applied to such a sore? Momentary pain, followed in the course of a few minutes by great relief, or complete cessation of pain, and diminished vascularity.

But how does the alcohol bring about such changes? If alcohol be added to any serous fluid, the albumen is precipitated. If delicately granular cells are placed in alcohol, and afterwards examined under the microscope, every one knows that they will appear shrunken, and will have altered much in form; and they would resist disintegration by pressure to a greater extent than they did before. The surface of the wound is covered with a dry crust produced by the hardening effects of the alcohol; and some of the rapidly growing cells are quite destroyed, while others become surrounded with an envelope of hardened matter, which prevents the possibility of their absorbing nutriment and giving rise to new cells so rapidly as before. Not only so, but the permeating power of the nutrient fluid itself is diminished by the tendency of the alcohol to coagulate it. The most superficial of the cells, composed entirely of germinal matter, would be destroyed by alcohol, though not so quickly, perhaps, as by the actual cautery, nitrate of silver, sesquichloride of iron, sulphate of copper, etc.

Next comes a more difficult question: How does the alcohol cause the vessels of the inflamed part to contract, and permit the flow of less blood through them? If you press upon the distended vessels of an inflamed part, as is well known, the blood is driven out of them, and the skin becomes quite pale; but the moment the pressure is withdrawn, the redness recurs, and exhibits precisely the same tint as before. From this it is clear, not only that the capillaries are distended, but that the calibre of the small arteries through which the blood is distributed to them is much larger than in the normal condition. Besides this, the simple experiment proves that the vessels are maintained for a long time of a given calibre. Such a state of things can only result from the influence of nerves which govern the calibre of the small arteries; and thus the quantity of blood permitted to flow through them in a given time is regulated and varied from time to time. The mechanism is such that a small artery is made to assume a different calibre, although this may be momentarily altered by artificial means. I have shown, contrary to the statement of Kölliker, that *all* the small arteries are abundantly supplied with nerves, and that nerves also ramify in the tissues external to the capillaries.

These are the *two* kinds of peripheral nerve-fibres which take part in regulating the supply of nutrient pabulum to every point of every tissue in the body.

1. The nerve-fibres distributed to the coats of small arteries and veins which ramify amongst the muscular fibres, and are *efferent* or *motor*.

2. The nerve-fibres distributed external to the capillaries, and in tissues which are altogether devoid of capillaries, are the *afferent* or *excitor* branches connected with the centres from which the vaso-motor nerves arise.* (See specimens of fibrous tissue, cornea, palate, and skin of frog.)

Now, any alteration taking place in the nutrition of the tissue-elements external to the capillaries must of necessity influence these excitor or afferent branches. The fibres may be subjected to increased or diminished pressure, to the influence of an increased or diminished quantity of fluid; and their numerous nuclei will necessarily be exposed to the same conditions as the nuclei of adjacent tissues. In the inflamed tissue, these "nuclei", like the nuclei of the tissues around, would receive more pabulum, would grow faster; and where growth and increase of living matter are most active, the particular action or function of the tissue is least manifested, because the function results from changes in matter which has been already *formed*. Hence it is not when nerves are *growing* that we find nervous action remarkably developed, but when they *have grown*. So here the nerves are less active than in the normal state, and we have dilatation of the vessels. A farther development of the same changes will lead to paralysis, and ultimately to complete destruction of the normal tissue.

Let me now consider what is the condition of things in pneumonia. The air-cells of the lung are filled with multitudes of living actively growing cells, which absorb

* These branches have been demonstrated by me in many tissues, and form a new system of nerve-fibres, not previously described. (See *Archives*, No. XIII.)

a quantity of nutrient pabulum; and probably, as these cells increase in number, an increased proportion of pabulum is diverted from all parts of the body to the focus of inflammation. We *know* that a determination of common salt takes place to this spot; and it is only reasonable to infer that other matters are absorbed here, instead of being devoted to the ordinary changes occurring in the normal state. (*Med.-Chir. Trans.*, vol. xxxv, 1853.)

I have already spoken of the pabulum which in a fluid state transudes through the walls of the blood-vessels, and feeds the cells which lie just outside them. Not only are the capillaries more readily permeated by reason of the stretching and consequent thinning of their walls, but the fluid in the blood-vessels possesses a greater tendency to permeate animal membrane; so that it would seem but reasonable to consider if anything can be done to diminish this by altering the character of the fluid itself.

Many of the so-called tonics have the property of coagulating albuminous fluids and solutions of extractive matters. Preparations containing tannin, the mineral salts, such as the sulphate and sesquichloride of iron, nitric and hydrochloric acids, and a host of other remedies that will occur to every one, possess this property, and render solutions containing these and allied substances less permeable, perhaps by increasing their viscidity. The favourable action of such remedies is probably due to their direct influence on the fluid constituents of the blood. They, no doubt, also diminish the rate at which blood-corpuscles are disintegrated, and at the same time they tend to render the walls of the blood-vessels less permeable to fluids.

But, of all remedies, I believe alcohol acts most rapidly in this way, and in these particular cases most efficiently. The properties alcohol possesses of hardening animal tissues, and of coagulating albuminous fluids, are well known; and these properties must not be forgotten when its effects in the animal body are discussed. Of course, when absorbed by the blood, it does not actually coagulate the albuminous matters; but it probably renders them less fluid, and reduces their permeating property. Alcohol interferes with the disintegration of blood-corpuscles; and in cases where this is going on very rapidly, and where fluid is passing through the walls of the vessels in considerable quantity, in consequence of the walls themselves being stretched and too readily permeable to fluids, alcohol is likely to be of service; but where these changes are occurring very rapidly, and the patient's strength is fast ebbing, it may save life.

We may, therefore, explain the beneficial action of alcohol without assuming that it is a food, or contributes directly to the process of nutrition. Nay, though it merely filters through the blood-vessels, and leaves the body by different emunctories as fast as it is introduced, we can account reasonably for the good effects we observe.

It might be asked, upon the theory I have ventured to propound: How is it that the alcohol acts upon the morbid, and not upon the healthy structure? But the question has, in fact, been answered already. The healthy cells, being surrounded by a thick protective covering (cell-wall), are not affected by it; while the morbid cells, growing so fast that time is not allowed for the production of a hard external envelope, undergo the changes already described, and are caused to increase more slowly, while many are destroyed. So that, in the growing cells in the air-cells of a hepatised lung, there is *no deficiency* of *vital* power; and the remedies which act favourably really seem to act, not by *increasing vital power*, but by diminishing *the rate at which vital changes are proceeding*—in fact, by causing cells which were living *too fast* to live *more slowly*, and by producing *the death* of many.

This view of the action of alcohol accords with many broad facts familiar to all. It accounts for the shrivelling of the hepatic cells, the shrinking of the secreting structure, and the increased hardness and condensation of the entire liver, which result from the continual bathing of the gland-structure by blood loaded with alcohol. It accords with the gradual shrinking and condensation of tissues which occur in persons who have long been accustomed to excess. The tendency to increased formation of adipose tissue which occurs in persons who live generously, and seems to be augmented by alcohol, may be explained upon the same view, and the stunting in growth which follows its exhibition to young animals is readily accounted for.

It is most important, but in some cases very difficult, to determine the exact amount of stimulant that ought to be given; but even here we have very positive data for our guidance; and the general inference is, that a little more than the exact quantity absolutely necessary does no harm. I need scarcely say that in slight cases of fever, pneumonia, etc., no stimulant whatever is required; and that I am now discussing the action of alcohol in *very severe cases of disease* only.

1. In what appeared hopeless cases, as much brandy as the patient could be made to swallow (an ounce and a half to two ounces in an hour) has been given for several hours in succession, and then as much as thirty ounces a day for several days, not only without producing the slightest intoxication, vomiting, or headache, but the treatment has been followed by recovery.

2. I would adduce the fact that a man not accustomed to drink, when suffering from acute rheumatism, complicated with pericarditis with effusion, pneumonia at the base of one lung, and pleurisy on the opposite side, has taken twenty-four ounces of brandy a day for eleven days; the tongue being moist and the mind calm during the whole time. While under this treatment, inflammatory products were absorbed, and the general state of the patient much improved.

3. I have been compelled to give a very weak child, weighing less than four stone, twelve ounces of brandy a day for ten days, while suffering from acute rheumatism with pericarditis and effusion. This quantity did not produce the slightest tendency to intoxication, or exert other than a favourable effect upon the disease.

4. I would state that, among the general conclusions I have arrived at after carefully watching more than one hundred serious cases of acute disease treated with large quantities of stimulants, are the following:—*That intoxication is not produced,—that delirium, if it have occurred, ceases, or is prevented from occurring at all in the course of the case,—that headache is not occasioned, —that the action of the skin, kidneys, and bowels goes on freely,—that the tongue remains moist, or, if dry and often brown, often becomes moist,—that the pulse falls in frequency and increases in power,—that respiration is not impeded, but that, where even one entire lung is hepatised, the distress of breathing is not increased; and it appears that the respiratory changes go on under the disadvantageous circumstances present as well as if no alcohol were given.*

The conclusion from all this is, most certainly, that alcohol does not do harm in acute inflammation; that it does not produce intoxication in persons suffering from exhausting diseases; and that large quantities (from twelve to thirty ounces) may be given in cases which appear very unlikely to recover; and the conviction is forced upon the observer that, in desperate cases, these large quantities of alcohol are directly instrumental in saving life, not by *exciting or stimulating to increased action, but by moderating actions already excessive.*

In this communication I have adduced arguments in favour of the following propositions.

1. That each tissue contains *living matter*; and that

this living matter is nourished by inanimate pabulum formed in the blood.

2. That, therefore, the blood neither *gives life* to the tissues, nor *increases* nor *diminishes* the *vital powers* of the organism.

3. That remedies and foods of various kinds may modify, directly or indirectly, the composition of the pabulum distributed to the different tissues, or may influence the rate of growth of living matter; but neither foods nor remedies have powers of *giving* or *renewing* life.

4. *Tissue itself is not living*, and *cannot produce tissue* or *germinal matter;* but germinal or living matter (1) converts inanimate pabulum into living matter like itself, and (2) becomes itself resolved into certain formed matters having definite characters and composition.

5. All living matter has the power of completely changing pabulum which comes into contact with it, and of communicating to certain constituents of this inanimate pabulum its own wonderful powers. The elements of the living matter which thus originates arrange themselves, or are arranged, in obedience to some peculiar force or power (vital); so that when at length they gradually cease to manifest these active (vital) powers, or die, definite substances result, the properties, form, and composition of which are totally different from the pabulum and from the living matter, although they contain the very same.

6. The rate of growth of living or germinal matter varies according to the freedom of access of the pabulum. The production of the peculiar kinds of formed material characteristic of the different tissues and different living beings requires *time*. It is generally a very slow process, and really *depends upon the gradual death of living particles under certain conditions*.

7. Rapid growth is always associated with a large proportion of germinal matter which is naked, or covered only by a very thin layer or envelope of thin permeable material. The production of firm impermeable formed material is always associated with slow growth.

8. If a tissue which, under normal circumstances, grows slowly, and is characterised by the formation of firm, lasting formed material, like cuticle, cartilage, or tendon, grows very fast, it becomes represented by a soft spongy structure, which contains a much larger proportion of germinal matter than the normal tissue. Hence,

9. Many morbid processes are characterised, not by deficiency of action or defective vital power, but by the increased *activity of the vital changes*—that is, a greater quantity of inanimate pabulum becomes converted into living matter. Hence,

10. The object is, in many cases of disease, not to increase, but to diminish, the vital changes—to make the tissue live, *not faster*, but *more slowly;* and in some cases to destroy the life of the adventitious matter altogether.

11. In external wounds, and in internal diseases where alcohol acts beneficially, the good result is in part at least due to the alcohol checking the *increased action* already established.

12. Alcohol does not act as a food; it does not nourish tissues. It may diminish waste by altering the consistence and chemical properties of fluids and solids. It cuts short the life of rapidly growing cells, or causes them to live more slowly; and thus tends to cause a diseased texture, in which vital changes are abnormally active, to return *to its normal and much less active condition*.

13. Alcohol may possibly cause nerves to exhibit increased activity by restraining the abnormally free access of pabulum to their nuclei (germinal matter). The nervous, like other tissues, exhibits a greater activity of function when it has been *formed*, not while its germinal matter is growing fast and is freely supplied with pabulum.

14. In "exhausting" diseases, alcohol seems to act partly by diminishing very rapidly abnormally increased "cell-growth"; and the quantity required will depend upon the extent to which these changes have proceeded. In extreme cases, half an ounce of brandy, or even more, may be given for a time (in some cases even for several days) every half hour; and there is reason to believe that, in desperate cases, life is sometimes saved by this treatment.

THREE CASES OF ARTIFICIAL URETHRA.

By I. Baker Brown, Esq., F.R.C.S.(exam.), Senior Surgeon to the London Surgical Home, etc.

The three following cases which I now bring before you are very interesting, as proving that it is possible in cases where the urethra has been injured, and has lost the power of retaining urine, to give the patient an artificial urethra.

It is not at all uncommon in very bad cases of vesico-vaginal fistula to find that the urethra has sloughed away or become obliterated.

In one of the cases I am about to notice, the injury was produced by the urethra having been cut for stone when the patient was twelve years old; and there has been incontinence of urine ever since. It is very interesting, because I tried to cure her first by the old plan of simply restoring the urethra; but, though the operation was successful, so far as closing the lacerated urethra, she gained no power of retention, and I finally succeeded by stitching up the old urethra entirely, and making an artificial one under the arch of the pubes, using Mr. Harper's valuable instrument to retain the catheter.

The first case was one which is mentioned in my work on *Surgical Diseases of Women*, under the head of Vesico-Vaginal Fistula, of which it is the thirty-seventh case, at page 170. She came under my care in August 1860, having a large vesico-vaginal fistula and an entirely obliterated urethra. In her case, I closed the fistula in the usual manner, and made an artificial urethra as much as possible in the track of the normal urethra. A catheter was then introduced, and kept in for a few days; after which, the urine was drawn off every four hours.

The fistula healed nicely by the first operation; and a month after she could retain all her urine, and pass a little, but she had no power of completely emptying the bladder, nor had she up to the time when last I heard from her, and she was obliged to pass the catheter two or three times a day. I have no doubt that if I had had the advantage of Mr. Harper's instrument, which I will presently describe, that I might have made a more serviceable urethra in this case.

The second case is that which is published in the *Lancet* of June 20th, 1863, p. 689. It was the worst case I have ever seen. There was such cicatrisation of the vagina, that it was only about an inch long; there was a very large recto-vaginal fistula, a vesico-vaginal fistula, and the urethra and neck of the bladder had entirely sloughed away. By various operations, I healed the recto-vaginal fistula, and then operated on the fistula in the bladder, first puncturing the tissues under the arch of the pubes with a small trocar, rather to one side of the place where the urethra should be.

It required great delicacy of operation, as there was so little tissue. I then closed the fistula, and introduced a metal catheter, which was retained in position by the following instrument, which was invented by my colleague Mr. Harper, and well made by Mr. Pratt of Oxford Street. This instrument is very simple in its construction. It consists of an abdominal belt, made with hip and back lacings, and having in its front a piece of wood

curved to fit over the pubes, and well padded on the inner surface. The belt is retained steadily in its position by two thigh straps. Upon the piece of wood just over the pubic bones is attached an upright stem of silver plate, about an inch and a half high, and carrying at its upper end a ball and socket-joint; the side of this joint is perforated, and is fitted with a screw, which regulates the pressure upon the ball of the joint, and fixes the horizontal arm in any required position. This arm is a piece of silver rod, about seven inches long, and having at its lower end a pair of broad pincer-points, which serve to grasp the catheter. The rod slides in another pair of pincers, closed by another screw, which may be termed the female part of the screw of which the rod is the male, and one end of which is fixed to the ball and socket-joint. It will be seen that the action is as follows. The belt is fixed around the abdomen, and the pincer end of the instrument lays hold of the catheter previously introduced into the bladder. It can be kept in any required position, and moved to any angle, and by means of the two screws can be fixed firmly, and the wood of the abdominal belt becomes, as it were, a part of the catheter. The catheter which is used with the instrument is a small round one, and is open at both ends, so that it can be cleaned and kept open without the necessity of taking it out of the bladder. By means of this instrument, the catheter is kept steadily in the centre of the urethra, without any dragging whatever upon the walls. It is also introduced only just within the bladder, so that there is no fear of any irritation of the internal walls. Moreover, the patient moves about in bed whenever and wherever she pleases, without any fear of misplacing the catheter. It may be observed, that it is equally useful in certain cases where it is advisable to retain the catheter in the male urethra for any cause, and it prevents almost entirely the usual irritation which ensues. The action is exceedingly simple, and is much easier to observe than to describe.

After a few days, during which time the catheter was kept constantly in, the patient found that she could retain her water and pass it at pleasure; and she had also perfect control over her motions; and when I heard from her, a few days ago, she still continued perfectly well. This was a most satisfactory case, in which I succeeded beyond my hopes, but in which I should most likely have failed, but for Mr. Harper's instrument.

The third case I will give more in detail, from the notes of it kept in the case-book of the London Surgical Home by my son, Mr. Boyer Brown.

E. G., aged 18, single, was admitted into the London Surgical Home on November 5th, 1862.

History. Six years ago, she had a large stone removed from her bladder *per urethram;* it weighed 2½ oz. 12 grains. During the extraction, the urethra was freely divided; and it was afterwards stitched up with silk sutures. For two years after she never saved any urine, but lately has been able to retain a small quantity during the day. On examination, the urethra and neck of bladder were found to be quite destroyed; and there was nothing to represent the meatus but a gaping orifice, which had not the least power of contraction.

Dec. 14th. *Operation.* The patient being under the influence of chloroform, and placed in the lithotomy position, I proceeded to pare the edges of the lower three-fourths of the orifice; and I then brought the pared edges together by four silver sutures, which I twisted with my fingers in the same way as I do in vesico-vaginal fistula. A catheter was introduced; but for many hours there was much trouble, owing to very free hæmorrhage, which clogged up the catheter, and prevented it acting. On the 22nd, the catheter was removed, and she was allowed to pass her own water; but she was not able to retain much.

Dec. 31st. I removed the sutures, and found the edges quite united. She was able to hold her urine for two hours at a time when up, but not when lying down. I was in hopes that the urethra would gradually gain strength, and that eventually she would be cured; and I accordingly sent her home, but she returned in a few months, saying that she could not retain her urine as well as when she left the Home. She was, therefore, readmitted on June 25th, 1863.

July 2nd. I proceeded to operate, which I did in the following manner. She was, as before, in the lithotomy position, and under the influence of chloroform. I pared the edges of the entire urethra, and closed it with silver sutures; but I first pierced with a thin pointed knife under the pubes, a little on one side of the median line, until the knife entered the bladder. I then introduced a silver catheter, which was kept in position by Mr. Harper's instrument, and the patient was put to bed. The catheter was kept in until the 10th, never being removed, except on two occasions to be cleaned.

July 11th. She passed her urine, which at first she held only a quarter of an hour, then half an hour; and she gradually went on improving until, on July 28th, she could hold it for four hours, and pass it at will.

These cases are interesting, as showing that cases which we hitherto considered incurable can be safely and effectively treated by using mechanical appliances after operation. At the same time, it is not probable that many cases like the last will occur in future, because stone in the female bladder will not hereafter be removed by dividing the urethra, but either by dilatation, crushing, or extraction through the vagina.

Probable Existence of an Enormous Cavity in the Earth. A singular discovery has recently been made by M. Otto Struve, the Russian astronomer of the Observatory of Moscow. It was found that, upon calculating upon most rigid and exact astronomical data, the latitudes and longitudes of several of the principal points of the great Russian triangulation, and deducing thence the colatitude of the Moscow Observatory, it differed by eight seconds from the same deduced directly from the same points by geodetic methods. The result has been a careful recomparison of the positions of many points at various distances, amounting in extremes to several leagues around Moscow, deduced by both geodetic and astronomic methods; and it has been found that the plumb line at all points around Moscow, but chiefly along lines to the north and south of the city, is *deviated away from it*, the greatest deviation being produced at about twelve kilomètres distance from the Observatory. It follows from this, that beneath the almost unbroken rolling plain upon which Moscow is situated, either there are mineral masses of enormous bulk and density around the city; or there are masses of extremely low specific gravity directly beneath it; or there is an actual cavity. According to M. Schweitzer, the assistant-astronomer of Moscow, this deficiency of matter, supposing it all of the mean density of the earth's superficial crust, must equal in bulk a cube whose side is one-fifteenth of a mean degree of latitude. That is, there is probably a cavern somewhere at no great depth beneath Moscow, equal in bulk to a cube of 2700 feet. Nothing is more probable, sustained as it is by the character of the subjacent formations, by the enormous caverns known to exist to the south and west in Europe, and by the fact of the great depressions or fallings in of the earth's crust represented by the Dead Sea and the Caspian Basins. M. Struve is engaged in further investigating the subject. An artesian boring, of two or three thousand feet deep, might possibly pierce into this vast Russian Hades beneath their sacred city, or, failing to do so, might elate all Panslavism with the hope that, to the north and south of the ancient capital, they possessed beneath the surface enormous banks of platina or gold, wolfram or lead, or some such heavy material. (*Chem. News.*)

Introductory Lectures.

GUY'S HOSPITAL.

Dr. Pavy delivered the introductory address. He commenced by saying that the same old garment had come round for wear again. Year after year, for many years past, it had been regularly brought forward and placed upon somebody's shoulders. Not a particle of it remained that had not long since been worn quite threadbare. It had been turned and re-turned, and every fresh part in its turn had been picked out and put foremost, until all freshness had been extracted from it. The garment had this year been placed on his back, and he must endeavour to make the best appearance with it he could.

Students must place a high value on their time. Time was everything to them, and it behoved them to see that it was turned to profitable account. There was something melancholy in the picture drawn by the great Dr. Johnson in saying about time, that when we had deducted all that was absorbed in sleep, all that was inevitably appropriated to the demands of nature, or irresistibly engrossed by the tyranny of custom, all that passed in regulating the superficial decorations of life, or was given up in the reciprocations of civility to the disposal of others, all that was torn from us by the violence of others, all that was torn away from us by the violence of disease, or stolen away imperceptibly by lassitude and languor, we should find that part of our duration very small of which we could truly call ourselves masters, or which we could spend wholly at our own choice. Students, therefore, should be constantly on their guard. They would be constantly beset by thieves striving to rob them of their time. Let them beware of thief No. 1—Sleep. Sleep kept them in their beds. They were not up sufficiently early to attend their nine o'clock anatomical lecture; or, if they did put in an attendance, they did not arrive until it was half over. Such half-price attendance, as they called it—what was it? A conscience-offering. Their principle of industry was not sufficiently strong to bring them to the lecture, and their conscience would not allow them to remain away altogether. If they rose late, they would find themselves behindhand all day. Thief No. 2 was Idleness. There were those amongst the students who were scrupulously punctual in attending every lecture. They came almost exploding with eagerness for work. They rendered themselves conspicuous in the dissecting-room, and bustled about in the museum over their "bones". They were foremost in going round the wards, and were to be seen at all operations. They had stocked their rooms with books; and altogether it would seem as though they meant that the whole of their comrades should be eclipsed. But, alas! in many of these cases, the fire had been too strong to burn long. This excessive ardour vanished as the charm of novelty wore away. Such men soon began to make themselves scarce in places where they ought still to be seen; and, unless aroused by the chance of circumstances, might ultimately sink into the deplorable position of idle men. Let them not, then, be over-eager at first. Beginning quietly, they would have an opportunity of looking round them, and applying themselves in the most advantageous manner to work. Steadily advancing, they would day by day strengthen their resolution, until ultimately they became, both by habit and taste, industrious men. Thief No. 3 was the Solicitation of Friends. Those who would not work were not content with doing nothing themselves, but preyed upon the time of others. They were just going into lecture, perhaps, or had just sat down to study, when their friend dropped in upon them with "I say, old fellow, put that aside; it's all serene; there's plenty of time; you can do it by-and-by." By resistance, they would make themselves safe from future attack. If they yielded, they would very soon see their robber again.

The lecturer pointed out that there was no royal road to learning; and though geniuses might occasionally spring up, a genius had to work like others. Besides, eccentricity was a frequent accompaniment of genius. Men giving themselves up to one particular direction became neglectful in their observance of the ordinary customs of society. But let them not think that in eccentricity there was any characteristic of genius, or that through eccentricity any one could become a genius. Although he had laid down the law so strictly as to studying, he did not wish the students to be always at work, and never to seek amusement. They were aware of what all work and no play did in the case of that renowned personage going by the name of Jack. There had been many a student who, in working for university honours, had fallen into the error of not allowing himself the necessary time the mind required for repose; and when the day of examination arrived, the mind had been so overworked, the bodily energies had become so exhausted, that the nerves had been agitated and the memory had failed, and thus he fell short of what otherwise he might have attained. He reminded the first year's students that they could not be expected to study advantageously until their resolution was their own, and they could fix and hold their attention as they pleased. A man accustomed to deep thought could so rivet himself to his point that ordinary impressions failed to make themselves felt. He did not mean to say that it was desirable for them to encourage the development of such power of abstraction. Far from it; for, in the practice of their profession, the perspective faculties had to be employed as much as, or even more than, the reflective.

The lecturer concluded with some remarks on vivisection. In connexion with this, he said the gauntlet had been so pointedly thrown down to physiologists, that it might be interpreted as evidence of weakness on their side if they did not take it up; and this was as fitting an occasion as any for the purpose. Happily for society, it might be taken as admitted that, in every well regulated mind, a feeling of horror was experienced at the unnecessary infliction of pain upon any animate being. A society, composed of benevolent and well-meaning persons, who had specially espoused the cause of the lower animals, and had, doubtless, effected the prevention of an immeasurable amount of suffering amongst them, had been exerting its influence towards repressing the performance of experiments upon living animals for physiological or surgical purposes, and few would not admit that room had here existed for interference. But because the scenes that had been described of the sufferings occasioned for the mere purpose of acquiring dexterity in operative veterinary surgery, which could just as well be effected upon the dead as upon the living animal—because these scenes had justly excited popular indignation, were all operations upon living animals to be placed in the same category, and denounced as reprehensible? Were those who undertake operations purely for the advancement of science and the benefit of the community to be held up to public odium for doing so? The lecturer belonged to the class of experimental physiologists, and he was ready to justify and defend his course. Suffering, and often great suffering, was occasioned from the pursuit of many of the sports which the gentlemen of England engage in as a pastime or amusement; and why was there no popular outcry against these? His argument, however, rested upon a totally different foundation. He accepted the challenge that had been thrown down, and was prepared to meet the denunciators of experimental physiology upon their own ground. It could not truthfully be denied that the

knowledge acquired through physiology had been the means of averting premature death and alleviating the sufferings of humanity. Would any one say that surgery, from the information supplied by experimental physiology, had not, over and over again, averted impending death and mitigated an immense amount of suffering? If physiology, then, could be shown to have already done this, was it not fair to presume that it remained capable of doing more? Were the anti-vivisection agitators prepared to take upon themselves the responsibility of restricting the progress of science, and defeating the efforts which were being directed towards enlarging our sphere of usefulness in affording relief to the sufferings of humanity? Had these persons so far espoused the cause of the lower animals, had they so far allowed their feelings to get the better of their judgment, as to deny to their own species the benefits that might reasonably be expected to arise out of extended physical research? Upon which side, he would ask, did the greatest infliction of suffering lie; and especially when it was taken into consideration that, in by far the majority of the experiments, agents could be and were used for allowing the operation to be performed without the production of pain. He loved, he said, the lower creatures; but he loved his fellow-species more. It gave him pain to witness suffering in any living being, and carefully in his experiments had he weighed the advantages likely to accrue from their performance. But he had conscientiously felt that he had been acting in the discharge of a duty for the benefit of the community; and he hoped that no maudlin spirit would deter him from continuing such a course. Let us all, he said, no matter in whatsoever position we may be placed, fearlessly discharge, to the best of our ability, that which we conscientiously believe to be our duty, and we can then have nothing to be ashamed of. Let us all have occasion to feel that we are employing, to the best of our judgment, for the benefit of the whole community, the gifts which nature has bestowed upon us, and which place us at the head of the creation.

WESTMINSTER HOSPITAL.

The introductory lecture was delivered by Mr. Christopher Heath. Few men, he thought, entered at a medical school without some previous experience in the form of apprenticeship, which he believed to be fraught with much advantage when pursued under the tutelage of an able and enlightened practitioner; but he at the same time considered that preliminary general study was essential for a medical student, and therefore congratulated new students on having passed a preliminary general examination. Mr. Heath, in alluding to the subjects of the study of the first year's man, took occasion to make some remarks respecting anatomical study as pursued in the present day. He thought that anatomists were to blame for having overloaded their science with minutiæ—for having separated into distinct systems the parts composing the one perfect body, and for having kept asunder far too widely surgical and anatomical relations. The student was reminded that the creature he would have to treat in disease would be a man, whom he would not be able to dissect literally to find out the malady, but would have, as it were, to pierce the tissues with his mental eye, and discover the secret mischief by his cultivated senses. External form and general physiognomy both in health and disease, were also urged upon the student's attention, and the necessity for the operating surgeon's being a thorough anatomist was illustrated by reference to the examples of Astley Cooper, Liston, and Fergusson.

The lecturer earnestly deprecated the tendency to avoid responsibility which he believed to be prevalent; and thought that the "official fear of incurring responsibility," as Kinglake termed it, had invaded not only the army and navy, but to some extent the medical profession also. A proper feeling of responsibility regarding the life and death of patients was to be looked for in every medical man; but the young practitioner was exhorted not to be overwhelmed when the results of treatment proved to be unfortunate. But if thoughts like these were apt to arise in the treatment of ordinary cases, what must be the feeling of the surgeon when about to commence a complicated and serious operation? Much to be pitied, indeed, was the man upon whose shoulders this great weight of responsibility rested if he felt himself unworthy of it, or if his mind reverted to opportunities neglected and instruction despised; and therefore it was that he strongly urged upon them the necessity for thorough acquaintance with anatomy and for constant attendance in the wards and the operating theatre. And yet the most accomplished anatomist, the most skilful surgeon, could not command success. A higher Power than that of human hands alone could govern all results, and they must be content to bow before Him.

With regard to lectures and hospital practice, Mr. Heath did not ask the students, as was often absurdly done, to "live in the wards," because he knew that their time would be fully taken up with lectures, etc., except for two hours in the middle of the day, which hours should be devoted regularly to the wards or the out-patient rooms. Nothing was a better stimulus to the energies of medical officers in the care of their patients than the presence of students, and he therefore believed it to be the very best policy of governors of hospitals to foster the medical schools attached to them. The offices of clinical clerk and surgical dresser were pressed upon the student's notice as giving the best opportunities for acquaintance with practice, and allusion was made to the new regulations of the College of Surgeons requiring certificates of such appointments. Attendance upon *post mortem* examinations was also requisite, since any practitioner might be called upon to decide as to the cause of a sudden death, and his evidence might involve the lives and liberties of his fellow-subjects.

Mr. Heath, in speaking of prizes, said that class prizes had a tendency to induce the pursuit of one branch of study to the neglect of others. He cautioned his hearers against this error, whilst exhorting them to compete for the numerous prizes. He alluded also to the prizes provided by Mrs. Chadwick, the conditions of which guarded against the error he had mentioned, since they were awarded for general proficiency. The most valuable prizes offered to the students, however, were the offices of house-physician, house-surgeon, and assistant-house-surgeon, which were thrown open to all without fee; and the lecturer spoke in the warmest terms of his recollection of the tenure of similar offences by himself.

Mr. Heath next proceeded to address individually the three great classes of medical students, giving some excellent advice to each. He concluded his lecture as follows:—"And now, in conclusion, let me beg you all to be in good heart as regards your studies and your future career. We all, I suppose, at one time or another, feel inclined to despond and look at the black side of things; but, depend upon it, he who does so least is the happiest and most successful man. If the student allow himself to become despondent in his early studies, how can he ever overcome the still greater obstacles which await him? If the more advanced student shirk his final examinations, how will he ever become a practitioner? But it is as practitioners perhaps, that this 'equal mind' will be most necessary for you, since it may affect not merely your own but your patient's welfare. The man who is over-anxious unnerves himself in some degree, and is thus less fitted to take that calm view of his own affairs and of those of others, which will be most conductive to a good result; and, therefore, I

say again, be of good heart, not forgetting, however, to put your trust in Him who ruleth all things."

After the lecture, the board-room of the hospital was thrown open for a *conversazione*. Dr. Gibb demonstrated the use of the laryngoscope. Dr. Radcliffe exhibited some interesting electrical experiments; and Mr. Brook explained experimentally, the telegraphic apparatus communicating between the hospital and his residence.

ST. THOMAS'S HOSPITAL.

Mr. Sydney Jones gave the introductory address. He commenced by referring to the different classes of hearers who were present, and expressed a hope that those who might have found it necessary at some time to avail themselves of the services of the profession would ever retain a lively recollection of any benefit conferred; and that they would ever take an interest in the realities, not the quackeries, of the profession. He was glad to see, by the presence of so many old friends, that their interest had not flagged, but that they were willing to join with the teachers in giving a welcome to those who were about to make this for some time to come their future home. The profession on which the students had entered was one of great beneficence and reputation, and by becoming members of it they at once acquired a *status* of no ordinary kind. The exalted position it at present occupied was the accumulation of ages. They should try by all means in their power to raise the exalted character it already bore, and be careful to endeavour to sustain, at all events, the high position to which they had been raised with so little cost to themselves; and to be watchful, above all, that no act of theirs should have a tendency to detract from that position. He was afraid that the profession offered no inducement to join it, except for its own sake; but it offered a pursuit which, if followed out conscientiously and with right principle, would secure for them the respect, esteem, and gratitude of their fellow-men, and would afford them the pleasures arising from a discharge of duty in the cause of beneficence. They could not but hope that their profession was only now rising into that position which it was eventually to occupy; that so soon as a higher standard of education was generally established, and had brought amongst them men of high character and noble feelings; that so soon as bickerings and petty jealousies ceased, and peace and union reigned among them, then would the profession enjoy a still more exalted position, and the rewards now offered to the soldier, the lawyer, and the divine would not be withheld.

It was important to the students that they should have a good groundwork in preliminary studies; in classics and mathematics, modern languages, and natural philosophy. The authorities of St. Thomas's School instituted, some years ago, matriculation prizes, to be awarded to entering students who proved themselves, on examination, to be the most proficient on such subjects. Since that time, the example has been followed in most other schools; and now all the licensing bodies required students to undergo literary and scientific examinations before commencing their medical studies. It had, therefore, been thought unnecessary any longer to offer these prizes for competition; but in their place it had been determined to substitute other prizes for practical pathology, medicine, and surgery, to be awarded to students of the fourth year. He would recommend them, however, not to let the preliminary studies be lost. A very little exercise would enable them to keep up a knowledge of them, and at the same time they might be made to serve as by no means disagreeable relaxation from the monotony and irksomeness of some of the earlier medical studies. The use of a Latin Bible, Greek Testament, and a French Prayer-book, would afford a very efficient mode of preventing the accumulation of rust.

The lecturer then passed in review those subjects which were to form the materials of their building of medical knowledge on the part of the students. Dissection was the practical mode at their command for making their knowledge complete in anatomy, and the first year was the most important for such work. During the second and third years, they would be engaged in acquiring the practical part of their profession, and would, in all probability, have the duties of a clinical clerkship or dressership to perform; or they might be engaged in obstetric practice, in which case attendance on the dissecting room could not be too severely reprobated. Having glanced at the formation of the human skeleton, the lecturer said it was impossible that the study of anatomy could ever lead a right-thinking and reasoning mind to the borders even of atheism. The tendency to such error was dependent upon moral rather than upon scientific causes. For who could survey the complicated machinery of man, with its variety of organs and functions, with every organ adapted to the function which it has to perform, and all the functions uniting to ensure the usefulness and happiness of man, without acknowledging the hand of a superior, intelligent, omniscient, and omnipotent Being?

The lecturer here referred to the study of comparative anatomy, which had derived of late much additional interest on account of controversies between men of high professional standing on points thought by some to be of great social importance, and on account of recent assertions having a tendency to subvert theories which had been taught, admired, and fondly clung to. The lecturers at St. Thomas's had been in the habit of teaching the vertebral theory of the formation of the skull, in accordance with the doctrines of Oken and Owen. But Mr. Huxley, following out the discoveries of Rathke and Reichert, was opposed to this theory, and protested against the notion that the skull was in any way to be considered a modified vertebral column.

He then alluded to the importance of chemistry, especially in its bearings on physiology and pathology; and, in regarding physiology, he noticed it as being essential to a correct knowledge of pathology, medicine, and surgery. In connexion with this subject, he would remind them of, and congratulate the profession on, the advances which had been made in rescuing many of the actions which occur in the human body from the stigma of what were called vital principles, and in referring these rather to the influence of physical and chemical forces; for this term vitality or vital principle had been subjected to much abuse, and had long been the bugbear of medical science, serving as an excuse for idleness and as a cloud for ignorance, and tending to arrest or retard scientific progress and the formation of general laws. The lecturer next referred to the usefulness of a knowledge of botany, chemistry, and other branches of study, and laid great stress on the intimate connexion between medicine and surgery, which, he said, could not be separated. The physician must know something of surgery, and the surgeon must have a knowledge of medicine. As important means of gaining this knowledge, he referred to the offices of clinical clerk in medicine and surgical dresser, which might be gained as prizes by diligence. In the observation of cases, he said, it was not essential that they should be numerous; for Scarpa had only fifteen beds in his clinical hospital

After alluding to the improved means o diagnosis, and consequently of treatment, and giving some illustrative examples, Mr. Jones referred to vivisection, in order, he said, to express the indignation which must be felt in the mind of every Englishman at the atrocious cruelties which had been perpetrated in some of the veterinary colleges on the continent. Although it was

not necessary to use the same consideration as the Turks, who thought it a sin to kill a dog, had hospitals for superannuated cats, and did not venture to destroy even their vermin, but put them tenderly on the ground to be received into the clothes of the next passer-by, yet all well directed minds must recoil from inflicting any unnecessary cruelty. Surely it was not necessary, in order for students to become adept operators, that these operations should be performed on living animals; nor did it seem justifiable that experiments should be carried on simply for the purposes of demonstration, of impressing more vividly upon the mind certain physiological truths. But altogether to discountenance vivisection was quite out of the question; for it has already done much, and promises to do more, towards the alleviation of the sufferings of mankind and the elucidation of some of the mysteries of medical science.

He concluded by referring to the selection of a site for the future hospital. Notwithstanding the opposition which had been raised, the Stangate site would, no doubt, be eventually determined on. Stangate occupied a position corresponding pretty accurately with that which had been lost, and presented advantages not afforded by any other site which had been discussed. The hospital should be in a densely populated neighbourhood, of ready access to the masses, in proximity to factories and accident-making districts, and readily approachable by leading thoroughfares. The few nuisances enumerated as at present existing near the proposed site were remediable ones. He considered that at Stangate they ought to have a hospital that would rival in appearance and appliances any hospital not only in London, but in Europe; and that the opportunities of supplying the needs of the poor would be immense, perhaps not to be equalled, and certainly not to be surpassed, in any other district of London. These opportunities would be available not only to a large portion of the poor of Southwark, but to the densely populated districts of Lambeth, and to the western half of South London generally.

UNIVERSITY COLLEGE.

The introductory lecture was delivered by Dr. J. Russell Reynolds. After some prefatory remarks, he said it was towards clinical work that all medical study tended. It was at the bedside of the patient that medical science culminated and became an art. The "case" with which the students came into contact was, as it were, the "medium" through which "correlated forces" became exchanged; or, to alter the figure, the "reflective centre" in which all the "knowledge" they had laboriously gathered from without became converted into "power" for the patient's good. It was well, therefore, to keep that end in view, and to regard all their studies in that their high relation. The bedside of the patient was the point from which to value correctly all scientific medicine.

It was in his capacity of a clinical teacher that he proposed to address his hearers: and he accordingly proceeded to deliver a clinical lecture on students; first sketching the history of five cases, and then commenting on their pathology.

The first case described was that of the idle student, of whom the lecturer said that "while at the College, his attendance on lectures often assumed a remittent form; occasionally prolonged intermissions occurred; the intervals between his paroxysms of attendance gradually increased in length; and some curious repulsive influence seemed to become developed, not only between himself and the lecture-room, but between himself and the professor; for it was noticed that upon each period of his return he withdrew himself further and further from the professor's position in the lecture-room or theatre." The occasional taking of notes in a book by means of pen was gradually abandoned for the making of notes and illustrations with a penknife on the benches—the notebook, too, disappearing, and becoming replaced by a walking-stick. Another fact noticed was the gradually increasing delay in his appearance at individual lectures. A chronic form of delay, too, appeared to beset him in his attendance on the hospital practice; and it was remarked, that while the periods of his return to the wards were singularly uncertain, they appeared to have some relation to lunar time, and were often synchronous with the recurrence of the days on which the names of students had to be entered in a book kept near the door. Towards the end of each session, also, the patient manifested a propensity for reappearance in the wards—the determining cause probably being the presence of an unsigned schedule in his pocket. There were some remarkable negative characters, too, in the case. He never obstructed the house-surgeons or physicians' assistants in their morning duties; never complicated the work of selecting clerks and dressers; and so scrupulously followed the rule of not appearing improperly in the area of the dead-house or operating theatre, that he either never entered there at all, or, if he did, kept himself at the greatest possible distance from the object which was being studied.

The prognosis of this case was unfavourable. Dr. Reynolds saw in it a want of patience and energy, and of consideration—a want of common honesty and of heart. The father of the patient, whom the lecturer pictured as a hard-working country practitioner with a large family and small means, "laboured that his son might learn; he had placed him in the College amongst immense advantages; his small savings scarcely met the hospital and college fees; yet, while there was stint and toil at home, he sauntered lazily about the wards and lecture-rooms, and never lightened by the effect of one little finger the great burden, some part of which his broad young shoulders should now have learned to bear."

The second case was one of a totally opposite character. It was that of a student of intense diligence; an assiduous attendant on, and voluminous taker of notes of, every lecture that could possibly be attended; one who had held the office of clerk and dresser, and was a constant frequenter of the hospital practice in all its departments. "He seemed almost as ubiquitous as he could wish to be; he was up both early and late; he gave himself no time for rest, no time for play. He was in a condition of educational pyrexia; and even when he slept exhibited a low muttering delirium of broken bones, triple phosphates, rheumatic fever, and typhoid spots."

This case the lecturer regarded as much more hopeful than the first; yet it presented some morbid features. The accumulation of material was vast; but it was confused, and therefore of little use. A fact was seized here and there; but he had not been able to bind them together. His knowledge was too superficial; what was required was, that he should not only work widely and hard, but work deeply too, even though his progress should be slow.

The next case was that of a student who had a strong predilection for chemistry. In the chemical classes in the College, he gained the highest distinction; but in his hospital practice, as indeed in all his studies, he could attend to nothing but the chemical features of what was presented to his notice; and, consequently, was ignorant of many important points. "It was said that he could tell correctly all the daily changes in each case of pneumonia, chorea, and gout, that had presented itself during the last twelve months; but that he would be puzzled to distinguish a case of pneumonia from one of bronchitis; and that there were many forms of disease of which he scarcely knew the names."

In commenting on this case, the lecturer pointed out that, unlike the preceding one, the student recognised the necessity of working deeply; but the deep working had been applied to the favourite study, to the partial (not utter) neglect of other portions of the curriculum of education.

The fourth and fifth cases were those of two brothers, who, the lecturer said, came to their college duties prepared by an acquaintance with general physics and the laws of thought. Their attendance on lectures and hospital practice was punctual and regular, and at the same time judiciously arranged. Their plan was, not to attempt to learn too much at once, but to learn that well. "They endeavoured to know thoroughly what they knew at all; they were not afraid to ask questions; and they were very successful in the advance, not only of their knowledge, but of their power to know. There was this difference between them: the elder appeared satisfied when he found a case that corresponded exactly with a book; the younger was always trying to show his brother that the book was wrong. The one was disposed sometimes to fit his facts to the ideas he entertained of what facts ought to be, and to strain them a little, sometimes this way, sometimes that, in order to make the fit complete and creditable; the other was so averse to believe that facts ever do correspond with statements, that he sometimes looked at them through a distorting medium, and imagined that there were exceptions when there were only blank spaces or wrong entries in his own information. The elder saw things that did not exist; the younger as often failed to see those that did. The one was ever trying to verify the wisdom of the past, the other to show that it failed to meet the knowledge of the present; while the former looked somewhat hopelessly at the future of our science, the latter believed that it would witness the solution of every enigma, the unravelling of every tangled skein of truth."

These two—whom Dr. Reynolds regarded as belonging to a type far from uncommon in the College—while they counteracted, yet supplemented each other, and worked together usefully. The one regarded with all his affections, and sought for with all his energy, the establishment of the uniformity of Nature's processes; the other as earnestly endeavoured in those processes to discover advance, or progress.

What the scientific worker really needed was an appreciation and combination of the two; for in nature they were both present, and might be observed. In individual life, he observed, some great processes go on in the same way from hour to hour, from year to year. There is the alternate diastole and systole of the heart; the constant play of inspiration and expiration, with their effects on air, and blood, and tissue; there is the daily change from sleep to waking, from activity to rest; there is the daily disintegration of tissue, the excretion of waste material, and also the daily assumption and assimilation of fresh supplies. Further, there are recurrences, with wondrous order, of some physical changes—partly those of health, partly those of disease—at still longer, but yet time-ordered periods; and the seasons of this year have effects like to those of the years that have gone before. But, with all this order, and as the result of this order, there is progress; the infant grows into the child, the child into the youth, the youth into the man. The changes of dentition and of puberty lead onwards to the full growth of the adult; and then, in its due time, decay comes surely on. Some diseases may appear, go through their well-known phases, observe periods that we can with certainty predict; but they have not been in that individual before, and they will not visit him again: they have done their work. All that he has passed through makes him what he now is; there has been recurrence and order, but also growth that does not return into itself. But, on looking further, we see that these things which occur in the individual but once, which even constitute his separate life, do recur, but recur in others; and so again we see the circle, but a wider one. But is there no progress of this larger group? Families, races, nations, too, have their periods of infancy, of youthful follies, of angry passions, of wise discretion, of ease, of feebleness, and death; and while the one nation, with its own life, sinks away, another takes its place, and the great world is ever young.

Again, in physiology, in its largest aspects, we observe an onward progress amidst the orderly recurrence of events. Not merely individuals but species become extinct; new species take their empty places, and lower give way to higher forms of life. Whatever may be the theory for its explanation, there can be no doubt about the fact—that the life upon the world at this present moment has not the form it had; seeming uniformity of process has wrought out change, and that change is one of progress or advance. We do not exhaust the question of how this is, we only move it a few steps further backwards, if we admit the principle as readily as we see the facts of so-called "natural selection". If it be imagined that all the variety that now clothes the world has sprung from one common form, it must be admitted that there was in it the possibility of divergence from the type, or, in other words, that it contained within itself the germ of all subsequent development; and thus, in the only conception we can frame of primeval life, we see in its apparently simpler, but really more complex order the mainspring of advance. It is easy enough to trace life backwards until we fail to see the differences that lie hidden in some fœtal form, common to all kinds of fowl, to the donkey and the dog, to the monkey and the man. But it must not be supposed that differences though hidden, do not exist. We may not be able to distinguish the one ovum from the other; and yet the difference between them is so great that one becomes the peacock, and the other the Cochin China hen; the one a Skye terrier, and the other a learned doctor of the law. It is when brought face to face with facts like these that human science, grateful for what it is, should not trumpet forth generalisations to which it has leaped to conceal its weakness; but should show its real strength in humbling itself before great truths that are as yet past its finding out.

Again, in the yet infant science of geology, we may observe the same combination; and both order and progress may be seen combined in the history of scientific systems and of philosophic method. Their movement is onward, but it often appears to return into itself; yet it does not thus return. It is not a circle that is described, but rather, as it has been said, a widening and ascending spiral, whose ultimate course we cannot now compute. Lastly, in human life, the one kind of law, by its constant and orderly operation, develops results of another and a higher kind. The physical forces are often determined in the direction of their action by the chemical constitution of the bodies in which they are displayed; chemical actions are coordinated to produce results which cannot be expressed by chemistry alone, but require another set of terms, which are denominated vital; animal life is determined by mental conditions; the latter often yield to social and moral obligations; and they are all marvellously intertwined to produce that complex creation—a living man! How long the apparent conflict of these two elements will last in science, we cannot tell. Where is their common point we cannot see; as the circles of order widen they lose their apparent recurrence, and order and progress become, even in our own minds, one. The infinite circle is identical with the straight line infinitely produced. Our definitions fail, or contradict themselves, when we endeavour to carry them thus far; but there is no contradiction in the things themselves, and our finite minds can feel assured of the existence of some great facts that they

have as yet failed to grasp, and may be convinced of the reality of an infinite, abiding, and eternal truth, in which all truths shall centre; in which is no error—no darkness at all, but which can now be only dimly seen or felt after amid the changing and passing shadows of time.

In entering upon their profession, the students were exhorted to take high views of its vast demands as a science, and of its claims, not only upon their mental, but upon their moral nature. They must strive to learn the inner, often hidden relations of all branches of medical knowledge; but much was yet hidden, and, therefore, they must approach truth from many sides. And, lastly, in their earnest work to know the laws of life, and in their hereafter daily contact with life—at its beginning, in its troubles, and at its close—they should not, in recognising the divinely appointed order of all events, lose sight of that great divine plan of progress which will surely evolve the highest good out of much that now seems deepest evil. They would thus often see a moral purpose in the suffering they tried, but vainly, to assuage; a good in the death they feebly struggled to postpone.

Regarding disease as fraught with meaning and purpose other and higher than the mere change of organ you can see, and handle, and record, in your pathological note-book; looking on death as the fulfilling of some greater end than can be represented in the Registrar-General's returns; though often saddened, often baffled in your unequal conflict with those two great foes, you may see that they also have a work to do, perhaps more friendly than your own; and thus you will be led to feel, and that with a conviction no other profession could urge so strongly upon you, that though

> "Suffering is permanent, obscure, and dark,
> And has the nature of Infinity,
> Yet through that darkness (infinite though it seem
> And irremovable) gracious openings lie,
> By which the soul—with patient steps of thought,
> Now toiling, wafted now on wings of prayer—
> May pass in hope, and though from mortal bonds
> Yet undelivered, rise with sure ascent
> Even to the fountain-head of peace divine."

QUEEN'S COLLEGE, BIRMINGHAM.

The introductory address was delivered by Mr. Furneaux Jordan. The lecturer, after some introductory remarks, said that the subject which he had chosen for consideration was, the elevation of medical science in the estimation of society. The estimation, he observed, in which medical science was held by the public varied with every class and with every individual. The capability of forming an opinion differed; the criteria on which opinions are based differed; and, therefore, opinions themselves differed. All the varieties of opinion, the causes of the varieties, their justice and injustice, their truth and error, might, with sufficient precision, be placed under the categoric head unsatisfactory. How, then, should medical science attain a higher position in public esteem? There were particularly two principles of action. First. Society must be enabled to form a judgment of the true value of medical science. For this purpose, a certain amount of medical knowledge (especially physiology) must form a part of every system of education. Second. Medical science must be still more zealously advanced; rendered, in short, more worthy of public esteem and confidence. It was a fact everywhere conceded, that with singularly few exceptions the public had no knowledge of medical science; hence, public opinion in this direction was vague, capricious, and valueless. If a person totally ignorant of astronomy formed the opinion, on grounds best known to himself, that there would be an eclipse of the sun next week, or that a comet would appear next year, it was absurd to ask what value his predictions would possess. It was not surprising that men otherwise of education and intelligence, could form no just estimate on questions of health and disease, simply because their education had not included even the simplest rudiments of physiology. In the presence of this great ignorance of physiology, how was it possible even to guess at questions of disease?

The eminently unsatisfactory position of medical science was due to ourselves. Had we as a body encouraged the pursuit of medical learning by the lay public? Had we represented to Government Boards the desirability of teaching physiology in all national schools and colleges? Had we so exerted our influence that in any single system of education the doctrines of the science of life were taught—a science the rudiments of which might wisely be taught to every boy and every girl? Did those of our body who had learning and ability give popular lectures on physiology or pathology? Did the members of our profession, as a rule (he knew that a few did), explain to those most interested as much of the physiology and pathology of the given disease as admitted of popular illustration, and thus diffuse—better than none, better than lies and quackery—rude ideas of the normal and the abnormal in our physical organisation? Did we greet with thanks or respect any attempt to write for the people? In asking this question, he did not allude to works on what was foolishly called "domestic medicine", because to attempt to explain diseases to persons ignorant of healthy processes was as premature and foolish as would be the attempt to demonstrate the principles of the differential or integral calculus to youths unacquainted with the simple rules of arithmetic. He knew nothing in all the varied problems of life, or society, or history, more calculated to astonish, if not to alarm, than the modern ignorance of physiology. And yet what question was there in moral, intellectual, political, or social science, so momentous as the ignorance of sciences which explain how we live and act, and droop and die. Moreover, a physiological public would require an increasingly high standard of education in the medical profession. Thus, by a salutary reaction, the physician and the surgeon would reach a higher grade of culture, and acquire a stronger power to benefit the human race.

There were indications, however, that in this all-important matter a new epoch was about to commence. A few of the largest and most active minds of modern times had deemed the structures of the human body and their actions worthy of the protracted research of the loftiest faculties. Anatomy, comparative anatomy, physiology, and natural history, had been on rare occasions the favourite studies of poets, philosophers, and historians. The lecturer referred to the examples of Goethe, Lewes, Kingsley, and Buckle. Mr. Buckle not only fully acquainted himself with physiology, anatomy, and chemistry, but he passed on into the larger and more difficult field of pathology—a field where the processes are so mysterious and the problems so abstruse that the ablest minds of unnumbered generations yet to come will be required before nature shall have been compelled to disclose her inmost secrets. With beacons so illustrious before them, and with the assistance and encouragement we ought to afford, he did not doubt that the public would discover for themselves the precise value which attached to modern medical science. The sooner this occurred, the better for us and the better for society.

There were still other important signs of increasing interest in subjects intimately connected with medicine. Such were the greatly increased use of the microscope, the amazing zeal with which natural history was everywhere cultivated, the widely spread and keen interest which was taken in the question of the origin of species, and the physiology and anatomy of geology, and the publication of excellent serials for the diffusion of sci-

ence and the simplification of scientific difficulties. Such were the *Popular Science Review*, the *Intellectual Observer*, the *Social Science Review*, and others.

In passing to consider the second proposition, the desirability of still greater zeal for the advance of medical science, Mr. Jordan would by no means be understood to imply that progress was slow; and in proof of this he gave several examples. The realisation of past achievements was an admirable stimulus to future enterprise. It was wiser, however, to dwell not on what has been done, but on how much has yet to be accomplished. In reply to the question, how might future progress be most efficiently secured? he suggested that the task of increasing our knowledge should devolve on a larger number of individuals. It was everywhere, and at the present time, a just ground of complaint that the work of our learned societies and scientific journals falls on a few. How was this to be obviated? It was first of all requisite that young men should not study simply to to obtain legal qualifications. They must be taught to regard themselves as students for life—perpetual students of a science which marches on for ever. He believed that the student who had already satisfied the law might be made an unceasing student most effectively by making him a teacher also, a teacher of the public, or of those intending to enter, or of those who have already entered upon the study of medical science. The vocation of the future medical worker would be not merely to remove disease, but to teach men how to live, how to give to physiological action its most perfect freedom, how to secure for it its most favourable conditions, and to communicate to others the great secrets of organised nature. Why should not medical science be taught everywhere? If it were desirable that the larger seats of medical learning be located in the larger towns, there was no just reason why preliminary and most useful schools should not be established in every town, almost in every village. These smaller centres of medical education might be so arranged that every member of the profession should have the opportunity of feeling that he was one of a band devoted to the great work of diffusing and advancing medical knowledge. An eminent thinker had drawn forcible attention to an important means which was essential to the progress of all science; it was especially applicable to the science of medicine, The means to which he alluded, was a systematic and complete disregard for authority. All progress was preceded by inquiry, and all inquiry was preceded by doubt. A golden maxim, at least for a medical labourer, was—doubt all things that are not proved. By this means alone was the growth of proven knowledge secured. For only doubters originated, only doubters advanced, only doubters annihilated doubt. The most thoroughly efficient means, however, by which any science was advanced lay in the perseverance and zeal of the individual workers.

Mr. Jordan concluded with a few words of advice to the new students, whom he exhorted not lightly to enter on the study of medicine—not unless they had an almost passionate ardour for science, for the study of its laws, for the desire of its progress; not above all, unless they had well considered that the mysteries and the organisations of this life were worthy of the exercise of the highest faculties which men possess.

LONDON HOSPITAL.

Mr. Maunder delivered the introductory address. He regarded the first of October as a day of peculiar interest to the medical profession in this country. Old and young met together on the same benches, the former to shake hands with old friends and fellow students, to chat over the pleasurable recollections of earlier days, and probably to introduce a son to the well-remembered walls; the latter full of hopes and fears, freed from the discipline of school, and eager to commence the great work of life. It was to the junior members of his audience that he more especially addressed himself. To them he offered a hearty welcome, and gave some excellent advice and encouragement to those who were entering the profession. He advised those who had passed their examinations to travel if possible, and pointed out various methods by which in so doing they might derive both pleasure and profit. As a mental recreation, they should cultivate general literature to enable them to associate with all classes of society. Travel and reading would enlarge their views, and give them liberality of sentiment and manners. Let the student cultivate easy and agreeable manners, which were quite compatible with sincerity, and avoid any eccentricity either of dress or otherwise, which might offend society. He should be kind and courteous to his patients, but withal independent, never forgetting that he who possesses no self-respect has no right to exact respect from others.

In speaking of the army medical department, Mr. Maunder expressed his surprise at the treatment to which it was subjected, and at the short-sighted policy of the government. He was astonished that the combatant officers did not know their own interests sufficiently to lead them to encourage well educated men to enter the service.

The lecturer then alluded to a subject which had for some time occupied his mind (they might call it a crotchet if they liked)—he referred to the distinction between physician and surgeon, the "pure" physician, and the "pure" surgeon; the hospital physician, and the hospital surgeon. What was meant by the term "pure?" It implied, he presumed, that the individual purposed to practise either medicine or surgery only, and to qualify himself to take a high walk in his profession. All his abilities were concentrated upon the study of the one branch, without a commensurate and progressive knowledge of the other. It was true that during the first years of his professional life he had studied medicine and surgery equally, but his hospital appointment compelled him to give the preference to one or the other, and thus while his opinion was valuable in the one case, it was of little worth in the other; and it was upon these grounds that he held the physician to be unqualified to give a sound opinion in a surgical case, and the surgeon to be incompetent to take a right view of a medical case. He was of opinion that the consulting physician or the consulting surgeon who took all fish that came to the net, who considered all patients who could pay a fee as belonging to his speciality, did a great injustice both to the patient and to his brother practitioners, to whom custom and education assigned the care of individual cases. It appeared to be sufficient for a medical man to be thought clever, no matter whether physician or surgeon, and the public was eager to consult him in every imaginable case. Such a step taken without the advice of his usual medical attendant by an individual was consequent on unavoidable ignorance; but were they to take advantage of that ignorance, and perhaps jeopardise the health and life of a fellow-creature? Certainly not. It was their duty to refer the patient to the right man, to exercise those virtues which the practice of their profession taught—benevolence and charity. It would, perhaps, be said that it was useless to expose an evil without having a remedy to meet it; the antidote was within the grasp of the individual practitioner, and its application too. There was, probably, one means—the only one that had occurred to him—by which the public might be assisted in the selection of a physician or surgeon. It was that the consulting surgeon should emphatically declare his calling by replacing the "Mister" now before his name by the word "surgeon" both on his door-plate and private card. This object might be slowly attained, and the moral courage of individual practitioners

in refusing a fee would be often tested. In Dublin it was usual to see on the door-plates, "Surgeon So-and-so;" why should not the example be followed in this metropolis.

Mr. Maunder concluded by reminding his audience that the study of medicine, if pursued in a right spirit, was such as to fill their minds with wonder and admiration at the power displayed in the creation of man. Surely no profession could be more honourable than the medical, except that great profession whose ministrations were not physical and whose influence did not cease with the term of our brief mortality.

CHARING CROSS HOSPITAL.

THE introductory address was delivered by Mr. C. W. HEATON. He commenced by remarking that any day which divided into time the brief span of our lives must needs be a memorable and even solemn one ever afterwards. The 1st of October was so felt by medical men. The oldest and wisest so felt it, and so quite equally must those upon whom its sun had not yet set. The student could not be unmindful that to this day he would in future years look back either with pride as to the day which had opened to him that career which had brought him comfort, independence, the grateful love and respect of his fellow men; or with bitter shame, as he thought of opportunities wasted and time misspent.

The lecturer regretted that, not being a medical man, he could not venture to speak technically of the nature of his hearers' studies, or of the professional cares and duties of their future lives, but observed that it gave him an opportunity of speaking more freely than he could otherwise have done of the universal respect with which the members of their profession were regarded by mankind. And well, indeed, was that respect earned. Medical men had the best reason to pride themselves on the general unselfishness of the members of their profession. The solemnity of their trust, and the awfulness of the responsibility involved in it, rarely failed to raise the intellect and expand the heart of him to whom it was confided. Without venturing to assert that as a general rule doctors disliked fees, it might safely be said that the earnest endeavour, the errand of mercy, was not limited or measured by those fees; but that like God's rain it descended alike on the just and the unjust, on the rich and on the poor. It was to be hoped that this lofty character of the profession would never be lost; but that every doctor, in building up his fortunes, would take care that the foundation-stones were his duty towards God and his duty towards his neighbour. No better wish could be offered to a student than that during his life he might work hard, do his duty, and, when need should be, die bravely—

> "In some just cause, not in thine own,
> To perish, honoured, wept for, known,
> And like a warrior overthrown."

The student must not disguise from himself at starting, that his education must be a most difficult, complicated, and comprehensive one. Beside the regular branches of education, there were others which no reading and no teaching could supply. They must learn to read men's characters, must often humour their weaknesses, keep their secrets, and soften their fears. They would have to warn the sufferer of the near approach of death, and as far as in them lay comfort the fatherless and widows in their affliction. After quoting an eloquent passage from Thackeray's *Pendennis* on their lofty duties, the lecturer proceeded to condole with his audience on the recent loss which they, and indeed the whole profession, had sustained in the death of Dr. Golding, who had been the chief means of founding their hospital, and for thirty years had laboured unremittingly for its advancement.

The rapid rise in the character and manners of medical students within the last few years was next passed in review. The strange animal described in the writings of Dickens and Albert Smith could now nowhere be found. He eschewed collars and hated clean linen; his hands were dirty and gloveless; he breakfasted on raw brandy and full-flavoured Cubas; and amused himself when in church by carving his name in big letters on the pew. These things had gone by, and a man who should now indulge in them would be reckoned by all his companions as a blackguard. It was, indeed, hard to fancy that some of those grave, well-conducted gentlemen who now alighted from neat broughams at our doors, might in early life have belonged to such a wild harum-scarum family. Much of this change might be traced to the higher education now required in a medical man, which, in the generality of cases, excluded all but gentlemen from the profession. In place of the wild dissipation of the past age, there were plenty of healthy amusements, which, so far from hindering a man, would enable him to work the harder. A good pull on the river, a ten mile walk, or a stiffly-contested game of cricket, would send any man home to his work with cleared brain and cleansed fibres. It was to be hoped that the time would come when Charing Cross men would be equally celebrated for their success in examinations and for the scores they made at cricket.

Coming to more serious subjects, it was to be remembered that the great point on which success depended was diligence. The habit of steady and continuous attention to lectures was hard to acquire, and the temptation to allow the thoughts to wander was very great; but the advantages to be gained by perseverance were marked. There were certain necessary inconveniences incident to all teaching by lecture. The various lectures succeeded each other so rapidly in a day, that it required great practice to prevent the different subjects from being confused together in the mind. Then it often happened that the student who missed a lecture missed the key to a good deal of what followed, and the subsequent lectures became in this way unintelligible to him. This might be remedied to a certain extent by reading up the subject in a hand-book; but it too often happened that everything was neglected. Besides the systematic course of regular attention to lectures, and careful study of the subjects of them in the evening, the student might, if he pleased, adopt a different, though a far inferior, plan. He might take up vigorously with a branch of study, and neglect for a time all others. Then, discarding this first love, he might take up something else; and, in this way, he certainly would at last acquire a smattering of each subject; but this would be in exchange for the clear and satisfactory knowledge of it which he might have obtained by greater regularity.

Referring to the study of anatomy and physiology, chemistry and botany, Mr. Heaton observed that, at first sight, the student would probably perceive but a very slight connection between them. But as he advanced, he would find that they, like all other branches of physical science, were united together by the closest bonds, and that no one of them could be pursued without constant reference to the others. Certain constantly recurring facts were observed, in which nature seemed never to vary; and although we knew nothing whatever of the cause of these facts apart from the first great cause, yet we were able to trace, to some extent, the modes of their operation. Now, these laws of nature pervaded all sciences alike. If, for instance, they had studied the so-called laws of chemical affinity, they would find in botany that the assimilation of food by the plant, and the formation of starch, sugar, and woody fibre, were all instances of their action. In geology, the

case was the same; and even in astronomy, where, at any rate, we should have expected to be free from chemical sway, we found that she had lately planted a promising colony. It was in physiology, however, that this dependence of different sciences upon one another was most strikingly seen. The lecturer suggested as the most probable road to discovery the careful study of chemistry in its relation to physiology; and dwelt on the importance of the recent discoveries of Graham in liquid diffusion.

But, in spite of the interest and importance of science, they must not forget the great object of their lives was not to become scientific men, but doctors. After their first year, they would be called upon to bend all their energies to the attainment of this great end. Without entering into many of the details of the studies they would have to pursue, one point would be clear to all. The great guide and instructor of every man must be experience.

Mr. Heaton pointed out the important benefits which modern science had conferred upon medical practice. The essential importance of pure air and water, with the increased attention which the knowledge of it had attracted to ventilation, drainage, and the purification of our rivers, formed a remarkable illustration of this. And the improvement which had been effected in these respects was very remarkable. We could no longer point, as Pope did,

> "To where Fleet Ditch, with disemboguing streams,
> Rolls the large tribute of dead dogs to Thames."

The Thames itself was being purified, and optimists told us that the time was approaching when the stranger should come from afar to slake his thirst with the clear pellucid waters of the ancient river.

In speaking of experience as the great medical guide, the lecturer did not mean to recommend an absolute and undoubting trust in empiricism. On the contrary, the opinion of an experienced medical man was a highly composite one, formed from a hundred small observations, and the result of an almost infinite knowledge. Precedent, with all its force, was but an element in that opinion, although, probably, in all cases, the most important one. The most perplexing of all the difficulties with which a medical man had to deal arose from the marvellous connection between the body and the mind. Our consciousness taught us that the qualities of reason, fancy, understanding, and will—not to speak of the lower appetites and passions which we hold in common with the brutes—were in some inscrutable way bound up with our frail tenement of flesh, and that, for some mysterious reason, the cessation of the peculiar chemical and mechanical processes which constitute physical life, involved the arrest of the mental operations. We knew no more. We were powerless to explain the nature of the tie which bound them, and must be content with the conviction that, spite of the temporary association, mind had a separate existence apart from and above matter. The practical knowledge which could be gleaned on this interesting subject resolved itself into observations on two points: the influence of the mind over the body, and the influence of the body over the mind. From the attentive study of these problems, physicians told us that many valuable precepts might be gained, and they were, besides, interesting from their connexion with some of the great unsettled problems of the age. Under the latter head might be included the important question of moral accountability, with its train of considerations on the amount of physical disease which might deprive a patient of the power of controlling his actions. The lecturer concluded by exhorting his hearers not to be content with anything short of the greatest attainable perfection, and by assuring them that their happiness and welfare would always be objects of the greatest interest to their teachers.

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SATURDAY, OCTOBER 10TH, 1863.

THE INTRODUCTORY ADDRESSES.

OCTOBER has again returned, and has again brought with it the day long to be remembered by hundreds of youthful and hopeful minds—the day on which they commenced to receive systematic instruction in the healing art. The Æsculapian temples of the metropolis and of the great towns of England have been opened; and their high priests, selected to officiate on the occasion, have welcomed, in choice words of encouragement and of advice, the novices who seek to be initiated into the mysteries of medicine. This is a fitting commencement to the great work which is about to be undertaken both by the teachers and by the taught: it demands "earnest words", as Schiller has it.

> "Zum Werke, das wir ernst bereiten,
> Geziemt sich wohl ein ernstes Wort;
> Wenn gute Reden sie begleiten,
> Dann fliesst die Arbeit munter fort.
> So lasst uns jetzt mit Fleiss betrachten,
> Was durch die schwache Kraft entspringt;
> Den schlechten Mann muss man verachten,
> Der nie verdacht, was er vollbringt.
> Das ist's ja, was den Menschen zieret,
> Und dazu ward ihm der Verstand,
> Dass er im innern Herzen spüret,
> Was er erschafft mit seiner Hand."

For this year, the earnest words fitting to the occasion have been spoken with eloquence. May their effects for good, on those to whom they have been addressed, be universal and lasting!

Introductory lectures, however, in the present day, are not made up merely of good advice to students as to their demeanour as gentlemen and Christians during their pupilage, or as to the course which they should follow in regard to the objects of study placed before them. Dr. Pavy has spoken of the duty of delivering an address as an old garment, turned and re-turned, and periodically brought out, so that it has become at last difficult to discover a fresh part and put it foremost. So it would be, if the addresses were entirely made up of the material—good advice for the especial benefit of the students. But lecturers have come now to look on the first of October as an opportunity for giving vent to sundry and various of their thoughts *de re medicâ;* and hence it is now not uncommon to find the introductories consisting in great part of commentaries on medicine in all or any of its aspects—as it is taught to and learned by the student, as it is practised by him who has received a legal qualification to do so, in its relations to the state, and to the public. The occasion, indeed, is held to be a fair one for descant-

ing on any subject whatever having a medical bearing, that has agitated or ought to agitate the professional or the public mind.

Of one of the primary and most important objects of these addresses, that of pointing out to the students the moral duties devolving on them, there is no need for saying much. The responsibilities of those entering on the study of the medical profession have been truthfully laid before them. This only we will say: that the magnitude and solemnity of the duties devolving on the students have happily for some years been more generally recognised by them than was wont to be the case in times past. Of the classes so facetiously but ably described by Dr. Reynolds of University College, the first, never the true type of the student, but once common enough to appear as a type to novelists, has now become the rare exception. As another lecturer (Mr. Heaton) said, the practices once followed by such men had gone by, and "a man who should now indulge in them would be reckoned by all his companions as a blackguard." How has this change been brought about? It cannot be altogether the result of the moral advice given in the introductory lectures; for such advice has always been given. We rather agree with Mr. Heaton, that "much of the change may be traced to the higher education now required in a medical man." The medical learning of the present day is so varied in its details, and requires so great application for its mastery, that no student having a grain of "honesty or heart", or hoping to become competent to hold a respectable position among his fellows in the profession, can possibly devote his days and nights to idleness and dissipation, in the confidence of being at last able, by a spasmodic effort and by the help of a "grinder" to master a sufficient show of knowledge to satisfy an examining board, or, having passed that ordeal, to gain that estimation among his profession and among society which an honourable and competent practitioner of medicine deserves. There is one other agency, too, which we would suggest as having been effective in this improvement of the *morale* of the medical student. There have long been, in every medical school, students who have understood the earnest nature of the work before them, and have acted accordingly. May it not be, that their good example has gradually acted as the leaven on the masses surrounding them? The old proverb, that "one black sheep infects the whole flock", is capable of being sometimes read with a more favourable meaning.

The deliverers of the introductory addresses have, then, not had to deal so much with men who require goading and enticing to their task, as with men earnestly bent on their duties; and hence it will be found that a frequent theme in the addresses has been to show how the student should set about his work. Advice on this point is not more than necessary; for every one will recognise the four classes described by Dr. Reynolds, of students having a conscientious appreciation of their duties, yet seeking to do their work in divers manners, some positively faulty, and none absolutely perfect, however commendable in design and in result. It is, as Mr. Henry Lee well put it, the variety of subjects of instruction, and the number of facts contained under each subject, that perplex and even terrify at the outset, and either cause them to exclaim, "It cannot be done"; or to act in the manner of Dr. Reynolds's second case—laboriously accumulate facts without giving themselves time to discover their bearing on each other or on the science of medicine; or again, perhaps more rarely, to devote attention to some one department, to the comparative neglect of others of at least equal importance. More than one of the lecturers disapproved of the plan of attempting merely to study medicine as made up of a mass of isolated facts, and of treasuring up in the memory each of these without perceiving the mutual connexion between certain of them. Dr. Reynolds, as we have already noticed, pointed out the disadvantageous position in which the student who attempts this course is placed; and Mr. Henry Lee, too, specially insisted on the advantage to the student of endeavouring to recognise general principles, and of making each observed fact an illustration of some such principle, which would connect the fact in the mind with others of a similar character.

On one subject, however, connected with this topic, we must make a remark—the number of lectures which the student is required to attend. It is true, that the number has been reduced by the examining boards below what it was some years ago; but it is still a fair question, whether the number of obligatory courses be not still too many to be useful. Dr. Reynolds, while defending—and rightly—the utility of lectures as a means of instruction, virtually admitted the possibility of overdoing attendance on them, when he said of his most favourable types of the student, that they "attended lectures with punctuality and regularity; *but they did not waste time by going uselessly over the same ground again and again.* They did not lose the continuous course of information which a course of lectures can supply; but having gained that, they used other means to confirm and enlarge their knowledge." That students should be required to attend one course of lectures on each subject, so as to assure to them a connected exposition of it, is beneficial; but the demand for attendance on courses at a time when the time would be more usefully employed in the study of things rather than of words, is at least superfluous, and is liable to confuse the conscientious student as to his line of duty, or to cause him to attempt so much, that the attempt can only defeat its own object.

One point more bearing on student-life demands notice. While the deliverers of the introductory addresses endeavour to guide the intellectual course of the student, and congratulate him on the abandonment of some of the very questionable amusements of past days, several of them most judiciously hint at the advantage of maintaining a *corpus sanum* in which he may exercise the *mens sana*. Dr. Pavy, for instance, said :

"Although he had laid down the law so strictly as to studying, he did not wish the students to be always at work, and never to seek amusement. They were aware of what all work and no play did in the case of that renowned personage going by the name of Jack. There had been many a student who, in working for university honours, had fallen into the error of not allowing himself the necessary time the mind required for repose; and when the day of examination arrived, the mind had been so overworked, the bodily energies had become so exhausted, that the nerves had been agitated and the memory had failed, and thus he fell short of what otherwise he might have attained."

Mr. Heaton, too, spoke boldly of the advantages of bodily exercises in fitting the mind for study :

"In place of the wild dissipation of the past age, there were plenty of healthy amusements, which, so far from hindering a man, would enable him to work the harder. A good pull on the river, a ten mile walk, or a stiffly contested game of cricket, would send any man home to his work with cleared brain and cleansed fibres. It was to be hoped that the time would come when Charing Cross men would be equally celebrated for their success in examinations and for the scores they made at cricket."

Beyond the advice intended specially for the students, as to their moral responsibility and as to the manner in which they should proceed to gather instruction in the great field lying open before them, the lecturers offered comments on various topics of interest to medical men of all classes, and also to the public.

Thus Dr. Pavy at Guy's Hospital, and Mr. Sydney Jones at St. Thomas's, had each a word to say on vivisection ; and both agreed in condemning the unnecessary and cruel practices which have been followed in the French veterinary schools, while they recognised the value of experiments on living animals as having done much, and promising to do more, towards the alleviation of the sufferings of mankind and the elucidation of some of the mysteries of medical science. We are glad that Dr. Pavy, who is one of our most able and zealous experimental physiologists, has had an opportunity of expressing his sentiments on the subject of vivisection. What he says, is quite in accordance with the views that have been advanced in this JOURNAL, and to which, we think, no unprejudiced person, no one possessing common sense, can make objection. No one could have stated the proper bearings of the question more clearly or more justly than Dr. Pavy has done ; and, we repeat, we rejoice to find him, a leading man among our physiological vivisectors, so ably and temperately defending the legitimate practice of vivisection against the well intending but indiscriminate zeal of the Society for the Prevention of Cruelty to Animals.

At St. Mary's Hospital, the subject of Dr. Markham's address was, the present scepticism concerning the effects of remedies over diseases. As his observations on the subject will shortly be laid in full before the readers of the JOURNAL, it is unnecessary to say anything concerning them in this place.

In the introductory address at the Birmingham Queen's College, Mr. Furneaux Jordan made some remarks on one of the most important topics which could possibly be brought forward—the public relations of medicine. He argued most truthfully, that the misunderstanding on the part of the public with regard to legitimate medicine, and their readiness to fall into the hands of pretenders, arises from their ignorance of the principles of physiology. As a remedy, he would have this science taught in our colleges and schools ; and he would have the members of the medical profession take an active part in the diffusion of physiological science among the masses of the people. He rightly sees in this a remedy against quackery. We are quite at one with him in his views ; and we would gladly see instruction in physiology generally recognised as a branch of ordinary education. This precaution only we would suggest ; that the knowledge imparted should, while concise, be complete and systematic, and not a mere superficial smattering. The aim should be to teach physiology as a rational science, not as a mere collection of dry facts ; and to give the public such a correct insight into the structure and actions of the body, as will, on the one hand, show how health is to be preserved and disease avoided, and, on the other, convince them of the true value of medical science. We would commend Mr. Jordan's remarks on this subject to the attentive consideration of our readers.

In concluding this outline of the introductory lectures delivered this year, we have only to remark on the philosophical tone which generally pervades them. Students are now exhorted to observe the mutual bearing of facts on each other, and to study medicine as an intellectnal pursuit, not as a mere collection of isolated facts, so that they may become scientific, and not mere empirical or haphazard practioners of their art. In such a course lies the best safeguard against treachery from within, and the attacks of ignorance from without. There are topics, indeed, of public as well as of professional interest, in which it might have been desired that some of the lecturers had expressed their opinions fully—we mean, for instance, the indiscriminate giving of gratuitous medical advice. Perhaps this subject will be taken up on some future occasion, with the object of enlightening the students and the public on the abuse of charity which prevails in the medical

profession. But, for the present, we have to recognise only the general excellence of the remarks made by the deliverers of the introductory addresses, and to express our sincere hope that the thought and time and labour which have been bestowed on these productions may meet with its due reward, not only in the beneficial effects produced on the students themselves, but in elevating the position of the medical profession both in itself and with the public.

A HINT FROM VERONA.

Dr. Lee, of Philadelphia, who has been lately travelling through Italy, visiting its hospitals, etc., gives us a description of the bathing department of a new military hospital lately built at Verona. There is really something very humiliating to science—something not very creditable to our profession—in the fact of the neglect—we had almost said the complete neglect—which is shown by our hospital physicians and surgeons in general respecting the treatment of diseases by the application of water in its many forms.

Our profession has, in this matter, played right well into the hands of the irregulars. Because M. Priessnitz, and others of his kind, have chosen to quack this most excellent remedial agent, the profession has turned up its nose at the whole thing. The very term hydropathy is a term of reproach and reprobation with us. But, philosophically speaking, because a set of quacks seize upon and quack an excellent remedy, is that a reason why medicine should disdain to recognise its goodness? We have no hesitation in saying, that the absence of apparatus for the cure of disease by the agency of water in our London hospitals is a disgrace to the profession.

Dr. Risdon Bennett, and one or two other physicians, have had the courage to use the wet-sheet in the use of certain diseases; and, we believe, still use it. But, we ask, is there any hospital in London at this moment in which the systematic treatment of disease by the various possible and useful modes of the application of water is a recognised and established fact? Surely every member of the profession will admit the powerful agency of the remedy. What excuse, then, is there for our not more generally and systematically resorting to its use? We suppose the only answer which can be given to the question is, that our hospitals do not afford the means. Let our readers see what the Austrians can do in this way. In the new military hospital, containing 1500 beds, at Verona. Dr. Lee tells us :—

"The bathing-rooms are fitted up on a very extensive scale, and are supplied with hot and cold water-baths, steam-baths, douches, etc. For steam-bathing, a large room is fitted with rows of bedsteads, one rising above the other in steps, like an amphitheatre, with sloping head-board for the comfort of the patient, who is laid in his blanket on one of these wooden platforms or bedsteads, and steamed by the admission of any degree and quantity of steam from the boiler in an adjacent apartment. In the adjoining room are small apartments, or stalls, of sizes suited for patients standing, sitting, or reclining, fitted with pipes and faucets, admitting a shower-bath from above, or horizontal jets from the sides, or a perpendicular jet falling quietly on the patient, thus furnishing ample facilities for every kind of local or general bath.

"Two other large apartments are fitted up with thirty-six large marble bathing tubs, with tubes and valves for hot and cold water. These tubs are sunk several inches in the floor, the top remaining about one foot above, making it easy of entrance by the invalid, and at the same time convenient to put a patient in the bath who may require assistance.

"In another apartment is a large boiler, set in masonry, for steam and hot water for the bathing-rooms; and connected with this is a room containing a reservoir or cistern, rising nearly to the ceiling, supplying a head of cold water for the bathing-rooms, steam-boilers, etc. This reservoir is supplied with water pumped by manual labour from the river Adige. All the bathing-establishment, the store-rooms, apothecary's department, and kitchens, are on the basement floor, and elevated about three feet above the court-yard."

VIVISECTIONS IN FRANCE.

M. Dubois has published a discourse which he intended to have delivered at the Academy on the subject of Vivisections, in answer to the objections made to the amendments proposed by him. It is a brilliant summary of the whole subject, logical and consistent, and utterly condemnative of the amendment which has been carried by the Academy. M. Dubois showed to demonstration that the operations—surgical manœuvres—as practised on the living horse in France, and physiological demonstrations on living animals in the public schools, are utterly unjustifiable, and a scandal to humanity. In all this we most thoroughly agree with him.

"If we," he said "are to carry out the wishes of certain savants, we shall make every one of our professional chairs a scene of blood, and even this very tribune which I now occupy. Already I have heard the cries of some wretched animals in your library, which they have desired to bring here under your eyes. Let us tell the minister that vivisections are necessary for the advancement of science, and that to suppress them would be to arrest the progress of physiology; but let us also say, that they are unnecessary in the teaching of this science, and that recourse ought not to be had to them either in public or private lectures. Astonished am I to find that the Society for Protection of Animals contains amongst its members professional vivisectors. But if it be thus that they protect animals, I can do no more than hide my face. I thought to be of service to the poor horse; and I see that I have rather injured than improved his case. M. Bouley said incidentally that human surgery might well take a lesson from the school at Alfort, and practise our pupils in operations on the living horse. And the remark did not pass unnoticed; for it has been already seized upon by the partisans of vivisection at any price; so that henceforth this practice may come to be regarded as a necessary part of surgical education. This, therefore, is, alas! poor horses, all that you will have gained by this discussion. The branch of industry concerned in the supply of these wretched horses will be extended."

THE WEEK.

The *Pharmacopœia* is already in print; and we understand that in a few weeks it will be presented to the profession. Some few small items have yet to be settled between the triangular committees which sit in London, Edinburgh, and Dublin. The main delay results from this necessarily prolonged method of settling any disputed point between three parties each living widely apart.

Two new journals have appeared in Italy, *Il Raccoglitore* and *La Rivista di Scienze Mediche*, the first at Leghorn and the second at Turin. Rome, we need hardly add, has neither a medical journal nor a medical society. It effects its cures by other means than medicine.

A faculty of medicine is to be founded in the Tyrol, at which lectures will be given in German and in Italian. This, we suppose, is, in part, a political manœuvre on the part of Austria to bridge over the differences in race and feeling, which exist between its Italian and German subjects.

"It is seldom," says a French journal, "that we find royal personages who deign to interest themselves in the works of the scientific. War, politics, etc., absorb all their attention, and a congress of doctors generally passes by unnoticed. The public scarcely notice the fact; and the press generally pass it by, and regard the meeting of less importance than a flower show."

The second annual medical congress has just passed over at Naples with grand *éclat*. All the Italian provinces were represented there; and if we read our *confrères* of the City of the Lagunes and of Magna Roma were absent from the banquet of our Association, they, nevertheless, assisted at it with the spirit of those generous souls which the force of despotism may silence, but can never extinguish.

Professor Rostan is about to retire from his public Lectureship, after having been engaged for forty years in teaching. M. Grisolle, at present Professor of Therapeutics, aspires to occupy the clinical chair vacated by M. Rostan.

A Society of medical men in France brought actions against certain charlatans in their district, Eure-et-Loire, and obtained upwards of £20 damages. This sum they have distributed amongst the poor of the district.

On the 20th September, the Academy Royal of Medicine of Madrid consecrated a monument to the memory of the celebrated physician Vallès, called the *divine*. A stone commemorating the fact was placed in the house where he lived, at Alcala; and another stone on the spot where he was buried.

ARMY MEDICAL SCHOOL.

The Royal Victoria Hospital was visited on October 1st by more than a hundred gentlemen, including many civil practitioners of Southampton, and officers of both services, in order to hear the address by Dr. Maclean, Professor of Military Medicine, at the commencement of the seventh session of the Army Medical School.

Dr. Maclean delivered a brilliant oration, in which many subjects of great interest were reviewed. The main topics were the impending measures for the reorganisation of the Indian medical service; the report of the Sanitary Commissioners on the mortality of Europeans in India; and the system of instruction at the Army Medical School. The speaker referred with regret to the fact that a complete identification of the Queen's and Indian medical service was not to be carried out; and he expressed his belief that this could have been done with due regard to every duty and to every interest. He was glad, however, that there was still to be some bond of union, and that a common portal would introduce men into both services. In reference to the Sanitary Commissioners' report, he vindicated at some length their statistics from the objections raised against them; and drew a vivid picture of what England has done, and can do, in India, to improve the condition, not only of the European, but of every native race. A short statement of the objects of the school followed, and concluded a most interesting address.

After the lecture, the commandant of the hospital, Colonel Wilbraham, C.B., an officer distinguished for a long and honourable service in all parts of the world, including Syria, Persia, and the Crimea, made an address to the candidates for the service, who had just arrived to attend the school. After referring to the very gentlemanlike and excellent conduct of the assistant-surgeons who had just left the school, and expressing a hope that he would be able to report equally well of their successors, Colonel Wilbraham took occasion to say a few words on the mutual positions and feelings towards each other of the combatant and medical officers. He said that in both the regiments in which he had served for so many years, the medical officers were on the best terms with their comrades, and were esteemed by all for their intelligence, professional knowledge, and gentlemanlike conduct. In the Rifle Brigade, he never heard the name of Dr. Anderson, the present Inspector-General of Netley, referred to but in terms of the greatest affection; and it was the same in the Fusiliers with Dr. Morehead, and in the 19th Regiment with Professor Longmore, two others of the staff. And so, he believed, it was everywhere, when medical officers were, what the majority of them were, able in their profession, conscientious in their duty, and gentlemen in word and deed. He regretted to see the attempt which had been made to sow discord between officers of the same service; and he begged those gentlemen who were about to enter the army to remember that it was not rank which gave a man status in his regiment; but his own qualities and capabilities. He trusted that while at Netley they would find everything done for their comfort as well as for their instruction. He was quite sure that it was the intention of the Government that it should be so. He thanked Dr. Maclean for his most interesting lecture.

Before the lecture, a grand luncheon was given to the visitors by the officers of the medical staff, in their new mess-room, which was opened on that day for the first time. This is a splendid room; lofty, well-ventilated, and warmed, and capable of dining one hundred guests with ease. It is in accordance with everything else which the War-office has done at Netley. Everything is on a good scale, without unnecessary expense, and yet designed on a liberal plan.

Progress of Medical Science.

Pneumatocele of the Skull following Fracture of the Petrous Bone: Recovery. Emphysematous tumours of the cranial region do not seem to be common; for very few examples are known. One has been recorded by M. Jarjavay; and another by M. Balassa of Pesth, in the *Archives Générales de Médecine* for 1853. To these, Dr. Chevance of Wassy adds the following.

A miner, aged 44, of good constitution, fell in 1850, from a height of five *mètres* (nearly five yards and a half) on his feet, and immediately felt a very intense fixed pain at the back of his head, on the left side, with dazzlings of the eyes, slight giddiness, and singing in the ears; he felt stupified also for half an hour, but did not lose consciousness. He said afterwards that he several times heard a crackling sound at the back of his head, in the situation of the pain. There was no wound, nor any escape of blood or of any fluid by the ears, nose, or mouth. The symptoms which followed were pain at a distance of about five *centimètres* behind the left external auditory meatus, and difficulty of swallowing on this side. No treatment was pursued. Six weeks afterwards, there were difficulty of hearing, and constant troublesome buzzing noises in the left ear. At the same time, there appeared at the painful spot a small tumour, which remained stationary eight months, and then increased rapidly in size, so as to occupy the left posterior half of the head and almost the whole of the occipital region. Two punctures were made in it by a medical man; but air only escaped. At this time, seventeen months after the receipt of the injury, the patient entered the hospital at Wassy. At this time, the tumour commenced four *centimètres* from the ear, had a transverse extent of fifteen *centimètres*, and extended from the neck to the back of the head, forming a curve of twenty *centimètres* in extent on the left side and eighteen on the right. It was painless, elastic, resistant to pressure, without heat or any trace of inflammation, and gave a tympanitic sound on percussion. There was no pulsation nor fluctuation. On being punctured with a trocar, it gave issue to gas alone, which, on being collected under water and tested, presented all the characters of atmospheric air. After its removal, there were found, a little above and behind the mastoid process, about four or six *centimètres* from the left auditory meatus, two hard, bony, unequal projections, between which a depression was felt; it was in this situation exclusively that the patient had always complained of pain. When the man made a strong expiration, the nose and mouth being closed, the air escaped with a hissing sound through the left ear. When the swelling was compressed with the hand, it collapsed, and gradually shrivelled, producing, the patient said, a crackling sound in the left ear. The membrana tympani was torn.

M. Chevance concluded that the case was one of fracture of the petrous bone by *contrecoup*, producing a communication between the tympanic cavity and the areolar tissue lying beneath the scalp; and in this way he explained the gradual formation of the pneumatocele. In order to produce a radical cure, he determined on provoking adhesive inflammation on the walls of the tumour. A seton was, therefore, introduced, by which violent inflammation was set up; and on the third day, there was an abscess which, on being opened, discharged 500 *grammes* of pus. In a month, the adhesion of the skin appeared complete. But, two months afterwards, the tumour again formed, being attended with the same symptoms. An abscess was, therefore, again evicted by the introduction of another seton; and on this occasion the cure was permanent. In M. Ballassa's case, also, the cure was completed by the excitation of inflammation so as to produce adhesion of the integuments. (*Union Méd.*; and *Bulletin Génér. de Thér.*, 30 Août 1863.)

Successful Result of Division of the Nerve in Traumatic Tetanus. A case of this kind was recorded by Mr. S. Wood of Shrewsbury in the Journal for July 6th. Since the publication of that paper, the history of another case of the same class has come under our notice. It occurred in the practice of Dr. Fayrer of Calcutta, and is recorded by him in No. xvi of the *Indian Annals of Medical Science.*

A young Brahmin, aged 22, was admitted into the Calcutta Hospital on November 3rd. A week previously, he ran some splinters of bamboo into the left hand at the root of the thumb; they broke off, and remained lodged in the hand just by the ball of the thumb. Suppuration followed, and was attended with much pain. The patient, during the three days before admission, had been able to close the fingers of the injured hand, but when he opened them they became spasmodically contracted and twisted; the thumb and the three fingers supplied by the median nerve were implicated. He had no spasm of the arm, but pain in the left shoulder, and partial closure of the mouth, which could be opened sufficiently to introduce the handle of a table-knife. He was in good spirits, and seemed to have had good health before the accident. Dr. Fayrer made an incision into the palm of the hand, and removed a splinter an inch in length. An enema of castor-oil and turpentine was ordered; also two grains of opium, to be taken immediately. The next day, the spasms continued in the hand, and he had frequent spasms in the back, and some rigidity of the jaw. The slightest touch produced spasm of the arm, back, and jaw. He was ordered to have tincture of Indian hemp and chloroform; enemata of oil and turpentine; opiate poultices to the wound; and, as diet, milk and sago, or whatever he would eat.

Dr. Fayrer removed another small splinter. As the splinters were impacted just where the median nerve divides into its digital branches, the patient was put under the influence of chloroform, and Dr. Fayrer divided the median nerve just above the annular ligament. Very little effect was produced at the time. Six hours afterwards, he said that the fingers were somewhat benumbed; that he had pain in the hand and arm; but that the contractions of the arm were much less frequent and violent.

On the following day (Nov. 5th), there was no rigidity in the neck and jaws. The spasms in the arm and hand continued, but were less violent and persistent. The Indian hemp, opium, and chloroform, were continued up to November 9th. On November 12th, matter having formed in the hand, incisions were made and another splinter was removed. The spasms had ceased, but the fingers continued bent into the palm, though less rigidly than before. The hand remained for some time contracted, long after spasm had ceased. When he left the hospital on November 28th, he could with slight effort straighten the fingers, and was regaining the use of them.

Dr. Fayrer believes that the arrest of the tetanic symptoms was due rather to division of the nerve than to the internal remedies which were employed. The operation was done soon after the tetanic symptoms set in.

Perinephritic Abscess. This affection, M. Jobert de Lamballe observes, is common enough. He has seen several instances among M. Trousseau's patients, and one under the care of M. Rayer. In the latter instance, the abscess was developed in the cellular tissue which surrounds the kidney; on being opened, it gave exit to

pus, which had an odour of peritoneal fluid, intestinal contents, and putrid liquids.

These abscesses are not always produced by disease of the kidney. Cold may induce in this region a diffused phlegmonous inflammation, like that which the same influence produces in the thigh, arm, etc.; or the abscess may follow a fall or blow. Pyelitis or pyelo-nephritis also may implicate the cellular tissue and produce phlegmon. Gravel, or calculi, especially rough ones, lying in the renal calices, may produce fistulous abscesses. In such cases, the abscess may be the result of pyelitis, the inflammation reaching the kidney and the areolar tissue surrounding it; or the tissue of the kidney perforated; and the abscess is produced by urinary infiltration.

Whatever be the mechanism of its formation, the abscess points either externally or into the rectum; sometimes towards the iliac fossa or the crural arch; sometimes it opens into the peritoneal cavity; it has even been observed to reach the air-passages.

The symptoms are, at the commencement, sudden pain in the kidneys and hypogastrium, with frequent and abundant vomiting. The pain is seated more deeply than in lumbago; and its nature is further explained by the fever and rigors which ordinarily precede it. If this condition persist seven or eight days, it may be predicted that pus has been formed in the areolar tissue surrounding the kidney. At this time, also, inspection and palpation of the lumbar region may detect, if not fluctuation (which is rarely absent), at least sensible tumefaction of the lumbar region with a pasty or œdematous feel, especially behind. But even if these external signs be absent, the sympathetic reaction, with the history of the case (if the perinephritis be not primary, in which case the diagnosis is very difficult), are sufficient to render the diagnosis of phlegmon almost a matter of certainty.

The prognosis is grave; for, if the existence of the phlegmon be not diagnosed, and if issue be not given to the accumulated pus, it may spread to the right or left, or be effused into the peritoneum, etc.; and the inflammation may extend to neighbouring organs, as the spleen or lung. Even in the most favourable cases, where the abscess opens spontaneously outwards, troublesome fistulæ are formed; the pus becomes thin, decomposed, and acts as a formidable poison.

When suppuration has once taken place, the only treatment is to allow it exit by a large opening. M. Jobert is opposed to the plan of making a small incision with a narrow bladed bistoury; as the muscles of the back must be cut through, and, if an artery be divided, it is impossible to secure it. He, therefore, advises a long incision. The tissues must be divided layer by layer, and as each is reached, the finger must be carried to the bottom of the wound. If an artery be felt, it must be tied and divided; if a vein, it is divided between two ligatures. The covering of the purulent collection being at last reached, a small opening is made, on which the pus escapes; and the aperture may be enlarged by scissors or by a probe-pointed bistoury, in order to allow the free escape of the pus, or of calculi if they be present. (*Journ. de Méd. et de Chir. Pratiques*, Août, 1863.)

Uræmia in Uterine Cancer. According to Dr. Wannebroucq, uræmic poisoning is a frequent mode of death in cases of cancer of the uterus. The uræmic symptoms assume either the acute or the chronic form, most commonly, perhaps, the latter. Headache, sleeplessness, creeping sensations in the limbs, and disturbances in the organs of sense precede, for a longer or shorter time, the more severe and acute symptoms of convulsions, delirium, coma, etc. Sometimes the patients die in a few minutes; sometimes not until after several attacks. In a case observed by Dr. Wannebroucq, the vomiting, which is an ordinary symptom of uræmia, was unusually predominant and violent. It was incessant and unrestrainable, so that it produced death by inanition, although the fatal termination had appeared distant. In all the cases where uræmic symptoms have been noticed, one or both of the ureters has been found more or less implicated in an extension of the cancerous disease. (*Bulletin Méd. du Nord de la France;* and *Bull. Génér. de Thér.*, 15 Sept. 1863.)

Pulmonary Apoplexy in New-born Children. M. Hervieux sums up a memoir on this subject with the following conclusions. 1. Pulmonary appoplexy in new-born children generally attacks both lungs simultaneously. 2. The hæmorrhagic deposits occupy the surface of the organ, rather than its interior. Of variable number and size, they consist sometimes of small subpleural ecchymoses, sometimes of true sanguineous clots with or without alteration of the pulmonary tissue. 3. Sanguineous infiltration with integrity of the pulmonary tissue is the most common form in new-born children. 4. The tissue on which the apoplectic deposits may be in a state of splenisation or of hepatisation. 5. In one-third of the cases, an effusion of serous or sanguinolent liquid is found in the pleura of the diseased side. 6. Although the heart is ordinarily sound, the same is not the case with the other viscera, such as the brain and the intestines, the peritoneum, the intestinal mucous membrane, the liver, the spleen, and the kidneys, which present traces either of true interstitial hæmorrhage or of apoplectiform hyperæmia. 7. The symptoms observed during the life of new-born children attacked with pulmonary apoplexy are, alteration of the cry, increasing difficulty of respiration, expectoration of frothy or sanguinolent mucus, thoracic dulness, weakness of the vesicular murmur, moist mucous or subcrepitant rhonchi in some cases, and finally symptoms of progressive algidity. 8. Aphthæ, jaundice, and diarrhœa, are the most probable concomitants of the disease. 9. The determining cause of pulmonary apoplexy in new-born children appears to be the disturbance of the calorific and circulatory functions. 10. Pulmonary apoplexy, like progressive algidity, scarcely attacks young infants except during the first three weeks of extrauterine life. 11. The duration of the disease varies between two and twelve days, and it terminates commonly in death. 12. The treatment consists in the use of the means ordinarily employed in the treatment of algidity, and of dry cupping, sinapisms, etc. (*Gazette Médicale de Paris*, 5 Sept. 1863.)

Application of Caustics in Diphtheria. Dr. Casali recommends astringent or caustic injections to be made through the nostrils in cases of diphtheria affecting the fauces or larynx. The advantages of this plan are said to be the following. 1. The child cannot resist the application, as it often does when the application is made directly to the tonsils or larynx. 2. The parents, or those who have the care of the patient, can make the injections without medical aid, so that the frequency of the application can be insured in cases where it is required. 3. The injected fluid, being thrown back immediately by the expulsive efforts which its contact produces, comes into contact with all the surfaces and anfractuosities of the throat—a result which cannot be attained by direct application. The spasmodic movements, moreover, aid powerfully the detachment of false membrane. 4. The child, not having been terrified by the direct application of the caustic, does not refuse to open its mouth to take proper food and medicine. (*L'Imparziale;* and *Bulletin Génér. de Thér.*, 15 Sept. 1863.)

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Oct. 15, 2 P.M.
SOUTH MIDLAND. [Autumnal.]	Infirmary, Northampton.	Thurs., Oct. 22, 1 P.M.
BATH AND BRISTOL. [Ordinary.]	York House, Bath.	Thursday, Oct. 22, 7.15 P.M.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, September 29th, 1863.

PRESENT:—Sir Charles Hastings (in the Chair); Mr. Bartleet; Mr. Clayton; Dr. Falconer; Mr. Fowler; Dr. Roberts; Mr. Southam; Dr. Stewart; Dr. Styrap; Dr. Westall; Dr. Wilkinson; and Mr. Williams (Secretary.)

The following resolutions were adopted.

1. That there shall be only two addresses delivered at the annual meeting at Cambridge.

2. That Dr. Ormerod be appointed to deliver the Address in Medicine.

3. That Dr. Humphry be appointed to deliver the Address in Surgery.

4. That the Secretary, as far as practicable, carry out the recommendations contained in the Report of the Finance Committee, presented June 24th, 1863.

5. That the President of the Association, the President of the Council, and the Secretary, be appointed a sub-Commitee, to prepare a Memorial to the Council of the Royal College of Surgeons of England, as recommended in the Annual Report; and that the same be forwarded to the President of the College, signed by the President of the Association and the Secretary.

T. WATKIN WILLIAMS, *Secretary.*

Birmingham, October 2nd, 1863.

P.S.—The Committee earnestly urge upon those members of the Association who have not yet paid their subscription, the necessity of doing so without further delay.

Correspondence.

THE SOCIAL EVIL IN LONDON, AS VIEWED BY A FOREIGN PHYSICIAN.

SIR,—Having paid a good deal of attention to this plague, with its physical and moral consequences, both here and on the continent, it has struck me that real prostitution, in its most hideous aspects, is more general in this country than elsewhere. In some continental seaports, it exists to a great extent, but is there confined to certain spots; but in this country, wherever great masses congregate, you will find it in all its hideousness and audacity.

The question has two sides, the moral and physical. With the moral question our social state has some connexion, and I believe the laws of the country exercise considerable influence upon it.

I proceed to the physical and medical parts of the question: these are, prevention and cure of the consequent disease. The people of this country justly condemn the continental system of visiting those unfortunates and packing them together. The practice may do some good, but it is a very disgusting one for government to be engaged in. The question is a social one, and ought to be taken in hand by society itself. Other nuisances, such as juvenile crimes, have been arrested and abated by courageous and good men. We should have a hygienic code to prevent the disease, and I am convinced that the remedies exist.

For curing the diseased women, I would have a medical man specially attached to each hospital and dispensary, and well paid. I say well paid, because otherwise the duties would not be so satisfactorily discharged; the philanthropical profession of medical men giving their time and services gratuitously being cant, or they estimate their amount of knowledge at its true value. I would then endeavour to induce all the unfortunates voluntarily to visit those hospitals and dispensaries, whether ill or well, and as frequently as possible, every three days at least; and, to save appearances and scandal, those visits might be in the evening. After each visit, if the woman's condition justifies it, let her have a clean bill of health. I believe it would soon be found that she could not successfully pursue her calling unless she could produce such certificate. I propose this means as a progressive remedy for this great evil, the question being how to deal with it according to English ideas. Any interference on the part of the government, beyond keeping the streets quiet and respectable, would put in jeopardy that great principle of individual liberty which is rigidly kept in view in all legislation in this country.

I am, etc., H. D.

IRIDECTOMY.

LETTER FROM JOHN C. WORDSWORTH, ESQ.

SIR,—Permit me to offer a few remarks on the article that appeared in our JOURNAL of September 26th, on the subject of Iridectomy. I desire to do this in justice to those who practise the operation, rather than in the hope of converting those who condemn it untried.

It seems to me that I might as well attempt to convince some "first-rate surgeons" that it is better to excise joints than to amputate limbs, as urge further reasons why iridectomy should be adopted in the treatment of glaucoma, rather than allow such cases to run their acknowledged course, unopposed by any remedy. There are, no doubt, in our profession, representatives of the tory type of mind, who cannot be converted, or will not be dispossessed of preconceived views, by any arguments whatever, be they never so unanswerable.

Such men have their use in the world probably, though it may only be that of acting as drags to the rapid progress of others; therefore, let them be allowed to fulfil their destined purposes in their own way.

Turn we then to those who are open to conviction, and being convinced, though it may be somewhat against their established and long-cherished notions, are willing to avail themselves of all the resources of art, rather than abandon those suffering from otherwise irremediable disease. For if iridectomy be not a remedy for glaucoma, where does one exist? In the hands of the most expert and judicious surgeons, it, doubtless, will not always succeed in restoring sight; but in a large proportion of the cases in which it is indicated, much improvement may be predicted, with as much confidence as justifies the operations for hernia or aneurism.

So much has been accomplished by it in the treatment of glaucoma, and other conditions that are much influenced by the tension of the eyeball, as well as in cases of recurring iritis, attended by adhesion to the capsule, that, in my opinion, it can never fall into disuse, so along as we are only possessed of the means at present known for combating these affections. If "the celebrated eye-surgeon" whose opinion you quote, as to its evanescent fate, is enabled, in his prescience, to foretell that iridectomy will soon be superseded by some new mode of treating glaucoma, then I will hail with satisfaction its becoming "a mere matter of history"; nay, I

look forward with much hope that a better acquaintance with the pathology of the eye will indicate the means of cure before iridectomy has become the last resource. That it is becoming obsolete already is certainly contrary to the experience of my colleagues and myself at the Moorfields Hospital. On the contrary, I believe that we daily perform the operation even more than ever; and not only for the glaucomatous states, and for restoration of the pupil, but as a preliminary to extraction of cataract by the small spoon. If I were asked to instance one of the most splendid triumphs of modern surgery, I believe that I could adduce no more remarkable one than that of "linear extraction" of cataract in the adult. I have witnessed, by this mode of operation, the restoration of vision in both eyes within twenty-four hours; and the operation has been attended with so little inconvenience that the patient has not even been confined to his bed, nor lost one night's sleep.

That iridectomy should be abused, we should expect from all we have known of other novelties. That it should be employed in hopeless cases, and so fall into disfavour, must have been anticipated; and that it would be discredited by inapt operators, and by those who do not attempt even to perform it properly, also was to be foretold, almost as a matter of course. These detractions pursue us in all our efforts to fulfil the indications of science in the use of remedies; still there is always a margin left to indicate the value due to all our proceedings.

We see how severely ovariotomy has been assailed; yet though as much injured, almost, by its advocates as by its detractors, it still continues to snatch those who seem hopeless from their impending fate.

I am, etc., J. C. WORDSWORTH,
Surgeon to the Royal London Ophthalmic Hospital.

50, Queen Anne Street, September 1863.

Medical News.

APOTHECARIES' HALL. On October 1st, the following Licentiates were admitted:—

Gooding, Ralph, Ipswich
Harmer, William Milsted, Hawkhurst, Kent
Lightbourne, James Ashburner, Church Street, Preston
Meadows, George Frederick Walford, Otley, Ipswich
Miles, George, Gillingham, Dorset
Parks, Charles Holman, St. Colomb, Cornwall
Skelton, John, Great Russell Street, Bloomsbury
Towne, Alexander, Kingsland Crescent

At the same Court, the following passed the first examination:—

Covey, Charles Edward, Basingstoke

APPOINTMENTS.

ASPRAY, Charles D., M.D., appointed Resident Surgeon to the Western General Dispensary.
COOPER, Frank W., Esq., appointed House-Surgeon to the Sheffield Public Hospital.
HAINES, R., M.B., appointed Acting Registrar of the University of Bombay.
HAMILTON, William G., M.D., appointed Medical Officer and General Superintendent of the Dundee Royal Infirmary.
*SCOTT, Thomas A. F., Esq., appointed Public Vaccinator for the parish of Lochmaben.

BEDFORD GENERAL DISPENSARY AND LYING-IN INSTITUTION. The following appointments have been made in this Institution.

*BARKER, T. H., M.D., appointed Senior Surgeon.
*GOLDSMITH, G. P., Esq., appointed Surgeon.
HACON, R. D., Esq., appointed Surgeon.
*PRIOR, C. E., M.D., appointed Senior Surgeon.
ROBINSON, C., Esq., appointed Senior Surgeon.
ROBINSON, G., Esq., appointed Surgeon.

POOR-LAW MEDICAL SERVICE.

ALEXANDER, Frederick J., L.R.C.P.Ed., to the Metfield District of the Hoxne Union, Suffolk.
HENDERSON, Joseph, Esq., to the Lower Deptford District of the Greenwich Union.

INDIAN ARMY.

BROUGHTON, Surgeon F., Bombay Army, to be Surgeon-Major.
JOHNSTONE, Surgeon T. B., Bombay Army, to be Surgeon-Major.
SANDERSON, Assistant-Surgeon J. T., M.D., Bombay Army, to be Surgeon.
WIEHE, Assistant-Surg. C. G., M.D., Bombay Army, to be Surgeon.

ROYAL NAVY.

ADAMS, W. H., Esq., Surgeon (additional), to the *Royal Adelaide.*
MACDONALD, John A., Esq., Acting Assistant-Surgeon (additional), to the *Euryalus.*
M'MAHON, William, M.D., Acting Assistant-Surgeon (additional), to the *Euryalus.*

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

SNAPE, R. F., Esq., to be Assistant-Surgeon 18th Lancashire A.V.

To be Honorary Assistant-Surgeons:—

CASH, J., M.D., 11th Derbyshire R.V.
CLARKE, J., Esq., 22nd Staffordshire R.V.
CLAYTON, R. P., Esq., 1st Lancashire Light Horse Volunteer Cavalry.
TAYLOR, R. F., Esq., 8th Argyllshire A.V.

YEOMANRY CAVALRY.

MAURICE, J. B., M.D., to be Assistant-Surgeon Prince of Wales's Own Royal Regiment (Wiltshire).

DEATHS.

ALLANBY, John S., M.D., 95th Regiment, at Hyderabad, Scinde, aged 27, on July 28.
BERNAYS. On September 27th, at Hampstead, aged 14 weeks, Ethel Frances Helen, daughter of Albert J. Bernays, Ph.D.
BORLAND. On September 29th, at Teddington, aged 77, Susan Frances, widow of James Borland, M.D., Inspector-General of Army Hospitals.
CANHAM. On September 26th, at Sudbury, Frederick, youngest son of Joseph Canham, M.D., of St. Lawrence, Isle of Thanet.
CROOKS, Henry, Esq., Surgeon, at East Harling, Norfolk, aged 62, on September 26.
HALIDAY. On September 26th, at Dublin, Marian, widow of William Haliday, M.D., of Clifden, co. Down.
HANSARD, F. N., Esq., Surgeon, at Montacute, on October 4, Gilbert Henry, Esq., Surgeon, at Kensington, aged 56, on October 5.
HOOKER. On September 28th, at Kew, aged 6, Maria Elizabeth, second daughter of J. D. Hooker, M.D.
MAY, William, Esq., Surgeon, in Great Trinity Lane, aged 66, on September 23.
PELEKINE. At Kief, aged 18, Olga, second daughter of P. Pelekine, M.D.
RAPER. On September 17th, at Portsmouth, Mary H., wife of William A. Raper, M.D.

NEPHRITE OR JADE. A block of this rare mineral, weighing 1,200lbs., and of exceptional purity, has just been obtained. The Kensington Museum at London also possesses a valuable block of this mineral.

ROYAL COLLEGE OF SURGEONS, EDINBURGH. At a meeting of the College, held on the 2nd inst., Dr. Andrew Wood was unanimously reelected representative in the General Council of Medical Education and Registration, for the period of five years.

DEATH FROM EATING LABURNUM SEEDS. A little girl, nine years of age, living at Worcester, died on Saturday last from eating the seeds of the laburnum. It appeared that on the previous day the deceased, with some other children, was eating Indian corn, and it is supposed that some of the laburnum seeds were among it. She was taken ill in school and sent home, where a medical man was soon in attendance. The little sufferer, however, grew gradually worse, and died at five o'clock on Saturday morning. (*Worcester Chronicle.*)

TESTIMONIAL TO Mr. W. G. A'BECKETT. The gentlemen composing the resident medical staff of the Melbourne Hospital, entertained their late colleague, Mr. William Goldsmith a'Beckett, on June 5th, on the occasion of his retirement from office in the institution. In the course of the evening, they presented him with an elegant vase formed of an emu's egg, exquisitely mounted in silver, and bearing the following inscription.—"W. G. a'Beckett, a parting gift from the resident staff of the Melbourne Hospital, June 1863." (*Herald,* June 8th.)

Thallium. Mr. W Crookes, F.R.S., read at the late meeting of the British Association, at Newcastle, an interesting paper *On the Extraction of Thallium on a large scale from the Flue Dust of Pyrites Burners.* It appears from operations upon five tons of material, to have produced a bar of thallium weighing a quarter of a hundred weight.

A Scapegrace Profession. The police reports of last week tell us of two "surgeons," who have been convicted of stealing. We suspect that these "surgeons" are as much so, as many of those riotous Haymarket gents, who some years ago used to figure in the papers as medical students, were medical students.

Spectrum Analysis. The practical employment of spectrum analysis is, I regret to say, of but very limited use, and has caused me many disappointments before I finally determined to abandon it except by way of confirmation in subsequent experiments. The spectrum by itself gives no indication of quantity. The green line produced by a residue containing but one part of thallium in a thousand is as vivid and distinct as the line given by the pure metal. (*W. Crookes.*)

Matches. In a lecture by Sir Robert Kane, *On the Chemical Manufacture of Matches*, we are told that: the number of matches manufactured in Great Britain was about 40,000,000 a day, in addition to which the importation of foreign matches was five times as great, so that the total consumption of matches might be estimated at 240,000,000 a day. The manufacture of this immense quantity gave employment to a large number of workmen, and it was satisfactory to know that, owing to recent improvements, the diseases formerly incident to the manufacture were now avoided.

Foundling Hospitals. It appears that for some time past numbers of newly-born infants have been sent across the French frontier and deposited in the turning box of the foundling hospital at St. Sebastian. The Spanish authorities have determined henceforth to punish the persons who commit such offences with the utmost rigour of the law, and have made an appeal to the French authorities to aid them in putting an end to what has become a disgraceful traffic. The Prefect has accordingly instructed all his subordinates to keep a strict watch on the frontier.

Liverpool Royal Infirmary School of Medicine. The Winter Session of this School was opened on October 1st, with an address by E. Batty, Esq.; after which the following prizes were delivered. *Principles and Practice of Surgery.* Medal, J. P. Irvine; certificates, J. C. Roselloty, and R. H. D. Johnson.—*Principles and Practice of Medicine.* Certificates, R. H. D. Johnson, and J. C. Roselloty.—*Anatomy, Physiology, and Pathology.* Senior class: Medal, J. P. Irvine; certificate, J. H. Gornall.—*Descriptive and Surgical Anatomy.* Junior class: Medal, W. H. Burgoyne.—*Chemistry and Pharmacy.* Medal: H. Sewill; certificate, H. M. Steele; special book prizes, H. G. Samuels, and R. Leigh.—*Midwifery, Diseases of Women, and Diseases of Children.* Medal, J. P. Irvine; certificate, J. Houghton.—*Materia Medica and Therapeutics.* Medal, J. P. Irvine; certificate, F. Long.—*Medical Jurisprudence and Toxicology.* Book prize, J. P. Irvine; certificate, G. Griffith.—*Botany.* Certificate, R. Leigh.—*Ophthalmic Medicine and Surgery.* Book, J. P. Irvine.—*Practical Chemistry.* Book, R. A. Mowell; certificate, R. Hughes. *Pathological Anatomy.* Medal, G. Griffith; certificate, J. Houghton.

Queen's College, Birmingham. The October session commenced with an address by Professor Furneaux Jordan. The chairman (the Rev. Mr. Poulton), distributed the following prizes:—*Anatomy.* First certificate and medal, Mr. Mackay; second certificate, Mr. Wykes and Mr. Tonks (equal).—*Anatomical Demonstration.* First certificate and medal, Mr. Mackay; second certificate, Mr. Wykes and Mr. Tonks (equal).—*Medicine.* First Certificate and medal, Mr. Lloyd; second certificate, Mr. Bousfield.—*Surgery.* First certificates and medals, Mr. Gibbs and Mr. Richardson (equal); second certificate, Mr. Mackay.—*Physiology.* First certificate and medal, Mr. Mackay; second certificate, Mr. Wykes.—*Chemistry.* First certificate and medal, Mr. Tonks; second certificate, Mr. Bousfield.—*Botany.* First certificate and medal, Mr. Thomas.—*Practical Chemistry.* First certificate and medal, Mr. Soyer; second certificate, Mr. Thomas.—*Midwifery.* First certificates and medals, Mr. Baxter and Mr. Bousfield. (The papers presented by these two gentlemen were so good that the Professors decided to give a medal to each. The second medal was given by Dr. Suckling).—*Forensic Medicine.* First certificate and medal, Mr. Baxter; second certificate, Mr. Bousfield.—*Materia Medica.* First certificate and medal, Mr. Bousfield; second certificate, Mr. Sainsby.—The *Warneford Medal.* For an Essay, setting forth the Power and Wisdom of God in the Creation, Mr. Lloyd.

Educational Vaccine Stations. In order to provide for the granting of those special certificates of proficiency in vaccination which, under the regulations of the Privy Council, are required to be part of the medical qualification for entering into contracts for the performance of public vaccination, or for acting as deputy to a contractor, the following arrangements are made:—1. The vaccinating stations enumerated in the subjoined list are open, under conditions appointed by the Privy Council, for the purposes of teaching and examination. 2. The public vaccinators officiating at these stations are authorised by the Privy Council to give the required certificates of proficiency in vaccination to persons whom they have sufficiently instructed therein. 3. The public vaccinators to whose names an asterisk is prefixed are authorised to give such certificates after satisfactory examination to persons whom they have not themselves instructed:—*Mr. Marson (Principal Station), Surrey Chapel, Blackfriars Road: Mr. Gerrans (North West Station), Lisson Grove; Mr. Jordan (West Station), Lower Belgrave Street; Mr. Lewis (East Station), Well Street, Wellclose Square; Mr. Simpson (North Station), Tottenham Court Chapel, Tottenham Court Road. *Mr. Garner, the General Dispensary, Birmingham. *Mr. Sheppard, St. Augustine's Place, Bristol. *Mr. Gibson, Nile Street, Hull. *Messrs. Steele, Wilson, and Fenton, acting conjointly, or at least two of them together, the Ladies' Charity, Parr Street, Liverpool. *Mr. Guest, Rochdale Road, Manchester. *Dr. M'Nay, Bricklayers' Hall, Castlegarth, Newcastle. *Mr. Allanson, St. George's Terrace, Sheffield. *Dr. Husband, the Royal Public Dispensary, Edinburgh. *Dr. Dunlop, the Hall of the Faculty of Physicians and Surgeons, Glasgow.

Decrease of the Agricultural Population. Mr. Purdy, in a paper read at the recent meeting of the British Association for the advancement of Science, said that, at the last census, it was found that the only counties which had decreased in population were the agricultural ones of Cambridge, Norfolk, Suffolk, Wilts, and Rutland. To exhibit the decrease in the population ascribed to the class "agricultural" in the census of occupiers of 1861, the writer divided the kingdom into three sections: 1. 24 counties of highest rank, where upwards of 20 per cent. of the adult population are occupied in agriculture; 2. 16 counties of intermediate rank, where over 10 and under 20 per cent. are so employed; and 3. 5 counties of lowest rank, where less than 10 per cent. are so employed. Between 1831 and 1861 the first section of counties had increased 1,093,000 or 22 per cent. in the population generally; the second section, 1,651,000, or 39 per cent.; and the third section, 3,425,000, or 73 per cent. In 1831 the population was pretty equally divided between the three sections; the

respective proportions were then 5·0, 4·2, and 4·7. In 1861, however, in consequence of the unequal rate of increase, these ratios became 6·1, 5·9, and 8·1. In 1851 the number of persons in England and Wales aged 20 years and upwards occupied in agriculture was 1,576,080; in 1861 the same class had fallen to 1,531,275—a decrease of 44,790 persons, or nearly 3 per cent. The greatest decline had taken place in the south-western and the Welsh divisions. In the former, consisting of the counties of Wilts, Dorset, Devon, Cornwall, and Somerset, the decrease was 20,381 or 9 per cent.; and in the latter, including Monmouthshire, it was 13,285, or 8 per cent. The ratio of adults engaged in agriculture in England and Wales on the adult population generally in 1851 was 16·1 per cent., and in 1861 it was 13·9 per cent., which was therefore a decline of 2·2 per cent.; in other words, 22 in every 1,000 of the adult population had, between 1851 and 1861, ceased to belong to the agricultural class. Sussex had lost 2,698, Hants 3,412, Berks 1,158, Herts 1,095, Bucks 1,048, Suffolk 3,306, Wilts 2,837, Dorset 1,343, Devon 9,475, Cornwall 3,917, Somerset 2,809, Gloucester 1,166, Northumberland 1,265, Cumberland 2,099, Monmouth 1,089, South Wales 4,530, and North Wales 7,666. The percentages of decrement were, in Devon 13·3, North Wales 11·0, Cornwall 10·5, Hampshire 8·8, Cumberland 7·7, Monmouth, 7·6, Wilts 7·3, Sussex 6·5, Suffolk 6·4, Dorset 5·6, South Wales 5·6, Hants 5·4, Bucks 5·1, and Northumberland 5·1. Eleven counties increased their agricultural population. Salop had increased 1,226 or 3·5 per cent., Worcester 1,281 or 5·7, Leicester 1,371 or 6·0, Lincoln 2,139 or 3·3, Chester 1,550 or 4·2, and Lancaster 5,336 or 7·1 per cent. Lancashire in 1861 employed a larger agricultural population than any other county. The number of adults so engaged was 80,222. The West Riding of Yorkshire employed 77,168, and Lincoln, a purely agricultural county, 67,357. Though the adult agricultural population of Lincoln was 11,000 less than Lancashire, the return of the farmers' profits in 1859-60 in the former county exceeded those of the latter by £1,000,000. Excluding from each county those persons placed under the agricultural class, but who, in fact, worked in woods or in gardens, it is found that in Lincolnshire there was 65,849, and in Lancashire 76,496 adults engaged in agriculture properly so-called. The diminution of the agricultural population was attributed to emigration and to the attraction of higher wages in other industries; though a considerable advance had taken place of late years in the money wages of the farm labourer. Contemporaneously with the general advance of agricultural wages large tracts of waste land had been enclosed for cultivation.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. North London Medical Society.

THURSDAY. Harveian Society of London. 8 P.M. Mr. J. Z. Laurence will exhibit his Reflecting Ophthalmoscope.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M. Inaugural Meeting.

SATURDAY. Association Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—OCTOBER 3, 1863.

[From the Registrar-General's Report.]

	Births.	Deaths.
During week..... { Boys..1037 / Girls.. 898 }	1935	1274
Average of corresponding weeks 1853-62	1736	1159

Barometer:
Highest (Sun.) 29.965; lowest (Th.) 29.141; mean, 29.660.

Thermometer:
Highest in sun—extremes (Sun.) 95.8 degs.; (Fri.) 65.4 degs.
In shade—highest (Wed.) 63.2 degs.; lowest (Wed.) 35 degs.
Mean—52 degrees; difference from mean of 43 yrs.—1.8 deg.
Range—during week, 28.2 degrees; mean daily, 16.3 degrees.

Mean humidity of air (*saturation*=100), 84.

Mean direction of wind, S.W.—Rain in inches, 0.78.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MR. PRIMROSE BOLTON has not sent his address.

CARBUNCLE AND DISEASED MEAT.—SIR: The police report copied into your JOURNAL, which attributes to me the opinion that there is a connective, as a cause and effect, between the carbuncle and unsound meat, is without foundation. All that I was called upon for by the prosecution in this instance was to prove, in accordance with the recent Act of Parliament, that the meat was that of *diseased* animals. Not a word was said as to the effect of such food on the human system.

On a previous occasion, another magistrate, Mr. D'Eyncourt, asked me my opinion as to the "new theory", which attributed the more frequent plague of boils to the consumption of diseased meat. I told him that, personally, I had never traced the disease to this cause; but that Professor Gamgee had collected some striking evidence on the point; and that some German physicians had made out the transference of carbuncular murrain (*milzbrand*)—a disease from which our cattle are, as yet, free—to the human subject, by the consumption of the diseased flesh. The only cases of injury to health which I have traced to eating diseased meat have been cases of gastric irritation which, in two cases, I was inclined to attribute to the drugs the animals had taken just previous to being slaughtered. I am, etc.,

SEPTIMUS GIBBON, M.D.

3, Finsbury Square, E.C., Oct. 1863.

ONLY A FLEA-BITE.—SIR: In reference to the letter with the above heading in your last number, signed M.R.C.S., I would suggest the use of camphor. Small muslin bags of camphor distributed about the wardrobe and the drawers where linen is kept, and a small lump or two in different packets about the person, will, I think, keep off those delicate attentions of which your correspondent complains. I am, etc., HUGH NORRIS.

South Petherton, October 7th, 1863.

MR. PRIDHAM'S paper will appear shortly.

COMMUNICATIONS have been received from:—Mr. FURNEAUX JORDAN; Mr. JAMES ROBERTSON; Mr. H. LEE; Dr. HERBERT BARKER; Mr. R. S. FOWLER; Mr. CURGENVEN; Dr. BRUSH; Dr. HESLOP; Mr. C. F. HODSON; Dr. PARKES; Dr. STYRAP; Dr. LIONEL BEALE; Mr. T. L. PRIDHAM; Mr. J. SPROULE; Mr. ISAAC BAKER BROWN; Mr. T. A. F. SCOTT; Dr. J. H. GLADSTONE; SECRETARIES OF THE WESTERN MEDICAL SOCIETY; Mr. F. D. FLETCHER; Mr. A. NAPPER; Mr. BRODHURST; Dr. GIBBON; Dr. H. NORRIS; Mr. J. K. SPENDER; Mr. T. P. PICK; and Mr. T. JONES.

BOOKS RECEIVED.

1. A Practical Treatise on Eczema. By T. McCall Anderson, M.D. London: 1863.
2. The Surgical Diseases of Children. By Thomas Bryant. London: 1863
3. Guy's Hospital Reports. Third Series. Volume IX. London: 1863.
4. Diphtherial Nerve-Affections. By E. H. Greenhow, M.D. London: 1863.
5. The Laryngoscope: Illustrations of its Practical Application, and Description of its Mechanism. By George D. Gibb, M.D., M.A. London: 1863.

Introductory Address

DELIVERED AT THE OPENING OF

ST. MARY'S HOSPITAL MEDICAL SCHOOL,

OCTOBER 1, 1863.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO THE HOSPITAL, ETC.

GENTLEMEN,—I have this year accepted the honourable task of delivering the Opening Address of our Medical School; but not without considerable misgiving, for I really cannot but consider the undertaking a difficult one to accomplish satisfactorily. What is there connected with the study of medicine, having reference to the duties of the student and the duties of his teacher, which has not been already again and again said, and well said, within these very walls? And what could I hope to tell you on the subject, that is not to be found recorded in the opening addresses delivered in past years by medical lecturers?

Perhaps, therefore, you will excuse me if I venture (as some of my predecessors have done) to leave the ordinary path now, through former teachings, made so familiar to us all—I mean the attempt of enforcing upon you the duties which you owe to yourselves as students of medicine; the duties which you owe to your parents, who have sent you here for instruction; the duties which you owe to your teachers; and the duties which you owe to society at large, in properly fitting yourselves by study now for the great future business of your lives.

Truly, I would believe that the students of this generation need not the enforcement on them of such lessons. I would believe that, better prepared by an improved preliminary education, they have good sense enough to feel the responsibility which rests upon them while occupied here in the acquisition of knowledge. Our medical corporations seem to have sanctioned this opinion, in that they have diminished the number of lectures which you are obliged to attend. But they have surely not done this in order that your minds and hands may be less occupied than formerly. On the contrary, you are expected now to depend more upon your own exertions, and less upon the instruction of your teachers; and to play the part rather of active learners than that of passive hearers.

I will presume it, therefore, to be a fact, that you, gentlemen, in pursuing your medical studies here, feel that you are engaged in a serious business; that you have come here as responsible men, cast much upon your own resources, with time, and intellect, and means, at your disposal, freely to prosecute a great end. I say freely; because it is your own free will to learn, and your own free will to let the precious hours of student life pass idly by. All the elements of knowledge requisite to help you to an intimate acquaintance with your profession are here abundantly laid to your hand; and at every turn you will find a teacher ready and anxious to show you how best and most profitably to use those instruments. In every department of your studies, there will, indeed, be found for him who would learn nothing but freedom and encouragement.

Instead, therefore, of attempting to read you a homily demonstrative of your duties as students, I shall venture to occupy your attention for a short time by saying a few words in reference to a phenomenon, which is thought by many estimable members of the profession to be a deplorable error, characteristic of the present generation of medicine—I mean the existing scepticism concerning the effects of remedies over diseases. I will endeavour to show you that there is here, as in other matters requiring the exercise of our judgment, a true and a false scepticism—a reasonable and an unreasonable faith; and that the scepticism of the time, in so far as it is reasonable, is simply the search of honest and inquiring minds, guided by the light of modern discovery and modern science, in pursuit of truth. In doing this, I shall have occasion to refer especially to what seem to me to be two serious obstacles to the advance or settlement of our knowledge concerning the effects of remedies over diseases. The first consists in the unreasonable deductions which men of our profession are wont to draw from what they conclude to be the effects of the remedies employed by them in the cure of diseases; and the second is the practice, which I may surely call unreasonable, heretofore so common, and still not wholly abandoned by us, of prescribing drugs in those cases in which drugs are admittedly not required for the cure of the patient. In other words, I would point out two great difficulties with which this modern and rational scepticism has to deal—the reception of illogical deductions concerning the actions of remedies as positive facts in therapeutics; and the throwing in our way of impediments by the unnecessary giving of drugs to a better and truer knowledge of the natural courses of diseases.

Gentlemen, we are often told that we live in a sceptical age; and if by the term it is meant that we live in an age when men refuse to accept without question the dogmata of the past, merely because they are consecrated with the dust of antiquity, or have high and honoured names for their authors, I believe there is complete truth in the assertion. How could it be otherwise? The sciences alike of mind and of matter, the arts and manufactures, political creeds, the very face of the earth, have been revolutionised since the birth of the present generation of man. Who of us has not lived long enough to have seen articles of political, social, and every other kind of faith, rudely shaken; to have seen opinions long received as settled truths on matters touching the worldly—aye, and the more solemn interests of man—modified or subverted?

This generation truly has seen the world march on with giant strides in the path of civilisation, such as centuries of its former years of progress have not witnessed. Well, I suppose that in the advance of science must we look for a solution of this surprising tale. Science has subjected to her searching analysis the opinions and the credulities of mankind. She has called upon men to give an account of the reason of their opinions. She has waged, and is still waging, combat with the ignorance, and the prejudices, and the thousand vain images, which have so long kept, and which still keep, the world from a clear vision of the unclouded truth.

How, then, should medicine—an art, above all

others, based on empirical practice, on opinion, on the results of individual belief and experience—escape the questioning of an age in which opinions are being thus remodelled? Assuredly, this questioning and revolutionary spirit has passed into medicine. We cannot but recognise and accept its workings. And our duty clearly is so to direct this inquiry, as most effectually to advance the knowledge of our art.

I think you will agree with me, that never at any period of the bygone days of medicine, did science—as we now understand the term—subserve the physician's purposes in the cure of disease, either directly or indirectly. In his treatment of disease, he trusted to his own experience, and to what he could gather from the recorded experience of his forefathers. His diagnosis of diseases was most defective; his theories of their nature, for the most part, baseless fabrications; and his treatment was necessarily guided by, and on a par with, his diagnosis and his theories. But (and we surely may learn something from the lesson) his belief in the powers of his remedies over diseases was unhesitating and complete. In the application of his defective knowledge to the cure of disease, he never doubted. If the patient recovered in his hands, the remedies administered cured the disease; and if he died, still the remedies were not wrong—only the disease, the concoction of ill-humours for example, was too powerful for the remedy. The greater the ignorance of the physician in his knowledge of the nature and diagnosis of diseases, the more implicit, it would appear, has ever been his belief in the power of the therapeutical agencies employed by him in their cure. True, in all this, medicine was handled like every other branch of human study of things material. The masterly minds who then practised medicine acted according to their lights. Their generation did not grant to them those instruments and aids to better knowledge with which we have been favoured. We may, indeed, regard the past history of medicine with reverence and pride. We find recorded proofs that the very highest order of intellect has been engaged in the practice of medicine.

Our forefathers erred inevitably, because, dealing with matters of the utmost complexity, they possessed no other light to guide them through the labyrinth than experience—experience, whose fallaciousness in matters medical the father of medicine has so emphatically, and alas! so vainly, recorded. But to us science—that tree of the knowledge of good and evil—has come bearing with it its fruits of present painful doubts and difficulties, and also the full assurance, we may safely add, of great future good. It has demonstrated to us the errors of the past. It has shown us how we may struggle out of the errors which have heretofore beset the path of medicine. It enables us to judge with a something like certainty between the positive and the hypothetical in medicine. It tells us where we may walk securely, and where we must step with hesitation. What, in fact, is all this remarkable conflict of opinion now going on in the profession concerning the effects of remedies, but the struggle of modern scientific investigation with errors which have been handed down to us, and which encumber the progress of medicine? We are now, at last, beginning to learn what are the limits of our powers as curers of diseases; to moderate the powers which our forefathers taught us we possessed over them; to appreciate the line of demarcation which must be drawn between what is positively true and what is possibly true, and what is positively untrue, of the effects of remedies; to distinguish more nicely between what our art can and what it cannot do in the cure of disease.

I believe that now, for the first time in the history of medicine, our art is finding something like a sure foundation to rest upon, and that (although the actual advances hitherto made by it towards the position of a science be small) it has entered on the path by which alone it can ever hope to reach that position. Our actual knowledge of disease and of its treatment, though it be limited, is still, as far as it goes (in one sense) becoming sure. Active error is now no necessary associate of medicine. We can mark where our positive knowledge ends, and where our treatment becomes experimental. We can calculate nicely the worth of the theories and the worth of the practices which we follow out in the cure of diseases. What is it, indeed, which most essentially distinguishes rational scientific medicine from barren empiricism, but this very knowledge of its imperfections, this philosophic estimate of its actual powers over diseases? Who now but the veriest quack boasts of his unlimited powers and of the infallibility of his remedies?

If our modern progress in medicine were measured solely by this negation and elimination of past errors—a supposition which assuredly I do not for a moment admit—it would have been immense. For, how can we ever hope to lay the foundation of a true theory and practice of medicine, until all the vicious theories and practices which have directed, and of course viciously directed, the hand of the practitioner to his work, have been cleared away? The fermentation which medicine is now undergoing, under the agency of modern science, is, as I see it, a process of its purification from the errors which have become mingled with and have corrupted it, during past ages. We need not, then, be surprised that, whilst this elimination of error is going on, our progress in a positive sense should have been but small; why we have, as yet, made but slight advances towards a knowledge of the essential nature of diseases, and of that kind of treatment of them which may be called specific.

We of this generation cannot hope, it is true, to witness the consummation of which I have spoken, the elevation of medicine to the rank of a science. We must be contented with the humble task of assisting in the removal of the obstacles which have hitherto concealed its true features, and which still beset its progress; we must be content to collect materials for the reconstruction of the building. We must, I fear, learn humility, and moderate our pretensions as curers of diseases, casting aside that false goddess which men of our profession have so long and vainly worshipped. We must be satisfied with that true and legitimate knowledge which comes to us as the offspring of rational scepticism enlightened by science. We must subject the daily and ordinary methods which we employ in the treatment of diseases to the test of a reasonable inquiry; and when we have done this, must then ask ourselves how far they are really and in truth worthy of the full and unhesitating confidence which we repose in them, remembering that the profoundest belief of the

physician in the efficacy of the remedy which he administers, imparts no real curative powers to it. Our medical opinions must, in fact, like other opinions upon which action is taken, be passed through the fire of rational inquiry.

The source of the deepest errors which have ever attached themselves to medicine may, I believe, be traced to the overweening confidence which men of medicine have placed in what is called their experience—that infallible oracle, from whose dictum, alas! there is often no appeal. Men have not always sufficiently appreciated the real value of the words, medical experience. They have been content to bring into immediate relation, as cause and effect, the two extreme factors of the problem—the giving of the drug and the recovery of the patient—leaving out of the calculation the infinite number of disturbing causes which affect and interfere with what is in truth the experiment they are watching—the effects of a remedy over disease. Does not every page of the history of medicine bear proofs of the fact that the medical man has ever been over-hasty in attributing the cure of the disease directly to the effects of his remedy—too readily concluding that the result, the cure, was a positive effect of the cause, the remedy; instead of being, possibly, the mere sequence of an antecedent? I need not stop to point out how complicated is, in fact, the character of most diseases; how infinite the variety of accidental agencies that are at work in the body, inherent in the constitution of the patient, or to which he may be temporarily subjected from without, all or any of which may interfere with and modify the natural or ordinary progress of disease, or interfere with its progress at any one of those numerous periods, or series of links which form the chain of the diseased process. I only refer to them to show how irrational we are, when, in the satisfaction of this most complicated problem, we are content to draw positive conclusions concerning the effects of remedies from the knowledge obtained through a mere personal (and, therefore, most limited) experience of their actions.

If it be not to this unreasonable, this illogical mode of drawing conclusions, that we must ascribe the extraordinary differences of opinion held by equally capable observers concerning the effects of remedies, I really know not whither to look for an explanation of the unfortunate fact. You know, gentlemen, that when, in the case of any particular disease, the treatment of the present day is opposed *toto cœlo* to the treatment of the past, an explanation is found in what is called a change of type in the nature of the disease. For example, men bled in other days, I suppose I may say from the time of Hippocrates down to the beginning of the present generation; but they bleed not now in inflammatory diseases. And why? Because diseases have changed their type! Doctors who bled then were right, just as also are doctors who bleed not now. I know not who invented this *deus ex machinâ*, nor will I here stop to argue upon his worth. Horace, as you will remember, objected to the introduction of such violent powers on the scene, unless the difficulty were so great as to be otherwise incapable of a satisfactory solution. I will not, however, draw any illustration of the point in hand from the differences of treatment of the past and of the present day. I will content myself with begging you to call to mind the profound—I would almost say the melancholy—differences in treatment which, in the case of acute diseases, characterise the practice of men of equal capacity and of equal honesty, at this present day, in cases where change-of-type theory cannot interpose its subtile explanation of the difficulty. Surely I need no other proofs of the statement that our deductions must be somewhere illogical, than these very discordances of opinion. Nor need I stop to illustrate the fact of these discordances. I apprehend that they are spread broadcast through the pages of our modern medical literature, and well known to us all. But how, it may be asked, are we to emerge from the difficulties which surround us? One source of instruction is, I fear, almost closed to us; and that is, the observation of the natural progress of disease. Yet I know not how we can ever arrive at any completely satisfactory results respecting the effects of remedies until we have determined what is the natural progress of disease—the course which diseases would follow, if left to work their way in the body without interference. This source of instruction, for obvious reasons, has been hitherto almost untouched, though manifestly the most important additions to our therapeutical knowledge are to be derived from it. I think, however, that we may, independently of this source of instruction, by a careful and logical comparison of the value of our present methods of treating, obtain a much more accurate estimate of their real value than we at present possess.

Let me, therefore, venture to point out what, as I I think, may be considered as the proper and only test by which we can determine what is a therapeutical fact founded on experience; and then consider how far our daily practice is founded on, or is in accordance with, such rational experience. I believe that a therapeutical fact, to be worthy of the title, must have something of the following definition. It should be the resultant of very numerous observations made by fitting and capable inquirers, who, after due inquiry, have arrived each at a like conclusion—the conclusion not being contradicted by the observation of other equally capable observers. Every practical deduction in therapeutics, which will not bear this test, seems to me to deserve the title of irrational, in so far at least as it is accepted and acted upon as a positive fact. The wide and uncontradicted acceptation of the deduction alone gives it a stamp of genuine value—entitles it to the name of a fact. Are we not, indeed, reasonably and logically forced to the conclusion, that the real virtues of a remedy have yet to be decided, so long as the experience of half the medical world applauds its use, and the experience of the other half condemns it as useless; when men of equal honesty and equal capacity are totally opposed concerning its use? Is it not, I ask, illogical, in the satisfaction of this most complex problem—the effects of remedies—to permit our personal opinions, the deductions of our limited experience, to degenerate into solid convictions, so long as the experience of others has not confirmed, or is opposed to, our conclusions? Well, if this reasoning is right—and I see not how it can be disputed—there results from it this important conclusion: that in every case in which there exists (amongst competent observers) discordance of opinion of the kind spoken of, concerning the effects of a given remedy over a given

disease, the true effects of that remedy over that disease have not yet been definitely settled. It is, in truth, the tacit and partial recognition of this truth which has given birth to what I have called the rational scepticism of the day respecting the effects of remedies over diseases; and as the truth spreads, so will the consequences of irrational belief, or, in other words, error, be more and more eliminated from the practice of medicine. Surely we are daily becoming better acquainted with the lesson taught us by scientific investigation; viz., that our estimate of the real value of this or that drug, or of this or that other method of treatment, must be derived, not from what we have hitherto been too apt to regard as the unanswerable conclusions of our own personal and therefore limited experience, but from a comparative consideration of its value, as estimated by the experience of other and equally capable observers. A reasonable scepticism teaches us to measure and try our personal convictions by the convictions of others, and modestly to accept the conclusion. And am I not justified by fact in saying that all of us fall more or less into the way of gathering strong convictions from the apparent results of our personal experience, and of acting upon them after the fashion which I have ventured to call unreasonable? And no one can doubt that such a practice must be a stumbling-block to the advance of therapeutical knowledge. How can we ever hope to obtain an expression of the truth, if each of us proudly and obstinately maintains that his conclusions alone are right?

There is one other drawback to the advancement of our therapeutics, which, unless I am much mistaken, has injured our art deeply both in its scientific and in its social aspects, to which I would shortly allude. I refer to the too common practice of prescribing drugs on all occasions, whether they be or be not required by the condition of the patient. Doubtless, we are all of us, in this matter, much under the pressure of custom—under a somewhat slavish adhesion to the habits of our forefathers. We, with our better and more scientific knowledge of the nature and diagnosis of diseases, and of their natural modes of progress, are still, in the matter of drug-prescribing, living somewhat in the dark ages of medicine. In other days, the very soul of the treatment of diseases was, in all cases, thought to lie in some heroic exercise of the lancet, or in the virtue of some superdecompound bolus, or in an extarordinarily compounded draught: these things were regarded ever as essential in all cases. We, however, have learnt the error of all this, and yet we adhere to the practice, certainly in a very modified and comparatively harmless form; but still we adhere to it, and so far we allow our therapeutical practice to lag behind our scientific knowledge. We know, for example, that there are diseases in which medical treatment of the most effective kind does not involve the administration of drugs; but I put it to you, is it not a fact that the writing of a prescription is, as a matter of course, a part of every medical consultation? Does not the very word prescription mean, in our ordinary use of it, simply and solely the writing of a drug-formula? In prescribing a particular line of treatment, is not the prominent, if not the only feature, in such prescription, the drug-formula? The patient assuredly looks for the, to him, cabalistic formula, as the chief equivalent received for his fee. He regards as of infinitely greater consequence a due attention to the taking of the physic prescribed, than he does the punctual fulfilment of those other apparently minor directions which, it may be, are in reality of fifty times greater importance, and perhaps absolutely essential to his cure. We, or rather those who went before us, have, I fear, educated our patients in the belief that the cure of diseases and the taking of drugs are in all cases things inseparable, and that the main and most essential part of the practice of medicine and the cure of disease consists in the prescribing and taking of drugs. But are we, in so far as we keep up this delusion in practice, doing justice to our patients and to ourselves? And, above all, are we thereby advancing the scientific standing and the social character of our profession? I cannot but think that our patient often positively suffers in this way, through the neglect of those other things which are recommended for his cure, and which are in reality of much greater need in his case. Not being prescribed, they are regarded as of little value. So long as the drug is regularly taken, the patient considers that he acts in sufficient conformity with the line of treatment advised for his cure. Moreover, to this unfortunate custom of ours, and to this habit of the patient, may, I believe, be in great part traced the spread of many quackeries and delusions, and especially of that most remarkable of all quackeries and delusions—I mean homœopathy. And, conversely, I am led to think that there is no better means of waging successful combat with these quackeries than the simple one of giving drugs in those cases only in which, in our opinion, drugs are actually required; and of educating our patients to a better understanding of the uses of our art, and its power. Our patients have been educated, or, at all events, have grown up, in the belief that the drugs they take are in all cases not merely elements, but the essential elements, of their treatment; and this, too, sometimes, even though the physic be as mild as coloured water, or as innocent as a bread pill; and the result is evident, and, as I think, most hurtful to our profession's reputation. If the patient recover not, he blames the drug and him who gave it, and at length loses his faith in the practice of legitimate medicine, or in the taking of drugs, which are to him convertible terms, and so rushes into the arms of the homœopathists, or of some other of the Bashi-Bazouks of medicine. I venture to think that, at this time of day, we should come to a better understanding with our patients. It surely cannot be worthy of the medicine of this day to play in any way down to the weaknesses and false imagination of the patient. And if it be indeed true, that our profession originally created the delusion in his mind, still more forcibly is the duty pressed home to us of removing the scales from his eyes.

But pray, gentlemen, do not misunderstand me. Do not suppose that I want to inculcate the idea that the cold shade of scepticism hangs over the entire practice of medicine, and that drugs are useless as remedies in diseases. Let me defend myself from such an imputation by saying, that I dare say I prescribe as many drugs as any of my colleagues do. What I ask is simply this; that we should give drugs only when we can reasonably conclude that drugs are actually required; that we should write no prescriptions of complaisance, and give no physic on

the principle "that it will do no harm, if it does no good"; and that we should educate our patients to the knowledge that the whole cure, and often the most important part of the cure of diseases, does not consist in the taking of drugs—teaching him that there is not in all cases an inseparable connexion between the physician's art and the druggist's shop.

Neither do me the injustice of supposing, because I have objected to the drawing of positive conclusions concerning the effects of remedies from the results of mere personal experience, that I mean to infer we have no positive facts in therapeutics to rest upon. I could run on for an hour, and give you examples of that kind of concordance in treatment which justly gives to that treatment the title of rational. I could give you numerous instances, I need hardly say, in which large, concurrent, and uncontradicted experience points out to us the usefulness of given remedies in given diseases. The fault which I speak of is the practice, wherever it exists, of unhesitatingly attributing to remedies virtues which, arguing reasonably, they cannot be said to possess, or which, at all events, are not yet proved of them. I would impress on your minds the cultivation of a *reasonable* faith in the powers of our art to cure diseases, and so save you from that blind scepticism—that dead sea of negation—into which unreasonable and disappointed expectations too often lead the enthusiastic. I would save you, on the one hand, from that irrational and blind credulity which finds its most perfect exposition in the insolence and unbounded promises of quackery; and, on the other hand, I would dispose you, by forming and moderating your faith in the power of medicine in accordance with the reason of the thing, from ever falling into that atheism in therapeutics which is born of an overweening and unreasonable credulity, and of broken and deluded expectations.

In so far as the practice of our art is still an experimental practice, let us, I would say, pursue it as philosophical experimentalists, not with the credulity of pure empiricism. In all cases let us fashion our belief in the power of our art in accordance with the light which we possess. In those instances in which a universal concurrence in opinion prevails, we can act in full assurance of the result. In those other cases, in which adverse opinions neutralise our own, we should act with caution, as I have said, experimentally, not blinding ourselves to the truth by an overweening reliance on what we deem the unanswerable convictions of mere personal experience. I do not ask you to sit idly by whilst disease is working its ravages. When the human body is sick, the physician's skilful art has ever its useful labours to perform. I know of no disease—I know of no phase or period of any disease—wherein the presence of the healer is not required to conduct and guide the cure; wherein he may not practise his art—do something, if you please—to the advantage of his client. My desire has been simply to warn you against the adoption of that unreasonable course in the treatment of diseases which, as I have attempted to show, deceives ourselves, deludes the subject of our treatment, and hinders the progress of therapeutics. Rather, indeed, I ought to say that I have attempted merely to put forwards a few words in favour of that rational spirit of inquiry which has already entered into and is leavening the practice of medicine—hoping thereby to assist in hastening the advance of those good things which a rational scepticism, if read the matter aright, has in store for us. I have, indeed, been engaged in laying somewhat markedly before you facts, which have been now for some time accepted and acted upon by most of the leading and scientific members of our profession.

Gentlemen, I fear I may have already made a call upon your patience by attempting to say thus briefly what it would take many lectures to develope satisfactorily; but perhaps I may yet for a few minutes longer ask your indulgence, whilst, turning from this special subject, I address, as I feel I ought to do before I conclude, one or two special words to those of my hearers who are about to engage themselves in the pursuit of the study of medicine. I have promised to read no homily, and would venture merely to offer you one or two words of exhortation.

Let me assure you, then, if you have not already realised the fact, that your business in this school is, measured by its future consequences, a most solemn business. Let me assure you that, in truth, the whole course of your future life will be to a great extent, if not altogether, influenced by the line of action which you follow out here during these years of studentship. Believe me, it will not be the mere acquisition of a given amount of knowledge, such as may suffice to gain you the legal right to practise your profession, which you will obtain here, if you occupy yourselves well. It will be something far beyond this. It will be the fixing and the forming of your future character; it will be the establishment of steady, industrious, and laborious habits, which will hang to you through life, and be the surest groundwork of your future success in life; and it will be that inestimable prize of a high moral tone of mind, which you will win if you honestly perform your duties here. The character which you acquire here will be the die from which your future actions through life will take their impress. The evil and the good which men do not only live after, but live with them. Every vain and idle hour of a student's life I might, in this sense, liken to the broken surface of a smoothly flowing stream; a mere superficial and passing irregularity it seems to be, disappearing with the violence which produced it. But it is not so. The laws of mind and matter have here similar actions. The ripple of the water represents a motion which is a lasting and effective power. The visible signs of the perturbation may have disappeared; but the irregular motion thereby excited still exists—altered in kind, and elsewhere operating, it is true, yet ever an effective force. And just so is it with those diviner laws which preside over the moral life of man. Every violence done by him to his better nature is a disturbance whose tremulous waves will never cease to exercise, to the last hours of his life, their baneful influence on him.

Let me tell you, moreover, that the practice of medicine is a stern and rugged business; and whoever ties himself to it, as to the business of his life, must not, therefore, expect to float calmly down the stream. You must be prepared for struggles and ready to encounter hardships, and to meet with disappointments and temptations; and now is the time for preparation to meet the struggle successfully and manfully. There is no profession, I believe, which brings more trials, and I may add more consolations, to the conscientious man; there is none in which a want of conscience and a want of honesty

are so often repaid with what the world calls success; and there is assuredly none in which the performance of his daily business can better give a man the full satisfaction of a well-employed life. The business of the physician is ever to assuage the woes of humanity; never to make the worse appear the better cause.

And, gentlemen, if I allude especially to this dark side of the profession of medicine, it is because I would earnestly bid you now brace yourselves for the future occasion, by training your minds to an unswerving and honest performance of the work cut out for you here. So study now, that you may become hereafter honest and scientific practitioners of medicine. The greatest safeguard which you can possess against the contagious influence of the quackeries and bad practices which beset the profession, both from within and from without, is a well grounded and scientific knowledge of your art. But such a knowledge you never will attain, if you miss the golden opportunity which now lies before you. It is a consoling fact, that men of science do not practise quackery in medicine. The most successful of the quackeries of the day, homœopathy, is a striking illustration of this fact. I never heard of a homœopathist possessed of a name known in the smallest corner of the wide world of science. Of the great makers of impossible cures, and of the successful operators in the broad field of human credulity, there is not to be found a man who has done a single deed, or made a single discovery, tending to the progress of medical knowledge, or who has left behind him a name honoured by any whose praise is of price. Where is the individual of them who has a reputation to leave behind him, such as the meanest member of our profession would care to have as a legacy? We look in vain for the good thing that ever came out of these quackeries. We see the names of Harvey, and of Jenner, and of a host of such like worthies, inscribed on the edifice of medicine; and we mark that at all times men of our liberal profession have disported and distinguished themselves in the different fields of knowledge. Our profession has produced illustrations in chemistry, in botany, geology, mathematics, theology, in every branch of human learning and study; but we look in vain for one single example in this way, which might serve to throw some slight relief over the dark shadow and disgrace of quackeries. Be then scientific, honest, and conscientious students now, and you will lay the surest foundations for becoming honourable and scientific practitioners hereafter. As men of science, you can never honestly fall into the deceits of charlatanry; and as men of science, you will find it hard to let your moral sense grow dumb in that direction. The voice of self-interest may tempt you in many a form; you may have to choose between the hard path of an ill-requited but honest labour, and the ready road which leads to a certain sort of popular repute and professional dishonour. Get ready, therefore, for the battle of an honest life, by doing your work honestly here. If, indeed, I were asked how you might best act now so as to ensure welfare in after-life—not welfare in its restricted and ignoble, but in its perfect sense—I should say, keep the law of duty now ever before you. Let it be your never failing pillar of light. Study conscientiously—religiously, as the Frenchman forcibly puts it. And when you have gained this conscientious, this religious knowledge of your profession, and have, as members of society, to bring it into practice, use it ever conscientiously. Be, at all events, brave and on the square with your conscience to the last. Your success in life may not equal your hopes or your deserts. It is not in man to insure the success of this world. The best and the wisest of us may fail in the struggle. But we have our consolation even then. To gain the world's applause, and to snatch its fleeting spoils, is not man's sole and proper business here. Immortality smiles forth on the scene, and beckons him ever on in the race for those eternal honours, which the world can neither give nor take away—the prize which all may strive for, and no one strive in vain. So long, gentlemen, as you steadily obey the dictates of that inward monitor, you may, like the ancient knight of chivalry, when all is lost in the battle, still proudly boast that nothing is lost, honour and conscience being to the last without reproach.

Last Danish Census. The whole Danish monarchy has a population of somewhat about 2¾ millions. The increase of the population during the five years immediately preceding the census was between 5 and 6 per cent. The largest town is Copenhagen, with 155,000 inhabitants; next, Altona (45,000); then two with between 15,000 and 20,000 (Kiel and Flensburg), five between 10,000 and 15,000 (Odense, Schleswig, Aarhuus, Rendsburg, and Aalborg), and 14 between 5,000 and 10,000 inhabitants. The average population on a Danish square mile (about 18 English) is 2,532. The increase in the population by births has, on an average, been at the rate of 165 children to every 1,000 women between 20 and 50 years of age. Out of the above number of children one in every 10 or 11 has been illegitimate, and between 4 and 5 per cent. stillborn. Twins have been born in one case out of 69, three children once in 5,783 births, and four children at a birth have come into the world only once in 211,062 cases.

The Fowls we Eat. We have domesticated some nine species of birds, to the advantage of the public diet, chief of which is the common fowl, never mentioned in the Old Testament or the Homeric poems, and which, probably, came to us through Persia from Hindostan. Chanticleer and his dame were known at Nineveh; they were represented on Syrian monuments; and they are heard of in Greece, a little later than the battle of Marathon, from Theognis. But neither Helen nor Iphigenia ever tasted the wing of a chicken. Whether in the wild or domestic state, they were wholly unknown on the continent and islands of America, and they owe their presence there to Columbus, as in New Zealand to Captain Cook, and in Australia to later navigators. We ourselves declined to eat them in the time of Julius Cæsar, though even then we cherished them for cock-fighting, like the Mahomedans and Malays. The gallinæ we got from Africa, pheasants from Asia Minor, and peacocks somewhat later through Persia from India. The turkey (so miscalled) is the gift of the New World, and the small fowl designated bantam really comes to us from Japan. Of course, Shakespeare's carrier in *Henry the Fourth* is guilty of a slight anachronism when he complains that "the turkeys in his panniers are quite starved." As to pigeons, ducks, and geese, these are the mere scum of Mr. Crawfurd's fleshpots, of which he has various things to say, contemptuous but pleasant. "The domesticated birds are very far from having proved of equal utility to man with the domesticated quadrupeds. Their strength is nothing, their tegument of small comparative value, and their flesh more or less a luxury, viewing the comparative cost of rearing them.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

ON A CASE OF WASTING PALSY.

By John Kent Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

[*Read April 30th*, 1863.]

I propose to relate a case which illustrates some of the most interesting features of what is called "wasting palsy".

Martin L., aged 42 in November 1862, residing in Trim Street, Bath, a married man and a shoemaker, was seen first at the Eastern Dispensary in June 1862.

April 1863. He is a man of good muscular conformation, moderately well nourished, with dark hair and thin anxious countenance. He is five feet five inches in height. His respiration is regular and tranquil; the pulse 80, soft and feeble. The general surface is pale, and the skin is usually dry. The tongue has a natural appearance, with the exception of a slight fur on the filiform papillæ.

He complains of weakness and wasting of the biceps muscle of the right arm, which prevents full flexion of the forearm on the upper arm of that side. There is no history of syphilitic disorder nor of metallic poisoning; and the urine is natural.

Rather more than eleven years ago, he first found a weakness in shaving; but for a short time before this, while in domestic service, he had a difficulty in grasping spherical objects, such as a tumbler. He is quite sure that he has never had a blow on the arm; and that he has never suffered from a strain or from any other violence to the limb. When an apprentice to the trade of shoemaking, at the age of 16, he could not put the awl in as quickly as other lads, and consequently could not get through so much work. Up to 1847, he followed his own employment as a journeyman trader without interruption; but found a gradually increasing weakness in the upper arm and in the movements of the wrist-joint; so that his shopmates noticed a peculiarity in his "hammering". In 1848, he entered domestic service in London; but was obliged to leave his place on account of inability to perform manual duty. After that time, he pursued his usual calling without serious difficulty until 1853. In 1856, owing to a rapid increase of weakness, he consulted Dr. Jenner at University College Hospital; and subsequently came under the care of Dr. Russell Reynolds, by whom he was carefully examined. He took cod-liver oil, and was "galvanised" eight or nine times. From this treatment, he says that he derived considerable benefit; expressing it in this way, that he could now "hold the hair in his right hand when at work"; and this improvement continued for two or three years.

In 1859, he returned to Bath, and soon found a return of his old symptoms. He tried douching with the thermal waters without relief, and eventually abstained from all medical treatment, until coming under my notice in June 1862.

Present Condition. *a. On the right side.* The biceps is very much wasted; the brachialis anticus are much reduced in size. The flexor muscles of the forearm are smaller than usual. He can flex the forearm to a right angle with the upper arm; but, when in that position, if he wish to bring the former to a more acute angle, he is obliged, by a swinging movement and backward action of the body, to let the forearm *fall* on the upper arm by the mere action of gravity. When the forearm is retained at a right angle, he says that it feels like a "dead weight", owing to the suspensive function of the biceps muscle being impaired.

b. On the left side. Here we have a curiously mechanical state of things, due, not to any muscular atrophy, but to a condition of tonic muscular contraction. The upper fibres of the rhomboid muscles, and the fibres of the levator anguli scapulæ, resemble tight hard cords; they draw the superior internal angle of the scapula towards the spine, and fix it there almost immoveably. When the man stands quite upright, with the arms dependent by his side, this angle of the scapula is tipped up, so as to be elevated more than an inch above the back. When the arm of the same side is brought forward, the muscles connecting the extremity with the lower part of the scapula would naturally rotate the latter bone forward, turning it upon an imaginary horizontal axis passing through its spine. But, in this man, as the superior internal angle of the scapula is tied down, so to speak, to the vertebral column—the latter even reciprocally curving out of place to meet the scapula—the lower part of the scapula no sooner moves forward with the arm, than it is again dragged back by the tight muscular cords which fix the upper angle. When the arm is stretched out at right angles with the body, the vertebral side of the scapula stands out from the back as a narrow prominent ridge. The muscles of the left side are not invaded by atrophy in any appreciable degree; in fact, the left arm is larger than the right, probably from the habitual attempt to do double duty.

Dr. W. Roberts, in his monograph on *Wasting Palsy*, teaches as the essential etiology of the affection, destruction of muscular substance, and consequent loss of power; and that no lesion acting downwards from the nervous system to the muscles can produce the results observed. All that Dr. Roberts can say about this destruction of muscular tissue is, that it is a fatty and granular degeneration, similar, in its anatomical bearings, to what is observed in fatty heart. It is, of course, easy to use the technical phrase, "error of nutrition." But this ruin of muscular fibre involves injury to the extreme branches of the motor nerve; indeed, we have only to refer to the last volume of Dr. Beale's *Archives of Medicine*, to find that we know with much more certainty now than we did when Dr. Roberts wrote his book, five years ago, that the "peripheral expansions of motor nerves are essential constituents of muscle"; and that there is an "organic connexion between the ultimate ramuscles of the nerve-tubule and the sarcolemma of the muscular fibre, so that lesion of the one necessarily involves lesion of the other." Then the morbid movement creeps up—or may creep up—until it reaches the anterior roots, and even the spinal cord; and another reason why the nerves are prone to morbid change is, that every organ, gland, or tissue, wastes when brought to compulsory rest; and when a limb is deprived of motion by muscular atrophy, motor impulses cease to be transmitted along its nerves.

The man whose case has been related, and who is now presented to the meeting, is suffering from what Dr. Roberts calls the primary or direct phenomena of wasting palsy—destruction of muscle, and consequent loss of power. He has no neuralgia, cramps, nor tremors. The malformation on the left side of the body began long before the first symptom of muscular atrophy of the arm; and is attributed by him to a "fall" when an infant, though no certain information can be obtained on this point, as his parents are dead, together with every one else who knew him as a child. And it seems clear that the destructive wasting of muscle on the right side is unconnected with any history of overwork, violence, or special dyscrasia.

Postscript. I have this day (October 6th) visited the patient, and find that the disease has not sensibly progressed during the last six months. He wears a wrist-

band of elastic material. I regret to say that no medical treatment has been of any avail. In the current number of the *British and Foreign Medico-Chirurgical Review*, is a noteworthy paper by Mr. Lockhart Clarke, detailing the results of a *post mortem* examination of the spinal cord of a man who died apparently from atrophy gradually invading the muscles subservient to respiration. So far as the case goes, the connection of "wasting palsy" with structural disease of the spinal cord seems unquestionably established.

EAST ANGLIAN BRANCH.

OBSERVATIONS ON THE VALUE OF SOME OF THE DIAGNOSTIC SIGNS OF INCIPIENT PHTHISIS, AND ON THE REMEDIAL MANAGEMENT OF THE DISEASE GENERALLY.

By C. M. Durrant, M.D., Physician to the East Suffolk and Ipswich Hospital.

[*Read at Yarmouth, June 26th*, 1863.]

After all that has been written upon phthisis, but little, it may be thought, remains to be deduced from so fully investigated a subject. Still, I believe that, if it were possible to collect the personal observations of a large number of those who have carefully watched and treated the disease, a valuable amount of practical information would yet accrue to the profession.

Fatal as is the termination of the malady in the great majority of cases, most observant physicians are now, I believe, ready to admit that phthisis does, more frequently than was formerly supposed, yield to remedial management: further, that in a few unmistakable cases, it does pass through its stages even to the extent of cavity, which does ultimately, by the process of cicatrisation, yielding to the assisted powers of nature, leave, with a healthy enjoyment of life, a fairly useful condition of lung. This fact has been recently prominently brought before me in the history of a sailor, whose case I had an opportunity of watching from the commencement. This man, in whom all the phenomena of the disease, both physical and general, were unmistakeable, is now apparently recovering; the cavity having completely cicatrised, leaving subclavian flattening; the respiration around the spot returning, but of course remaining harsh and tubular; while the general symptoms are all rapidly giving place to returning health and strength.

It is not my intention to enter upon the general symptoms of phthisis, too well known as they are to all, but to refer briefly to some of those physical signs which appear to demand most attention in reference to its early diagnosis.

First, I would mention *insufficient expansion and flattening of the subclavian regions*, particularly if they be marked by inequality in the two sides. This is a sign less observable in the very earliest stage of tuberculous deposits, and more frequently obtains when a certain amount of pleuritic adhesion has been excited by the existing tubercles. It is, however, when present, a valuable sign, and not likely to mislead unless extensive pleuro-pneumonia in a more or less chronic form be present.

Tactile vibration is less to be depended upon, as the vocal thrill may be conveyed by other than tuberculous condensation, as by glandular enlargements in the neighbourhood, or, indeed, by any lesion producing unnatural density of the lung.

Dulness on percussion is a most important indication of phthisis; but, as the diminution of clearness varies so much in the different stages of the disease, it is necessary that the ear be educated to the degree of dulness, and also that the examiner percuss for himself, and not trust to the uncertain sound conveyed by the performance of this act by another person. To obtain a satisfactory and correct result from percussion, both the eye and the ear must act in unison, and the force of the stroke must be apportioned to the tone elicited, the extent of which, practice and experience will soon determine.

In the earliest stages of phthisis the clearness of sound on percussion may be very slightly diminished, especially if the deposit be chiefly scattered through the centre of the apex, and the surface of the lung be tolerably healthy. In these doubtful cases, it will be well to percuss at the close, both of a forced inspiration and also expiration, as the latter act, by reducing the size of the lung, will facilitate the detection of the deeper seated deposit. In some cases of acute phthisis, and in others with a partially emphysematous condition of the apices, the natural sonority of the chest will remain unaltered.

We shall generally, however, find that a diminished clearness of percussion-sound, most evident above, and becoming less pronounced as we proceed downwards, to be a tolerably sure guide taken in addition to the other general and physical phenomena of the disease. It must not be overlooked that the apex of one or of both lungs is occasionally (and I believe more often than is generally suspected) the seat of latent pleuritic deposit, and also of pneumonic condensation. These cases will require much care in diagnosis; and the result of treatment, in addition to the general history, may alone be sufficient to clear up the sometimes doubtful point. I shall not allude to the amphoric and cracked metal sounds elicited by percussion, as these refer to the more advanced stages of the disease with which we are not at present concerned.

As of percussion, so of auscultation, I refer only to the comparative value of those signs said to be indicative of early phthisis.

Diminished murmur is generally regarded as one of the earliest auscultatory characteristics of incipient phthisis; and in the majority of instances it is so. As it may have either a superficial or a deep seated origin, it is well in all cases at first to examine the two apices under natural breathing, and then to ascertain the comparative difference existing in the two sides, by moderate as well as by deeply forced inspirations. By following this plan as a rule, the diagnosis will be much facilitated.

Harsh, tubular, and exaggerated breathing is also a valuable sign of commencing tuberculisation; but that we may read its significance aright, we must be careful to ascertain that the increased breath-sound is not supplementary of diminished lung-volume at a distance, rather than a result of local condensation by tubercles in the suspected part.

Jerking respiration sometimes obtains as an early indication of tubercle, and exists at a stage when every evidence which can be brought to bear upon the subject is of value. I have met with two or three cases, in which this phenomenon was the only precursor at the time of what was to follow; the correctness of its import being verified by the subsequent progress of the case. It must be borne in mind, however, that jerking respiration may exist, independently of tuberculisation.

Prolonged expiration, if confined to the affected side, may be a sign of some value occasionally; but, like the former, it is not to be universally depended upon. It may arise from many causes besides tubercles, and it is not an uncommon attendant in some individuals upon their natural state of breathing.

Transmission of the heart's sounds, unless limited chiefly to the affected spot, is a very uncertain indication of tubercles. The density of the cardiac walls, as well as the varying thickness of the costal parietes, and also the excitable condition of the nervous system of the patient, all tend to diminish the value of this feature, as a

diagnostic auxiliary of early phthisis. If, however, the cardiac sounds be decidedly louder at the right apex than at the left, accompanied by other signs of the incipient disease, we may accept this as additional evidence of the probable existence of deep seated tuberculisation.

The occasional existence of a *vascular murmur beneath the clavicle*, or having a pulmonic origin with its greatest intensity between the second and third left ribs, near their junction with the sternum, has been considered a sign of existing tubercles. It may be, and doubtless is, caused sometimes by the pressure of tubercular disease upon the subclavian or pulmonary arteries; but I have so frequently heard this murmur, when no indications of phthisis obtained, that I cannot regard it as a sign upon which much dependance should be placed.

The *rhonchi* which are of most value in the diagnosis of incipient phthisis, are the dry crackling and the crepitating; to which may be added the occasional click which is heard in the subclavian regions. All these, in addition to the other signs referred to, and especially when confined to one or both apices, render the probability of existing tubercle almost certain.

Before leaving the subject of auscultation, there is one point to which I would allude, notwithstanding that to some it may appear to be trivial and of no moment. It is the advantage of warming the end of the stethoscope in cold weather, before applying it to the chest. Again and again have I seen, in addition to the discomfort of the patient, the result of the examination rendered almost nugatory, by the contraction of the muscles, and by the sudden shivering which the application of a cold stethoscope has produced. Trivial as this matter may appear, it should not be disregarded. Equally to the advantage of the examiner is the propriety, before auscultating young children, of allowing the little patient to become reconciled to the instrument before applying it to its chest.

On the therapeutic management of early phthisis, my observations will be brief. There is no specific, and one rule should be prominently kept in mind in the treatment of all cases of the incipient form of the disease; viz., the attention to the improvement of the general health; and the removal of gastric derangement, if it exist, is the *sine quâ non* of success, and should claim the fullest consideration.

Cod-liver oil deservedly holds its place; but it is often unfairly dealt by, in consequence of its being prescribed in cases where the tongue is coated, and the stomach is quite unfitted for its reception; and of what I think is also an error, viz., that the commencing doses are too large, and the stomach is not permitted to become gradually accustomed to its use. I have often succeeded in having it taken with advantage, by commencing with drops, when even teaspoonful doses at first would have been rejected. The medicine from which I fancy that I have seen most benefit accrue, is the iodide of potassium, in combination with the bicarbonate and chlorate of potash, with a sedative and the aromatic spirits of ammonia. This medicine acts favourably upon the digestive organs, and certainly improves the cachectic condition of the patient. If there be hæmoptysis, it will be well to omit the ammonia, as likely to interfere with the consistence of the blood. If anæmia with a clean tongue be present, the syrup of the iodide of iron may with advantage be added to the mixture; or the sulphate, with or without quinine in the form of a pill, may be administered with each dose. I have tried arsenic (lately recommended as a tonic in phthisis), but I was not satisfied that any particular advantage resulted from its use.

Sedatives in the form of morphia, are perhaps the best calmatives that we can employ. Local depletion may sometimes be advisable, particularly if much congestion around the suspected tuberculisation exist; but there are few cases in which greater benefit will not be derived from the application beneath the clavicle of a small blister. I believe that there is no form of counterirritation so effectual in incipient phthisis, when the disease is of limited extent, as repeated small blisters. If the disease be scattered over a large portion of lung, the croton oil, or acetic acid with turpentine, may be, and probably is, a better application.

The regulation of the diet of a phthisical patient is an important element in the general management of the disease; and, while nutritious and easily digested food should be allowed liberally, it is most necessary carefully to avoid overloading the stomach with too large a quantity of any kind of food taken at one meal. This applies particularly to the article milk, a diet considered *par excellence* as well suited for the consumptive invalid, but which is frequently rendered heavy and indigestible from its coagulation by the acids of the stomach, as well as from the quantity taken. A well dressed mixed diet, including fish and vegetables, is perhaps the best; while for breakfast, eggs and toasted bacon, with a liberal supply of cream in the tea, may be allowed if the appetite and digestive powers admit of its being taken. Of the wines, Manzanilla sherry is perhaps the best; next claret, and then champagne. When malt liquors are taken habitually, sound draught porter, or a smaller quantity of Guinness's stout, or bitter ale if it be preferred, may be allowed. As a rule, I think that porter agrees better than ale in phthisis.

The subject of change of residence has always claimed and received a large measure of attention from writers on consumption.

If benefit is to be derived from change of air, and wintering in a warmer climate, it is, I believe, in its most incipient, or only threatening stage, that the greatest amount of good will be effected. When the disease is advanced, and the patient is visibly declining, I cannot concur in the opinion of many of our metropolitan brethren especially, that, with all the inconveniences and disagreeables inseparable from a sojourn in a distant foreign land, added to the depressing influence of home separation, even if the pecuniary circumstances of the patient warrant his removal, the amount of questionable benefit to be derived is at all proportioned to the many discomforts which are certain to obtain. I believe, however, that frequent short trips from home, avoiding, at the same time, undue fatigue, will often prove of inestimable advantage.

As winter residences for the consumptive, we have in this country many spots where we may obtain all the advantages of Continental or Eastern sojourn without the painful and inseparable feeling of banishment, which attends a residence there. Among many other spots, the Cove of Cork, Torquay, Bournemouth, and Hastings, perhaps demand our first claim. From the month of June, to October, or even November, I believe that no part of England offers greater advantages to the subjects of threatened or early phthisis, than the shores of our own eastern coast. It is both drier, and more bracing than the watering places of the south and west; and I am glad to learn that this fact is beginning to be appreciated by the physicians of the metropolis, as well as by others who have hitherto regarded our eastern shores with the greatest possible dread.

While thus advocating the claims of our own country, I would on no account underrate the advantage to be derived from an occasional tour on the Continent, which, by amusing and occupying the mind, is capable of effecting simultaneously the most beneficial influence upon the phthisical tendency. With the same view, a sea-voyage, provided that it be not too extended, so as to produce *ennui*, is a valuable auxiliary to the hygienic management of phthisis in its early stage.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

FATAL CASE OF VARICELLA.

By Frederick J. Brown, M.D., Rochester.

[*Read September 25th*, 1863.]

William D. H., aged 3¾ years, was first seen by me on August 30th, 1862. He had been ill about five days with chicken-pox. The vesicles were desiccating; but there were two apertures in the skin of the back, as if portions had been punched out, resembling the perforating ulcer of the stomach. One aperture was equal in size to a groat; the other was rather smaller. There was induration and livid redness of the skin of the back, in a diffuse form, constituting erysipelas. The child was suffering from irritative fever. I ascertained that the urine was passed in bed, because the child dreaded to be lifted out. The course of the erysipelas was to affect the whole of the abdominal wall. Peritoneal effusion took place, with diarrhœa; and the child died on September 10th.

The death-certificate was as follows:—Varicella, 17 days; erysipelas, 12 days; peritonitis, 4 days.

The treatment consisted of the application of nitrate of silver dissolved in sweet spirits of nitre (gr. v to ℥i) to the erysipelatous skin, and of zinc ointment to the ulcerated apertures. Quinine was administered internally. Very little nourishment was taken by the child, although beef-tea and wine were ordered.

I have brought this case forward, because it is the only fatal case of varicella that I have ever seen. I once saw an ulcer in the abdominal wall equal in size to a halfpenny, in a quadroon child; but it was not a punched-out ulcer. That child recovered.

In the case under consideration, it is probable that the wetting of the skin by urine may have determined the fatal event.

I do not know whether perforating ulcers have been ever observed before, either as an occasional occurrence in the scabbing stage of varicella, or as an event in the course of low forms of erysipelas. It was not a case of ordinary sloughing. There was no appearance of gangrene.

The sanitary condition of the house was bad. The privy was close to the house, and waste water was permitted to run into the privy, so causing agitation and dilution of the night-soil, from which evaporation would be constantly going on. The child occupied the basement story, and was lying within a few yards of the privy. Another child was suffering from deep ulceration of the gum and cheek; and a week or two after the death of the child whose case has been narrated, there were two children ill with swelling of the glands below the ear, accompanied by pallid countenance and feverishness. These circumstances are evidence of defective sanitary condition, and show that the family was suffering from blood-poisoning.

English in India. There is too much reason to fear that our race in India undergoes rapidly a fatal deterioration. On the testimony of Sir Ranald Martin a third generation of unmixed Europeans is nowhere to be found in Bengal, and Major-General Bagnold has remarked that the oldest English regiment, the Bombay "Toughs," notwithstanding that marriages with British women are encouraged, have never been able from the time of Charles II to this day to raise boys enough to supply their drummers and fifers. In fact, whatever difference our increasing care for sanitary safeguards may affect, there is a certain deterioration of our race always under present circumstances tending to its extinction in the Indian Peninsula.

Introductory Lectures.

ST. GEORGE'S HOSPITAL.

The introductory address was delivered by Mr. Henry Lee. Among the illustrations which the lecturer offered of the greatest interest was the coagulation of fibrine within the vessels of the living body, and its subsequent liquefaction and disintegration, so that it might again mix with the circulating blood and be carried to any part of the body. But inasmuch as the blood-vessels were constantly divided into tubes of smaller dimensions, if the process of liquefaction had not been completely carried out, the particles of altered fibrine at length met with tubes of so small a diameter that they were unable to pass. They thus became impacted in the vessels, and sometimes masses of a very considerable size were thus accumulated. In the process of liquefaction the fibrine might undergo a greater or less amount of decomposition, very much in the same way as it would if allowed to remain at a high temperature out of the body. This decomposed or decomposing fibrine he knew by experiment to act as a powerful poison when introduced into the circulation. Dr. Polli, of Milan, had recently published a very interesting series of experiments, by which he showed that the use of sulphurous acid in combination with potash or soda possessed in an eminent degree the power of arresting organic fermentations and putrefactive changes. He proved that the sulphite of soda, or of potash, or of lime, were perfectly harmless when taken into the living body; and the idea occurred to him that these same preparations, which exercise such a powerful influence in preventing decomposition out of the body, might also prevent similar actions in living animals. Dr. Polli had given the details of sixty-eight experiments, which appear to have been most carefully made. Several dogs had putrid blood injected into their veins; and, being subsequently left to themselves they all died, with one exception. An equal number of dogs had large and repeated doses of the sulphites administered, and subsequently had the same quantity of putrid blood injected. These all recovered. Dr. Polli also found that if he mixed the putrid blood with a certain proportion of sulphite of soda before he injected it the dogs did not die as when the putrid blood alone was used. Should Dr. Polli's experiments be confirmed by subsequent observation, there would be in these preparations containing sulphurous acid a means of counteracting in a great measure, not the affections which arose from decomposition of the fibrine of the blood only, but a very large class of diseases which had hitherto defied the utmost efforts of the physician. Dr. Polli mentioned among the zymotic diseases which he supposed to depend upon a fermenting principle in the blood, cholera, typhus, puerperal fever, glanders, black vomit, marsh fevers, etc.; and if his conclusions were confirmed these diseases would now be capable of prevention in a number of instances; in others, they would be no longer fatal. An army might be rendered safe from the devastation of typhus, and a military hospital from the scourge of infectious gangrene. Mr. Lee would, then, have his hearers study carefully any one case of blood-poisoning which might present itself, and consider the means which might be used either to prevent or to remedy such a disease, and they would know something of a large class of similar affections, and of their mode of treatment.

In endeavouring to impress upon the students the necessity of associating the different facts which came before them in the study of their profession, with the general principles, powers, or laws by which they are regulated, he would not be understood to mean that they

should be content with a general knowledge of any subject. On the contrary, he would have them, especially at the outset of their career, study each fact, at whatever cost of time and labour, with the greatest possible accuracy; inasmuch as the accuracy of the general principles which were to last them through life would depend upon the accuracy of the observations upon which those principles were founded. And in order that they might be sure that they had laid a sound foundation upon which to build their conclusions he would have them see, and touch, and hear for themselves, and never be satisfied with the description at second hand when they could use their own senses; and not only this, but he would have them obtain an insight of their subject. For centuries men had seen for themselves that when an arm was bound up by a tape the veins swelled; but the first man who obtained an insight into the meaning of that fact, the first who correctly perceived what he saw, was William Harvey. "If we content ourselves," said Harvey, "with the observations of others the spritely edge of our own art will languish, and we extinguish the lamp which they lighted to our hands. It is those who follow nature's conduct with their own eyes, sometimes through a perplexed yet faithful track, who attain the highest pitch of truth." "Let us blush," he observes, "in this so ample and wonderful field of nature (where performance still exceeds what is promised), to credit other men's traditions only. Nature herself must be our adviser—the path she chalks must be our walk; for so while we confer with our own eyes, and take our rise from meaner things to higher, we shall at length be received into her closest secrets. For nature being divine and perfect is always consonant to herself." Nor was the mode of learning he was then advocating of modern origin, however much it might have been neglected in past ages, and however little it might be esteemed by some in the present day. It had the highest sanction. The delicate pencillings on the leaves of a wild flower, the winter storehouse of the ant, or the wonderful provision in varied climes and under every diversity of temperature for the clothing and sustenance of all the different kinds, had been for centuries so many illustrations by example of principles higher in their order and more extensive in their application than anything it was in the peculiar business of Galen or of Harvey to teach.

It became, then, a question of the first importance in medical education to ascertain how this insight into nature's operations might be acquired; and very various modes had been recommended. Some had maintained, even in our own day, that the first principles of medicine, as of other branches of philosophy, must be developed in the mind by the pure light of reason, undisturbed by sensible impressions. It was maintained that man had the faculty by the pure reason within him, of obtaining the power of interpreting and of gaining an insight into nature's laws; and as a remarkable instance of this faculty it had been stated that Dalton was enabled at once, and without passing through the subordinate stages of painful inductive ascent, to announce in its most general terms the law of definite proportions in chemistry to which he had already alluded. But Mr. Lee knew that Dalton attributed his success chiefly, not to any particular innate genius, but to a sound mathematical education. Again, there had been others who had maintained that a thorough acquaintance with classical literature was the best preparation for the student's mind, and one need go no further than their own hospital for brilliant examples of those in whom the highest classical attainments had coexisted with the deepest insight into nature's laws. But if there were those who attributed their success in life to mathematical or classical culture, there were on the other hand men not less distinguished who had, without such advantages, gained as deep an insight into the numerous chemical, mechanical, and vital forces which govern this lower world. Faraday's attention had not been distracted from the contemplation of nature by any of the usual processes of education; and the greatest medical discovery ever made was not among the busy haunts of men, but in a country village. Unaided and alone, Jenner observed the beneficial effects of vaccination as revealed to him by the silent and hitherto secret operation of nature's ordinary laws. If, then, men with such different opportunities, and under such different modes of education, obtained the same power of insight into what Harvey called the closest secrets of nature, must it not be concluded that it was with the mind as with the body—that real strength and energy did not depend so much upon the kind of food presented—or in the manner in which it was prepared, as in the power of digesting and assimilating it?

MIDDLESEX HOSPITAL.

The introductory address was delivered by Mr. T. W. Nunn. He said that at no epoch in the history of medicine had the times been more pregnant with events affecting the interests of the medical profession than at present. It was not yet fifty years since legislative enactment gave some degree of unity to the great mass of the profession, and organisation had surprisingly permeated that mass. Organisation and corroboration were still going on, and were converting the profession into a compact whole, as crystallisation converted what was wanted in cohesion into the solid and adamantine. The daily increasing development of the importance of medical science and the expansion of its sphere of application demanded from all connected with it ever fresh labours and greater energy. Progress was a consequence now more than ever essential to the vitality of medicine and to maintaining its present position amongst the sciences. There was no finality in science; the more that was known only taught how much there was yet to learn, more was seen spread out to one's gaze; objects which at a lower level stood out conspicuous against the horizon were now scarcely distinguishable specks in the mid-distance.

The lecturer then dwelt upon the nature of medical studies and the means of prosecuting them, and proceeded to consider what qualities of mind and body the students must bring with them to succeed in their purpose. They must bring not the delicately gloved hand, but the hard fist of determination and perseverance. They must never permit themselves to be disheartened. It was frequently to be observed that students beginning energetically fainted after the first few paces of the race, losing heart at their inability to retain what they read and heard. Let them be persuaded that this treacherousness of memory was but a transient disorder, and ought not to lead to chronic despondency. Let them remember that with Englishmen to fail implied success, and to say that an Englishman was down was but another way of expressing that he was about to rise. He advised them to secure a daily improvement, however small; and not to trust to violent and spasmodic efforts. The daily plodding, persevering effort was as the slow but irresistible lift of the screw compared with the sudden hoist of the lever—every inch gained was safe: there was no fear of a retrogression more rapid than the advance.

Mr. Nunn then reminded the students that, whether they worked with themselves or their fellows as competitors, the preservation of bodily health was as important as success; in fact, it was essential to it. Sufficient sleep, food, and exercise, more than they perhaps imagined, would contribute to their progress. He made no apology for referring to such matters; a judicious general looked as closely to the shoes of his men as to their weapons.

There was no real gain in devoting to reading hours that Nature had assigned to rest. Without a healthy state of the body the intellectual faculties could not fully come into play. It was difficult in London, perhaps, to obtain the proper amount of out-door exercise; but cold bathing and the simplest gymnastics would in a great measure compensate. Again, relaxation was necessary for fresh endeavour. Idleness, however, was not relaxation. Since many of them were destined to pursue the profession in distant countries, how much to their advantage would it be to have some general as well as professional knowledge?

The lecturer observed that, assembled with a common purpose, they could not consider themselves as a fortuitous concurrence of individuals, each entitled to pursue independently that course which might happen to be most agreeable to himself. It was contrary to the nature of things that individuals could be associated without mutually influencing each other. He reminded them they had to undergo not only a technical training, but a moral and intellectual development. Admitted as students, they incurred obligations to their neighbour; one of the most binding was aiding their fellow-students in the pursuit of knowledge. Mutual instruction, more than any other thing, tended to elevate the general character of a school.

After some further excellent advice to the students, as to their several duties, Mr. Nunn recommended those whose term of studentship was drawing to an end to devote the current session to clinical study. They must learn to infer; so as when all the facts of a case and all the symptoms are carefully considered together, to arrive at a correct diagnosis. They must likewise begin to compare one case with another, so as to gain a view of the various classes of disease.

Admitted as practitioners, they at once become sharers in a noble heritage bequeathed by their predecessors. But the estate inherited was not to be misused and squandered; its jewels were not to be scattered broadcast—its mansions were not to be despoiled. They must strive to cultivate its waste lands, increase its treasures, add yet stately towers to its time-honoured fabric. They must endeavour to discover that which shall permanently benefit suffering humanity, and the discovery they should give ungrudgingly. Millions of money gained by a secret remedy would confer no dignity on the possessor thereof. What would Jenner's fame now be had he kept his immortal discovery a secret for his own pecuniary gain? It was the sentiment with which a benefit was conferred that in a great measure determined its value; and we should ever bear in mind the glorious declaration of Hippocrates:—"My sole end shall be to relieve and cure my patients, to render myself worthy of their confidence, and not to expose myself even to the suspicion of having abused this influence. .. To whatever dwelling I may be called I shall cross its threshold with the sole view of succouring the sick, abstaining from all injurious views and corruption."

The profession had its enemies, against which it would be the duty of his hearers to keep watch. Mammon was one of its foes; quackery another. The mere greedy gatherer of fees by his mephitic influence did incalculable harm to the profession to which he claimed to belong, but in the dignity of which he could bear no part. Quackery had ever been on the alert to injure the true physician—not only that form of quackery that sought with unclean hands to filch from the ignorant and credulous by clumsy devices, but quackery within the ranks of the profession. The fortress was often in more danger from the traitor within its walls than from the avowed assailants. Mammon and quackery were bosom friends; they were like evil genii, prowling about seeking whom they might entangle in their toils. There was no single function of a medical practitioner that was otherwise than honourable. It might be truly said of the profession that it "knows nothing base, dreads nothing known." Some had falsely concluded that, since men with ample fortunes did not enter the medical profession as they did the legal, military, and naval professions, the medical profession was less the occupation for a gentleman than the others just named. The real and true explanation was, that the miseries and sufferings of our fellow-creatures were not to be made a pastime of. Surely the profession had a pedigree sufficiently old to satisfy the most punctilious. It was one that can find employment for powers however great, and present problems difficult enough to make the most self-confident hesitate. Then, again, the science of medicine was gradually spreading out its roots, so as to assume an administrative importance. How steadily "state medicine" was advancing. The revelations lately made in sanitary matters especially connected with the public service would tend to put the physician in his proper place. The evidence of Sir Ranald Martin and others on the subject of the health of troops showed that the tenure of our Indian possessions will depend more on the skill of our physicians than on the strategy of our generals. Mr. Nunn was far from undervaluing those worldly advantages and distinctions that men so ardently pursue, offered by other callings in life; but he earnestly trusted that having once entered the medical profession, they might never harbour for a moment a thought of distrust of it. Some of those whom he addressed as students would assuredly attain to the highest honour accorded to their profession; but all, by a diligent and honest discharge of duty, might carry with them a consciousness of having alleviated human suffering, and of having lightened the ills of life, which to have "'twere sweeter than to wear what kings bestow."

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

The introductory address was delivered by Mr. Batty. He said that he felt strongly the importance and responsibility of his position, from two sources—1. His advanced years in life; 2. The fact that this was in all human probability the last opportunity of giving expression to his views of the profession in which he had been engaged for upwards of half a century. He referred to the wonderful changes and hitherto unlimited development of mind in every department of art and science in connection with medicine and surgery during that period, and now extending over the civilised world by the various associations of scientific men. In matters political combination was strength. With the medical profession it meant something more; it meant "progress." This view Lord Stanley had well expressed, viz., "that the history of science is the history of improvement, whereby life is lengthened and disease rendered less severe, knowledge more ample, and man better fitted for those high destinies which we believe it is the purpose of Providence he should fulfil." When they took a retrospective view of surgical and medical practice from their present stand-point, they had great reason to be astonished as well as thankful for the improved treatment of diseased and broken limbs which in his early days would have been memorable by their loss. Again, in ovarian disease, he had been permitted to see such bold surgery as would formerly have been laughed to scorn, and executed with such skill and decision as to reflect the highest credit upon the operator, with the happy result of a perfect state of health. And all who regarded the progress of medicine with an intelligent eye must have witnessed with sincere gratification the prodigious advance that had been made in microscopical anatomy and physiological chemistry.

Mr. Batty insisted on the necessity of devoting the

early years of youth destined for medicine to the acquisition of general knowledge. The position of medical men required that their attainments ought to be of the highest character, for they had to exemplify it as second to none except those ordained to preach the gospel. It was of importance that a class of men so widely diffused and mingling so much with society as the members of the medical profession should be so instructed as to be able to give a tone to conversation, and to promote amongst those with whom they associate the love and pursuit of literary and scientific accomplishments. In commercial communities, it was true, the superior wealth, lavish expenditure, and even ostentatious display, with liberal hospitality and magnificent style of entertainment, gave to these a prominent position; yet the medical profession occupied no secondary place, for its members exacted and received the courtesy and attention everywhere extended to educated gentlemen and finished scholars. He also directed attention to the cultivation of those accomplishments which would relieve the severe studies of the profession. It was a vulgar prejudice, which still held with weak and uneducated persons, that to be eminent in the medical or any other profession, the less one had to do with other sciences than his own the better; but, like many a sorry weed, it had a deep root in uncultivated ground. Great physicians and surgeons of the past had been scholars and men of science, and of taste, possessing knowledge and accomplishments in no small degree out of the course of their profession. In all professions, provided he knew his own thoroughly, the more he knew out of his peculiar pursuit, the more enlightened was that man, and the better able to follow his own occupation with success and originality. He advised the students to make coloured drawings of the objects presented to them in hospital practice. He would by no means exclude a knowledge of music where there was a taste for it. So eminent a man as Sir William Herschell was known as the best drummer in the Hanoverian army, and also skilled in other instruments; and by gathering up the fragments of time he became the friend of monarchs and first of astronomers. Eminent members of the judicial bench had been noted for their musical attainments. Lord Palmerston's occupation was mathematics during travelling. Biography of eminent medical men who have conducted their profession with a deep sense of its sacred character was a study of great importance. And Mr. Batty specially recommended to the students' notice the lives of Mr. Hey, Dr. Abercrombie, Dr. John Reid, and Dr. G. Wilson. When such bright lights were removed from this dark world, did it not become those less brilliant to endeavour to shed their rays over a larger sphere, that the gloom might be somewhat lessened, and the bright light everywhere hastened? The imitation of the excellence of great and good men was itself a step towards greatness and goodness. He urged on them the moral obligation of missionary enterprises in union with the profession, as resulting from the relation of superiority in which we stand to less civilised men. The claims that these races had upon their more advanced brethren it was impossible to deny. He referred specially to the medical missions in China, and of Dr. Livingstone in Africa.

Another subject of great interest was also pressing forward upon the medical world; the earnest desire to investigate the economy of human existence, to ascertain the causes of human wretchedness, and to employ safe and active measures for its amelioration or absolute removal. Such a period every true philanthropist must hail with unmixed satisfaction. Men were discovering that this world had not been created that it might be the theatre only of guilt and misery. Man's physical organisation, his mental faculties, and the nature of the objects around him, were now the studies which were meant as blessings for all—the labourer, mechanic, and peasant, as well as the lord or monarch. These were the subjects of social science which engaged the attention of the noble as well as the learned, and medical men were deeply interested from the amount of their intelligence and moral influence; and to obtain the position of a medical officer to a board of health required an amount of information and study little suspected except by those who had been engaged in it. The profession could not be exalted too highly; it was one which commanded the blessing of God when conducted in dependence on his guidance, for it had the promise of present and also of future reward.

Reviews and Notices.

A Practical Treatise on Eczema, including its Lichenous, Impetiginous, and Pruriginous Varieties. By T. McCall Anderson, M.D.; Fellow of the Faculty of Physicians and Surgeons; Physician to the Dispensary for Skin-Diseases, etc. Pp. 134. London: 1863.

The object of Dr. Anderson in writing this book has been to direct attention to certain views as to the nature of eczema, which, although shared in by Hebra of Vienna and several continental dermatologists, differ from those which have been generally received by the profession in this country.

The book is divided into thirteen chapters.

In the first chapter, the author, with Hebra, objects to the restricted meaning commonly given to the word eczema—the restriction arising from the idea that the elementary lesion in the disease is the formation of a vesicle. In contradistinction to this, Dr. Anderson says that careful clinical study of eczema leads to the following conclusions.

"1. The elementary lesion of eczema is not of necessity a vesicle.

"2. It may be an erythematous state of the skin, a vesicle, a pustule, a papule, or a fissure.

"3. Impetigo, lichen, and prurigo are merely varieties of eczema, in which the elementary lesions are respectively pustules and papules.

"4. Cases of eczema are often met with, in which an erythematous state of the skin, vesicles, pustules, papules, and fissures are met with in a combined form." (P. 3.)

The author then describes the symptoms which, in his experience, are almost always present in the height of an eczematous eruption; viz., infiltration of the skin; exudation on the skin; formation of crusts; and itching.

In the second chapter, Dr. Anderson describes at length the elementary lesions met with in cases of eczema; viz., an erythematous state of the skin; vesicles; pustules; papules; fissures; or a mixture of several or all of these lesions. The varieties of eczema here described include several skin-affections to which special names, and special places in dermatological classifications, have generally been given. Thus the pustular form of eczema is the *impetigo* of authors; papular eczema includes those forms which are generally described as separate diseases, under the names of *lichen* and *prurigo*—the difference between lichen and prurigo being merely produced by the excessive itching in the latter, and by the consequent scratching on the part of the patient. While, however, Dr. Anderson objects to the idea that impetigo, lichen, and prurigo are distinct diseases, he

would retain the words as synonyms of the various forms of eczema to which he has referred them.

Dr. Anderson gives the name of *eczema rimosum* to that form which is characterised by the formation of fissures—the *eczema fendillé* of the French. Fissures are, he observes, a frequent accompaniment of the other forms of eczema; but they also often constitute the principal elementary lesion, though they usually form, like the vesicles and pustules, on an erythematous ground. The most typical cases of *eczema rimosum* are met with in "chapped" hands.

The third chapter is commenced by a summary of the preceding remarks on the varieties of eczema; and Dr. Anderson here arranges them in the following order.

"1. The principal elementary lesion an erythematous state of the skin (eczema erythematodes).

"2. The principal elementary lesion a vesicle (eczema vesiculosum), the typical eczema of Willan and Bateman.

"3. The principal elementary lesion a pustule (eczema pustulosum or eczema impetiginodes), the typical impetigo of Willan and Bateman.

"4. The principal elementary lesion a papule (eczema papulosum, including lichen or eczema lichenoïdes, and prurigo or eczema pruriginosum).

"5. The principal elementary lesion a fissure (eczema rimosum), the eczema fendillé of the French.

In speaking, in the course of this chapter, of the names which have been employed to express other forms of eczema, Dr. Anderson notices the eczema marginatum, a variety which has been described by Hebra, and also by Devergie, who, however, notices it under the head of herpes.

"It commences almost invariably on the inner aspect of the thigh, where it is in contact with the scrotum, and gradually extends circumferentially while it heals in the centre; so that, when fully formed, there is an elevated eczematous circle or segment of a circle, sometimes extending from the lower part of the abdomen to the knee, and inclosing skin which is either healthy looking or coloured by a deposit of pigment, the result of the previous inflammation of the part. It usually occurs on the inner aspects of both thighs simultaneously, in which case the eruptions on the two sides occasionally meet superiorly in the region of the pubes, and inferiorly in the perinæum. It is met with almost exclusively among shoemakers and dragoons (Hebra), a circumstance which is easily accounted for by the continued moisture and friction which these occupations entail in the situations referred to."

In the fourth chapter, Dr. Anderson treats of the Etiology of Eczema. The predisposition to the disease is strongest in persons of lymphatic temperament and in the scrofulous and debilitated, in whom it is called forth usually by some external or internal irritant. Sometimes, however, it appears in healthy persons, without apparent cause—being in this condition referrible to what the French call the "dartrous diathesis." It is caused, especially in infants, by improper or insufficient food; excess of food is a predisposing, but rarely an exciting cause. Dr. Anderson believes that eczema is hereditary, as several cases have come under his notice which favour this idea. It is more frequent in infants and females than in males, from their greater excitability and sensibility of skin. Among the exciting causes of the disease, Dr. Anderson enumerates vaccination.

"There can be no doubt that the inflammatory action set up by vaccination is a frequent exciting cause of eczema in those who are so predisposed; the eruption in these cases commencing sometimes in the site of the operation, sometimes on distant parts, as on the head."

Other exciting causes of eczema are those arising from the nature of occupations, and to which males are especially exposed; such as exposure to acrid substances or great heat, as occurs in cooks, grocers, bakers, etc. (hence the terms "grocers' itch," etc.); the heat of the sun (producing "eczema solare"); the use of hot and mineral baths; various mechanical irritants; the application of stimulating liniments and ointments; and internal irritation, as from teething, disordered bowels, etc.

In the fifth chapter, Dr. Anderson points out the diagnosis of eczema from erythema, some varieties of herpes, scabies, psoriasis, pemphigus foliaceus, pityriasis rubra, the lichen ruber of Hebra, and some forms of syphilitic eruption.

In the sixth chapter, the Prognosis and Course of Eczema are described.

The seventh chapter is devoted to the Constitutional Treatment of the disease; and the eighth and ninth, to the Local Treatment.

In the remaining chapters, the author describes the symptoms, diagnosis, and treatment of eczema, as it affects various parts of the body; namely, the head, face, lips, edges of the eyelids, nostrils, external auditory passage, hands and feet, legs, genital organs, anus, nipple, and umbilicus.

We cordially recommend a perusal of this work to medical practitioners. While we have principally called attention to the views which the author holds as to the nomenclature and classification of eczematous diseases, we must not omit to mention that the practical parts of the book—those relating to diagnosis and treatment—are well worked out, and that the practitioner can scarcely fail to receive some valuable instruction from their perusal.

THE SURGICAL DISEASES OF CHILDREN. Being the Lettsomian Lectures delivered before the Medical Society of London, March 1863. By THOMAS BRYANT, F.R.C.S., Assistant-Surgeon to Guy's Hospital. Pp. 145. London: 1863.

THIS book is a reprint of Mr. BRYANT'S Lettsomian Lectures, which appeared a few months ago in the pages of this JOURNAL. An analysis of the work is, therefore, unnecessary; and we will, therefore, merely direct the attention of our readers to the fact of the republication of these lectures, which afford an additional proof of the already well known industry and practical skill of the author.

THE JEWS. Of all races the Jews, the gipsies, and the Chinese appear to approach nearest to a cosmopolitan character. Statistics which have been published respecting the Jews in different countries seem to show that the Jew is subject to different physiological laws to those of the people by whom he is surrounded, as, for instance, the statistics of disease and death of the Jews and the other colonists in Algeria, which seem to show that the former are more completely acclimatised than the latter. The chief cause of the apparent superiority of the Jews in this sense, according to Mr. Hunt, is assumed to consist in the fact that they are a pure race. All pure races support the influence of change better than mixed races, as the examples of the Chinese, the gipsies, and even the nomadic Arabs indicate; nor are we ourselves, probably, on a par with either of these races, notwithstanding our tendencies and successes as a colonising people.

British Medical Journal.

SATURDAY, OCTOBER 17TH, 1863.

PSEUDO-CURES FOR THE SOCIAL EVIL.

LATELY, in speaking of prostitution and the diseases which spring from it, we referred to the large amount of misconception, or rather to the ignorance, which prevails amongst many of those who pretend to enlighten the world and the profession as to the proper mode of reducing the effects of the vice. We showed, in the first place, that there were strong indications, if not proofs, that governmental or police supervision of prostitution was a failure when practised in large cities and amongst a community at large. Certainly, proofs of the success of such supervision have yet to be given. It is probable enough, we readily admit, that in small garrison towns, and in the case of soldiers who are under regimental control and live in barracks, police interference of this kind may be of much and marked service; but it is manifestly absurd, in dealing with this question, to provide for isolated and exceptional cases. The government, if it supervise prostitution at all, must supervise it altogether; and we maintain, therefore, that as far as facts go, the attempt to arrest the spread of syphilis in a community by supervising prostitution, appears to be a failure. We maintain, for example, that syphilitic diseases are as common in Paris as they are in London. We know that these diseases rage in their worst forms in India, although, as we are told, a certain number of authorised and superintended women are allowed to each regiment.

In the second place, the immorality of the proceeding—the recognising of prostitution as a necessary evil by the government—is, in our opinion, patent. As we have already said, it paves the way for the commission of the sin by man, and makes the fatal step downwards for the woman ready and easy.

But it may be said, is it not possible to apply the system in a limited manner, so as to provide for and protect the health of our soldiers and sailors. A little consideration will show the impossibility of any partial legislation in such a matter, and the impossibility of in any way interfering with the liberty of the woman, unless under the authority of the laws of the country.

The truth is, indeed, that those who call out for some kind of effectual police interference present us with no practical scheme for the carrying out of their proposal. Does any Englishman in his senses believe that a House of Commons would ever be brought to pass a law that all women who practise the trade of prostitution shall be subjected to a weekly or a semi-weekly examination? But this is positively what these *Saturday Reviewers* and their echoes cry out for, if they mean anything at all; this is what it must come to, if the remedy is to be applied in that way. And who is the prostitute in such case? And who is to form the diagnosis of what constitutes a prostitute? We suppose that this part of the business must be left to the police. The police must, in fact, have the power of declaring such and such a woman a prostitute under the statute, and therefore a woman proper to be subjected to the weekly examination of the policeman's examining doctor. The policeman is to have the power of carrying off a woman on suspicion of being guilty of syphilis, and of handing her over to the speculum of the doctor, just as is done in Vienna, where the law declares every woman who practises prostitution *de facto* liable to punishment.* We may, perhaps, be told that these examinations of the women are only to take place in the "licensed houses", and only in the case of women who have entered themselves properly and legally on the rolls of prostitution—who have, in fact, become prostitutes according to law. No other females would be subjected to the supervision. But, as we showed before, it is just here that the whole benefit of the system falls to the ground. Here it was that came in Parent Duchâtelet's lament. "We have", he said, "only four thousand women under our control in Paris, whilst there are forty thousand in the city spreading disease and debauchery." And his remedy was to increase the tolerated houses in all directions! Is any one silly enough to believe that soldiers and sailors and others would ever be brought to confine their attentions solely to these tolerated houses? The police, of course, might publicly announce that their licensed women all carried clean bills of health; but what attention is a drunken tar likely to pay to such a recommendation as that? And what sort of an announcement is this for the legislature of England to make?

Clearly, these writers have never considered the subject about which they have taken on themselves to instruct the public. Perhaps, again, they may tell us, "Oh! we will seize on every prostitute, whether registered or non-registered, and bring her under police supervision." Now, let our readers only imagine what we should come to, if the policemen of England were to take upon themselves to make the diagnosis of what constitutes prostitution in a woman! Fancy a policeman having the power to seize upon a suspected woman, and bringing her up before the magistrate to obtain an order for a speculum-examination of her by the medical officer of police! But this is really and truly what is de-

* It is worthy of note, that at this very moment the medical press in Vienna is calling out for some more stringent laws to stop the spread of syphilis, which appears to be raging in that city at the present time.

manded, when an effectual supervision of this kind is demanded.

Then, again, it is said, every woman guilty of syphilitic disease must be held in durance until she is cured. But why not also every man? Do men never spread the disease?

Let our readers only reflect for a moment on the difficulties which the interpretation of such a law would instantly create. What is a contagious syphilitic disease? What is a syphilitic disease? Now, we suspect that a surgeon, on examining the suspected woman, would have considerable difficulty, in *a great many instances*, in swearing that the breach of surface or the lesion which he found was syphilitic. He, of course, might have his belief and his opinion that it was so; but so long as the possibility remained that the lesion was a simple wound, it is evident that he could not subject the woman to the proposed detention. The truth is, that the police supervision of prostitution is surrounded with difficulties which, in this free country, are utterly insurmountable. The more the subject is examined, the more evident does its utter impracticability and inapplicability become.

And who are the authorities by whom we are called upon to introduce these novelties? We will give our readers an idea of the knowledge possessed by these gentlemen, who write so glibly in the *Saturday Review*. We insert an extract from the number of that journal for September 19th, 1863.

"At present, not only does this country enjoy a melancholy preeminence in the statistics of the disease itself, but, as a consequence of our sentimental views on the subject, the medical men of England are perhaps less qualified, as a rule, to treat it than any other particular form of malady. Nor is the Lock Hospital itself free from special difficulties which attend its poverty. It hardly dares to appeal to public support; and it may almost be described as an institution which says as little as possible about its own object, but which is attached to a fashionable Proprietary Chapel, rather than what it ought to be—a public institution, supported by public money, and conducted with the publicity, and therefore the efficiency, of similar institutions in Paris and almost every other European capital."

Through want of a proper licensing system, English surgeons do not know how to treat syphilis! And the Lock Hospital (whose advertisement may be seen every day in the *Times*) dares not appeal to the public for support!

Again, we are told that we have a perfect right, for the protection of society, to shut up women affected with syphilis, just as we have a right to subject to quarantine the subjects of pernicious contagious diseases; but the fallacy of the reasoning is apparent to any one who thoroughly knows the subject. True, we have a right, for example, to declare that a scarlatina or small-pox patient shall not use a public conveyance, except under penalty; and for an obvious reason. Such patients are, by the use of that conveyance, spreading disease through society after a method against which its members have no protection whatever. Society has clearly a right to protect itself against such a deadly source of disease —to which it is in this way *unconsciously* subjected by those who are *knowingly* spreading the disease. But these flippant young first-class gentlemen from Oxford, who ply their classic pens in the *Saturday Review*, see no difference between such a case as this and the case of the prostitute who is affected with syphilis! The distinction, nevertheless, is manifest and complete. No member of society is *unconsciously* subjected by her to the possibility of contracting disease. Every member of society, in fact, who contracts disease from her, knew beforehand that he subjected himself to the liability of contracting disease. The man knew the risk he was running, just as much as he knows the risk he is running who thrusts his finger into a fire. There is, consequently, no kind of comparison between the two cases, such as the *Saturday Review* has tried to lay down. It is not, indeed, society that calls out for protection in such cases, but only that portion of society which practises fornication, and knowingly runs the risks of the practice. But if we are to be told that the disease is handed down from generation to generation, that the sins of the fathers are visited on their children, and that, therefore, our duty is to protect the unborn generation, we open the field of argument to a world of other considerations of a like kind. Why not call upon the government equally to interfere and put down the spread of scrofula, gout, phthisis, and other constitutional maladies which sap the health-strength of the country? Why (according to this argument of preventing the spread of syphilis from generation to generation) have you not an equal right to seize upon the rickety, scrofulous female, and forbid her to marry, as you have to seize upon the prostitute and arrest her for spreading syphilis?

One other difficulty we will throw out for the consideration of those gentlemen who admire governmental regulation of prostitution. The most important performer in the working staff of a prostitution superintendence is, evidently, the medical man. On his skill and surgical knowledge must depend the whole success of the affair—regarding it, at least, from the syphilis-arresting point of view. But, we ask, would any respectable and competent member of the profession be found to undertake the office—to accept the appointment of surgeon to a house of prostitution—even though it were duly registered according to Act of Parliament? Could a respectable medical member of society in this country be found, with sufficient courage twice a week, say, to attend at the well known prostitution-house for the purposes supposed—viz., of giving certificates to prostitutes, that they may ply their trade with safety to society? We very much doubt it. We believe

that the education of gentlemen in this county has yet hardly reached that degree of philosophic superiority which would lead them to sacrifice their own feelings and the feelings of their family to the performance of such a profound act of humanitarianism. What would be the natural sentiments of the wife or daughter of the medical philosopher concerning his bi-weekly visits to a first-class registered establishment of this character? What respectable medical man would like to have his certificate of clean health and fitness handed about by prostitutes to their customers? It is of no use our being told that these things work very well on the continent. The answer is plain. Englishmen are not Frenchmen, and all Frenchmen are not Parent-Duchâtelets. But—to test the matter practically—if one respectable medical gentleman and philosopher in this country will tell us that he is ready to accept such an appointment from his deep sense of its utility to society at large—is ready to sacrifice his feelings to his love of his fellow-creatures—we will admit that our argument is defective. In the meantime, we call upon those who are shouting out so loudly for the introduction of these continental blessings amongst us, to answer the case as now laid before them.

TITLE OF ASSISTANT-PHYSICIAN AND ASSISTANT-SURGEON.

It is high time that the use of titles assistant-physician and assistant-surgeon at hospitals were abolished. The title "assistant" is inappropriate, untrue, useless, degrading, and injurious to the interests of our hospitals. The term no longer bears its original signification. The office of assistant to the medical officers of hospitals was, we believe, first created at the request of some of our metropolitan surgeons—at St. George's and at Guy's Hospitals. These gentlemen, after many years of duty, finding the work of the hospital in some particulars severe to them, applied to the governors for relief, which was granted on account of their long term of services. They were allowed to select an assistant to help them. Now this assistant was really and truly what the name implies. He did that portion of the work of the surgeon which the surgeon delegated to him. But, as time went on, this idea of assistant officers was developed into a formation of a set of extra physicians and surgeons, for whom special work was assigned and created in the out-door department of hospitals. Their main business was no longer that of assistant to the physician or to the surgeon, but was an entirely new branch of hospital medical service. They were no longer chosen by the surgeon or physician, but were solemnly elected by the governors, and had their special duties assigned to them. They became, in fact, physicians and surgeons of the out-door department of hospitals.

The title, however, stuck to the holders of these offices, though now manifestly most inappropriate; and, as year after year has gone by, it has, for many obvious reasons, become more unfitting, unjust, and inappropriate; and we imagine that it would be a very difficult task for any one to give a single sufficient reason why the title should still be maintained.

That the title is unfitting, is manifest from the fact that the main duty of the assistant-officer is to attend to the patients in the out-door department of our hospitals. In that department, he is as much master of the field as the physician and the surgeon are in the wards of the hospital. No one can interfere with him. He is in no sense assistant to any one in the main business which he performs in the hospital.

The title is degrading, and therefore so far is injurious to the interests of the hospital, as well as to the interests of the bearer of it himself. The patients in the out-door department very naturally feel that their "doctor" is an inferior sort of article, as he is merely an assistant; and consequently they have not that full amount of confidence in him which they ought to have, and which it is to the especial interest of the hospital that they should have. Can anything be more absurd than for a hospital to give a title to its medical officers which tends in any way to degrade them in the eyes of their patients? Is it not manifestly their duty to create in the minds of the patients the fullest confidence in the skill and capacity of the gentlemen into whose hands they confide them?

Again, it is certain that, with a large number of the public, the house-surgeon of our hospitals is a far superior personage to our assistant-physicians and assistant-surgeons. Again and again we have had practical proofs of this given us. The patient "doesn't want to see an assistant; he wants to see the house-surgeon."

It should also be remembered that the present class of men who are assistant medical officers are a very different class, in years and in medical standing, from the young gentlemen who were originally made assistants.

We cannot, indeed, imagine of what earthly benefit or use the retention of the title is to any living soul. We have seen that it is degrading and most unfitting to the physician or surgeon himself, and that it is in so far injurious to the interests of the hospital. A gentleman, it appears, is worthy to be physician to a dispensary; but the moment he is elected to a hospital, though he there performs precisely similar duties, he must come down to the title of assistant-physician. Is it reasonable, is it not rather something approaching to scandalous, that men with the

reputation of a Paget, a Prescott Hewett, and a Skey, should have been made in the prime of their lives, and up to a late period, to bear the title of assistant-surgeons?

Thus, then, it appears that the title is anomalous, the object for which it was originally applied no longer existing; that it is degrading and injurious to the interests of those who have to suffer it; that it is prejudicial to the interests of the hospital; and that no earthly reason can be given for keeping it up. There is, indeed, one only possible suggestion which can be offered in favour of it; and that is, that keeping up the distinction in some way or other serves the interests of the physicians and surgeons of the in-patients, by laying down a marked line of distinction between their quality and the quality of the physicians and surgeons of the out-patients. But we are sure that the physicians and surgeons of our hospitals of the present day would be the very last persons to adhere to any such artificial mode of sustaining their rank. They have sense and liberality enough to know that men now-a-days form their reputation without resorting to any such distinction as this. The junior officers of hospitals complain of it, and justly, because it places them in the eyes of the public, and to a certain extent in the eyes of the profession, in a position beneath that which they do actually hold in the profession. It artificially debases them. And the truth is, indeed, that some of our metropolitan hospitals have already seen and practically acknowledged the truth of these remarks by giving to their junior officers the full title of physicians and surgeons.

So reasonable, indeed, is the claim, and so just, that we are satisfied, if those most interested in the matter will only express their wishes and fully state their case to the governors of the different hospitals throughout the country, they will be sure to obtain relief. Equally satisfied are we that in their attempt they will receive the cooperation of their senior colleagues. They have only to ask and to have; the case is too clear to admit of denial. All parties concerned in the matter would be considerable gainers by the change, and no one could by any possibility be injured by it.

ARMY MEDICAL GRIEVANCES EXPLAINED AWAY.

A Deputy Medical Inspector-General of the army, who speaks apparently with authority, although without a name, tells us that his branch of the service has been grossly maligned. The army medical service is an excellent service; it opens up for a young man a career such as he will find nowhere else; viz., £200 a-year to begin with, with certainty of promotion to the rank of surgeon-major, if he sticks to the service long enough, with chance of earlier promotion for distinguished merit; half-pay if disabled by ill-health; and optional retirement, twenty-one years of service completed, on at least £300 a-year.

Such is the bill of fare laid down by the Deputy-Inspector. And, certainly, he does not make out a bad case for his inspected ones, as far as he goes. If we remember aright, however, the main grumbling in the army has been, not in reference to pay, but in reference to rank. We have always understood that the assistant-surgeon received snubs in the matter of rank; and was refused those things which, by a royal warrant, were once granted him. The Deputy Inspector thus answers these objections. He says, that a medical officer, being a non-combatant, is very properly not allowed to exercise command in any situation, to sit as president at any court of inquiry or board of survey, or to command at mess; and for the following reason: viz., that if the medical officer were allowed thus to act, so must every other member of the civil departments, and then the army would be disorganised. Besides, the doctor has enough to do in learning his own profession without educating himself as a military officer.

The complaint about forage, again, is all nonsense. The colonel's horses are liable to be killed in action, whilst the doctor's are not, and, therefore, he has a right to more horses and more forage than the doctor.

The complaint about leave of absence is said to be all moonshine. "Every medical officer appears to be able to get at least two months' leave a year, and if he be sick, a very much longer period." What the Deputy Inspector means by "*appears* to be able", we do not quite understand.

As for making doctors pay the expenses of rejected recruits, that is only fair; "the public must be protected." But the fine is only "enforced in palpable cases."

Favouritism has been spoken of; but any show of the kind is capable of ready explanation—the case of Dr. Becker, for example.

But one grievance the army medical officer may fairly complain of:

"The army medical officer may justly think the period he has to serve on full pay, before being allowed to retire, too long. This is a real grievance, and is the chief cause of the length of time the assistant-surgeon has to serve before he gets promotion. The wear and tear of the constitution of the medical officer, the anxieties he has to undergo in the hospitals of the tropics, and the exposure to climate day and night, in comparison with the military and other officers of the army, entitle him to more consideration on this score; whereas he is worse off than the military officer, who can retire in twenty-five years, but who can enter the army at eighteen, which the medical officer cannot do. Moreover, arduous service for so long a time prevents his looking forward to anything but crippled health after a period of twenty-five years on full pay; and, therefore, it would be but an act of justice to shorten this period, and to give the rate

now given for twenty-five years to those who have served twenty-one years."

One other grievance we would venture to add, and that is, the superintending of branding, upon which point we should also like to hear the Deputy Inspector's opinion.

We suspect that our brethren in the army will see the case somewhat differently from this gentleman; and we have no doubt that they will fully answer his explanations.

THE WEEK.

At the Social Science meeting in Edinburgh, Dr. Christison, on Tuesday last, delivered a most admirable address in the Public Health Department. It was full of matter worthy of serious reflection, and pregnant with useful practical conclusions. We shall give a full summary of this discourse. Dr. Christison is the first medical man who has occupied the presidential chair of the Public Health Department; and it is saying nothing to the prejudice of his predecessors, to say that the chair has never been occupied so well. Who so well as a physician should know the state and the requirements of public health; and who of physicians should know these things better than Dr. Christison? Dr. Christison, in his address, called attention to the very defective state of our Registrar-General's nomenclature of death-returns; instancing the fact by reference to the vague terms of asthma, dropsy, atrophy, death from old age, of which latter cause he said that he himself had never seen an example. He, therefore, asked the Association to call upon the Registrar to reform the evil. He then treated at length of the causes of fevers, showing how much we had yet to learn of their causes. *Ague*, for example, had vanished from Scotland; and people generally attributed the fact to modern draining; but Dr. Christison, by reference to some curious statistics, showed that, in all probability, other causes must have been at work removing the disease; as these statistics clearly showed that, in one district at all events, ague had disappeared long before the modern system of drainage came into operation. Now, if (he argued) these other supposed causes be really effective, and we can ascertain their nature, we may do something to destroy ague in our colonies independently of draining. As regards *relapsing fever*, Dr. Christison never met with it except in an epidemic form; and then only when wages were low and the people in distress. The true remedy for this disease, therefore, is not the modern panacea, "draining", but proper food and ventilation. Of *typhus fever* he had known five epidemics during the last forty-five years. He attributed the fever, when not epidemic, to deficient food and bad ventilation, not to bad drainage; the sources of foul air not being the sources of typhus. The decrease in the number of cases of typhus in Edinburgh began before the "fever-nests" there were improved; nor, in fact, has any real cleansing of them taken place. The cause of the decrease is to be sought in a probable change of the type of the epidemic constitution. At all events, typhus cannot prevail where work is plenty and ventilation good. *Enteric fever* has increased of late years, but only very lately so in Scotland. Dr. Christison cannot ascribe its origin to foul air. London is better drained, and yet the disease exists. Edinburgh's drainage is improved, and yet the fever increases there. Its cause is unknown. Foul air may favour its rise, of course. Neither are there any good grounds for ascribing *diphtheria* to foul air. As regards *phthisis*, Dr. Christison mentioned a remarkable fact. Dr. Macrae, of Lewis (one of the Western Isles), had never seen a case of pulmonary consumption in any islander. There is, indeed, a tradition that the islanders there never die from consumption. Those who die from phthisis there are persons who have gone into the cities and towns as servants, etc., and who return home to die. We mention these few facts to point out the extremely instructive character of this address.

In his opening address last week, as President of the Social Science Association, Lord Brougham made the following remarks on the introduction into this country of nurses trained on the same principle as the French *Sœurs de la Charité*:—

"It was more than once urged at our last congress that the invaluable attendance in French hospitals of *Sœurs de Charité* made their establishment in this country not only expedient but a kind of duty. There is great satisfaction in finding that steps have been taken with much success towards the attainment of this object. The most important by far is the foundation, by the sister of our colleague, Lord Granville, Lady G. Fullerton (so well known for her excellent writings), of a sisterhood under a Paris superior, in a spacious building, for which her coadjutor, Miss Easton, has nobly contributed £5000. These ladies being Roman Catholics, their sisterhood is of the same persuasion, and this somewhat interferes with their attendance in hospitals. But Miss Brownlow Byron has established another body of the same kind—the All Saints' Home in Margaret Street—and there are no other attendants than these sisters at the University College Hospital. This is a great benefit gained; and undoubtedly the exertions of this association, and of those ladies especially who are in cooperation with us, have mainly effected it. It is plain that the duties of nurses offer a great and constant means of female employment, as our amiable and able colleague Miss Hope, and her coadjutors in this town, have shown, confirmed by the excellent training schools for nurses under Mrs. Balfour. The *Sœurs de Charité* also perform the service of nursing the sick at their dwellings. I remember that, when attending M. de Tocqueville's funeral at Cannes, the feeling most generally expressed by all present was thankfulness for the comfort which attended the last weeks of his life from the care of those excellent persons. Surely those who have introduced this sisterhood into our country are worthy

of all acceptation. They well deserve to be the countrywomen of Florence Nightingale—and no higher panegyric can be pronounced."

The *Journal of Psychological Medicine*, which was established in 1848 by Dr. Forbes Winslow, and has since then appeared under his able editorship, is to be discontinued—at least, in its present form. In an amiable and kindly spirit, Dr. Winslow lays down the editorial *bâton*, which he has so long wielded to the satisfaction of his numerous readers.

Our obituary of this day contains a notice of the death of an old member of the Association, Mr. Henry Swift of Liverpool. The decease of this gentleman is attributed to typhoid fever, contracted in the discharge of his duties as one of the medical officers to the parish of Liverpool—an appointment which he had held during the last eighteen years. He was also, since the beginning of the present year, surgeon to the northern division of the Liverpool police.

L'Imparziali relates that a woman at Florence lately produced four children at a birth. The placenta was single, and had attached to it four cords.

M. Reybard's conclusions, in the late discussion on urethrotomy, in the Surgical Society of Paris, are: 1. When the stricture interferes with micturition, is superficial, and of small extent, it may be simply incised. In this way, we obtain a temporary result, which may be also obtained by dilatation; but which is obtained more rapidly by incision, and without accidents. 2. In other cases, where a radical cure is desired, we incise superficially, and dilate largely, once only; this proceeding is expeditious, and gives definite results. M. Reybard obtained, in fourteen cases, fourteen cures without accidents. 3. Deep strictures must be incised largely; and the operation is serious, on account of the deep nature of the incision required. In this deep urethrotomy, M. Reybard has often observed accidents, but has only lost one patient in seventy.

A Putrid Well. At a meeting of the Truro Town Commissioners, an extraordinary fact was brought to light. The surveyor admitted that there was a public pump in Rosewin Lane, which had been used by the poor people in that populous neighbourhood for the last two years, and was found to emit such a stench that workmen now employed could not stand over its mouth. The well was found to contain a large quantity of decomposed wood, from the decayed pump-tree and other sources, and a common sewer opened into it. The poor people of Truro have to trust altogether to these public pumps for their supply of water for culinary purposes; and as they are "few and far between," the effect upon the health of the neighbourhood by the use of water in such a filthy condition is incalculable. It appeared that complaints had been made respecting the pump two years ago, and the grievance had only recently been remedied.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [Autumnal.]	Infirmary, Northampton.	Thurs., Oct. 22, 1 P.M.
Bath and Bristol. [Ordinary.]	York House, Bath.	Thursday, Oct. 22, 7.15 P.M.
Shropshire Scientific. [Ordinary.]	George Hotel, Shrewsbury.	Tuesday, Oct. 27, 5 P.M.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Town Hall, at Maidstone, on Friday, October 30th, at 2 P.M.

Dinner will be provided at the Mitre Inn at 5 o'clock. Tickets, 5*s.*, exclusive of wine.

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, October 13th, 1863.

SHROPSHIRE SCIENTIFIC BRANCH.

The next meeting will be held at the George Hotel, Shrewsbury, on Tuesday, October 27, at 2.30 P.M. Dinner will be ordered at 5 P.M.

Samuel Wood, *Hon. Secretary.*

Shrewsbury, October 14, 1863.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of this Branch was held in the Medical Department of the Birmingham Library, on Thursday, October 8th; Alfred Baker, Esq., President, in the chair. There were also present twenty-two members and visitors.

Paper. A paper was read on

A Successful Case of Ovariotomy; Remarks on the Selection of Cases, and on Certain Details in the Operation. By F. Jordan, Esq.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

October 1st, 1863.

A. B. Steele, Esq., Vice-President, in the Chair.

Testimonials from Medical Men. Mr. Lowndes drew attention to a letter that appeared recently in the *Medical Times and Gazette*, with reference to the printed testimonials affixed to "Martin's Infant Preservative".

Dr. Stookes explained that, until he saw the letter referred to, he was not aware that his name had been so made use of. Mr. Martin had come to him for a certificate of the harmlessness of this medicine, to satisfy the coroner in a particular case. He thought the mixture contained carbonate of magnesia, chloric ether, and syrup. Mr. Steele, however, who had also seen the prescription, thought it contained a very small quantity of laudanum. When he saw what use had been made of this certificate, he wrote to Mr. Martin, and received an answer which he read, and which stated that the use of the certificate as an advertisement was quite without Dr. Stookes's knowledge.

The Chairman said the dose of laudanum was very minute. Mr. Martin had called on him also for a cer-

tificate, and had said positively he only wanted it for the satisfaction of the coroner.

Mr. Townson spoke very strongly of the impropriety of any physician lending his sanction or support to any such nostrum.

Dr. Stookes said he had directed Mr. Martin to remove his name from the wrapper alluded to.

OPENING ADDRESS. BY THE CHAIRMAN.

Mr. Steele said that, though the Society could not congratulate themselves on being a numerous assembly, yet they were consoled by the reflection that to their little band was due the credit of evincing, by their presence, a sincere desire to promote the efficiency of the Institution, and thus to discharge an important duty to the profession. It seemed to him that no member of this Institution, who habitually absented himself from the meetings, except, of course, he were prevented by unavoidable causes, could be held excused from a serious dereliction of duty; and he would further affirm, that no practitioner of the town, however successful his career, or however brilliant his acquirements might be, could be said thoroughly to appreciate and faithfully to discharge all that he owed to himself and to his profession, so long as he stood aloof from this Institution, and deprived it of that aid and support which his influence and means might be expected to afford.

After alluding to the building in which they were met, a building such as the medical profession in no other town in the kingdom had the privilege to possess, and to the valuable library here preserved, he spoke of the advantage of the meetings held twice a month, to hear cases and papers read and discussed, and for the exhibition of pathological specimens; and he thought it impossible to conceive that the result of a number of men of education and refinement coming together month after month, to deliver themselves of thoughts and opinions, to discuss and criticise each other's views, sometimes, indeed, to engage in a keen intellectual combat, could be otherwise than conducive to the progress of our art, as well as most useful and instructive to the individuals taking part in it. He was persuaded that much good was effected by the members of the profession coming into contact with, and thus becoming better known to, each other; and he regretted that attempts to combine with the meetings a more thorough development of the social element had not hitherto succeeded.

On those comparatively rare but important occasions when an united expression of opinion on professional subjects seemed to be called for, this Institution afforded facilities for attaining that object with energy and promptitude; and that these advantages had not been neglected, the annals of the Institution sufficiently testified. Looking back for a few years, many could recall a memorable occasion when an esteemed and highly deserving member of our profession was the subject of a base and cruel attempt to blast his reputation; and when, at a meeting held in this building, the verdict of the profession overwhelmed his assailants with defeat and dismay, and at once restored him to the position from which he had for a time been wrongfully excluded. On a later occasion, when a certain form of quackery, especially mischievous and contemptible from the fact that its main supporters are renegade members of our own profession, ventured to thrust itself into closer contiguity than was deemed reputable or tolerable, this Institution came boldly forward to maintain its position and dignity, and that with no uncertain voice.

On a still more recent occasion, the practitioners of Liverpool, as represented by this Institution, published, without respect of persons, their solemn protest against the prevailing iniquity of medical men prostituting their talents and their influence in behalf of those who, for their own base and sordid ends, essayed the ruin of the very men to whom they were indebted for the greatest kindness and consideration. He alluded, of course, to the subject of medical prosecutions; and thought they had in this matter lately seen the good effects of the firm and dignified position assumed by the profession on this most important point of medical ethics. At the recent trial at the Liverpool Assizes, although it was rumoured that some medical men were so regardless of their own self-esteem, and of their duty, as to lend themselves to aid the prosecution, yet they were, on that occasion at least, spared the humiliating spectacle of medical advocates coming publicly forward to swear away the reputation of a professional colleague. He thought he might venture, in the name of the Institution, thus to express his cordial sympathy with those gentlemen who, as defendants, had been subjected to so harassing and annoying an ordeal.

After speaking further of these trials, and of the difficulty or hopelessness of trying to enforce that by Medico-Ethical Societies, which our feeling of duty to each other and our professional honour fail to bring about, the chairman passed on to a brief consideration of the recent Medical Act, and observed that this great desideratum that was to have exterminated quackery, and to have elevated true medicine to a position never before attained, had led to results which were, considering the time and trouble it had taken, most disproportionally, nay microscopically, minute. He compared the profession to the frogs in the fable who prayed to Jupiter for a king; first they got a stork who gobbled up their guineas; and next they were vouchsafed a log which proved an incumbrance without any compensating utility. Our reformers, like most reformers, went to work on the levelling principle; but, unfortunately, in our case, the levelling has taken place from above downwards, instead of from below upwards. The once honourable and respected section of our profession, the pure physician, was now lost in the *mêlée* of L.R.C.P.s, graduates who had never graduated, but had straddled up all the steps at once.

With regard to the suppression of quackery, nothing could be a more consummate failure than Section 40, which was just sufficiently obscure to lead us into useless and expensive litigation. By prosecuting these people ineffectually, we only increased their number and augmented their arrogance and rapacity. The duty of suppressing this nuisance belonged to the general public, who were the sufferers, rather than to the medical body; and we, perhaps, actually did good to these quacks when we led the public to believe that we were acting from fear for our own interest, rather than from our wish to eradicate a public evil.

In conclusion, the chairman said that the progress and position of the Institution sufficiently testify that there was no just cause for apprehension as to its continued prosperity. The meetings, though not numerously attended, were kept up with increasing spirit and interest; and the building itself was maintained in a state of thorough efficiency; and that in spite of difficulties that would not exist if the whole profession of the town did their part.

On the motion of Mr. Hakes, seconded by Dr. Waters, a vote of thanks was accorded to the chairman for his address.

PATHOLOGICAL DEPARTMENT.

Amputation at the Ankle-joint. Mr. Bickerton showed a foot that he had just removed at the ankle-joint. It had been crushed in a railway accident, and he had been in hopes to save a part of the foot; but the deeper parts were so much more severely injured than the state of the integuments led him to expect, that he was obliged to give up the partial operation.

Long Retention of Acidity by Urine. Dr. Balman showed a specimen of urine from a patient who was suffering from a rather rare skin disease—absorption of the

pigment of the skin of the face. His skin, formerly dark, was becoming light and mottled; the hair of his head was black, but his beard was turning white. The peculiarity of the urine was, that though passed ten days ago, it was still highly acid; its specific gravity was 1025.

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

WEDNESDAY, OCTOBER 7, 1863.

E. LUND, Esq., in the Chair.

ONE new member was elected, and seven proposed; and a large addition to the library was announced.

Conjunctivitis, etc., from Lightning. Dr. SAMELSON exhibited a boy who, during a thunderstorm, was suddenly affected with symptoms of acute conjunctivitis—pain, redness, photophobia, etc. These symptoms lasted for a day or two, in conjunction with some pain in the bowels, and a parched and discoloured state of the mucous membrane at the orifice of the nostrils and mouth. Five days afterwards, a mere trace remained. The patient was the only one affected out of some thirty children present with him at school.

Dilated Aorta. Mr. MIDWOOD exhibited a specimen of dilatation of the abdominal aorta from a patient who had died of dysentery.

Total Absence of the Iris in both Eyes. Dr. SAMELSON exhibited the case of an adult man who has total absence of the iris in both eyes. There seemed to be little doubt that this state was congenital, as the patient had always suffered from weak eyes, although his sight had been by no means bad. There were several other points of interest in the case, regarding the condition of the lens, etc.; and as Dr. Samelson considers it to be one of remarkable interest and rarity, he proposes to publish a separate and exhaustive account. A conversation on the subject was adjourned till the next meeting.

Absorption of the Iris. In connection with the preceding case, Mr. HUNT exhibited some drawings illustrative of the manner in which he believes that gradual absorption of the iris may occur.

Blepharoplastic Operation. Mr. THOMAS WINDSOR showed a boy in whom he had succeeded, with considerable difficulty, in replacing the upper eyelid. There was still great deformity of the lower, upon which he intended to operate, and afterwards to communicate the case again to the society.

The Glucogenic Theory: its present state. Dr. WM. ROBERTS gave an elaborate statement of the present state of the glucogenic theory, attempting to define, as far as possible, how much had been ascertained with certainty, how much was still *sub judice*, and what were the probable future developments of the theory. He gave a full and lucid account of the original observations of Bernard, Pavy, Harley, McConnell, etc., with regard to the presence and probable mode of production of the amyloid substance and its conversion into sugar. He referred also to some experiments of his own, which seemed, as far as they went, to confirm Pavy's views of the *post mortem* character of the ordinary saccharine changes in the liver. He also detailed the observations of Schiff, Pavy, etc., on the influence of various portions of the nervous system on the urinary secretion; considering that the sole positive deduction, as yet, from these is, that nervous influence must undoubtedly constitute one important link in the chain of causation in diabetes.

Correspondence.

IRIDECTOMY.

SIR,—I cannot allow to pass unnoticed the letter in your impression of October 10th, on "Iridectomy"; which, be it understood, means cutting off a piece of the iris, just as the operation is done for the making of an artificial pupil. That letter was published as an answer to some remarks of yours, rather depreciating* the operation as a cure for glaucoma.

Nothing, in my opinion, can be gathered from it that in the least invalidates what has been stated, nor is there a single fact commendatory of "iridectomy" in the sense alluded to.

The writer comes forward, as he says, "in justice to those who practise the operation, rather than in the hope of converting those who condemn it untried." In the first part of this sentence, there is something of a personal character, which I shall not comment on. But as regards the latter, I would remark, that if there be any persons of the class alluded to, I can add besides, that four of my own friends with ample opportunity have tried "iridectomy," and condemn it.

A long tirade follows about persons of the "tory" type of mind, who won't be converted, and who act as drags to the rapid progress of others; but not a word in argument about the real matter in question—not a thing about the principle. I was not disappointed, and breathed a hope that the writer's career may never suffer that violence from the "drags" that he speaks of.

He continues, "if iridectomy be not a remedy for glaucoma, where does one exist? In the hands of the most expert and judicious surgeons, it, doubtless, will not always succeed in restoring sight; but in a large proportion of the cases in which it is indicated, much improvement may be predicted, with as much confidence as justifies the operation for hernia or aneurism."

Surely he does not seriously mean "iridectomy" to be received on the argument of the first remark. That is impossible; and the latter is too weak for what he would wish to imply. We learn that it will not always succeed, but where indicated, etc. Why did he not tell us where? It is just this improvement about which observers differ. Those who trace the natural history of glaucoma, say that after the sight has been entirely and quickly lost from an acute attack, there is often recovery of it, sufficient to enable ordinary books to be read, by the natural process of repair. The comparisons to hernia and aneurism do not hold good, as the least reflection will shew. There is a principle in these operations which is acted on, and is unaltered, whether the operations succeed or not.

There is much said by the writer that has nothing whatever to do with the matter, that I need not notice, as to "iridectomy" for recurrent iritis, and for the linear extraction of cataract. But the following statement I cannot pass. "That it should be employed in hopeless cases, and so fall into disfavour, must have been anticipated; and that it would be discredited by inapt operators, and by those who do not attempt even to perform it properly, also was to be foretold, almost as a matter of course."

The allusion to inapt operators is an unhappy one. Every operation in surgery is at times—aye, and very often—badly done, and will be blundered at so long as they are undertaken; but this neither destroys the application, nor the usefulness of them, nor throws those

* Our correspondent should have said "questioning". What we suggested was, that all operations in surgery should be based upon definite principles; and that the principles (so-called) upon which iridectomy was based seemed to us to want definition. EDITOR.

founded on approved principle into discredit. Then I must tell your readers that, among those referred to by me as dissentients from iridectomy, are operators of a class that cannot be called "inapt".

The speaking of inapt operations reminds me that "iridectomy" is not without its perils, even in the hands of experts. I have often thought that, distressing as was the result of its application to a late surgeon, the greatest in his generation, still I believe hundreds have benefited; for had no ill consequences followed, to say nothing of benefit, or not, from the force of circumstances, there would have been a reckless adoption of it for a long time.

The reader, at one of our Association meetings, of the surgical address, which was devoted to the progress of ophthalmic surgery, said that he received "iridectomy" with favour, because that great surgeon had submitted to it.

One more word, sir: I ask, What is the principle on which iridectomy is undertaken?

I am, etc., AN EYE SURGEON.

LETTER FROM R. T. HUNT, ESQ.

SIR,—Perfectly agreeing with the observations on iridectomy in the JOURNAL of Sept. 26th, I beg to offer the following remarks.

Iridectomy is nothing more than the old operation for artificial pupil, by removal of a portion of the iris; but, at present, adopted in cases different from those in which it was formerly recommended. Iridectomy is not now used merely for the purpose of remedying the defect of vision occasioned by an obliterated pupil, or a more or less central corneal opacity; but for treating that condition of the internal structures of the eyeball which has been called by Graefe "acute glaucoma."

This may be briefly described as deep-seated inflammation of the eye, accompanied by a peculiar opacity behind the pupil, and by great loss of vision. Of all the internal structures of the eye, the choroid coat is the most vascular; and there is no doubt that its vessels normally carry red blood, whereas those of the retina, which are also numerous under ordinary circumstances, convey only colourless blood. The very free inosculation of the choroidal vessels with those of the iris and ciliary processes, and the extreme vascularity of all these tissues, must cause any operation which interferes with the circulation of the iris to materially affect the circulation of the others. I believe that excising a portion of iris (iridectomy) may act beneficially in this manner, by affording the best method of depleting the choroidal vessels. If the operation be restricted to such cases of deep-seated inflammation, we shall, in time, estimate its importance. But it is much to be feared that its adoption in many cases to which it is altogether inapplicable will ultimately prevent its receiving that consideration which it deserves. I am, etc.,

R. T. HUNT.

Manchester, Oct. 13, 1863.

VILLAGE HOSPITALS.

LETTER FROM ALBERT NAPPER, ESQ.

SIR,—In your paragraph on Village Hospitals, in the JOURNAL of the 3rd instant, you allude to the enormous abuses which they are likely to engender, unless they be established on a just and equitable footing; and that the practice of giving to them our gratuitous services is likely to establish a system of professional demoralisation throughout the country. Should this evil unfortunately be the result, I shall deeply regret the part I have taken in inducting the system; but I can see no grounds for entertaining such an opinion. Nevertheless, your earnest and repeated appeals on the subject demand from us that calm and serious consideration you advise. That the institution has taken deep root, and is fast spreading itself in all quarters, I have almost daily evidence; and I quite think with you, the time has arrived that a "just and equitable" and an uniform system should be adopted for its future management.

I will not attempt to discuss the subject of gratuitous services, as it would raise questions far too intricate for my present purpose; but would suggest that those gentlemen who are engaged in, or interested in, the formation of Village Hospitals, should take an early opportunity of meeting in London for the purpose of discussing the whole subject; and, upon their united experiences, founding a "just and equitable system" of management.

Should the gentlemen thus engaged be so disposed, I shall be happy to be the medium of receiving their communications, with a view of carrying out the above propositions. I am, etc. ALBERT NAPPER.

Cranley, near Guildford, October 6th, 1863.

[Nothing could be fairer or more candid than our correspondent's proposal. Such a meeting and such a discussion might be pregnant with good for the purpose proposed. EDITOR.]

COMPULSORY VACCINATION AND REGISTRATION.

LETTER FROM WM. FAWSSETT, ESQ.

SIR,—Much has been lately written on the subject of "Compulsory Vaccination," so called; and we have had a staff of M.D.s sent round the provinces to show us how to vaccinate; and to take statistics. Doubtless, we ought to be very grateful for the information and knowledge imparted by these gentlemen; but are we one jot nearer the grand object of general vaccination than we were before? I trow not.

The present system is clogged with certificates and papers that are worse than useless. If the Registrar, when he registers the birth of the child, had one proper form to issue, which must be returned to him by the parent of the child within four months, signed by the medical officer, certifying the successful vaccination of the child, or the contrary, there would no longer be any difficulty in the matter; and he might be made the informer for neglect, with half the penalty on conviction for his trouble. The onus would then rest on the parent whose child is benefited, and not on the medical officer, as it does at present.

The system of certificates is becoming an intolerable nuisance. We have three for each case of vaccination beside our own account, which has to be copied to send to the Board; we have lunacy papers to fill up quarterly (no case, no pay); we have certificates as to the cause of death to give for each pauper, the only remuneration being the honour of attaching our professional titles at the end.

You now ask, "On what grounds we propose to work village hospitals gratuitously?" We are so accustomed to work for nothing, that the very fact of having three, four, or five cases brought under one roof near one's residence, under a nurse qualified to carry out the rules laid down, would be the greatest boon to an union medical officer in a large village, and an immense saving of time and labour.

I have long wished to give my views on the vaccination question, but had hoped that some one would have hit on this simple expedient before.

I am, etc., W. FAWSSETT,

An Union Officer from the first formation of Unions.

Binbrooke, Market Rasen, Oct. 7, 1863.

Medical News.

APOTHECARIES' HALL. On October 8th, the following Licentiates were admitted:—

Beverley, Michael, Seething, Norfolk
Cook, Robert Foreman, Gateshead-on-Tyne
Emanuel, Leonard, Stanley Gardens, Notting Hill
Harrison, Robert, Nether Levens, Milnthorpe
James, Joshua, Bristol
Jones, Walter, Llansilin, Oswestry
Kempe, Charles Marshall, Augusta Place, Clapham Road
Morley, Frederic, Bicker, Lincolnshire
Sheldon, Thomas, Stratford-on-Avon
Taylor, Hugh, Norwich
Turner, Richard, King's College

At the same Court, the following passed the first examination:—

Carpenter, Edward, St. Thomas's Hospital
Hiron, William, Nathaniel, Sydenham College, Birmingham

APPOINTMENTS.

BRACEY, William A., Esq., elected House-Surgeon to the Birmingham and Midland Eye Hospital.

CORRIE, James J., Esq, elected House-Surgeon to the Leeds Fever Hospital.

HICKS, J. Braxton, M.D.Lond., F.R.S., has been appointed Physician to the Royal Infirmary for Diseases of Children and Women, in the room of Dr. Hutton, resigned.

HOLDEN, John, Esq., appointed House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

PADFIELD, James, M.B., appointed Junior House-Surgeon to the Liverpool Northern Hospital.

RANSOM, Robt., M.D., appointed Surgeon to the Cambridge Borough Police.

RAYNER, William, Esq., appointed Resident Medical Officer to the Leeds Public Dispensary.

WILSON, J. G., M.D., appointed Lecturer on Midwifery in the Andersonian University, Glasgow.

ARMY.

CHALMERS, Surgeon W. K., M.D., from half-pay, to be Staff-Surgeon, *vice* J. T. O. Johnston, M.D.

FYFFE, Surgeon W. J., M.D., 5th Dragoon Guards, to be Staff-Surgeon, *vice* J. C. Ovens.

JOHNSTON, Surgeon-Major J. T. O., M.D., Depot Battalion, retiring on half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

OVENS, Staff-Surgeon J. C., to be Surgeon 5th Dragoon Guards, *vice* W. J. Fyffe, M.D.

WATT, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon, *vice* J. S. Allanby, M.D.

To be Staff-Assistant-Surgeons:—

HEATHER, J. W., Esq.
STEWART, A. A., M.D.

INDIAN ARMY.

DAVY, Assistant-Surgeon W., Bombay Army, to be Surgeon.
HARRISON, Surgeon J. B., M.D., to be Surgeon-Major Bengal Army.
KELLY, Surgeon J. P., to be Surgeon-Major Bengal Army.

ROYAL NAVY.

FULTON, Thomas, Esq., Assistant-Surgeon, to Plymouth Hospital.
HUNTER, John M., Esq., Assistant-Surgeon, to the *Formidable*, for the *Lizard*.
LAWRENSON, R. C. P., Esq., Assistant-Surgeon, to the *Cumberland*, for Marine Barracks.
MOORE, John T., Esq., Assistant-Surgeon, to the *Indus*.

DEATH.

*SWIFT, Henry, Esq., at Liverpool, aged 60, on October 7.

PHARMACEUTICAL SOCIETY. The sessional prizes, with the Herbaria and Pereira Medals and Bell Scholarships, were distributed at a meeting held at the Society's house on Wednesday, October 7th; Mr. Hills, Vice-President, in the chair. The following were the successful candidates:—*Chemistry and Pharmacy*—Medal, M. Carteighe; certificate of honour, C. Umney. *Botany and Materia Medica*—Medal, M. Carteighe; certificates of honour, J. Watts and C. Umney; certificate of merit, J. Phillips. *Practical Chemistry*—Medal, C. Umney; certificate of honour, H. A. Peele; certificate of merit, J. Bourdas. *Pereira Medal*—M. Carteighe. *Herbaria*—Silver medal, T. Harrison; bronze medal, E. M. Holmes; certificate of honour, H. Medd. *Junior Bell Scholarships* (value £30 *per annum*, with free laboratory instruction)—J. Watts and F. E. Pasmore. Mr. Hills presented to the society a bust of the late Jacob Bell, by T. Butler, which was recently exhibited at the Royal Academy.

THE WILL OF WILLIAM M'NAB, ESQ., of Ware, Hertfordshire, surgeon, has been proved in London under £30,000 personal property, the executors and trustees appointed being his wife, Mrs. H. M'Nab; his brother, D. R. M'Nab, Esq., of Epping, surgeon; J. T. Humphry, Esq., of New Square, Lincoln's-inn, barrister-at-law; and G. M. Humphry, M.D., of Cambridge. The testator executed his will in 1860; two codicils in Feb. and March 1862; and a third codicil in January 1863. He bequeaths to his wife a life interest in the bulk of his property; bequeathing to his daughter a liberal annuity and the right of presentation to the advowson of Great Amwell; and upon the decease of his relict he leaves the whole of his property to his said daughter Harriet, wife of the Rev. Richard Parrott, B.A., domestic chaplain to the Earl of Lisburne. (*Illustrated London News.*)

VEGETABLE MUSCLES. The *Quarterly Journal of the Microscopic Society* contains a paper by Dr. F. Cohn, "On the Contractile Filaments of the Thistle Tribe." In the *Cynareæ* (the Professor says), the fine filaments are inserted into the tube of the corolla, and support at their extremities the anthers, which in all the composita are conjoined into a complete tube. At the time of flowering, this anther tube is closed at the end, and envelopes the pistil which arises at the base of the corolla from the inferior ovary. At this period, the anther tube rises at four m. m. above the summit of the corolla. When touched, pollen masses are extracted from its apex, and at the same time the tube exhibits a peculiar twisting movement. After about five minutes, the experiment can be repeated; the pollen is again forced out of the tube, and the twisting movement will again be witnessed. When the filaments are extended, they appear as if longitudinally striated; when contracted, as if transversely striated. He considers the fibres to correspond in their behaviour essentially with unstriped muscle; but he regards their shortening as of a passive nature, and due to elasticity, and their lengthening an active condition which is the opposite to what takes place in muscular fibre. He considers that we may now be said to be acquainted with plants which, so to speak, have muscles, and in the lowest animals which possess no muscles, their contractile parenchyma behaves after the manner of contractile vegetable cells.

LUCIFER MATCH MAKERS' DISEASE. Dr. Bristowe's report, embodied in the official statements of the Privy Council, establishes the accuracy of Von Bibra's conclusions as to the pathology of disease of the jaw-bone from phosphorus. It is quite certain that the disease is in its origin purely local; that it depends on an influence which the fumes of phosphorus are able to exert directly and specially within the mouth. Having set forth the instances adduced by his coadjutor, Mr. Simon reports as follows: "The dangers to which I have adverted, as belonging to the phosphorus industry, belong exclusively to working with common phosphorus. Working with amorphous phosphorus is unattended with danger to health. Since, however, it appears that, with reasonable precautions, the use of common phosphorus for match-making needs not be an unwholesome occupation, I cannot say that, in my opinion, the substitution of amorphous for common phosphorus in the manufacture is, for sanitary purposes, an object to be unconditionally insisted on. Yet, having regard to the fact that amorphous phosphorus not only is manufactured without danger to the worker, but that its use in lucifer-boxes (according to the patented plan of Messrs. Bryant and

May) also involves infinitely less danger of fire than belongs to common lucifer-boxes, I think that the substitution is altogether one to be desired. And of course, with reference to any restriction which the legislature might think of imposing on the utilisation of common phosphorus, it would deserve to be remembered that manufacturers would have at their option the alternative of using without restriction the innocuous amorphous material."

Pernicious Effects of Arsenical Green. In his Public Health Report, Mr. Simon reiterates his opinion, that "all industrial establishments which directly or indirectly endanger health ought to be subject to official superintendence and regulation." Sufferings from arsenical green, it would appear, arise much more during the applications than during the manufacture and packing of the pigment; but even in dealing with the raw materials of this dangerous appliance of decorative art, the workman is subject to irritations, which produce itching, blotches, rawness, and perhaps boils—inconveniences which commonly induce him to discontinue work before he has absorbed such quantities of the mineral as would develope signs of true arsenical poisoning. The green is used principally for two purposes—first in the colouring of various papers, either of the sorts used for ornamental wrapping and lining, or of the sorts used for hanging in rooms; secondly, in the colouring of artificial leaves, fruits, and flowers. The pigment is also used, though less considerably, by chromolithographers and toymakers. It is likewise used by house-painters, and as a colour for tarlatanes. More culpably and wickedly, though now only to a small extent, it is employed by the makers of cake ornaments and coloured confectionery. Very considerable suffering is brought to light by the reports collected by the medical officer of the Privy Council. In particular, he adduces the powerful testimony of Dr. Guy, who found, in visiting one of the larger manufactories, where about a hundred young women are employed in making leaves for artificial flowers, that hardly any of them escaped skin disease. The hands, the face, the neck, the roots of the hair, the flexure of the arms, the axilla, and, in a most distressing degree, the genitals, were affected by the arsenical dust; the pudendal eruptions being frequently so severe that the sufferers could not bear to sit down. Dr. Guy examined twenty-five of these unfortunate sufferers, and nearly all of them showed highly developed signs of chronic arsenical poisoning. Their symptoms were excessive thirst, nausea and loss of appetite, vomiting, pains in the stomach, palpitation and shortness of breath, debility, fever, headache, drowsiness, dimness of sight, tremblings, nervous twitchings, and convulsions. An investigation which made some public stir at the time was induced by the death of one of these victims, a girl of nineteen, the coroner's jury bringing in the sternly truthful and suggestive verdict, "Death by arsenite of copper." Her story was but the common story of the workshop, and, except that its fatal termination was so abrupt as to call for inquiry, it differed in no respect from those which Dr. Guy elicited from the many sufferers he examined. Every humane and thoughtful person will agree with Mr. Simon that the tortures which that poor girl must have endured will not have been in vain if the public knowledge of them leads, as it must do, to the amendment of such a system. The case of the little girl who was poisoned by sucking a bunch of artificial grapes; the evidence that emerald green, brushed from paper-hangings in an impalpable powder, is productive of grave injuries, if not of sickness and death; the declaration of Dr. Letheby, that "he had known two children in Hackney die from arsenical poisoning, imbibed while playing for a few hours daily in their father's library"; and many similar warnings, will have done much good, in deterring all classes of the community from encouraging the use of arsenic in manufactures. Indeed, it seems that the demand for paper-hangings, tarlatanes, and wreaths of the vivid emerald hue produced by arsenite of copper has sensibly diminished.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—October 10, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys .. 962 / Girls .. 911 }	1873	1258
Average of corresponding weeks 1853-62	1818	1132

Barometer:
Highest (Mon.) 29.806; lowest (Fri.) 29.417; mean, 29.609.

Thermometer:
Highest in sun—extremes (Fri.) 85.4 degs.; (Tu.) 73.8 degs.
In shade—highest (Sun.) 66.5 degs.; lowest (Tu.) 37.5 degs.
Mean—53.3 degrees; difference from mean of 43 yrs.+1.0 deg.
Range—during week, 29.0 degrees; mean daily, 12.6 degrees.

Mean humidity of air (*saturation*=100), 87.

Mean direction of wind, S.W. & S.E.—Rain in inches, 0.44.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Syphilitic Disease of the Mouth.—Sir: My plan of treatment for the above disease is to clean the ulcers well by pressing into them a little dry lint, and then fill them with pure dry calomel; giving at the same time hydrargyrum cum cretâ in small doses every night, till I produce the desired effect. If the ulcers are out of reach, I apply sulphate of copper on the end of a small cane or whalebone, rubbing the ulcers firmly. In all ulcerated throats, I have found this plan answer the purpose very well; but in that case I give the calomel by mouth, in small repeated doses, with Dover's powder every night. I am, etc., J. Sproule.

Communications have been received from:—Dr. Frederick J. Brown; Mr. E. Bremridge; Mr. H. Swift; Chemicus; Mr. H. M. Morgan; Dr. Heslop; Mr. J. K. Spender; Mr. Oliver Pemberton; Mr. Lowndes; Mr. R. T. Hunt; Mr. R. Craven; Mr. W. Fawssett; Mr. W. Favell; Dr. Kirkes; Mr. James Allen; and Dr. H. Sandwith.

BOOKS RECEIVED.

1. The Diagnosis and Treatment of Diseases of Women. By Graily Hewitt, M.D. London: 1863.
2. The Home-Nurse and Manual for the Sick Room. By Esther Le Hardy. London: 1863.
3. Skin-Diseases of Parasitic Origin: their Nature and Treatment. By W. Tilbury Fox, M.D. London: 1863.
4. Handbook of Physiology. By William Senhouse Kirkes, M.D. Fifth edition. London: 1863.
5. Second Medical Report of the Hospital for Consumption and Diseases of the Chest. London: 1863.
6. The Characters, Actions, and Therapeutic Uses of the Ordeal Bean of Calabar. By Thomas R. Fraser, M.D. Edinburgh: 1863.
7. Introductory Lecture delivered at the Westminster Hospital. By Christopher Heath, F.R.C.S. London: 1863.

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LINGEN TESTIMONIAL.

AT a Meeting of Professional Friends of Mr. CHARLES LINGEN, of Hereford, held at the residence of J. T. Clover, Esq., 3, Cavendish Place, Cavendish Square, London, on Friday, 18th of September—CHARLES HAWKINS, Esq., of Savile Row, in the Chair—a Discussion having taken place on the action, recently tried, against Mr. Lingen, at Gloucester, for libel, in which a Verdict was given for Defendant, but which verdict is sought to be set aside by an intended motion for a new trial, it was

RESOLVED—"That the Professional brethren of Mr. Lingen are desirous of marking their sense of the propriety and delicacy of his conduct towards the Plaintiff in the late action—Morgan *v.* Lingen—and their sympathy with him in the trouble and anxiety imposed by that vexatious lawsuit—followed up, as it is, by legal notice to move for a new trial to set aside the verdict of the jury—and that, with a view of giving expression to the sympathy and unabated respect entertained by his medical and private friends for Mr. Lingen, as one who holds a high position in his Profession, and has ever borne a reputation conspicuous for its moral and Christian character—a Committee be now appointed to promote a Testimonial to him."

RESOLVED—"That the amount of Subscription shall not exceed One Guinea from each person."

RESOLVED—"That the following be a Committee (with power to add to their number) to promote the Testimonial, and report progress to a Meeting to be held in London early in November:—

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The Gentlemen whose names follow have, since the Meeting, kindly consented to be added to the Committee:—

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F. C. SHEPPARD, Hon. Sec.,
5, Robert Street, Adelphi, London, 12th Oct, 1863.

President's Address

IN THE

PUBLIC HEALTH DEPARTMENT OF THE SOCIAL SCIENCE ASSOCIATION.

Delivered at Edinburgh, October 13th, 1863.

BY

ROBERT CHRISTISON, M.D., F.R.C.P.Ed.,

PROFESSOR OF MATERIA MEDICA IN THE UNIVERSITY OF EDINBURGH, ETC.; PRESIDENT OF THE DEPARTMENT.

THE office whose duties I have had the honour of being appointed to discharge at these meetings has been filled in turn, since the birth of our Association in 1857, by men of no less mark than the Hon. Mr. Cowper, Lord Shaftesbury, Lord Ebrington, Lord Stanley, Lord Talbot de Malahide, and Mr. Fairbairn. When I made this discovery, I first became sensible that, in undertaking to deliver this address as their successor, I had incurred a greater responsibility than I was aware of in accepting it. As your President, I thought I could not repeat those general considerations which have been put before you so often and so ably by my predecessors, and which would, I feel, lead in my hands to little else than weariness on your part and unprofitableness on mine. Turning next, among other suitable subjects, to the readiest which lay to my hand, the advancement made in our knowledge of public health since the Association last met a year ago, it appeared to me that the progress made in that time has not been in any way so remarkable that the retrospect was likely to prove either a large enough or a pleasant enough theme. I have, therefore, been led to look for materials to the very opposite quarter. For some time past we have been told a good deal of what has been latterly done in this field. I propose rather to say something of what is still undone. An inquiry of that kind will be less flattering to our vanity, but it may turn out more serviceable, if we should succeed in discovering some well defined "desiderata" for a better knowledge and a better condition of the public health; and more especially if we can thus point out some blanks in our knowledge, which may be filled up by encouragement held out by the Social Science Association.

I propose to look at my subject from a physician's point of view. I am inclined to think it is well that we should all sometimes look at public health from this direction. The branch of knowledge called public health is not essentially medical in all its details. It is far from indispensable that every inquiry concerning it be carried on by the physician alone. On the contrary, much has been done in this line, and well done too, by members of the Association, as well as by others, not belonging to the medical profession. But there are inquiries of great consequence to public health, which no one can fitly undertake without a wide acquaintance with medicine. Others, which may be carried on independently, may, nevertheless, require to be tested by reference to medical principles and medical experience. And, on the whole, the closer the bond of union is drawn between medicine and public health, the better will it be for the stability of the latter branch of knowledge. This truth seems to have been sometimes lost sight of lately; and perhaps it is on this account that some non-medical inquirers have arrived at conclusions which medical observation refuses to confirm.

Public health, in the simple acceptation of the term, means nothing more than the aggregate health of each individual in a community. But, as a branch of social science, public health deals as little as possible with individuals. Its principles rest on observations made on bodies of men. Inquiries into public health are carried on with reference to bodies of men, because in that way we escape the disturbing effect of collateral circumstances. For a reason somewhat analogous, such inquiries are best carried on, not by individuals, but rather by bodies of men, or by individuals acting under their authority or liable to their check; because we are thus more likely to escape the bias arising from the prepossessions of individual minds. And further, when measures for raising the standard of public health are based on such inquiries, it is not left to individuals to carry them through. They generally require aid from the municipal powers or the general government of a country. Hence the importance of attaching the study of the public health to this Association, as a department of social science; for inquiry will thus be encouraged; its conclusions will be tested by discussion at the hands of many well qualified persons; and the resulting measures will go forth to the nation with the sanction of a public body, and with the aid of many who have either a share or an influence in legislation.

Public health, as a branch of social science, treats of the agents which influence, for better or for worse, the average bodily vigour, mental energy, healthiness, and length of life of the community. The main agents of this kind are the earth and its covering, the air, water, and heat, food, drink, and exercise, occupation and habits, education, whether bodily or mental, and moral discipline. They act by favouring or engendering diseases, or, on the contrary, by circumscribing or extinguishing them. Very few diseases are exempt from the influence of one or more of these agents. But hitherto the researches of the inquirer into public health have been necessarily confined to certain great classes of diseases, and some special diseases of frequent occurrence.

The study of public health may be taken up from the basis of the agents that influence it. The study may be also taken up from the basis of the diseases whose sway is ruled by these influences. The physician naturally prefers the latter mode of inquiry. The relations of diseases and groups of diseases to the various agents I have enumerated is a very large subject—much too large to be exhausted on such an occasion as the present. I may be thought inconsiderate, therefore, in choosing such a topic for this address. But I have thought it might interest you more, and be more in keeping with my own pursuits, if, instead of the eloquent general views usually dealt with by those in my position, I should endeavour to offer you a sketch of the mode in which the principal diseases or groups of diseases are influenced by the agents which affect the public health, and attempt to illustrate by a few apposite instances what has been already done, and what remains to be done, for lessening the prevalence of such diseases, and the mortality, ill health, and pecuniary loss arising from them.

In carrying out this design, I shall take for my guide, wherever I can, the Government Register of Deaths, which ought to be our main text-book in all inquiries relative to public health on the large scale. I must deviate, however, from the register in its classification of diseases, which will not suit my purpose altogether; for diseases are by no means always so grouped there as to

* We have thought it right to publish in full the very important address delivered by Dr. Christison at the meeting of the Social Science Association at Edinburgh. Dr. Christison has himself kindly corrected the address for publication in our pages. EDITOR.

bear relation to the agents which cause or favour them. Keeping that relation in view, we might comprise at least five-sixths of the deaths in the register in the nine following groups:—1. Epidemic diseases; 2. Inflammatory diseases; 3. Diseases of the brain and spine; 4. Diseases of the heart and blood-vessels; 5. Diseases of the digestive organs, not included in the inflammatory group; 6. Diseases of the uterine organs; 7. Diseases of the urinary organs; 8. Diseases of depraved constitution; 9. Death from violence. The remaining sixth of the register consists mainly of deaths whose causes are so vaguely given in the returns, that they are incapable of being arranged with any defined group.

I propose to take the Scottish register for my guide. I suppose it is generally as exact as the English register, and, though on a less scale, yet quite large enough; and it has the advantage of supplying facts from large populations, the most different we could well find in civilised society as to situation and manner of life.

When the Medical Registrar for Scotland, Dr. Stark, drew up in 1861 the *First Detailed Annual Report of the Registrar-General for Scotland* for the year 1855, he found the average mortality to be lower than in any other kingdom in Europe; viz., one in forty-eight annually. He therefore properly added a *caveat*, that this particular year might not yield a true average. I am happy to say that ulterior experience exactly confirms the original result, the average for seven years ending with 1861 being also one in forty-eight. It would be most interesting to trace the diseases which occasion that relatively low mortality, compared with those which cause the higher rates of less favoured lands—Lower Austria, for example, where the deaths actually reach one in 27.4—and thus to see whether in this way the agents which produce, and the influences which extend disease, can be discovered, and then possibly mitigated or removed. But there is an insuperable difficulty in the constitution of the register itself. It may surprise you to learn that even in Scotland, which is supplied with medical men not inferior in professional skill to those of any other country, more than a fourth part of the deaths are returned to the registrar in a shape which renders them useless for such an inquiry as that now referred to. A tenth part of the deaths in 1855 are returned without a cause being stated at all. Of the remainder, about a fifth are returned in a nomenclature which admits of being interpreted in two or more ways, or in any way one likes. The deaths in 1855 were 62,000. Of these, 5732 were returned without any cause being assigned; 5725 were referred to such vague causes as lung-disease, asthma, atrophy, sudden death, teething, and diseases of unascertained seat; and 5685 were referred to the gradual decay of old age. The English register is not quite so defective as this; nevertheless, the deaths unreturned, or faultily returned, amount to a fifth of the whole.

Let it be understood, however, that no blame attaches to the registrars. But there was an error on the part of those who organised the list of names of diseases to be used by the certifiers of death. Lung-disease is a term which positively invites a man to carelessness. It should be extinguished. I suspect most returns under it should be transferred to the category of pulmonary consumption; but it may correctly mean one or other of at least four well defined diseases. The term asthma is not more fortunate. When it causes death, it may mean bronchitis, or emphysema of the lungs, or heart-disease. Dropsy is even worse. It is not once in fifty times the disease, but a mere symptom of the disease; which may be diseased heart, or kidneys, or liver, or lungs, or pancreas, or peritoneum. Deaths from atrophy, sudden death, teething, 1767 in number, are little else than so many confessions of ignorance. The 5685 deaths from old age are nearly on the same footing. Few people really die through gradual failure of the functions of life. Even the oldest, like young people, die mostly of special diseases. Nine-tenths die of bronchitis, diseased heart, diseased liver, diseased bladder, diarrhœa, and a wearing senile fever, which is apt in old people to be the issue of an attack of almost any acute disease. An observant physician seldom sees his patient truly die of the gradual decay of old age. I can safely say that I have hitherto seen only one man die in that way.

These faulty returns, useless for all statistical purposes, amount in the Scottish register to 17,142, of 62,004, or between a fourth and a third of the whole. The fact suggests a grave matter for our consideration here. We take into high favour the statistical method of investigation. In our prospectus inviting papers, we give an express preference to those based on statistics. But, in truth, in questions relative to public health, the statistical method of settling them may be quite as open to fallacy as any other. There are questions, indeed, as to which this method is positively more fallacious than any other—for example, than general observation and experience—if the statistical basis be so loose as to embrace only two-thirds of the facts which the questions have to deal with. Some time ago, I was desirous of verifying statistically an important fact as to public health, stated to me, on very good authority, as the result of general observation in one of the large islands of Scotland. On applying to the Registrar-General's office, in the hope of testing this statement statistically, I was informed that at that time Government had not sanctioned the necessary additional outlay for summing up the details of the register. At last, came forth the Detailed Report in 1861; and there I find that almost one-half of the deaths in the islands, of which this is one, are referred in the certificates so loosely to their causes, that they must be left out as unserviceable. For my purpose on that occasion, a register so defective was good for very little; for much less, certainly, than the general impressions of an acute physician, which it was my aim to test. I have been repeatedly arrested in the same way in attempting to arrive at results for illustrating this address.

The insufficiency of the register amounts to more than a simple defect. It may be thought, and has been said of such defects generally, that a register is good for so much as the correct returns amount to; in the Scottish register, therefore, for nearly three-fourths of the population. For it is assumed that the deficiency or faulty returns may be rectified by distributing them among the sound ones in proportional rates. This may be true for some purposes. If the inaccuracies might be safely held to bear upon all diseases according to their actual proportion in causing mortality, or in the correct returns, the loss of even a fourth in so large a number as 62,000 deaths might prove unimportant for some inquiries. But, unfortunately, we cannot always safely make that assumption. Defects and errors, in a national register with such a nomenclature as our own, bear much more on some diseases than on others. Deaths from diseases so easily recognised, even by unprofessional persons, as small-pox, scarlet fever, measles, erysipelas, cholera, croup, apoplexy, palsy, dysentery, hooping-cough, and even pure fevers, are far more likely to be returned correctly, and also entirely, than those from bronchitis, pneumonia, pleurisy, diseases of the heart, liver, and kidneys, tabes, and malignant diseases, as to which unprofessional persons are very dubious authorities on almost any occasion, and professional people often either careless or not well informed. The former set may with reason be assumed as all returned, and nearly all correctly returned. On the contrary, the latter set are apt to be returned incompletely and incorrectly. They form, in fact, the great mass of deaths concealed under the heads of atrophy, asthma, lung-disease, diseases of unascertained seat, sudden death, and old age; nor has the

Registrar any guide to a correct distribution of these loose returns among the exact ones.

I hope I may not be thought to have been wrong in bringing this matter forward on the present occasion. The legislature has supplied us with a complex, costly, and, to the members of my own profession, troublesome machine, which, for want of a little repair and extra outlay, has hitherto put out only an inferior article. Such a state of things, in regard to what must be the fundamental basis of most exact inquiries into public health ought not to exist in a country like our own. I submit that the register ought to be put to rights, if possible, and that this Association may usefully lend its influence and aid for the purpose.

It must not be inferred, from what has been said, that the Scottish register may not be applied with security to many statistical inquiries into the public health. On the contrary, it is a sound source of information for the very next topic which I propose to bring under your notice.

The first group of diseases I will notice is the first in the register; viz., that of zymotic diseases. They are so called from the Greek noun, *ζυμη*, signifying ferment, on account of a rather fanciful resemblance between their origin and the process of fermentation. They might have been equally called by the familiar term epidemic diseases—*i. e.*, diseases which tend to spread at times widely among the people; because, although this word has a more restricted meaning in professional nomenclature, it is used in common speech to include all diseases which ought to be comprised in the zymotic class. They are chiefly simple fevers, eruptive fevers, influenza, puerperal fever, diphtheria, croup, cholera, hooping-cough, dysentery, and others of less note. Of all groups of diseases, they are considered the most important in respect of the public health; for, in the first place, they account for 24·1 per cent., or almost a fourth part, of the mortality of the country. Nor is there any mistake here; because the register is not likely to be far wrong through faulty returns in regard to diseases so easily recognised even by unprofessional people; and, secondly, according to all recent experience, general no less than statistical, it is certain that much may be done, under the will of Providence, by human wisdom and human means, to lessen their ravages, and, above all, to put down their epidemic visitations.

This is a large subject; so large, that I must be content with touching on a few salient points only.

Simple fevers include ague and marsh remittent fever, inflammatory fever, typhus, enteric fever, and gastric fever. The four last mentioned are classed in the register under the single head of typhus. They account jointly for almost a fifth of the deaths from epidemic diseases, and for 4·47 of the total mortality. The first point I shall ask you to note under this head is, that ague is not accountable for a single death in Scotland. There are 107 heads in the register, and that for ague is the only one which stands blank. Hydrophobia, which accounts for a single death, is nearest to it. But the entry under ague, which takes in also the more deadly marsh remittent, is *nil*. And more than that, there is no ague in Scotland. I have asked many of my country brethren if they ever saw a true ague—an unequivocal intermittent fever—of home growth; but no one has been able to assure me that he has seen any in Scotland, except such as I have myself seen; viz., caught abroad, or in the fenny parts of England. But ague was at one time very common indeed in many parts of Scotland. My father, a Berwickshire man, often told me that in his young days, probably about 1775, ague was so common among the farm-labourers of that famous agricultural county, that a prudent farmer always set off on account of it a certain proportion of no-work days for his men in spring and autumn. The same was the state about the same time of the neighbouring county of Roxburgh. To Dr. Mackenzie, of Kelso, I am indebted for information, unique and satisfactory, as to the dates of the prevalence and disappearance of ague in that part of Roxburghshire. There are dispensary records extant there for one of the oldest dispensaries in Scotland, beginning, in fact, with 1777. The annexed table has been extracted from these records, showing the agues for every year from 1777 till its disappearance in the dispensary books.

Year.	Total admissions.	Ague.	Year.	Total admissions.	Ague.
1777	302	17	1792	570	16
1778	306	33	1793	666	19
1779	460	70	1794	447	9
1780	675	161	1795	513	23
1781	510	103	1796	355	12
1782	440	61	1797	318	9
1783	510	73	1798	415	7
1784	459	40	1799	558	2
1785	573	62	1800	665	4
1786	563	48	1801	433	9
1787	525	24	1802	377	5
1788	577	25	1803	308	2
1789	546	48	1804	422	5
1790	640	18	1805	469	0
1791	715	13	1806	318	1

From this table, it appears that the number of agues rose in 1780 to 161; by which time the total applicants for all diseases was nearly 700. Then it sank gradually to 18 in 715 applicants in the year 1790; and afterwards it went on fluctuating, but still on the whole diminishing, till in 1800 there were only four agues in 665 patients, none in 1805, and one in 1806; since which year no case of ague appears on the dispensary books. What, then, has been the cause of this striking improvement in the public health of Scotland? In what change of circumstances did it take place? This much is clear. We do not owe the blessing either to the government of the country, or to the College of Physicians—no, nor to social science. We owe it to incidental causes ruled to their end by another Power. In fact, it has been allowed to fall upon the country everywhere, without having even been publicly noticed anywhere at the time—an omission of which we certainly should not have had to complain had any man, or body of men, been able to claim credit for it. The real cause it may now be difficult to discover at so distant a date from the event; but this Association may lend its help. I can scarcely think that the great mass of old family records and remnants of old farm books in Scotland should all be silent on such a subject; and surely an appeal from this Association should call forth the information.

I shall be told that the disappearance of ague in Scotland is generally ascribed to the drainage of the country in the march of agricultural improvement, which began in the Border countries about the period referred to above. This is a tradition. But there are grounds for calling it in question. For example, I was assured, I think about 1820, by a well-qualified friend—the late Mr. Walker-Arnot of Arlary, father of the present Professor of Botany in the University of Glasgow, an able agriculturist and well informed gentleman, who farmed his own property in Kinross-shire—that he had been positively assured by the surgeon of his district, a man much his senior, that ague had all but disappeared from that country before the introduction of improved drainage; and that this gentleman ascribed the change rather to improved living among the farm-labourers. Then we know that a long time elapsed before the practice of extensive drainage extended from the Border counties to other parts of Scotland, where, nevertheless, there is at present reason to believe that ague disappeared about the same time as farther south. And, moreover, there are still marshes in some parts of Scotland, but there is no ague. Three sorts exist—peat-marshes; irrigated meadows, with pure water for the liquid; and irrigations with foul water. But all are alike ague-free. The last sort might with reason be strongly suspected. For, as managed in the immediate neighbourhood of Edinburgh,

they present that frequent alternation of considerable moisture and approach to dryness, that rankness of vegetation, and that abundance of decaying organic matter, which are thought, when combined, eminently to foment intermittent and remittent fevers in countries liable to these diseases. But if there be any doubt as to the general salubrity of the now famous marshes of Craigentinny, as to which I shall have a word to say by-and-bye, there is none, at least, to the total absence of ague among their inhabitants.

There is good ground then for an inquiry, in which this Association could lend its aid, into the circumstances which have led to the disappearance of ague from Scotland. Dr. Mackenzie has supplied one-half of the test. Since getting his table, I have not been able to satisfy myself about the other half. Dr. Douglas, writing his *Agriculture of the Counties of Roxburghshire and Selkirkshire* in 1796, by which time ague had all but disappeared, speaks of extensive draining having been effected by that time; but he also mentions incidentally in many places, "marshes," "marshy lands," "a great deal of fenny land," and "a deficiency of drains." I hope the history of agriculture may yet supply more positive evidence. The practical results may be of great consequence. Many of our colonies are now overrun with ague and its sister remittent fever. It can scarcely be that a successful inquiry into the agencies by means of which ague has been extirpated from Scotland should fail to be of service to our countrymen towards freeing also from that scourge the lands of their adoption.

Scotland is very far from having attained the same happy deliverance from continued fevers as from those of the intermittent type. But there are some very remarkable facts in their recent history, which point to the possibility of such an event and at any rate to the fruitfulness of further inquiry on the subject.

Four different forms of continued fever have been recognised by various authorities—inflammatory fever, typhus, enteric fever, and gastric fever. The registers of England and Scotland recognise only typhus. I presume they do not necessarily hold that all four are of one kind. The general doctrine, which some doubt, however, regards them as all distinct; and I do not mean to call that doctrine into question at present.

The first is in every circumstance the most singular of all fevers; whether, for example, we look to its nature and form or to its strict bearings on public health. It has been variously called synocha, inflammatory fever, simple fever, and relapsing fever. The last name, which it has of late generally borne, is nevertheless a misnomer. It no more deserves the name than ague deserves to be called relapsing fever. It is a fever of tolerably definite duration extending mostly to seventeen days; but with the singular peculiarity that there is an interruption in the middle of it varying from seven to ten of these days. It is far from being a deadly fever. But it causes great suffering, and debility so lasting that it makes a working man unfit for labour for two months, first and last. Strange to say, in this city at least, where it has been better studied than anywhere else, it is never seen but as an epidemic. I have known four such visitations of it—in 1817-20, 1827-28, 1841-42, and 1847-48. But I never saw it in the intervals; nor has any of my Edinburgh brethren. Hence at every fresh appearance it is at first taken for a new fever. It occurs only at periods when work is scarce, wages low, provisions dear, and the labouring classes consequently in unusual distress. In accordance with this fact, it is met with in the labouring population alone—never in the easy ranks of society, unless through very decided exposure to infection. Nor, in the next place, is it an infectious fever. Of this I have produced elsewhere proof which has never been controverted. (See Dr. Tweedie's *Library of Medicine*, 1840, i., 154.) But the infection is not a virulent one; and its progress by infection may be utterly extinguished.

This is the main fact to which I desire to draw your attention as social reformers. Healthy persons in communication with fevers of this kind accumulated in an hospital ward, or lying in less numbers in their own small unventilated chambers, are seized almost certainly if they remain long enough, and are not shielded by a previous attack. But from a single case of this fever in a middle-sized well-aired room it is never communicated to the healthy. With these facts before us, of which I could furnish pointed proof, were there time, it is evident theoretically how such a fever is to be extinguished. The favourite panacea of the present day for the prevention of all fevers, thorough drainage, is not the remedy. The best drainage leaves untouched the real foundation of the disease—viz., penury pent up in airless dwellings. But provide work for the unemployed, obtain in return due ventilation and cleanliness; and the epidemic will soon vanish. First, the new condition of things will make its infectious power harmless; and ere long it will cease to arise by spontaneous generation.

The carrying out of this theory into practice is, however, a formidable difficulty. How is work to be got in hard times for the unemployed? And, still more, how are the labouring classes to be taught the habit of ventilating their apartments? Success must depend on the resources, faith, and energy of a sympathising community, and upon the convictions of its suffering portion. But, at all events, we have a fundamental principle of social economy firmly established—that no epidemic of inflammatory fever can long withstand employment of the workman and fresh air in his house.

Typhus, simple typhus, nervous fever, low fever, putrid fever—a disease so familiar as to need no description here, though very different in form from the last—presents many agreements in those characters which give them both interest in the eyes of the cultivator of social science. It has its epidemic visitations; and fearful ones we have seen all over Britain, especially in this city, where there have been no fewer than five during the last forty-five years—the last and worst having occurred between 1847 and 1849. It puts on the epidemic shape only at periods of want among the labouring classes. Howsoever it may arise in the first instance, it spreads by infection. But its infectiousness is not intense. Hence adequate space and ventilation make it innocuous in that way—in so great a degree as to have misled good observers, and made them doubt it infectious property. So far typhus agrees with inflammatory fever. But, firstly, it is far more deadly, one in ten being the probable average of deaths from it. Secondly, it occurs at all times, and not merely at epidemic seasons. Seldom does a week pass in a large town like Edinburgh without one or more deaths from typhus appearing on the register. Thirdly, in these non-epidemic periods it is met with among the rich as well as the poor, and perhaps in as great a proportion to their relative numbers.

Nothing is known of the origin of typhus in non-epidemic periods. Infection will not explain the occurrence of such fevers—not those at least which show themselves in the easy ranks of life. With the most ordinary care, cases of it in that circle do not reproduce it in the exposed; whence, then, could it reach themselves by communication who had not had any exposure to it within their knowledge? Neither does it originate, at least generally, in faulty drainage, or other sources of foul air. In the metropolis, indeed, it is at present a prevailing opinion, much in favour also, as I understand, in this Association, that the sources of foul air are likewise the sources of typhus. But such a rule will not apply in Edinburgh. Foul air undoubtedly favours the spread of both typhus and inflammatory fevers in their epidemic visitations; for, setting aside its possible operation in other less ascertained ways, it implies confined air, want of ventilation, and therefore concentrated infection. I

do not mean to deny that foul air of some kinds may sometimes simply cause typhus. But there must be better proofs than now exist before this can be admitted as the constant or even general fact. Foul air will not account for the origin of the scattered (sporadic) cases of typhus in non-epidemic times. As little will air, merely foul, account for either the rise or the fall of epidemics. Every physician of experience in this city has repeatedly seen in a family a solitary case of well-marked typhus, which no skill could trace to foul air in any shape, or from any source. No one ever heard here of the spread of typhus in the epidemic form being referable to an increase of foul air, apart from the resulting concentration of infectious effluvia from those ill with the disease. We have had within the last few years an instance of the fall of a great epidemic, the worst on record, without any commensurate amelioration of air, drainage, or other branch of cleanliness. This incident is so remarkable in its circumstances as to deserve careful consideration.

The following table, from the records of the Royal Infirmary of Edinburgh, shows the number of fevers annually admitted there since the beginning of the century.

12 months to Dec. 31,	1800.. 329	12 months to Oct. 31,	1832..1394
,,	1801.. 161	,,	1833.. 828
,,	1802.. 156	,,	1834.. 690
,,	1803.. 232	,,	1835.. 826
,,	1804.. 323	,,	1836.. 652
,,	1805.. 175	,,	1837..1224
,,	1806.. 95	,,	1838..2244
,,	1807.. 110	,,	1839. 1235
,,	1808.. 111	,,	1840.. 782
,,	1809.. 186	,,	1841..1372
,,	1810.. 143	,,	1842.. 842
,,	1811.. 96	,,	1843..2080
,,	1812.. 103	,,	1844..3339
,,	1813.. 75	,,	1845.. 685
,,	1814.. 87	,,	1846.. 693
,,	1815.. 96	,,	1847..3688
,,	1816.. 105	,,	1848..4693
,,	1817.. 485	,,	1849.. 726
,,	1818..1546	,,	1850.. 520
,,	1819..1088	,,	1851.. 959
,,	1820.. 638	,,	1852.. 691
,,	1821.. 327	,,	1853.. 574
,,	1822.. 355	,,	1854.. 168
,,	1823.. 102	,,	1855.. 201
,,	1824.. 177	,,	1856.. 180
,,	1825.. 341	,,	1857.. 132
9 months to Oct. 31,	1826.. 450	,,	1858.. 111
2 months to Oct. 31,	1827..1875	,,	1859.. 183
,,	1828..2013	,,	1860.. 152
,,	1829.. 771	,,	1861.. 122
,,	1830.. 346	,,	1862.. 136
,,	1831.. 758	,, Oct. 13,	1863.. 196

From this table it appears that after 1816, for a period of thirty-six years, the continued fevers of Edinburgh, of which typhus formed the largest proportion, seldom fell short in the Edinburgh Infirmary alone of 500 in any one year. In 1818 and 1819, the annual average reached 1300; in 1827 and 1828, nearly 2000; in 1837, 1838, and 1839, nearly 1600; in 1843, and 1844, above 2700; and in 1848 and 1849, 4200. It then suddenly fell next year to 700, and kept that average for five years. But in 1854 it sank again abruptly to 170; since then the annual fevers have never exceeded 200. The average for the last ten years has been 158; last year there were only 136; and this year, which ends for the hospital statistics on 1st October, there were 196. Until 1860 the statistics of the Infirmary did not distinguish the several forms of fever from one another. In 1848 and 1849, however, the annual average of typhus could not have fallen short of 2500; and after that it must have been between 400 and 500 until the year 1854. But in 1860, the number was accurately ascertained to be 67; in 1861, it was 50; in 1862, 14; and in 1863, 74. I am further indebted to the medical officer of the city, Dr. Littlejohn, for the fact that the deaths from typhus for the whole town, registered in nine months since January 1st, have been 18. According to the average mortality of typhus, this number indicates 240 cases of typhus for the present year.

Now, about the period of this decrease, the drainage of that part of the city, where the chief nests of fever always lay, was improved. But the decrease began decidedly before the commencement of that reform. I am informed by our Superintendent of Drainage, that the works for improved drainage of the worst part of the city — the Grassmarket, Cowgate, Canongate, High Street, and the closes communicating with these — were only begun in 1854, were far advanced only in 1858, and are now all but finished. Neither can the rapid decrease of fever be ascribed to any satisfactory improvement in the cleaning of the lanes and houses of the working classes. I believe that long prior to the decrease, our police had done as much for the cleansing of the fever districts as the impracticable structure of the streets or lanes there and the incorrigible habits of their occupants would allow. And as for the home habits of these people, no such improvement of them has taken place in my time as will explain any other change of circumstance in their social economy.

Here, then, is a discovery which remains to be made in social science. Why is it that typhus, which had been almost a perpetual pestilence in Edinburgh for a third of a century, has been of late wearing itself out, and last year almost flattering us with its extinction? The cause has certainly not yet been discovered. My own strong impression is that the secret will be found to be connected with the theory which has been much canvassed in the present day, the successive changes of type or constitution of epidemic diseases. But as this is a favourite theory of my own (See *Edinburgh Medical Journal*, 1857-8, iii, 577), I shall not here insist on it further than by warning all inquirers into the origin of zymotic diseases in foul miasms, that they run great risk of ascribing to these, and the removal of these, fluctuations in the prevalence of such diseases which are often far more probably owing to a more recondite cause—a change in epidemic constitution. In the meantime, the experience of the physicians of Edinburgh presents us with the precept, also derived from the experience of other great towns, though perhaps nowhere else so categorically, that typhus never can prevail in the epidemic form in face of employment for the working classes and ventilation of their dwellings.

In the present line of inquiry there is no occasion for noticing any other fever than enteric fever. Gastric fever, the only other sort arranged under the head of continued fevers, is not generally acknowledged at present by systematic authors. If it be a separate fever, it is one which, according to my own observation, occurs chiefly in the easy and wealthy ranks of life, and owes its origin mainly to high living and over-indulgence in the excitements of society, whether of the nature of business, study, or amusement. We have but little to do with it therefore. Enteric fever is very differently circumstanced. This disease, variously called dothinenteritis, entero-mesenteric fever, enteric typhus, typhoid fever, but most conveniently enteric (bowel) fever, is the most deadly of all forms of continued fever. It was first distinguished from others in Germany in 1763, and was first accurately described in France by Bretonneau in 1812. It began to be distinguished from others in London about the close of the first quarter of the present century, and first of all by Dr. Bright in 1827. A little later a few cases occurring in hospital here attracted great attention. It has since increased in both cities, as well as in Britain at large. In London it has been common for many years, and is sometimes the commonest of all forms of fever. In Edinburgh its course has been very singular, and deserves careful attention with reference to English opinion as to its cause, and the sanitary conclusions to which that opinion leads.

For many years after Bright wrote about it as a fre-

quent fever in London, we saw it seldom here—never in the proper inhabitants of the city, but only in persons brought ill with it from Linlithgowshire or Fife, or who had quite recently left these counties. It began to be studied here with great care on its being recognised in the Infirmary in 1847, in a German lad only six months from his "Vaterland," on which occasion it was believed that no case had occurred in the hospital for a period of five years. By-and-by it became not uncommon. For some years past every practitioner meets with it. It occurs among old residenters and natives of the city. Within a few years it is encountered even among people in easy circumstances, and in the best houses of the town. In our Infirmary statistics it was not taken account of separately from other fevers till 1860. In that year, according to a table supplied to me by Mr. Macdougall, superintendent of the hospital, there were 41 cases of enteric fever; in 1861, 35; in 1862, 79; and in 1863, 67; during which period the fevers of all kinds did not exceed 150 in any single year till the present, when they reached 196. These are no great numbers, and yet sufficient to show a decided tendency to increase during the last fifteen years. Further, Dr. Littlejohn, medical health officer for the city, informs me there have been seventeen deaths from enteric fever reported to the registrar since the 1st of January last, which will correspond with about 120 cases in twelve months, if the average mortality be taken at one in five.

Of all forms of fever none has been more confidently ascribed than this by London writers, medical and non-medical, to faulty drainage and faulty provision of water-closets. If we are to believe what some have advanced on the subject, there is no case which may not be traced to foul air, derived mainly from one of these sources. Were this a well established principle in social science, the extinction of so deadly a fever should be no very difficult matter. Through the publicity given to the discovery by this association, and the influence of its members, we might hope to see protection established far and wide against the pestilence.

But I am sorry I cannot call on you to assent to this theory, and carry out its consequences, for there are insurmountable facts in its way. During the period that this scourge has been alternately growing and diminishing in London, has London become alternately worse and and better drained, or the habits of its working classes alternately less and more cleanly? Does the disease generally appear where drainage is bad, or water-closets wanting or faultily constructed? Does it attack workmen who live in the London drains, as well as those over them, near them, or far from them? I believe all these queries must be answered in the negative. And what is the case here? Our street drains in the Old Town have been much improved during the very period that enteric fevers have been increasing. The habits of the working classes in regard to cleanliness admit of reform undoubtedly, but certainly they have not been growing worse. Besides, the individual cases which have been occurring here have been made the subject of careful inquiry, and in many of them it has been impossible to discover any peculiar source of foul air—anything different from what may be met with in thousands of dwellings where this fever has never shown itself. Of the seventeen deaths hitherto this year, nine occurred in localities to which no objection could be found. And what are we to say of its appearance among people of easy circumstanes? In this sphere I have myself known several deaths from it during the last few years, and no fewer than three during the last twelve months. In the first place, why has it occurred in that class of society only of late? Surely not from any general increase in defective drainage, defective water-closets, or other sources of uncleanliness. As to the history of individual cases, I have been content to ascribe the disease, in obedience to the theory of London writers, in one instance to gross disregard of ventilation, and in another to a faulty water-closet. But in the last three I have seen, no fault could be found anywhere. Further, this fever does not by any means generally break out where the streets are ill-drained, water-closets wanting, and habits filthy. In countless places of that sort in Edinburgh it is unknown. It may be worth while adding, in reference to an independent question likely to be discussed in this section, that enteric fever is not known in or near the "foul meadows" of Craigentinny.

I suspect, then, it must be allowed of this disease, as in respect to most other epidemic diseases, that we do not yet know its cause—that foul air merely favours its invasion; but that its true cause is something much more specific—some ζυμη or ferment which has hitherto eluded our search. In that case, while we shall do well to encourage better drains, more and better water-closets, and better ventilation of dwellings, still we must not count upon thus extirpating enteric fever.

As I am anxious to bring under view some part of a very different subject—the class of diseases originating in a depraved state of the bodily constitution—I regret that I must here quit the subject of epidemic diseases, of which there remain many for consideration—such as cholera, dysentery, diphtheria, small-pox, measles, and scarlatina. Small-pox especially might have been aptly discussed this season before the association, both on account of its increased prevalence last year and because of the hints recently conveyed to the public that the English Vaccination Act is to prove a failure, as well as because a similar Act is about to come into force in Scotland. But time will not allow of so extensive an inquiry as is necessary to complete the whole subject of zymotic diseases; and I must be satisfied with a brief allusion to only one more of them—diphtheria—which happens to be connected with a sanitary question of strong local interest in Edinburgh.

This terrible disease is far from common in Edinburgh. I am glad to say I have seen but one instance of it originating in town, and that was many years ago, before it had begun to be much talked of in any part of Britain. No epidemic disease has been by many late writers in England more confidently referred to foul exhalations as its cause, and even its only cause. I shall not take up that question here, however. My own observation gives me little help in forming an opinion. Let me merely say that, as I, in the single case I have seen in Edinburgh, so likewise my professional brethren, in the course of their observation, have failed to trace diphtheria to any source of foul air. But it is remarkable that it seems to have shown a slight attachment to our irrigated meadows to the east of the city. Dr. Paterson, of Leith, informs me he saw last year five cases at a place on the borders of the district.

I scarcely think, however, that, taken along with the negative evidence I have received from others who practise among the natives of these marshes, these cases, which may have had a more local cause still, can be held singly to convict the irrigated meadows. For I wish to add the information, that I have recently been making careful inquiry respecting this famous and somewhat unsavoury institution; that many years ago my own prejudices were all against the meadows; that I have been compelled to surrender them; that I am satisfied neither typhus nor enteric fever, nor dysentery, nor cholera, is to be encountered in or around them, whether in epidemic or non-epidemic seasons, more than in any other agricultural district of the neighbourhood. About twenty-five years ago, it was stated that the cavalry soldiers at Piershill Barracks, which are situated very near them, were unusually liable to the zymotic diseases caused or promoted by foul emanations; and also, that meat could not be kept in the officers' larder on account of the absorption of foulness and quickly following decay. Either, however, there was some mistake committed

through prepossession, or the meadows are now worked on a better system. But, at all events, I have the assurance of Mr. Lockwood, surgeon of the Scots Greys, that, during their late occupation of Piershill Barracks for two years, the messman of the regiment never observed the meat to be injured; nor did he himself observe among the men anything but remarkable freedom from diseases at large. I think it right, in reference to the late introduction of the Craigentinny system of irrigation into the vicinity of other large towns, that these precise facts should be known.

Of all the diseases in our civilised and modern condition that human flesh is heir to, none have a larger share in causing mortality, and none are more fruitful still in inquiry, reflection, and warning, than the great group of diseases classed as dependent on deteriorated or depraved states of the constitution of the body. One tribe of these, the most numerous of them all, comprises Scrofula, Tabes, Consumption, and Water in the Head, which are usually classed together as tubercular diseases. The next in point of frequency, called Malignant diseases, because they creep from organ to organ, and lead surely to death, embrace scirrhus, fungus, and other forms of cancer. Gouty and Rheumatic diseases form a third tribe, and Diabetes a fourth; but all these are insignificant in their ravages compared with the others. All diseases of the class agree in apparently requiring for their development a depraved condition of the blood, or of some other component of the human organism; and from other diseases partaking of that character, they differ in being prone to descend from father to son, and increase in that respect by concentration through marriage. With the exception of gout and rheumatism, which medicine can do much to eradicate, they generally make sure of their victim at last. But they are slow to finish their work; and while it is doing, they are the most grievous of all maladies to bear. They are most grievous not only to the victim himself, but likewise to all who have to minister to him in his sufferings. It is a crowning misery, but too little adverted to, that the tending and comforting him, as it falls to the lot of his affectionate family, becomes the duty of those who by similarity of constitution are least fitted to undergo safely so hard an ordeal. Add to all this, that these diseases are the main source of the deterioration of the human race in all physical attributes among such civilised communities as our own, and the Association cannot fail to discover ample inducement to study their influence upon public health.

The Scottish Register in its present form does not fully meet the students' wants in this branch of inquiry. But an useful step or two may be taken with its help, as it stands, in tracing the influence of Consumption, which may probably be held to exemplify and stand for all the rest. The entire class account for no less than 20 per cent. of the total mortality in all Scotland—for 4100 deaths annually in every 100,000 of the population. Consumption alone accounts for more than half of this proportion—viz., 11·5 per cent. of the total mortality, and 237 deaths in a hundred thousand of the population. It has been known for some time that the proportion falls under this average in country districts, and exceeds it in large towns, and Dr. Stark's summary of the Register of 1855 shows that these differences are by no means small. I am not aware whether it has yet been noted, that the difference to the prejudice of the great towns of Scotland is much greater than their notorious difference in general mortality; or putting the case variously, that the difference in favour of the country seems conversely to increase in a greater ratio than the diminution of the general mortality, and *cæteris paribus*, always in an increasing ratio according to the degree of rurality, if I may use the word, of the country district. These important facts can be made out so satisfactorily from the Register, that I will not hesitate to offer you some proofs.

Taking the population of Scotland in 1855 at three millions, and assuming that the deaths from consumption were nearly all specified, or at least uniformly so, which is probable, the total mortality in a hundred thousand was 2080, and that from consumption 237. Dividing the mainland into large towns of 10,000 people and upwards, and the rural mainland, comprising all smaller towns with the pure country, it appears that the mortality from all diseases for the rural mainland in 1855 is 1800, and in the towns 2580—or in the ratio of 4 to 3 against the latter. But the mortality from consumption in a hundred thousand people was in the rural mainland 186, and in the great towns 333, or not much short of double.

But let us look into the facts more narrowly, and the real difference will be found vastly greater. In Glasgow, whose population in 1855 amounted to 356,000, and where all town causes of mortality greatly abound, so that the annual deaths reach 2890 in a hundred thousand, or almost one in 38 persons, those from consumption are so high as 385. Edinburgh and Leith, with a population of 206,000, present a mortality not much inferior—viz., 2380 in a hundred thousand, or one in 42; but there is a greater difference in the deaths from consumption, which are 283. Contrast, however, with even the latter proportions the data derived from the very rural counties of Caithness, Sutherland, Ross, Cromarty, and Inverness, comprising a population of 240,000, and we find that the general mortality falls to 1617 in every hundred thousand, and that from consumption to 179. The consumptive mortality is already less than half of that of Glasgow. But these Celtic mountainous counties are not so favourably circumstanced as other rural counties with respect to other sanitary influences—such as climate, food, and medical aid. Turn then to the agricultural Lowlands of Scotland. In the fine agricultural counties of Roxburghshire, Peebles, Selkirk, and Haddingtonshire, if we exclude two small towns, Haddington and Hawick, which, though under the town standard of the Register (10,000), own to the high mortality of one in forty, there is a population of 97,000, in which the total mortality sinks to one in 65, or 1546 in a hundred thousand, and the deaths from consumption to 138. In Fife, deducting 25,000 inhabitants of two unfavourably circumstanced towns, Dunfermline and Kirkcaldy, the population amounts to 130,000; and here the general mortality is 1750 in a hundred thousand, or one in 57, and the deaths from consumption 125—only a third of the proportion in Glasgow. But neither in Fife, nor in the four counties south of the Forth, which I have grouped together, even when the unhealthy towns are excluded, is the population so free from the disturbing influences of mining and manufactures as may be desirable for a perfect contrast. In the county of Berwickshire, however, we have the most perfect example in Scotland of a population combining the richest agriculture with freedom from the deteriorating influences of mining, manufactures, and large towns. None of its towns contains above 3500 inhabitants; there is, I think, only one large factory in it—a paper manufactory; and there are no mines. Here, accordingly, the total deaths in a hundred thousand fall to 1410, or one in 70, and the deaths from consumption to 104. The general mortality is nearly one-half of that of Glasgow, and the share contributed by consumption is as nearly one-fourth of the proportion in that city.

	Mortality 1 in	Consumption in 100,000.
Glasgow	38	385
Edinburgh and Leith	42	283
The North Highland Counties	62	179
Four Lowland agricultural counties, excluding two towns	65	138
Fife, excluding two towns	57	125
Berwickshire	70	104

It will be objected to these results, as the basis of evident deductions, that, as I began by rating the general authority of the Register low, its trustworthiness in the particulars now made use of must be proved. This is easily done. The data for the North Highlands may be insecure; but, in all other respects, it so happens that I have used the Register where it is most worthy of confidence. The returns for Glasgow, Edinburgh, and Leith, and the lowland agricultural counties, are very nearly complete; and in all these parts, consumption has so well understood a meaning, that, in using the term, the errors must be few, and, at all events, pretty equable. Others may object, that I am limited to the statistics of a single year. True. That may affect the general mortality, and certain diseases; but there is no ground for supposing consumption to be one of the diseases whose range varies one year with another. The basis in the case of Berwickshire is narrow; for the population in 1855 did not exceed 36,500. Still, until Government shall favour us with a larger basis by enabling the registrar to publish several years of "detailed reports", it is in the meantime a remarkable fact, supplied by every part of the Register for 1855, which can be aptly and fairly used for this inquiry, that wherever great towns, manufactures and mining concentrate and confine great bodies of the people, there will consumption be found to spread its ravages in a much greater ratio than the increase of the general mortality; and, conversely, that the more the influence of these deteriorating agents can be excluded, the more does consumption progressively decrease, and in a much greater ratio than the decrease in the deaths from disease at large.

This general rule applies also, and even with greater force, to the three other diseases of the tubercular class scrofula proper, tabes, and hydrocephalus. The certificates sent to the registrar cannot be so much relied on here for accuracy as in the case of consumption. But the errors must be nearly equable for such parts of the Register as I require to use for the main facts. The proportion of deaths caused in all Scotland by scrofula, tabes, and hydrocephalus together is, for every hundred thousand persons, 960, being a little more than 4½ per cent. of the total mortality. But the inequality of the distribution of these deaths between town and country is extreme. In Glasgow, for example, the proportion in one hundred thousand is 177; in Edinburgh, 96; in the six lowland agricultural counties, 32; in Berwickshire singly, 21. Where a pure and rich agriculture predominates, the havoc caused by these diseases is reduced almost to a sixth of what it is in a great town, such as Glasgow; and in the purest of rich agricultural districts, it is brought down even to a ninth.

The tribe of Malignant diseases are supposed by some to take the place after middle life of hydrocephalus, tabes, and consumption, whose season is from infancy to confirmed manhood; and, therefore, the former have been considered to belong, like the latter, to the developments of the scrofulous or tubercular habit of body. In that case, it might be expected of them that they should follow the law of prevalence which rules tubercular diseases proper. The Register, unfortunately, cannot be used to test this conclusion closely. The greater part of malignant diseases are concealed in the Register under the head of other diseases. Cancer, the only heading for them, accounts almost exactly for 1½ per cent. of the mortality. But at least as much lurks under the heads of chronic diseases of the stomach, liver, bladder, kidneys, and womb; another set, at least as numerous, are returned under old age, atrophy, and dropsy; and, on the whole, the entire tribe cannot be reckoned under 6 per cent. of the general mortality. For estimating the comparative prevalence in different circumstances, the only returns which can be safely used are those under the head of cancer. The result is quite at variance with the law for tubercular diseases. Town and country seem to share alike in the inflictions of this grim visitor. But the details are so contradictory to one another, that the data appear unsafe. Thus, in a hundred thousand people, the number for the six lowland agricultural counties is 35; for the six largest towns, 29; for the four last of these—Aberdeen, Dundee, Paisley, and Greenock, 26; for Edinburgh, 54; for Glasgow, 18. On the whole, it would appear that town life cannot be charged with the evil of fostering malignant diseases; and their causes, whether original or accessory, still remain to be discovered. But it is very different with the much more numerous tribe of tubercular diseases. In a first-class town, such as Glasgow, tubercular diseases account for 20 per cent. of the total mortality; in an agricultural county like Berwickshire, for 8 per cent. only. In a given number of townspeople, five die of tubercular disease for one in the same number of countrymen. Nor is this all the evil which life in a great city must lay at its own door. Tubercular diseases mainly are at once the cause and the test of the deterioration of a race in physical excellence. This mishap, though a more hidden consequence than an increased death-rate, is one no less sure to follow; and it is in the long run even worse for the wellbeing of a nation.

Philanthropists and legislators, in dealing with the unhealthiness of towns, have, until lately, had chiefly to do with epidemic diseases as their main source of excessive mortality. But it is apparent that tubercular diseases are a still more serious source of destruction to the wellbeing of a great city. It is also most probable that the abatement of their ravages will need a different description of measures from those which have been proved to be serviceable against diseases of the epidemic class. The discovery of the necessary measures is a duty which it peculiarly becomes this association to press upon the Government of the country, and also upon the great, the wealthy, and especially those whose business of life it is to amass wealth through the labour of the working classes, and whose requirements have occasioned the concentration of the people in overgrown towns, with all its concomitant evils.

On considering the whole circumstances attending the development or the circumscription of tubercular diseases, as brought out by a scrutiny of the Scottish register, and adding the reflections drawn from long professional experience, I cannot at present see any more probable source of the fearful growth of these diseases in great towns than the want of open-air exercise. Several excellent inquiries have been published, which point to certain trades as greatly contributing to develope tubercular diseases. A systematic general inquiry of the same kind might bring to light the fact that it is only a few trades which have to account for the high town mortality, and then our course would be clear and simple. But I confess, I have no hope of so simple a solution of the problem. All special inquiries hitherto made, except in the instance of one or two trades which have a special evil of their own to contend with, point in the same direction for the cause of concentration of tubercular disease in great towns—viz., a conjunction of defective exercise and exclusion from the open air. If this prove, on a more extended inquiry, to be the great or universal cause of evil, there is no remedy within reach except the spreading out of a city, the finding lungs for it in the shape of parks and gardens, the surrender to the working classes, and, above all, to the sedentary trades, of a proportion daily of that time which is now too entirely demanded of them for the toils of their craft, and the creation among them of a taste for the active exercises which were the pastimes of their ancestors. Something has been doing lately in this direction by philanthropists, who have felt a necessity for action through a species of instinct, or through general

observation of the present fitness and unfitness of things; and every now and then we have to record the generosity of an individual thinker and actor in this field. But we have now before us, from sundry quarters such precise and concurring evidence of the enormous extent of evil arising from the present mode of town life among the working classes, that, looking especially to the still increasing growth of our already overgrown great towns, and the stationary or rather retrograding numbers of our rural population, there is loud call indeed for public, systematic, extensive, though it may even be costly, ameliorations.

I am very unwilling to quit the deeply interesting subject of constitutional diseases, with which I propose to conclude my remarks, without adverting shortly to a most remarkable fact which has been lately made a matter of controversy relative to the circumstances which influence the dominancy of the most important of them all—consumption. I will therefore crave your attention for a very short time longer, because I have it in my power to throw a little light upon the question.

In 1848, an intelligent young practitioner of the Island of Lewis, when he graduated at Edinburgh, wrote a thesis on the medical topography of the island, for which he was awarded one of the university medals of the year. In this thesis the author, Dr. Macrae, mentioned that in his experience he had never met with the disease pulmonary consumption in any islander. The statement excited great surprise at the time, but was lost sight of soon by most people, though never by myself, to whose share the thesis fell for examination. As soon as the Scottish register was established, I asked Dr. Stark, the Medical Registrar, to look into the matter; but an insufficient staff prevented him from doing so till the "Detailed Report" for 1855, was undertaken and published so lately as 1861. Dr. Stark there takes up the question; speaks of a "tradition" prevailing in the Western Isles as to their exemption from pulmonary consumption; notices the fact that one medical gentleman had confirmed the tradition; but says that the register does not bear out the proposition; at the same time acknowledges that the returns are so incomplete, and the term consumption so vaguely used in the Isles, as to render the register an unsafe guide; and, after all, thinks he can make out, after proper allowance for errors, that consumption is very decidedly less frequent in the Isles than in Scotland at large. I find, however, that the register itself positively proves consumption to be still less frequent in the rich agricultural lowlands of Scotland than Dr. Stark has made it out to be, with allowance for errors, in the Western Islands. But the truth is, the returns to the registrar from these islands are so very faulty that, after looking carefully into the subject, it appears to me they are wholly unfit for use in such a question.

I, therefore, referred the other day again to Dr. Macrae, begging to know his ulterior observation upon a much larger experience than in 1848. He replies, that he continues to obtain the same result; that consumption in Lewis is almost entirely confined to strangers temporarily resident there, and to natives who have resided and contracted the disease elsewhere, chiefly as domestic servants in the southern towns of the mainland; and that natives who stick to the island are exempt from the disease, except in a few rare instances, where it had been brought on under long privation of food and exposure to cold. Adverting to the defects in the register, and the jumbled mode of using the term consumption in the return, he adds, that he investigated the reported cases for the last three years in the Stornoway district, which contains a population of 8500 inhabitants; that the total deaths were 444, or 1 in 61; that 24 deaths from consumption were registered; that every case had been seen at one period or another of its course by a medical man, so that he could trace it out accurately; that 8 of the 24 proved to have been bronchitis (a common mistake), 2 tabes, and 1 dropsy; that of the 13 true consumption, 5 were residenters from the mainland, and 4 native servants who had returned ill of the disease from service in Glasgow. Thus, we have only 4 cases in three years among the true resident natives of the island, or 16 only in 100,000. I have similar testimony from a very able authority in another island Dr. M'Coll of Mull, who brings the experience of thirty-three years to the inquiry. He informs me that in his island, which contains 12,000 inhabitants, he has scarcely ever known consumption occur, except among immigrants bringing with them the constitution of the mainland, or natives who had gone thither early to contract it, but returned to die on the soil of their birth.

I do not know a more interesting fact in the whole statistics and pathology of this melancholy disease than the apparent exemption of our western islanders from it. Nor is there any limited statistical inquiry more worthy of being encouraged by our Association, and satisfactorily cleared up as to its amount and causes, than this wonderful immunity, which is now no mere "tradition."

I feel that I must apologise to this meeting for having detained it so long with a somewhat excursive inquiry. More especially ought I do so, because I do not claim to have brought before you anything positively new—at least, of the nature of general principles. My purpose was to revive some old principles concerning public health, which have been latterly kept rather in the shade; to illustrate them and others by placing them before you in a new and stronger point of view; and to confirm prior observations by my own. I shall be content if I may be thought to have succeeded in some measure in these objects.

The Sick Poor of Bethnal Green. At a meeting of the Board of Guardians of the parish of Bethnal Green held on the 19th instant, the following Resolution was put and carried:—"That in consequence of a long continued series of causes, this board has lost all confidence in Dr. E. Moore, one of the district medical officers of this board, in which causes are embraced neglect of patients, extraordinary claims for vaccination, and extra midwifery fees—the latter being, as we are instructed, six times the percentage of ordinary medical statistics—determined opposition to, and public slander of, the board by gross falsehoods, the getting up of the unnecessary inquests for the purpose of degrading the parish and bringing on the poor-law system by public appeals to the benevolent, and for neglecting and refusing to keep his books as ordered by the Poor Law Commissioners; in consequence of these and other practices, which greatly tend to hinder the successful working of this board, the Poor Law Commissioners are hereby respectfully requested to sanction the dismissal of the said Dr. E. Moore from office." The proposer said that it became a serious case when one of their own officers took an antagonistic position to the board, and endeavoured to bring them into contempt. With respect to Hollybush Place, he had Dr. Moore's medical report book before him, and of the four cases of death mentioned by the newspapers as occurring through blood-poisoning, three were described as eruption, marasmus, scarlatina, and catarrh, but not one word about "blood-poisoning." He was of opinion, and that opinion was backed by gentlemen belonging to the medical profession, that scarlet fever was more the immediate cause of death than anything else. He said that Dr. Brotherton was prepared to give a certificate that all the children had died from scarlet fever, and not from "blood-poisoning." It was well known to all, that this animosity of Dr. Moore's had arisen from his being obliged to disgorge certain vaccination and midwifery fees.

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ON THE DERMO-PATHOLOGY OF CELSUS.

By Erasmus Wilson, F.R.S.

The nomenclature of cutaneous diseases is derived chiefly from the Greeks, who were the fathers of medicine. The descendants of the god of physic, Æsculapius, the Asclepiadæ, were observers deserving of all admiration; their observations were recorded with extreme care, and became the foundation of the works of Hippocrates. And the knowledge of Hippocrates, with his followers for five hundred years, has been handed down to us in the writings of one of the most distinguished of the successors of the Greeks, the great Roman physician, Celsus, whose labours date from a period antecedent to that of the Christian era.*

Cutaneous diseases being external, at least in their manifestation, are favourably seated for examination. Hence, facilities for their observation were as great at the beginning of the world as they are at the present time; and we have proof, in the writings of the ancients, that the opportunity was not lost, but, on the contrary, was eagerly improved, and these diseases were stamped unmistakably with names, which have come down to us unchanged; and are still in familiar use at the present day.

Under these circumstances, it is a matter of interest, if not of practical importance, that we should endeavour to discover with certainty the exact disease to which a particular name was given; not only that we may apply the name in the same signification and correctly at the present time, but also that we may gather such a notion of the disease as its name would have conveyed to the ancient physicians. The names of these affections would seem to have been sometimes suggested by their appearance; sometimes by their symptoms; and sometimes by the theory of disease which existed at the time when they were observed and their history recorded; and a knowledge of their meaning cannot, it appears to me, be otherwise than useful to modern investigators in pathology.

With a view to open an inquiry into this subject, and to compare the knowledge possessed by the ancients with that of the present time, I have had recourse to Celsus; and I subjoin an analysis of his views with regard to cutaneous medicine, with a brief commentary in illustration of his meaning, founded on my own researches and experience. I have had, also, another motive for undertaking this task; namely, the endeavour to clear up some confusion which exists at the present time with reference to the proper application of certain of these ancient terms.

Celsus, in his well known work on medicine, given to the world nearly twenty years before the birth of Christ, enumerates between forty and fifty cutaneous affections, which he treats of in his third, fifth, sixth, and seventh books; viz., in his *third* book, "On the Dietetic Treatment of Diseases"; in his *fifth* book, "On the Treatment of Disease by Medicines"; in his *sixth* book, "On the Treatment of Local Diseases by Remedies"; and in his *seventh* book, "On Surgery."

In his *third book*, chapter xxv, he gives an account of Elephantiasis. "The disease which the Greeks call elephantiasis," he observes, "is almost unknown in Italy, although very common in other regions of the world. The entire body is attacked, even to the bones. The surface of the body is thickly studded with maculæ and tubercles, at first red, then becoming brown; the skin is remarkable for inequalities, in some parts thickened, in others thinner than natural; in some, hard; in others, soft; in many parts rugged, and apparently coated with scales. The body is emaciated; the bones, the calves of the legs, and the feet, swollen. When the disease is of long standing, the fingers and toes become lost in the swelling; feverish symptoms are developed, and the patient sinks overwhelmed with suffering."

Nothing can be clearer than this description, and in a few words, more perfectly illustrative of that terrible disease, the *Elephantiasis Græcorum;* a disease, as Celsus says, of the entire body, involving skin, bones, indeed, every tissue and every organ, and especially the nerves and the brain. He makes no use of the word *lepra;* and there is no allusion to that disease of the cutaneous tissues which is known as the Barbadoes leg (*Bucnemia tropica* or *Elephantiasis Arabum*), which has since been confounded with the true elephantiasis. The "losing of the fingers and toes in the swelling" to which he refers, is a common character of elephantiasis, and depends upon œdema; and not, as in the Barbadoes leg, on obliteration of the toes by hypertrophy of the tegumentary tissues. Moreover, I do not remember to have ever met with a recorded instance of bucnemia of the upper extremities.

In his *fifth* book, Celsus speaks (chap. xxvi) of Erysipelas; (in chap. xxvii) of the Bites and Stings of Animals; (in chap. xxviii) of Carbunculus; Therioma; Ignis Sacer; Pernio; Struma; Furunculus; Phyma; Phygethlon; Kerion; Acrochordon; Thymion; Myrmecia; Clavus; Pustulæ; Exanthemata; Phlyctenæ; Phlyzacion; Epinyctis; Scabies; Impetigo; Papulæ; Vitiligo; Alphos; Melas; and Leuce.

In his *sixth* book, he mentions Defluvium Capillorum; Calvities; Porrigo; Sycosis; Area; Alopecia; Ophiasis; Varus; Lenticula; Semeion; Ephelis; and Phtheiriasis.

In his *seventh* book (chap. vi), he discusses certain tubercles occurring on the scalp; viz., Ganglion; Meliceris; and Atheroma.

The classification of diseases adopted by Celsus, is that which was common in the early days of medicine. They were arranged, in the first place, *remedially*, according to their amenability to hygiene and diet, to drugs, or to surgical manipulation. And, secondly, *topographically*, according to position, whether general, partial, or topical. Following upon this plan, cutaneous diseases come to be considered under four heads; viz.:

1. Diseases, general in their nature; to be treated by diet.
2. Diseases which may occur on any and every part of the body; to be treated by medicines.
3. Diseases limited to a particular part; to be treated by medicines.
4. Diseases to be treated by surgical means.

In the *first* group, elephantiasis stands alone.

In the *third* group—namely, of topical affections—are found diseases of the hairy scalp, the eyelids, and the face.

The *fourth* group contains encysted tumours only.

In the *second* group, that which comprises diseases which may occur on any part of the body, the greater number of these disorders are assembled. And his mode of arrangement is to take the largest, most prominent, and visibly most important, first—for example, carbuncle—and gradually descend from decided pro-

* Celsus was born fifty-three years before Christ; his works were published eighteen years before Christ; and he died, at the age 60, in the seventh year of the Christian era.

minence to mere asperity, placing first, asperity with inflammation—for example, exanthema and scabies; then asperity without inflammation, as in the case of alphos; and, lastly, smoothness, as in the instance of leuce.

This arrangement is simple and natural; and such as, in the absence of better knowledge of the structure of the skin, may be admitted to have been as good as could have been adopted; although, in modern times, it must appear strange to find carbuncle placed by the side of carcinoma; lupoid ulcers next to chilblains; warts and corns against abscess; and the whole of these taking precedence of urticaria, eczema, and lepra; and for no better reason, than because they were more prominent and more bulky.

Fifth Book. *Erysipelas* is treated of as a complication of wounds; and, also, as occurring spontaneously; it is attended with the greatest danger when it attacks the neck or head.

The *Carbuncle* he takes as the first illustration of "interior ulcers originating in corruption of some part of the structure of the body"; and he follows up carbuncle with the examples here enumerated; namely, Carcinoma; Therioma, a phagedænic ulcer; Ignis sacer, an eating ulcer; Chironium, a callous ulcer; Pernio; Struma; Furunculus; Phygethlon; Phyma; etc. The general idea of these affections is, a swelling or tumour, which opens externally, gives exit to humour, and is more or less difficult of cure.

Carbuncle, he observes, "is red at first, but afterwards livid; it is dense, hard, and solid, and spreads by its base more or less quickly. It is covered with vesications, which are but slightly raised, black, or more or less livid, in correspondence with the colour of the sanies which they contain; the surface beneath them being almost black. The treatment of carbuncle is, the application of the actual cautery; and the subsequent management of the case, such as is adapted for an ordinary burn."

Therioma "is an ulcer, sometimes spontaneous, sometimes attacking a part already the seat of ulceration; it is livid, almost black, and pours out a copious secretion resembling mucus. It is insensible, only itching a little; but the circumference is inflamed and painful, and from time to time the ulcer also is inflamed. Sometimes it bleeds, and sometimes it spreads. An increase of all these symptoms constitutes phagedæna."

Therioma would seem to be, either a syphilitic ulcer of the constitutional type, occurring in a low and irritable condition of the body; or, it belongs to an allied affection, *lupus*, lupus exedens; if the latter had been intended, it may be presumed that the common seat of that disorder, in the nose, would have been indicated. The term "therioma" is no longer in use.

Ignis sacer "must also be mentioned among the ill-conditioned ulcers. There are two kinds. One is reddish, or pale red, raised in permanent pustules, of which the principal are of uniform size, but the greater number very small. These pustules contain pus, and are often red and hot; the disease spreads and sometimes heals on the part first affected; sometimes, when ulcerated, the ulcer becomes permanent where the pustules have burst; and a discharge takes place, which seems to be intermediate between sanies and pus. This eruption occurs principally on the breast or sides, on the limbs, and chiefly on the soles of the feet."

"The other kind is a more superficial ulceration, not deep, but broad, somewhat livid and uneven; healing in the centre and progressing by the circumference; and often, when apparently sound, breaking out again; the skin of the circumference which is about to be attacked, being swollen, hard, and of a dark red colour. This disease chiefly attacks persons advanced in age, or those of unhealthy constitution; and principally the legs. Ignis sacer, as it is the least serious of the eruptions that creep, is, at the same time, almost one of the most difficult of cure. One day of fever, by drying up the noxious humour, becomes an accidental remedy. And the disease is least dangerous in proportion to the thickness and whiteness of the pus."

From the above description, we perceive, that ignis sacer is a chronic disease; that it consists of an eruption, in one case, of a pale red colour; in another, livid; that the tubercles (pustules) contain pus and ulcerate; and that the disease spreads, healing on the part first attacked, but sometimes constituting a permanent ulcer, which gives exit to a sero-purulent secretion more or less tinged with blood. The eruption is subject to exacerbations of inflammation, in one case, attended with considerable congestion, tumefaction, and hardness of the surrounding skin; and is very difficult to cure.

These characters correspond with two forms of disease known at the present day; namely, lupus and syphilis. The "pale red pustules" of the first variety may represent lupus non exedens; the livid kind, lupus exedens. The syphilitic eruptions which correspond with the above description are such as may be termed syphilitic lupus, and belong either to the tertiary period of constitutional syphilis or to hereditary or scrofulous syphilis.

It will be observed, that I have rendered the term "pustule" by the word "tubercle". Pustule, as used by the ancients, signified any eruption of the skin accompanied with prominence, and corresponds very nearly with our own word "eruption". It had no reference to the contents of the prominence, as at the present day, and was not, as it is with us, a *prominence of the cuticle filled with pus*. These pustules, says Celsus, "contain pus, and are often red and hot." The presence of pus in the pustule is here shown to be an accidental complication; while the tubercular nature of the eruption is indicated by the "pustules" being "often red and hot." But I shall have further occasion to illustrate this meaning of the term pustule; and will only add, that ignis sacer is represented by the author as being an ill-conditioned ulcer, and is associated, as we have seen, with carbunculus, carcinoma, therioma, and struma.

Dr. Milligan places the terms herpes zoster and herpes circinatus, in the marginal notes attached to his edition of Celsus, against the two varieties of ignis sacer; which is evidently an error. Ignis sacer is "herpetic", inasmuch as it "creeps"; but in no other particular can any resemblance be traced. And there is good reason for believing that the application of the term herpes to a simple vesicular eruption, not remarkable for a serpiginous habit, is altogether a blunder of modern times.

Pernio is well described by Celsus; and his description affords another example of the signification attached to the word "pustule". "Interdum pustulæ oriuntur, deinde exulceratio." Here pustulæ stands for the *bulla* of our nomenclature. Again, as to the word "exulceratio", this is intended to convey, not a loss of substance, as in the modern idea of ulceration, but a simple denudation of the derma. The instant a "pustule" broke, the state of "exulceratio" was established; no destruction of the substance of the skin was necessary, as would be the understanding at the present time. I may illustrate the idea further by reference to the action of a scald or a blister;—the raised cuticle is the "pustule"; the cutis exposed by the rupture of the cuticle, the "ulcer".

Struma "likewise is a tumour, in which, beneath a crust of pus and blood, things like small glands (moist granulations) arise, which are particularly troublesome to the physician; for they excite inflammation, and never maturate properly; and, whether they be treated with the knife or by remedies, they generally spring up again by the side of the cicatrix, but most frequently after the use of local applications; hence they are always tedious. They occur chiefly in the neck, but also in the armpits, groins, and sides of the trunk.

Furunculus "is a conical tubercle attended with inflammation and pain, the pain being aggravated by suppuration. When it opens and the pus escapes, the portion of flesh converted into pus is apparent; as also a whitish or reddish corrupt part, which is called by some the ventricle (core) of the boil. It is not dangerous, and requires no treatment; it maturates and bursts spontaneously. But, if there be much pain, treatment may be adopted, to bring about an earlier evacuation; and the pus being pressed out, no further attention is needful."

Phyma "is a tubercle something like a boil, but rounder and smoother, and often larger. For a boil never exceeds and is rarely so large as half an egg; but the phyma is greater in extent, but neither as painful nor attended with as much inflammation. When laid open, it is found to be filled with pus; but there is no ventricle (core) as in the boil, for all the corrupt flesh is changed into pus. Phyma is most frequent and most curable in children, less so in adolescents; while in age, with its denser tissues, it occurs but seldom."

Phyma is, clearly, nothing more than a cutaneous abscess, of a certain size.

Phygethlon "is a superficial tumour, somewhat broad, and in its nature something like a pustule. The pain caused by distension is excessive, and wholly disproportionate to the size of the tumour; sometimes inducing feverishness. It maturates slowly, and only partially suppurates. It is commonly met with in the neck, the axillæ, and the groins. We call it *panis*, from a certain resemblance in shape to a loaf of bread."

This description corresponds with that of the troublesome and very painful, partially suppurating axillary abscesses, which have been so common during the few last years, in connexion with furunculus. Its comparison with a pustule simply indicates its prominence.

Kerion "is a genus of ulcer, so named by the Greeks, from its resemblance to the honeycomb. There are two species.

"One is whitish, and like a furuncle in shape, but larger and more painful. When it maturates, it presents a number of foramina, through which exudes a glutinous and purulent humour; but it never maturates thoroughly. When opened, it is found to contain more corrupt matter than a boil, and is also more deeply rooted. It is seldom met with elsewhere than among the hair.

"The other kind is smaller, prominent, hard, broad, greenish, pale, and more ulcerated, since the foramina correspond with every individual hair, and give exit to a glutinous palish humour, of the consistence of honey, or resembling the juice of the misletoe, or sometimes oil. The pain and inflammation are severe, so as, in some instances, to excite a sharp attack of fever. . . . If the usual remedies fail in effecting a cure in either of these diseases, the ulcer should be cut out to the full extent of the diseased structure."

The consideration of kerion under two heads is an illustration of the careful observation of the Greek physicians; but, in reality, there is no ground for the distinction, which amounts simply to a larger or smaller development of the same disease. The peculiarities of that disease are well explained by the author;—its prominence; its apparent perforation with foramina, which are, in truth, the mouths of the hair-follicles; the copious exudation of a muco-purulent fluid; and the non-maturation of the tumour—that is, that although seeming to be in progress towards a regular abscess, it never attains that state; but, after pouring out a certain quantity of morbid secretion through the follicles of the skin, it gradually subsides, and is removed by absorption. Under these circumstances, puncture with the lancet is rarely necessary, and ablation by the knife wholly uncalled for.

It is evident that kerion is a suppurative inflammation of the hair-follicles, and under that name I have described it. But it has, besides, an especial interest for dermopathologists, as illustrating the primitive idea of a honeycomb as applied to cutaneous disease; and it is to be regretted that in modern times this designation should have been used so vaguely in connexion with several very dissimilar forms of disease; and, not least, that it should have been given to favus—a disorder apparently unknown to Celsus. In the "honeycomb" of the Greeks, there is very little trespass done to the imagination. The kerion or melikerion is a swelling perforated all over with openings, these openings the channels of the hair-follicles, and filled to the mouth with a yellow puriform matter; while the tumid skin rises between the openings, like the frame of the comb. One circumstance, however, Celsus has omitted; namely, the destruction of the hairs. They are loosened by the inflammation, detached from their adhesion to the fundus of the follicle, and cast forth; and, as a consequence, the patch becomes bald or scalled. In a word, this is the "scalled head" of popular language.

"There are certain tumours that resemble warts, although differing from them both in name and in the nature of the disease.

"One kind the Greeks call *acrochordon*, wherein is a development of something hard and uneven under the skin, the latter retaining its natural colour. It is thin towards its extremity, but broad at its base, and of moderate size, rarely exceeding a bean in dimensions. It is seldom solitary, but commonly occurs in clusters, and principally in children. Sometimes these little tumours terminate on a sudden; but at other times they become inflamed, and are removed by suppuration."

"Another kind they called *thymion*—a little wart which projects considerably from the skin, slender at the base, broad, hard, and uneven, and coloured at its summit like the blossom of the thyme, from which peculiarity it derives its name. The thymion splits up easily at the summit, and is raw, and sometimes it bleeds a little; its ordinary size is that of the Egyptian bean, rarely bigger, sometimes extremely small. Sometimes it occurs singly; sometimes there are several, and both in the palms and in the soles of the feet. The worst kind are those which are developed about the organs of generation; and there they bleed more freely than elsewhere."

Myrmecia "is the name given to warts dwarfer and harder than the thymion. Their roots are deeper; they are more painful; they are broader at the base than at the summit; they are less disposed to bleed; and they hardly ever exceed the dimensions of a lupine in size. They are met with in the palms of the hands and in the soles of the feet."

Clavus "is found chiefly in the soles of the feet, and arises commonly from a bruise, but also from other causes; it is sometimes met with in other parts of the body, and, if not otherwise troublesome, is painful in walking.

"Acrochordon and thymium often get well of themselves, and all the more quickly in proportion to their smallness of size; but myrmecia and clavus are rarely cured without treatment."

Of the three kinds of tumour-like growths, which resemble warts, here referred to—namely, acrochordon, thymium, and myrmecia—the term acrochordon would seem to be applied to those pouch-like growths of the integument which are now called "molluscum". They present considerable variety both in size and figure, some being a mere prominence of the skin no larger than a pin's head and sessile, others elongated and pedunculated; and others, again, as Celsus describes, broader at the base than at the summit. In general, they contain nothing but a loose, spongy, and imperfectly developed cellular tissue; but it will be seen that he mentions a hard and uneven body as being present under the skin in these little tumours; and he also alludes to their common appearance in children, in the

form of clusters; and, further, their occasional disappearance under an attack of inflammation and suppuration. These latter characters remind us of the small tumours caused by hypertrophy of the sebiparous glands, and which are distinguished by the name of molluscum simplex. And, as a further illustration of the relation of acrochordon to molluscum, it may be mentioned, that it is no uncommon thing to see a tubercle of molluscum simplex converted by the expulsion of the hypertrophied gland into a mere pendulous bag of integument.

The thymium appears to be nothing more than the fibrous wart so common on the hands; while the myrmecia is a broader, deeper, and less prominent variety of the same wart, occurring in the palms of the hands and soles of the feet. I have seen myrmecia chiefly in the thick cuticle of the heel, where it is extremely painful and troublesome. It may be worth while to remember the recommendation of Celsus to treat it by the application of a boiled fig.

[*To be continued.*]

Original Communications.

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page* 205.]

Paralysis from Morbid Growths in and about the Spinal Cord.

These adventitious products occur under various forms, and give rise to a diversity of symptoms, from which we may calculate upon more assistance in determining the functions of each individual portion of the spinal marrow than from any direct experiments, however carefully they may be conducted.

Of all extraneous growths from which paralysis ensues, the most frequent are tubercle and cancer. Neither, however, has been so often observed in the vertebral canal as in the cavity of the cranium; but when either occurs, the slow process of its formation may enable the cord so far to accommodate itself to exceptional pressure or structural disintegration, that the function of the special part which is the seat of lesion is more clearly manifested by its gradual disturbance than by any abrupt change induced by artificial means. The sudden shock and extension of irritation to surrounding parts, necessarily weaken the force of any inference that may be drawn from the result of an experiment.

Tubercle of the cord occurs more frequently in children than in adults, and its attendant symptoms are those of compression and irritation

Case. Philippe Oran, aged 29, was admitted into the Hospital St. Antoine, under Dr. Aran, with paraplegia, rigidity of the inferior extremities, anæsthesia of the legs and thighs, and enuresis. He was insensible to tickling on the soles of the feet; but reflex movements were produced thereby. This patient had practised onanism in his youth, and subsequently committed great excesses in venery. He had also been affected several times with syphilis. Percussion over the spine produced considerable pain over the upper third of the dorsal region. He had paroxysms of shivering and fever, and behind the trochanters bed-sores existed. Notwithstanding that the soles of the feet were insensible to tickling, pricking of the skin over the instep was felt acutely.

On examination of the body thirty-five hours after death, a mass of tubercular matter was found to have burst out of the vertebral canal, and to occupy a space over the fourth dorsal vertebra; but the greater part of the morbid product was contained in the canal, where it pressed upon the cord, which was flattened and softened to the consistence of cream. The osseous lesion existed in the bodies of the third and fourth dorsal vertebræ. (*Comptes Rendus de la Société de Biologie*, 1856, p. 191.)

The relation of the above case is not so explicit as we might desire; but I think we may reasonably infer that the partial anæsthesia was the consequence of pressure on the posterior columns of the spinal cord which were found flattened and soft. The persistence of reflex phenomena, however, and the sensibility to pricking on the instep, would indicate that the impressions of the afferent nerves continued to be transmitted to the central grey matter of the cord.

An interesting case of paraplegia depending on a tumour in the substance of the cord, is described by Dr. M'Dowel, Professor of Anatomy in the University of Dublin. (*Dublin Quarterly Journal of Medical Science*, November 1861.) The patient, a tin-plate worker, was affected with paraplegia, but regained, in some slight degree, the power of moving the left foot and leg. The foot could be bent and extended, and the leg could be drawn up in bed; the right foot and leg remained utterly powerless. But in the right foot and leg the reflex movements regained well-nigh their normal activity, whilst in the left it was impossible to excite them. Sensibility was equally impaired in both legs.

The difference in the amount of paralysis may be accounted for by the position of the tumour in the right side of the grey substance, where the vesicular portion of the nervous matter possessing the faculty of originating motive power is situated. But how shall we explain the loss of excito-motory phenomena on the left side, unless they depend on the decussating fibres which pass from the anterior cornu on the one side, into the anterior column on the other? The author of the history of the case has accounted for it by the supposition, that reflex motor phenomena are better developed when the influence of the brain is cut off from the spinal cord; but the cases are so numerous in which the reflex phenomena are entirely destroyed when the influence of the brain is entirely cut off, at least after a time, that I am more disposed to regard the disappearance of the phenomena as dependent on a solution of continuity at some point between the afferent and efferent nerves. That volition does exercise a restraining influence there can be no doubt, but the reflex function is not dependent on the abrogation of such influence.

The most unequivocal case that I remember to have read of, as showing that the posterior columns of the cord are not the sole channels for the transmission of the impressions of sensation, but that the grey substance is equally subservient to the function, is related by Ollivier. (*Traité de la Moelle Epiniere*, tome ii, p. 779, obs. 111; see also p. 693.) In reflecting on this case, it may be well to consider how far the fibres which pass from the posterior cornua into the lateral white columns, may have been implicated.

The subject of the case had a benumbed left arm, together with paraplegia, the loss of sensation in both legs being complete. A tumour existed on the left side of the back, on a level with the inferior angle of the left scapula; and in the very centre of the spinal cord, between the last dorsal and first lumbar vertebræ, an olivary tubercle was found, occupying the space of the grey matter, but leaving the columns of the cord all round it apparently healthy.

The sensation of numbness in the left arm was probably due to pressure on the cutaneous nerves (the nerves of Wrisberg) which proceed from the upper dorsal nerves, in the neighbourhood of the tumour observed on the left side of the back. The convulsive movements and other symptoms of irritation may be referred to the

morbid action, evidence of which existed on the surface of the dura mater; whilst the loss of sensation and motion was caused by pressure exercised on the vesicular nervous matter and the longitudinal tubular fibres of the grey substance, in which pressure the longitudinal white columns of the cord must have eventually participated.

It has been remarked that in paraplegia, dependent on tumours in the grey substance of the cord, anæsthesia sets in at the very beginning of the affection, and proceeds to a greater degree than the loss of the power of motion. Another remarkable feature in such cases is the exaltation of the reflex function in the parts of the cord below the tumour, probably from the irritation occasioned by the adventitious matter, for a very slight provocation will produce the most violent reflex movements.

All this is in strict accordance with the anatomical structure of the parts; and if more evidence be required to the theory which assigns to the longitudinal nerve-fibres in the grey substance of the spinal cord, the transmission of impressions of sensation and of the mandates of the will, it is beautifully supplied by cases in which the grey substance has been destroyed. An instance of this kind has lately been recorded by Dr. Gull, in *Guy's Hospital Reports*, vol. viii, 3rd series, p. 245. The patient was a tailor, who for some months had been unable to extend the little and ring fingers of the right hand, which felt cold and numb. He had shooting pains through the chest, and a sense of tightness across the upper part of it. The inner three fingers of the left hand next became similarly flexed, but without any numbness. The patient sickened with typhus fever and died. On examination of the body, all the organs were healthy except the spinal cord, in the centre of which a large cavity existed, beginning at the fifth cervical vertebra, enlarging downwards to the seventh, and from thence tapering to the fourth dorsal. The columns themselves were healthy.

It is worthy of observation that there is no notice of any paralysis of the inferior extremities, whence we may infer that none of the longitudinal nerve-fibres in the grey substance extend throughout the entire length of the cord; and in another case, described by Ollivier (vol. ii, p. 691, obs. 93), remarkably analogous to the above, the disorganisation of the grey matter appears to have taken place in a downward direction, the symptoms presenting a corresponding extension.

Portal also relates the case of a servant of the Duc de Crouy, who was seized with numbness of the arms and legs, which subsequently lost all power of motion, and became œdematous. On examination after death, a large quantity of fluid was found extravasated in the ventricles of the brain, and a large cavity was discovered in the centre of the spinal cord, extending down to the third dorsal vertebra.

A somewhat similar case is related by Velpeau, in the *Revue Médicale* for 1826, of a woman, aged 56, who gradually, but rapidly, became affected with complete hemiplegia of the left arm and leg, but without loss of feeling. The left arm became œdematous. Her respiration was quick, her voice weak, and her speech somewhat embarrassed. The pulse became feeble, the breathing stertorous, and in a week she died. In the middle of the cervical region, the grey substance on the *right* side of the cord was converted into matter resembling pus. An abscess, in fact, existed, three inches long and three lines in diameter. On the left side also, and in the corresponding portion of the cord, the grey substance was found in a state of softening, about an inch in extent.

Upon pathological cases, then, as well as upon anatomical structure and experimental observations (*Course of Lectures on the Physiology and Pathology of the Central Nervous System.* By C. E. Brown-Séquard, M.D., F.R.S. Lecture IV), it would appear that the central grey substance of the cord, independent of the vesicular matter which it contains, includes nerve-fibres which are directly or indirectly concerned in motion and sensation. But, upon anatomical grounds alone, there is great reason to infer that it is with the excito-motory or reflex actions that the grey substance is so concerned; for, as in the lower extremities, the reflex actions are more evident than they are in the upper, so the bulk of the grey substance is much greater in the lumbar region than it is in the cervical; and yet the ordinary sensibility of the legs is less acute than that of the arms. Case XIX would have presented an excellent opportunity of observing how far the reflex function was destroyed by the disorganisation of the central portion of the cord; but, beyond the remark that the contraction of the legs was increased when touched, at the time the patient was admitted into the Bicêtre, the narrative conveys no information on this interesting question. Case XVI is more suggestive, because it is more circumstantially described.

That paralysis may ensue from cancerous formations in and about the spinal cord, too many cases have been recorded to admit of the slightest doubt. Still, cancer in the cord is a very rare form of disease, and, like tubercle, is one of a secondary development, other organs being more obnoxious to such morbid growths. The symptoms, too, resemble, in so many respects, those which present themselves in tubercle of the cord, that the diagnosis is dependent rather on the general diathesis of the patient than on any special signs.

The vertebræ themselves may be the seat of the disease, as shown by Dr. Walshe (*Nature and Treatment of Cancer*) in a case where, with the progress of the cancerous infiltration, the bony tissue of the body of a lumbar vertebra had disappeared, and the adventitious substance, reaching the anterior and posterior limits of the cancellated structure, destroyed the compact tissue also, and protruded posteriorly under the dura mater into the spinal canal, and anteriorly under the anterior ligament. It had subsequently grown in front of the spine in an upward and downward direction, so as to reach the bodies of the vertebra next above, and next below.

A remarkable case, published by M. Velpeau (*Archives Générales de Médecine, Janvier* 1825, tome vii, pages 68-82) in 1825, to illustrate Sir Charles Bell's doctrine, has still its interest as regards the relationship existing between the seat of disease and disturbance of function. In this case, the adventitious matter in the anterior of the cord must have so completely destroyed the healthy structure through which it ramified (a process which connective tissue is specially prone to undergo), that the continuity of the complicated links which have been shown to exist between the nerve-fibres were as effectually severed as if they had been divided by a knife.

But in the process, the convulsive movements and pain in the left arm were doubtless due to the irritation set up in the corresponding side of the spinal cord, and transmitted by the motor and sensitive nerves backward to the arm; and in this stage of the disease hyperæsthesia of the arm existed, just as the irritation caused by a section of the lateral and posterior columns of the spinal cord produces hyperæsthesia (Dr. Brown-Séquard, pp. 19-21); but as the destructive influence of the cancerous infiltration progressed, and the vesicular matter of the grey substance of the cord was destroyed, motion, sensation, and the excito-motory actions were destroyed with it. It is probable that the persistent sensibility of the right arm was due to the fifth cervical nerve which sends a branch to the brachial plexus; for, if the least quantity of the central grey matter of the cord had been left, the reflection of irritation from one sensitive nerve to another sensitive nerve would not entirely have ceased, as it did in every nervous branch below the tumour. The extraordinary part of the case was the sud-

den supervention of paraplegia; for, in affections of the spinal cord, where the morbid change is of a chronic nature, the paralytic effects are less abrupt than in injuries or acute disease.

These physiological remarks find a place where some notice should appear in respect of prognosis and treatment; is it necessary, however, to confess that these cases are incurable?

Hydatid cysts have likewise been known to produce fatal paralysis. Five such cases are recorded by Ollivier, and, curiously enough, all occurred in females. In three, the cellular membrane on the external surface of the vertebral column was the primary seat of the parasitic growth, whence it spread in the track of the nerves, through the intervertebral foramen, to the external surface of the dura mater. One of these cases, which fell under the observation of M. Chaussier, is so interesting that I will venture to transcribe it.

An embroiderer, aged 22, after various premonitory symptoms, at the seventh month of her pregnancy, became suddenly paralysed in both lower extremities. Micturition and defecation also became more and more difficult, and less frequent. At the full period, parturition was accomplished without pain, the cries of the child and the rapid diminution of bulk being the only evidence by which the woman was assured of the fact.

All went on well till the fourth day, when an attack of fever came on, and from day to day assumed an aggravated form. On the tenth day she died.

On *examination*, an hydatid cyst, which had formed on the right side of the bodies of the third and fourth dorsal vertebræ, was found to have insinuated itself into the vertebral canal through the fourth intervertebral foramen.

Here, again, we may associate each and every symptom, in the order of its appearance, with the probable development of the acephalocystic formation. The first sensation of numbness in the right arm was doubtless attributable to pressure on the nerves of Wrisberg, or cutaneous nerves of the arm (the anterior branches of the second and third dorsal nerves), as were the subsequent disturbances of the right eye, and of the vascular system to pressure and irritation of the right sympathetic nerve. I have already had occasion to allude to the influence of the sympathetic on the motions of the eye, and its vaso-motor power is universally admitted. M. Colin, however, has shown that its sensibility is more effectively aroused by pressure than by any other means (*Comptes Rendus*, Mai 13, 1861, p. 969); and Dr. Augustus Waller has pointed out the fact that pressure on the trunk of the nerve gives rise to embarrassed respiration and disturbance of the heart's action (*Proceedings of the Royal Society for* 1861, No. 44, p. 382), symptoms which occurred in the course of the case in question.

It will be observed that up to the seventh month of pregnancy no symptom existed which might not have been caused by pressure on nervous trunks outside the vertebral canal; but the supervention of paraplegia attested the existence of a lesion of the spinal cord itself; and the question is, of what special part? Was it compression of the external white columns or of the internal grey substance to which the paralysing influence was due? The gradual penetration and intrusion of the cyst seems to favour the idea that it was the former; for, as the pressure was at no time so great as to produce disorganisation of the cord, it is reasonable to presume that the longitudinal columns suffered more than the grey substance.

Another interesting phenomenon was the painless, yet effective contraction of the uterus; and herein some light is thrown by the observations of M. Brachet, which render it probable that absolute destruction of the spinal cord is necessary for the perfect inertia of the uterus (*Fonctions du Système Nerveux Ganglionaire*); hence it would appear that, in paraplegia from simple compression of the cord, the sensibility of the uterus may be suspended or destroyed, whilst its contractile energy remains undisturbed. And this contractility appears to be of a reflex character, for it may be excited by the application of cold to the surface of the abdomen, by the introduction of the hand, or even by placing the child at the breast.

Whilst, therefore, I am disposed to think that, from pressure on the white columns of the cord, the nervous communication between the brain and uterus was cut off, it appears that an independent reflex action was preserved in the comparatively uninjured portion of the cord, and that to this latter operation the expulsion of the fœtus and the subsequent startings of the legs were due.

[*To be continued.*]

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

CASE OF PHTHISIS MASKED IN ITS LAST STAGE BY PRÆCORDIAL DISTRESS.

By Frederick J. Brown, M.D., Rochester.

[*Read September 25th*, 1863.]

George G., aged 45½ years, residing at Chatham, died on September 9th, 1863. The death-certificate was worded "Phthisis"=6 months.

I first saw him on August 12th. He was greatly emaciated, suffering from hectic fever, and perspiring profusely. He complained of pain and a sense of obstruction at the epigastrium, midway between the xiphoid cartilage and the umbilicus. The bowels resisted medicine for four or five days together, then operated once or twice, and again became obstinately confined. There was no complaint of cough. There was no abdominal tumour. His health had declined for two years; but he continued at his work as an artisan until thirteen weeks before his death. He was thought to be suffering under abdominal cancer.

A *post mortem* examination was made twenty-five hours and a half after death. There was extreme emaciation. The stomach and intestines were healthy. The liver was fatty, and presented a nutmeg appearance. The spleen was large and firm. The pancreas was wasted. The kidneys were natural. The right suprarenal capsule was natural; the left one was not examined, through an accidental omission.

Examination of the thorax showed excessive wasting of the heart. This organ did not appear to be more than one-third of its normal size, and it presented a whitish aspect. Its structure was not lacerable. The right lung was strongly adherent at its apex. There was a ragged vomica occupying the upper sixth of the lung. Yellow tubercle was disseminated through the lung, crude in some parts, softened in others. The left lung presented the most extraordinary appearance that I have ever seen. It was wholly adherent, but split up longitudinally into two slips with ragged ulcerated surfaces.

Remarks. The remarks that I have to make on this case are but few. In the first place, the man was never properly examined during life. The stethoscope was not used at all. This case shows the necessity of examining the lungs in all wasting diseases; and it also shows the danger of jumping at conclusions. This man must have expectorated purulent matter whilst he was engaged at his work; but, being of a quiet disposition, he had maintained a reserve on this subject sufficient to mislead his wife and friends. I would also remark that cancer of the abdominal organs is an unsafe diagnosis in the

absence of a tumour. Having confessed errors of omission and commission, I bring the case forward as a remarkable one, inasmuch as the lung-disease was completely masked by the solar plexus neuralgia. I judge that the neuralgia was due to the wasting of the heart. Two medical practitioners that saw the case, independently of one another, overlooked the lung-disease.

P.S.—Since writing this case, I have ascertained that the pulmonary disease was recognised by a surgeon previously to the last three months of the patient's life. There were cough and abundant expectoration during that surgeon's attendance.

British Medical Journal.

SATURDAY, OCTOBER 24TH, 1863.

THE PROFESSION AND THE PUBLIC.

NOTHING can more strongly show the untrue position which our profession holds in the estimation of the public at large than the extreme ignorance which even the educated public betrays on all matters which touch the practice of our art. However highly, as individuals, members of our profession may rank in general estimation, it is a fact that, as a profession, we are, socially speaking, grossly maligned and grossly misunderstood, or utterly ignored; and this, not on isolated occasions, but almost on all public occasions. The public press, as a rule, takes infinite pleasure in girding at us; and the more influential the press, the more marked the girding. Or, again, the proceedings of our body are ignored as being matter of no kind of public interest. Fullest reports are given of the opening of a ragged school at Sloughton-on-the-Moor, but not a word of the meeting of the *British Medical Association* either in London or at Bristol. This latter fact was markedly referred to by the *Social Science Review*.

"The first of the great social and scientific congresses of the present year, the annual meeting of the British Medical Association, has passed off with singular success. The meeting was held at Clifton, Bristol, under the presidency of one of the most accomplished of English physicians, Dr. Symonds. The proceedings of the congress on this occasion were of such immense public interest and importance, that on their own merits we should have been disposed to report them in all their details, as we have done in the forthcoming pages; but we feel another reason for supplying so free a record; we wish to introduce more distinctly to the notice of the general public the scientific progress and labours of that great section of the community to whom are confided responsibilities the most onerous, duties the most sacred. The time has arrived, we think, when the public ought to give a little more careful attention to the Æsculapian fraternity; ought to inquire, for its own sake, more closely into the progress of medical art; ought to question, if not critically, earnestly, the advances that are being made by the professed healers of corporeal evils; and, instead of constantly carping at the art, should look at it as something that is to be understood, and as something which might advance rapidly, if the cold hand of an ignorant and boastful tyranny were not ever upon it.

"We may take the late medical congress at Bristol as a fair type of the figure and thought of medicine as it exists at this moment; we have had it there presented to us voluntarily and openly. The public has not gone out of its way to inquire after the doctors, but the doctors have united to show themselves and their science to the public. They have met, argued, and discussed in broad daylight. The press has had free entrance, and scholars of all kinds have found no denial. It is, then, carelessness, and little less than insolent inattention to its own interest, not less than to the profession, for the intelligent section of the community to stand still outside the pale, making no inquiry as to what has been done, and as to what is promised to be done. Yet how remarkable the apathy! If the bankers of England had held a conference at Bristol, or the stock-brokers, or the insurance companies, or the politicians, what attention they would have secured; how would the London papers have teemed with the sayings and doings of the men who held the great meetings of bankers or other craft! As it was, some three hundred men, all scholars, met to discuss questions relating to the very existency on which all crafts depend: met to carry on debates, upon the result of which the practical meeting of death in endless disguises may largely turn: and not one metropolitan paper of an extra-professional kind, except our own, cares to give those proceedings so much as a column of notice."

Surely all this is very deplorable. And is there no remedy for it? Are we ever to occupy an ignored social position? And why do we hold such a position? Is the fault our own? or are we to look outside the profession for a remedy to the evil? On this score, referring to the above extract from the *Social Science Review*, we cannot forbear noticing the truly unprofessional spirit exercised by the *Lancet* on the occasion of our Bristol meeting. The *Lancet* considered that the proceedings of that meeting were utterly unworthy of notice in its pages! A journal, which every week devotes columns to matters of extra-professional interest, has no space for recording even a summary of the doings of the annual meeting of this Association, notwithstanding the notorious fact that matters of the highest importance both to the scientific and social position of our profession were there brought forward! Last year the *Lancet* attempted to smother our Association by its attentions; its whole weekly number, or something like it, having been devoted to the recording of our annual proceedings. Having failed in that notable attempt, it now tries it on in the other line. It calculates to send the Association into oblivion by coldness and neglect. How does that journal square the proceeding with all its fine verbal indignation of last year, of its being the true recorder of the earliest information of matters medical?

We now add an extract from the *Daily Telegraph*, which surpasses in ignorance, and, from its language, we may fairly add brutality, anything which has lately appeared in the way of injuring the profession. Speaking of the late conviction of a herbalist for manslaughter, the journal says:

"It is customary in these horrible cases, especially with the medical press, to make an onset upon the body of 'herbalists', and point the moral so as to pierce them

wholesale. We do not choose to do this. The study of the efforts of vegetable medicaments is as lawful as any other, when it is honestly and cautiously pursued; nor can few or many letters of the alphabet after a man's name make all the difference between a quack and a man of science. There is this to be said, too, for an honest herbalist, that he plies his trade under instant penalties for failure, while the graduates of medicine can kill, and do kill, with an almost legal impunity. The public chooses at its own risk between the accredited and the unaccredited doctor; and we must sadly confess that we have not so much faith in the kind of science available to a poor man's purse, as to lay it down that the people who sell him a harmless purge or a lotion cheap are to be exterminated."

If there be any truth in the saying that people are estimated in no small degree according to the value they put on themselves, we fear that we have much to blame ourselves for in this matter. We fear that we do not ourselves sufficiently exalt ourselves in the eyes of the public; that we suffer "the slings and arrows of outrageous fortune" in much too mild a fashion. Surely there must be something wrong in the body at large, when we find the leading public press rarely ever referring to us, except when it can abuse or Molièrise us. See how we now stand, for example, with the army authorities! See the contumely with which our army and navy medical brethren are treated! Happily, one proper and the best remedy for that evil is being applied, by the absence of applicants for the vacancies. We believe that it is an accepted fact, that the head of the Horse Guards has a profound contempt for our profession, and loses no opportunity of expressing it. And where is the head of the Army Medical Department, who shows us the finger of professional authority exerted on behalf of his profession? We have no hesitation in saying that, in our opinion, the head of that department ought to have remonstrated or even resigned office before he sanctioned the late order for "branding", whereby it is made compulsory on the army surgeon to supply the instruments for branding, and to superintend the branding; and that the branding shall be done by a hospital sergeant. What is all this, but converting the true office of the doctor, his ministry of mercy, into the business of the common hangman? What respect can the public at large have for us, when they see us degraded to the performance of such duties as these? And what, again, is the use to the profession of an Army Medical Director, if he allow such things to pass into practice without remonstrance?

Again, it is all very well for men in high office to say that our profession needs none of the adventitious circumstances of rank to maintain its influence; but the statement, so often repeated, is patent nonsense. Why should the surgeon in the army be the only man in the army to whom the artificial accidents of rank are of no importance? The colonel and every subordinate rank and file must stick to the smallest minutiæ of his rights and of his rank, to sustain his due influence and position; but the doctor needs none of these things! The statement made the other day by Colonel Wilbraham, at the opening of the Netley School session, is one from which we totally dissent. It is contrary to fact, contrary to reason, and contrary to experience. He told the medical gentlemen, "that he begged those who were about to enter the army to remember that it was not rank which gave a man status in his regiment, but his own qualities and capabilities." This is, no doubt, a good Horse Guards doctrine, and one which that body would gladly inculcate upon the army medical officer; but it is a manifest and patent fallacy, and a fallacy which, we trust, the Horse Guards are now having effectually pressed home upon them. If the accidents of rank are good for one man, they are equally good for another; if they aid in sustaining the dignity and credit of the colonel, they equally aid in maintaining the dignity of the surgeon. What Colonel Wilbraham ought to have told the young army surgeon is this: "Your rank in the army will demand from you a display of certain qualities and capabilities; and the higher your rank is in the army, the greater will be your opportunity for displaying and practising those good qualities and capabilities. Of course, a man must possess these good qualities to maintain his status; but he must also possess rank in order to practise them most effectually."

In conclusion, we cannot help often asking ourselves this question, and we now repeat it for the consideration of the profession: Do those members of our profession who hold high and official appointments, and who come into contact, and therefore represent the profession with the people in power, always boldly and properly maintain the interests and dignity of our calling? Or, do they not often show themselves wanting in proper moral courage; and so tacitly pass over and accept injuries inflicted on our profession?

We would also recommend to the consideration of those who may perchance benefit by them, the following remarks addressed to the American government, from a late number of the *American Medical Times*. We would ask whether they are or are not in any way now applicable to our Horse Guards:—

"Our own government seems less disposed than any of its contemporaries to listen to the voice of reason and experience. The medical department of its army remains where the present war found it, entirely subordinate to other authorities. Repeatedly during the present war, has it become painfully evident that the Medical Bureau must be more or less completely emancipated from the jurisdiction of state departments before it can fully accomplish its humane mission of health-preserving and life-saving in the army. Higher officers of government, having no just appreciation of the duties of the medical service, have controlled the department so as to destroy the efficiency of branches of its organisation. To complete the work of demoralisation, a person was

placed at the head of the bureau without a solitary qualification to recommend him. These are but examples illustrating the manner in which the central office of the medical department is hampered, and its efforts nullified, by powers which, from necessity, cannot appreciate its requirements.

"If we extend our inquiry to the field, we find the medical department labouring under similar embarrassments. It has neither rank nor power adequate to its importance. It is dependent upon other branches of the service for the means of discharging its duties, and must await their convenience. Its stores cannot be moved, its hospitals cannot be built; in a word, it can do nothing without the aid of the quartermaster. Innumerable are the instances in which the medical service has been completely foiled for want of independent action.

"If the teachings of history and experience are of any value in directing human affairs, it would seem that they ought to lead civilised nations to place the very highest estimate upon the military medical service. It should not only have free play to fulfil its obvious mission of life-saving upon the battle-field, but it should still more importantly be allowed to dictate, or even to command, the conditions on which it discharges its higher obligations of health-preserving, in the camp or in the field. And yet, modern nations, with rare exceptions, present the singular anomaly of consigning the most powerful element of their military organisations to an inferior and subordinate position, where it has neither the right nor the power to exercise fully and freely its humane vocation."

SUPPLY OF ARMY MEDICAL OFFICERS.

It is a well-known fact, that the supply of medical candidates for army honours is far below the demand; and that the recent admissions to army honours are not of that high character which the examiners would like to see intrusted with the care of that valuable article, the soldier's health. We can only say that, despite of the lament of Inspectors-General, and of other expectants of better things to come, we sincerely rejoice at the fact; and for this plain reason, that it is the only way through which the dull official senses can be penetrated. These gentlemen in high places, who think so well of the service, must surely have seen enough of the world to know that no abuse of that service, by the press or by medical teachers, would prevent a rush of applicants, if the service were really what it ought to be. Good openings elsewhere for medical men are not so numerous as all that.

It is quite time that the army authorities should be taught, once for all, to do justice, and to keep their promises, and for this reason, we can only advise the young medical man to avoid the service until he can ensure for himself on entering it that fair and proper treatment, which he does not now meet with. We are sorry to be obliged to add, that from all we can learn from this business, the worst friends which the assistant-surgeon has are those members of his own profession who sit up aloft as authorities, or at least as nominal authorities. It seems to us, that these gentlemen care rather to please the supercilious fancies of the great luminaries in whose warmth they bask, than to deal out justice and protect the status of the profession to which they have the honour to belong.

It is calculated that about a hundred and fifty new assistant-surgeons are required every year to make up for the deaths and retirements of the service; consequently, if candidates refrain from attending to the voice of these charmers until such times as justice has been fairly administered and secured to the army surgeon, we may be very sure that *malgré*, if not *gré*, his Royal Highness will not be long in issuing another royal warrant, or, at all events, in promising faithfully to fulfil the terms of the royal warrant, which has been so shamelessly disregarded. We say shamelessly, because the warrant was promulgated during the Crimean war, when red tape was grievously sick, and medical aid was hard to be had. It surely reflects no great credit on red tape, that it should thus, in resemblance to a well-known disreputable personage, now that it is no longer sick, cease to act becomingly.

Facts like the following speak volumes, and no special pleading of officials can explain away their significance; namely, that the army medical service is not at present a desirable service. At the last army medical examination, forty-five candidates presented themselves to compete for ninety-five vacancies. Of these forty-five, thirty-three alone passed muster. And how? Successful candidates are ranked in three classes, according to merit, as shown by their examination. Well, of these thirty-three successful ones, none were placed in the first class; but we find that the majority of them came into the third class, and only a minority into the second class. As regards nationality, we may add, that of the thirty-three, twenty-six were Irishmen, five Scotchmen, and two Englishmen.

A few more lessons of this kind brought thus forcibly home to the attention of supreme red tapeism, and we may be sure that our profession will conquer for itself its due position in the army medical service.

FOUL AIR AND FEVERS.

At the late meeting of the Social Science Association at Edinburgh, the most important discussion which took place in the Public Health Department was upon the subject of drainage of towns, and the effects of bad sewerage on health. The inevitable conclusion which the general public must have gathered from the discussion was this, that if the drainage and the sewerage of our towns were perfect, fevers would be things unknown. But then followed, unfortunately, instead of preceding the discussion,

Dr. Christison's address. In this address we have, *per contra*, the highest authority telling us that he has never been able to trace fever to bad drainage. Foul air may predispose the body to take fever, but it is not the cause of the fever; *that* must be sought for elsewhere. It is, indeed, much to be regretted, that this view of the case was not more prominently brought under the notice of the men of municipal authority in Edinburgh. The natural results flowing from an exclusively sewerage side of the question would be to lead non-professional persons to neglect those other important causes influencing health which are so remarkably in action in Edinburgh; viz., bad ventilation of and overcrowding of dwellings.

In reference to the subject of the injurious effects of the emanations from drains upon public health, we would venture to make one suggestion, which seems to us to be matter worthy of very serious consideration, respecting the sewerage operations in London. Our sanitary doctors tell us that cesspools are chiefly pernicious in consequence of the decomposition within them of animal and vegetable matters, and the elimination from them of poisonous gases, etc.; and it is mainly on these grounds that the removal of cesspools has been urgently demanded. Now, if this be really the case, we cannot but ask what is to become of the immense amount of poisonous gases, etc., which, as it seems to us, must inevitably be eliminated within our gigantic London sewers. When we reflect upon the enormous amount of sewage matters which has to enter these sewers, the great distances—the many miles—which the matter will in many instances have to travel, and the very slight inclination of some of the gradients of the main sewers, it appears to us evident that a very large proportion of the sewage matter must undergo decomposition within the sewers, just as it underwent decomposition within the cesspools. So that, in fact (if such be really the case), our sewers will become one gigantic sub-London cesspool. As a matter of course, the foul vapours so eliminated must be set free from the sewers; and must, therefore, be set free into the air of the city of London, as the sewers must always be in such a state as to allow men to traverse them without danger. How this difficulty is to be got over we know not. But this we do know: if the products of decomposition of the contents of cesspools be really as dangerous to health as it is usually supposed they are, there is clearly strong *à priori* grounds for fearing lest this new and splendid system of draining London may be productive of or seriously increasing the amount of the very diseases of which it was supposed to be the especial preventive remedy. The point is one which, we venture to think, deserves the serious consideration of sanitary men.

THE WEEK.

It has been decided that the amalgamation between the home and the Indian medical services, which has been so long talked of and so long hoped for, is not to come off; and it is generally understood that for this conclusion the profession is mainly indebted to the Director-General, to whose paternal care the medical men of the army are already under such deep obligations.

We recommend the following extract from the *American Medical Times* to the consideration of the Medical Council:—

"The English Medical Act, which compels every person practising medicine and surgery to be qualified and registered, does not, it seems, prevent quacks from this country obtaining a foothold in the profession. Many of these graduates from chartered medical colleges exhibit their diplomas, are registered, and commence practice. The profession of England should understand that our state legislatures charter colleges of every complexion, and the graduates of these institutions are, therefore, legally qualified. *The title of M.D. in this country has no significance whatever.*" (The italics are ours.)

M. Trousseau has astonished the French medical men by demanding permission to retire from his clinical chair. "This professor, still so fresh in mind and body, so zealous, and devoted to the instruction of students, whose lectures are so largely attended, is, we are told, fatigued, and requires rest. His pupils, however, see things differently. A petition has been got up by them, and already covered with signatures, calling upon the minister not to accept his resignation."

A subscription is in progress in Ireland for presenting Dr. Mackesy with a testimonial, on account of his great and generous labours in behalf of the Poor-law medical officers.

The President of the Academy of Sciences—M. Velpeau—in presenting the *Atlas d'Ophthalmoscopie* of M. Liebrich, remarked: "That without accepting as absolutely proved all that has been said on this subject by MM. Graefe, Donders, Cusco, Follin, and others, I do not hesitate in declaring that they have deserved well of science, and that ophthalmoscopy promises to do for the eye what the stethoscope has done for the chest."

From the report of M. Rouse, it appears that the water of the Dead Sea contains 206 *grammes* of saline matter in a *litre*. A cubic *mètre* of the water contains more than three *kilogrammes* of bromide of potassium. Here, then, we have a grand source for the supply of a new remedy, if importers of the water can only be found. We say new; but we are told by Pliny that the rich ones of ancient Rome had

water brought from the Lake Asphattites for the use of their baths.

The number of charitable establishments in the Department of the Seine in 1863 is 144, of which 17 are supported by the state, 29 administered by the Direction of Public Assistance, and 98 supported by private charity. The establishments supported by the state are the following: Les Quinze-Vingts; Charenton, Jeunes-Aveugles, and Sourds-Muets; the asylums of Vincennes and Vésinet; the orphan asylum of La Société du Prince-Impérial; La Maison Eugène; Napoléon; La Caisse des Offrandes Nationales; Des Invalides; Val-de-Grâce; Gros-Caillon; Saint-Martin; and Vincennes.

Dr. Vigouroux states that every well-marked act, either of inspiration or of expiration, is accompanied with a dilatation of the pupil. He explains the fact, by supposing that whenever a centrifugal nerve-current passes into the spinal marrow as high as the two first dorsal pair of nerves, a part of the current is directed on to the pupillary filaments, which arise from these nerve-trunks, and so cause contractions of the radiated fibres of the iris.

M. Hoefer has endeavoured to upset one of the so-called proofs of the very ancient existence of man; viz., the lake-habitations in Switzerland. These lake-constructions, he says, are the work of beavers. "1. Beavers once abounded in the Helvetian lakes. 2. These constructions are identical with those of beavers. 3. They are very near the borders of the lakes. 4. No human bones are found amongst them; but bones of the beaver are there found. The presence of stone or iron weapons merely shows that men in those days hunted the beavers."

A Lyons quack, having demanded 800 *francs* for curing a lady of a pretended mortal disease, when remonstrated with for his charge, indignantly replied, "Madam, to obtain my specific, are you aware that I had to distil amber?" The reproach was, of course, unanswerable.

The *Gazetta Medica Italiana*, in reply to reports that the minister La Farina was destroyed by repeated venesections, declares that not one single venesection was practised on him.

M. Pereire, the Israelite millionaire, is, *L'Union Médicale* says, the descendant of a Portuguese physician remarkable for his titles and his discoveries: "Jacob Rodrigues Pereire, pensioner and interpreter of the King, member of the Royal Society of London, and one of the leading minds of the eighteenth century, and who was the founder of the Deaf and Dumb Institution in France."

M. Guipon, in a memoir, tells the Academy of Sciences of the effects of consanguinity, syphilis, and alcoholism, as observed in the same family. The conclusions arrived at by him are:—That consanguinity exercises a depressing influence on the vital force, and particularly on the power of reproduction; and that it injuriously affects the hearing, the speech, and the sight; that, combined with syphilis or alcoholism, it may produce paralysis, etc.; that the intelligence may be also affected; that one function only seems to be increased, and that is the genital—the one whose final object, procreation, is most compromised.

M. Blache, we read, presented a memoir on diseases of the eye to the Academy of Medicine in the name of Prince Zaachen, Polish doctor of medicine.

The Academical Senate of Pesth has refused to confirm the appointment of Dr. Hasenfeld as Instructor in Balneology, on account of his being a Jew. "It will be a sad business for Hungary," writes the *Wien. Med. Woch.*, "if such principles as these are accepted, which have been long rejected by all civilised nations."

French publishers are about to reproduce the two grand and famous dictionaries of medicine—one known under the name of *Dictionnaire en* 15 *Volumes*, and the other as the *Dictionnaire en* 30 *Volumes;* the first comes out under the superintendence of Dr. Jaccond, and the last under that of Drs. Raige-Delorme and Dechambre.

Association Intelligence.

SHROPSHIRE SCIENTIFIC BRANCH.

The next meeting will be held at the George Hotel, Shrewsbury, on Tuesday, October 27, at 2.30 P.M. Dinner will be ordered at 5 P.M.

SAMUEL WOOD, *Hon. Secretary.*

Shrewsbury, October 14, 1863.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Town Hall, at Maidstone, on Friday, October 30th, at 2 P.M.

Dinner will be provided at the Mitre Inn at 5 o'clock. Tickets, 5*s.*, exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, October 13th, 1863.

MIDLAND BRANCH: QUARTERLY MEETING.

The quarterly meeting of this Branch was held in the Board-room, Infirmary, Derby, on Oct. 15; Dr. GOODE, President, in the chair.

After some desultory remarks from different members, Dr. Goode read a very interesting paper on a Case of Abscess of Small Intestine opening into the Bladder.

After some discussion on this paper, it was proposed, and carried unanimously, that the spring meeting of this Branch should be held in the northern division of the county, to afford country members a better opportunity of attending.

Mr. Dolman then showed to the members a little boy, aged 2½ years, who was the subject of an immense Spina Bifida.

After transacting the usual routine business, the meeting broke up.

Reports of Societies.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

Meeting at Edinburgh, October 1863.

DEPARTMENT OF PUBLIC HEALTH.

R. Christison, M.D., F.R.S.E., President, in the Chair.

How People may Live and not Die in India. By Miss Florence Nightingale. The paper was read by Dr. Scoresby-Jackson. The writer commenced by stating that her paper dealt with one of the most important social questions of the day, viz., how the British race was to hold possession of India, and to bestow upon its vast population the benefit of her own civilisation. The Royal commission on the sanitary state of the army in India had shown that unless the health of the British army in India could be improved, and the enormous death-rate reduced, this country would never be able to hold India with a British army. The average death-rate of the troops serving in India was no less than 69 per 1000 *per annum*. That death-rate, moreover, did not include those who were invalided, and who died on the voyage to England, or soon after their return; but taking it simply as it was, and assuming the strength of the British army at 73,000, it proved that such an army would lose on an average of years an entire brigade of 5037 men *per annum*; sometimes it would be half that number, but in other years it would lose two such brigades. It was said that the death-rates of the war year being the highest (not from wounds), peace, and not sanitary measures, was the remedy. As well might it be said that because the British army had nearly perished before Sebastopol not from wounds, but from want of every supply of civilised life, peace, and not the supply of the wants of civilised life, was the remedy. The Royal commission had shewn that, if the death-rate were reduced to even 20 per 1000 *per annum* (double that of home stations since these stations had improved) to India would be saved a tax equal to £1000 sterling. Referring next to the question how this great death-rate in India had arisen, Miss Nightingale was afraid the reply must be that British civilisation was insular and local, and that it took small account of how the world goes on out of its small island. The ordinary system of dieting British soldiers in India was more adapted to a cold climate than that of out-of-door farm servants doing work in England. More than this, the occasional dram at home was commuted by regulation in India into a permission to drink two drams—*i.e*, six ounces of rum spirit every day. And, at the same time, the men had little or nothing to do. The craving for spirit induced by this regulation-habit of tippling led to increase of drunkenness; so that, with over-eating, over-drinking, total idleness, and vice springing directly from these, the British soldier in India had small chance indeed of coping with the climate—so-called. The regulation allowance of raw spirits which a man might obtain at the canteen was no less than eighteen gallons and a half *per annum*, which was, Miss Nightingale believed, three times the amount per individual which had raised Scotland, in the estimation of economists, to the rank of being the most spirit-consuming nation in Europe. Of late years malt liquor had been partly substituted for spirits. So much for intemperance; but not to this and its kindred vice alone, or to this mainly, was to be laid the soldier's mortality in India, as had been falsely supposed. The diseases from which the soldier mainly suffered there were miasmatic. They were foul-air diseases and foul-water diseases—fevers, dysenteries, and so on. Intemperance might cause liver disease, and put the man into a state of health which prevented him from resisting miasmatic causes. There was no drainage either in town or country. There was not a single station drained. If such a state of things existed at home we should know that we have fevers, cholera, and epidemics to expect. As regarded water, there was certainly not a single barrack in India which was supplied, in one sense of the term, at all. There were neither water-pipes nor drain-pipes. Water was to be had either from tanks into which all the filth of the neighbouring surface was washed by the rains, or from shallow wells dug in unwholesome or doubtful soil. So simple a piece of mechanism as a pump was unknown. Water was drawn in skins, carried in skins on the backs of men or bullocks, and poured into a sort of vessel in the barracks for use. The quantity of water was utterly insufficient for health; and as to the quality, the less said about that the better. The construction of barracks where men had to pass their whole period of service was another illustration of how completely home civilisation was reversed in India. As soon as the soldier came to India he was put into a room with 100, or 300, and in one case, with as many as 600 men. To take another illustration. Our home British population was about the most active in the world. But as soon as the same men went to India they were shut up all day in their hot close barrack-rooms, where they also ate and slept. They were not allowed to take exercise; all their meals were eaten in the hottest part of the day, and served to them by native servants; and they lay in their beds idle, and partly sleeping, till sunset. "Unfreshing day sleep" was, indeed, alleged as one of the causes for the soldier's ill-health. The Indian social state of the British soldier was not only the reverse of the social state of the soldier at home, and of the class from which he was taken, but there was a great exaggeration in the wrong direction, and people were surprised that British sodiers died in India—and they laid the whole blame on the climate. Miss Nightingale proceeded to refer to the results of the inquiry of the Royal commission as showing that there was not a shadow of proof that India was created to be the grave of the British race. The evidence, on the contrary, showed that all the climate required was that men should adapt their social habits and customs to it. The recommendations made by the Royal commission for improving the health of the British army in India amounted to this: You have in India such a climate; if you wish to keep your health in it be moderate in eating and drinking, eat very little animal food; let your diet be chiefly farinaceous and vegetable. Use beer or light wine, but sparingly; drink coffee or tea; clothe yourself lightly to suit the climate, wearing thin flannel always next the skin; take plenty of exercise, and use prudence and common sense as to the times of it. So far for personal habits. What follows pertained to government: Be particularly careful to have a plentiful supply of pure water laid on for every purpose; drain all dwellings; have no cess-pits; attend rigidly to cleansing, not only surface-cleansing; never crowd large numbers into the same room; build separate barrack-rooms instead of large barracks; place these so that the air plays freely round them; raise them above the ground, with a current of air beneath; never build in a wet hollow, nor on a sludgy river bank, which would be avoided even at home. But if we would make India about as healthy as England, only somewhat hotter, let us have improved agriculture and agricultural drainage. If all these improvements were carried out, the normal death-rate of the British soldier would be not 60 per 1000, but 10 per 1000, say the commissioners. Miss Nightingale then referred to the cause of the prevalence of epidemic diseases among the natives of India. The worst condition of the most neglected district at home, multiplied many times over, was, to say the least of it, the normal condition of

every city and town in India. Not one city or town was drained. Domestic filth round people's houses beggared description. Water-supply was from wells or tanks in ground saturated with filth. Domestic conveniences were wanting. The air in and for some distance around native towns was as foul as sewer air, there being no sanitary administration and no sanitary police. There was not a town which did not want water-supply, draining, paving, cleansing, healthy plans for arranging and constructing buildings, together with agricultural drainage and improved cultivation all round. These things the people could not do for themselves. But the Indian government could do them. Three health departments (one for each of the presidencies) had been recommended by the Royal commission, together with a home commission to help those departments in bringing the appliances of home civilisation in India. The work was urgent. Every day it was left undone added its quota of inefficiency to the British army, and its thousands of deaths to the native population. Danger was common to European and to native. Many of the best men this country ever had had fallen victims to the same causes of disease which have decimated the population of Hindostan. The real, the main point—the great discovery of the Royal commission was this: Look to the state of your stations first, then look to the hills for help. The stations and cities were in a condition which, in the finest temperate climate in Europe would be—have been—the cause of half the population being swept off by disease. And, on the other hand, no climate in the world—certainly not that of India—could kill us if we did not kill ourselves by our neglect. The question was no less a one than this: How to create a Public Health Department for India—how to bring a higher civilisation into India? What a work, what a noble task for an Indian government. No "inglorious period of our dominion" that, but a most glorious one!

Mr. Rawlison thought that if similar measures were adopted in India to those which had been adopted elsewhere with regard to the army, there was no doubt that they might expect the results predicted by Miss Nightingale. They remembered the fearful mortality which occurred in the army which left our shores for the Crimea—a mortality which had no parallel in our history, which even exceeded that of the Walcheren expedition. That mortality was attributed to the climate and certain other things, to the want of roads, to excessive trench duty, to great exposure to the weather, etc., nevertheless, by the exertions made in the camp the mortality in the Crimean army during the last eighteen months of the campaign was reduced to a less rate than that army had ever enjoyed in its barracks at home.

Dr. Stevenson Macadam alluded to the great evil of the large dose of food referred to by Miss Nightingale. It was a larger ration than that given to soldiers in this country, although in India, as in all hot climates, you actually required, for the proper sustenance of the body, less food than you would do in this country, or in any temperate or cold region. Food was like fuel, and was consumed to keep up the animal heat. In winter more food was required than in summer, and in the same way less food was needed in a hot climate than in a cold one.

The Rev. Mr. Miller, chaplain of Edinburgh Castle, expressed his opinion that soldiers were not in any way worse than civilians occupying the same position in society, and that the high rate of mortality arose from variations in climate, exposure to night-work, and similar circumstances. The soldiers themselves possessed feelings as fine as those existing amongst their equals in any other professsion.

Admiral Saumarez related his experience in the West Indies as commander of a vessel on an unhealthy station, and expressed his firm conviction that religion and total abstinence had a beneficial influence upon men both in the army and navy. He also entertained the same opinion with respect to marriage, though he could not but regret the great temptations to which the wives of soldiers and sailors were exposed during the absence of their husbands on service abroad. He had often thought it would be well if villages could be founded solely for tho occupancy of these women, where they would be under the care of the clergyman and doctor, and free from the temptations of seaports and garrison towns.

Correspondence.

IRIDECTOMY.

Letter from James Syme, Esq.

Sir,—As you ask my opinion of iridectomy, I have no hesitation in saying, that it has always seemed to me an entire delusion accepted for the cure of blindness, on the same principle which leads drowning men to catch at straws. Glaucoma has been regarded as so hopeless a disease, that it was peculiarly well suited for the proposal of an operation which promised merely to afford some chance of relief. Such being its modest profession, the destructive inflammation, lenticular opacity, and collapse of the eyeball, which too frequently result from opening the cornea and cutting out a portion of the iris, were not held to counterbalance the benefit claimed by patients so fortunate as to escape these dangers. But this alleged benefit, from what has come under my observation, does not appear to be at all different from that which every one labouring under incurable deafness may believe for a time he has received from the use of remedial means, whatever they may have been. The truth is, that any man who has paid money, and suffered pain, does not like to confess that his object in doing so has not been accomplished; while his attention and imagination being at the same time excited, he is apt to regard the feeblest glimmer of light, or the faintest perception of sound, as a symptom of improvement. Iridectomy will, therefore, I trust, soon disappear, not only from surgical practice, but from surgical language.

I am, etc., James Syme.

2, Rutland Street, Edinburgh, Oct. 17, 1863.

Letter from John C. Wordsworth, Esq.

Sir,—May I ask the favour of your inserting a few remarks on the letters of your anonymous correspondent and of Mr. Hunt, that appeared in the Journal of the 17th instant?

Allow me to premise, that in writing my letter of Oct. 10th, I desired simply to record my own conviction that iridectomy was not falling into disuse in England as a remedy for glaucoma; but was more practised daily, and applied to the relief of conditions for which it was not till recently employed.

I did not aim at establishing the principle of the operation for the relief of glaucoma; nor was I ambitious of adding anything to the excellent observations of Von Graefe on the applicability of the operation; but rather desired to express my own opinion of its value as a remedy.

Can it be, then, that your anonymous correspondent has yet to learn where it is indicated? Does he, as "An Eye Surgeon", ask "the principle on which iridectomy is undertaken"? This is, indeed, a novelty.

I will not trespass on your space by answering these inquiries; but will only state that both have been answered long before iridectomy was introduced into England as a remedy for glaucoma. But if he has still to ascertain these *principia* of iridectomy, when may we hope for his mature observations on its value?

Again, we are informed by him, that "iridectomy means cutting off a piece of the iris, just as the operation is done for the making of an artificial pupil." And Mr. Hunt writes that "iridectomy is nothing more than the old operation for artificial pupil by removal of a portion of the iris." I must, with all deference to my known and unknown critics, deny their assertion; and insist that iridectomy so performed would not be the remedy introduced and practised by Graefe for glaucoma. He, and many others, have long known that the operation so practised does not suffice for the cure of glaucoma; the conditions would not be thereby fulfilled.

Was I, then, inapposite in stating that it was likely that iridectomy would be discredited by those who do not attempt to perform it properly? What would have become of the operation of ligaturing the artery for the cure of aneurism, had the principles been so neglected?

No greater service could be done to ophthalmic surgery than your correspondent might confer, by publicly recording the cases of improvement or recovery from glaucoma to which he refers. Allow me, then, to solicit this benefit to science from him. Placed in juxtaposition with iridectomy, can anything more satisfactory be desired than a fair statement of the history of these cases? For my part, I will undertake to sustain the comparison by cases treated by iridectomy. I am, etc.,

J. C. WORDSWORTH,

Surgeon to the Royal London Ophthalmic Hospital.

50, Queen Anne Street, Oct. 19, 1863.

PERSECUTION OF MEDICAL MEN.

SIR,—The London practitioner is at present free from one of the grievances to which his professional brother in the smaller parliamentary boroughs is liable. I allude to the risk of eviction from his house, and occasionally to the loss of practice, in case he has exercised his privilege of voting according to the dictates of his conscience, when his opinions do not coincide in all respects with those of his landlord. Mr. J. P. Wilding, M.R.C.S. and L.A.C., of Montgomery, has recently been made an example of, by receiving notice to quit the land he holds under Earl Powis (Clive).

These instances are not uncommon. A few years ago, a leading practitioner in one of the neighbouring towns, in Shropshire, underwent the same course of treatment, or rather, I should say, his poor beast of burden did; for the agent, not having it in his power to evict the medical man from his home, was obliged to content himself by taking away the pasture field from the doctor's horse. This mark of displeasure on the part of the territorial magnate was sufficient to induce others to follow their leader, by abstaining from employing him, and gradually led to the ruin of his practice. Such examples may be considered by some as wholesome warnings for medical men not to interfere in affairs of state; by others, as an intimidation against the exercise of an undoubted right. Be this as it may, it is desirable it should be generally known. I am, etc.,

SALOPIA.

October 12, 1863.

The following extract from the *Shrewsbury Chronicle* indicates the nature of the injury inflicted on Mr. Wilding this land of liberty of conscience:—

"*An Argument in Favour of the Ballot.* Those of our readers who have been in the habit of speaking of Lord Powis as being too honourable and too high-minded, etc., to descend to anything mean and petty, will be grieved to learn that Mr. Thomas Newill, the agent to the Earl of Powis, has given notice to quit their premises to all those who voted for the liberal candidate at the last election. Is this done with the knowledge and sanction of the Earl of Powis?"

A LIBEL ON THE MEDICAL STUDENT.

SIR,—You have at all times shown us that you are ready to uphold the honour and dignity of our profession. Have the goodness to peruse the book which I send to you by the same post which will carry this letter. I never read anything more calculated to give the public a wrong and humiliating idea of the medical student of the present day. There are some of the most barefaced lies and shameful libels in it that I have ever set eyes on. I have scored, in red pencil, the parts which I consider to be untrue and libellous; and I do not hesitate to say that, during the three years of my pupilage at King's College, I never saw or heard of such ungentlemanly, nay brutal conduct, as the author describes. Perhaps in the last century he might have met with one or two examples bearing some slight resemblance to the distorted image of the degraded beast which he portrays; but I will never believe that such things can exist in the present day, when the whole education and natural refinement of the candidates for Æsculapian honours tend to make them *gentlemen* in every sense of the word. We often hear of prosecutions for libel, whether on paper or by word of mouth: cannot the production of such a scandalous one as this be stopped in some way? I am, etc., M. M. H.

[The remarks of the writer are not at all too strong for the book on the medical student referred to, and we can well imagine his indignation on first reading it. The picture, however, of the student in the book is so grossly drawn as to destroy all its bad effect. The only regretable part of the thing is, that it should bear as its author the title of a man who was himself once a member of the profession. EDITOR.]

THE SPECULUM AND ITS USES (?)

SIR,—Can you, or any of our London brethren, inform me if it is usual, when examining the os uteri with a speculum, to request a female relative of the patient to examine also, and to explain to her what is to be seen?

The facts of the case are briefly these. I attend a lady, unmarried and about thirty years old, for nine or ten weeks, without discovering any special symptoms of uterine disease in the case, beyond the fact that she is subject to hysteria, and is of a sensitive nervous temperament. As soon as my patient is strong enough, I send her to the seaside, in charge of an unmarried sister of about the same age; and for two or three weeks the change seems to have been of service. Afterwards, further treatment being needed, a physician is called in, who appears to be in great repute, especially in uterine diseases; and he is convinced, on first seeing the patient, that hers is a case of uterine disease, and tells her he cannot undertake her treatment unless he is allowed to make the necessary examination. This is agreed to; and, on the speculum being used, the patient is told she has serious ulceration of the womb, which has been going on some time, and would in a few months have produced mortification, if not attended to; and the sister, who is present, is requested to see for herself, in order to confirm the opinion thus given, which she does, and, of course, writes home a detailed report of the result, though she does not appear to have seen more than a bright scarlet patch, of the size of a sixpence or shilling. Since then, the speculum has been used every other day for applying caustics, etc.; but I do not know whether the sister has again joined in the examination.

I do not wish to enter further into the case now, but merely repeat the question with which I began my letter: Is this ever done by the leading practitioners in town? or is it confined to the provinces? I hope it may be true of neither. To my mind it is simply disgusting.

I inclose my card, and am, etc.,

A GENERAL PRACTITIONER AND LICENT. MID. R.C.S.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Monday, October 19th, 1863,

Smith, Edward, M.D.Lond., 16, Queen Anne Street,

was duly admitted a Fellow of the College.

At the same meeting, the following gentlemen, previously extra-Licentiates, were admitted members:—

Hamilton, Mark, 7, Arundel Street
Jones, John, Springfield, Upper Clapton

At this meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Colbeck, Thomas William, Romsey, Hants
Emanuel, Leonard, M.D.St. Andrews, 6, Stanley Gardens, Notting Hill
Harris, George Smith Delavil, Haxey, Bawtry
Hindle, Frederick Thomas, Askerne, near Doncaster
Jones, Hermann Johnston, M.D.Heidelberg, Springfield, Upper Clapton
Keene, Frederick Joseph, Holbrook, Ipswich
Macgowan, Alexander Thorburn, New Brompton, Kent
Moore, Harry Gage, Lymington, Hants
Smith, Richard Wagstaff, Handsworth, Birmingham

The following gentlemen were reported to have passed the first part of the Professional Examination for the Licence of the College:—

Barraclough, Robert W. S., Guy's Hospital
Freeman, Henry W., Middlesex Hospital
Hilliard, Henry C., Guy's Hospital
Hiron, William Nathaniel, Sydenham College, Birmingham
Perks, Charles, Queen's College, Birmingham
Wilmot, Alfred Edward, Guy's Hospital

At a former meeting of the College, held on the 30th ultimo,

Stovell, Matthew, M.D.Aberdeen, Bombay Army

was admitted a Fellow of the College.

ROYAL COLLEGE OF SURGEONS. The following members of the College, having been *elected* Fellows at previous meetings of the Council, were admitted as such on October 15th.

Dunsterville, George E., Cape of Good Hope; diploma of membership dated August 13, 1841
Humphreys, Thomas B., Trinity Sq., Tower Hill; Oct. 16, 1840
Taylor, George, Derby; May 6, 1842

At the same meeting of the Council—

Martin, Arthur, of Liverpool, a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, his diploma bearing date May 8th, 1860, was admitted an *ad eundem* member of the College.

UNIVERSITY OF CAMBRIDGE. At a Congregation holden on October 15th, the undermentioned degrees were conferred:—

Doctor in Medicine.

Robinson, Charles Alexander Lockhart, Caius College

Bachelors of Medicine.

Burnaby, Thomas Frederick, Trinity Hall
Close, Henry Gaskell, Emmanuel College
King, Joshua, Trinity Hall
Langton, Thomas Augustus, Caius College
Oliver, George William, Christ's College
Phillips, Richard Augustus Long, Christ's College
Smith, William, Emmanuel College

APOTHECARIES' HALL. On October 15th, the following Licentiates were admitted:—

Costine, David Dunlop, Liverpool
Dunlop, Robert, Drumhead, Dumbartonshire
Jenkins, John Edwin, Stow-on-the-Wold
Kemphorne, Henry Law, Wedmore, Somersetshire
Wintle, Richard Prior, Earl's Court Terrace, Kensington

At the same Court, the following passed the first examination:—

Barraclough, Robert Wooding Sutton, Guy's Hospital
Thomas, Robert Wrentmore, St. George's Hospital

APPOINTMENTS.

ANDERSON, Mark F., L.R.C.P Ed., elected Honorary Medical Officer to the Coventry and Warwickshire Hospital.
EARLE, James L., M.D., appointed Surgeon-Accoucheur to the Queen's Hospital, Birmingham.
FAGGE, Charles H., M.D., appointed Physician to the Royal Infirmary for Diseases of Women and Children.
FERGUSSON, William, Esq., F.R.S., elected Professor of Anatomy and Surgery in the Royal College of Surgeons of England.
*GOODWIN, John W., M.D., appointed an Examiner of the Candidates for Medical Degrees in the University of Cambridge, for the ensuing year.
HARLEY, John, M.D., appointed Assistant-Physician to King's College Hospital.
PEACOCK, Albert L., Esq., appointed Resident Medical Officer to the St. Marylebone General Dispensary.
TAYLOR, James, Esq., appointed Surgeon to the Ballieborough and Grousehall Constabulary, co. Cavan.
THOMPSON, Thomas, Esq., appointed House-Surgeon to the Queen's Hospital, Birmingham.
WINTERBOTHAM, Washington L., M.B., appointed Surgeon to the Bridgewater Infirmary.

POOR-LAW MEDICAL SERVICE.

BECK, James T., Esq., to the Union House and District No 6 of the Chesterton Union, Cambridgeshire.
CLEGG, William J., M.D.Univ. Edin., to the Brandwood District of the Rochdale Union.
DOWNING, Samuel D., L.R.C.P.Lond., to the New Workhouse, Birkenhead.
HOPKINS, George H., Esq., to the Stone District and the Workhouse of the Stone Union, Staffordshire.
KITE, William J., Esq., to the South-East District of the parish of West Bromwich.
PRITCHETT, Henry, Esq., to the Rastrick District of the Halifax Union.
SIMPSON, John H., Esq., to the District of Marksbury, in the Keynsham Union.
TRIMMER, Henry B., M.D., to the Gamlingay District of the Caxton and Arrington Union, Cambridgeshire.

ARMY.

BARCLAY, Surgeon A., M.D., 43rd Foot, to be Staff-Surgeon, *vice* A. F. Turner.
BREBNER, Staff-Assistant-Surgeon A., M.B., to be Assistant-Surgeon 55th Foot.
DUDLEY, Staff-Assistant-Surgeon W. E., to be Assistant-Surgeon 76th Foot.
REID, Surg. T. B., 92nd Foot, to be Staff-Surg., *vice* A. C. Ross, M.D.
ROSS, Staff-Surgeon A. C., M.D., to be Surgeon 92nd Foot, *vice* T. B. Reid.
TURNER, Staff-Surgeon A. F., to be Surgeon 43rd Foot, *vice* A. Barclay, M.D.

To be Staff-Assistant-Surgeon:—

HAMMOND, G., M.D.

ROYAL NAVY.

DUNCAN, George, M.D., Surgeon (additional), to the *Narcissus*.
MCCLINTON, William F., B.A., M.B., Surgeon (additional), to the *Egmont*.
ROLSTON, Peter W., Esq., Surgeon, to the *Falcon*.
WALSH, John, M.D., Acting Assistant-Surgeon (additional), to the *Sutlej*.
WAUGH, James, Esq., Assistant-Surgeon, to the *Falcon*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

ACTON, W., Esq., to be Assistant-Surgeon 1st Staffordshire A.V.

DEATHS.

CASE. On October 15th, at Croydon, Mary Cheshyre, youngest daughter of the late John Case, Esq., Surgeon, of Runcorn.
DIXON. On October 20th, aged 30, Elizabeth, wife of John Dixon, M.D., of Prospect Row, Bermondsey.
MAWSON. On October 19th, aged 81, Mary Ann, widow of the late George Mawson, Esq., Surgeon, of East Ilsley, Berks.
*OLIVE, George, Esq., at Northampton, aged 59, on October 16.
ROGER, Alphonse Réné, M.D., at the Maison Imperiale de Charenton, France, aged 48, on October 10.
SMITH. On October 16th, at Burbage, Wilts, aged 1 year, Charles J. P., son of C. Swaby Smith, Esq.

SIR HENRY HOLLAND, physician to the Queen of England, is on a visit to Washington. (*American Med. Times.*)

NEW WORK BY DR. WYNTER. A new volume has just been published by Dr. Wynter, entitled *Subtle Brains and Lissom Fingers.*

ADDENBROOKE'S HOSPITAL. The governors of Addenbrooke's Hospital, Cambridge, have determined to adopt Mr. D. Wyatt's plan for the new building, modified to suit the wishes of the medical officers.

The New Register. We beg to remind our readers that the General Council has given notice, that the Register for 1864 will contain only those names which appear in the General Register on the 1st of January next.

University of Bonn. A report has reached us from Germany, that Dr. Hofmann has accepted the appointment of Professor of Chemistry at Bonn, where they are about to erect the most splendid laboratory in Europe, at a cost of 150,000 thalers. (*Chemical News.*)

A Coroner for Bridlington. There is a vacancy for the coronership at Bridlington, and a medical man is in the field for the same. Let us sincerely hope that our medical brethren will on this occasion resemble the united bundle of sticks.

Munificent Gift. Mr. Mackenzie, of Fawley Court, has transmitted to the British Orphan Asylum, Slough, £14,000 in redemption of his promise to indemnify them to the extent of what may be termed the "capital" expenditure upon that institution.

The Number of Medical Students now pursuing their studies at our metropolitan schools, is rather under the number registered in October last, and considerably under those registered in 1860, when the number reached 1230.

Ophthalmia in the Dover Union. The ophthalmia which has prevailed amongst the children in the Dover Union for some time past has been checked, the sanitary measures recommended by Mr. John Woolcott, surgeon to the Kent County Ophthalmic Hospital, having been rigorously enforced.

To Physicians and Surgeons. The following advertisement adorns the pages of *The Times* :—"*Medical Editorship.* The proprietors of *Who to Consult*, 7s. 6d., are desirous of securing the services of four gentlemen, viz., two M.D.'s and physicians and two F.R.C.S.'s, to form a council to conduct the new edition of that popular work *Who to Consult.* Apply, by letter only, to Junius, care of Messrs. Aylott and Son, 8, Paternoster-row, London.

Death of a Russian Doctor. Dr. Alexis Georghesky, chief surgeon of his Imperial Russian Majesty's screw steam frigate *Oleg*, 51, now in Plymouth Sound, died on the 14th inst., on board, rather suddenly. He joined at Cronstadt September 15, and has been suffering lately from an affection in the throat. For the last three days Dr. Georghesky received unremitting attention from the surgeon of Her Majesty's screw steam corvette *Pelorus.* Mr. Ludovich Ignatievich, the assistant-surgeon, is now the only medical officer in charge of the crew, 685 men.

Queen's University in Ireland. The annual meeting of the Queen's University for conferring degrees and the distribution of prizes took place on the 13th instant, in Dublin Castle, in presence of the Lord Lieutenant, the Lord Chancellor of Ireland, etc. The Lord Chancellor addressed the assembly on the progress of the Queen's Colleges. He announced a remarkable increase in the numbers of the graduates and students. The numbers for 1862 were 141, the largest heretofore, while the examinations of this academic year have been attended by 177 students. Of these 26 have been found qualified for the degree of Doctor of Medicine, and 42 have passed the first University examination for that degree.

Recruits. The army returns for the year 1861 show that in that year 12,191 recruits were examined, and 4,600 of them were pronounced unfit for service. A much smaller number of men being required, greater strictness in the selection was observed. As in the preceding year, the proportion of rejections was highest among the natives of Scotland and Ireland, and lowest among the Welsh. The highest proportion of rejections was among the manufacturing artisans, and the lowest among the shopmen and clerks. Small or malformed chest gave rise to a much larger number of rejections than any other cause. Upwards of two-fifths of the rejections were for causes indicative of ill-health or feeble constitution, and one-fifth for defects which would have affected the marching power of the men. The returns show, as in the previous year, a considerable excess in the amount of diseases of the eyes and eyelids in Ireland.

Roman Exiles and a New Puff. Dr. Maggiorani has left, too happy in being permitted to do so, *exile* being the condition of his passport. Surgeon Feliciani is in the agonies of the same course, as is also Signor Porretti, who holds in Chemistry the reputation corresponding to that of the other two in physic and surgery. The poor Romans are thus deprived of their best resources in a department not over rich in talent or science. One would think that the government was in league with certain doctors of the right sort, who, having emigrated from Naples, cover the walls of this ancient city with puffs of original or translated works, "sold only at the residence of the authors."

Death of nearly a whole Family from Eating Toadstools. On September 12th, John Deute, a boy of 12, went into the woods near Coniston, to seek nuts. He came upon a large bed of what he supposed to be mushrooms; gathered a quantity, and on reaching home his father selected twenty or thirty to be stewed for supper; Mr. Deute did not fancy the dish, but Mrs. Deute, Amelia, and John partook of them. During the night Mr. Deute became poorly, and on Sunday was worse, and the doctor was called in. Amelia attended church in the morning, and though suffering from uncomfortable sensations, went to the chapel in the evening. Mrs. Deute died on Tuesday, Amelia on Thursday, and John on Friday, and on the following afternoon, at four o'clock, they were laid, side by side, in one grave, in Coniston churchyard.

Royal College of Surgeons. From an examination of the annual list of Fellows, Members, Licentiates in Midwifery, and of persons who have received the certificate of qualification in dental surgery, just published by the Council of the College of Surgeons, it appears that the total number of Fellows amounts to 1296, of which number 286 passed the examinations for the honour. The Members of the College are about 14,000 strong. The Licentiates in Midwifery which last year numbered 840, have only increased their number by an addition of 38; owing, no doubt, to the Diploma of the College of Physicians, which includes this branch of the profession, possessing greater attractions. There are now 192 persons upon whom the Dental Certificate has been conferred.

Donations and Bequests. A lady, unknown, has given £500 to University College Hospital, and the same sum to the Middlesex Hospital. The Samaritan Free Hospital for Women and Children has also received £250 from an anonymous benefactor. Other charitable institutions have been benefited, probably from the same generous hand. The Duke of Marlborough has forwarded 100 Guineas to the Radcliffe Infirmary, at Oxford, being the proceeds of fees from visitors to Blenheim Palace and Gardens. Richard Owen, Esq., of Wakefield Lodge, Northamptonshire, has bequeathed £500 to the London Fever Hospital, and to the Brompton Consumption Hospital, £1000.

University of Cambridge. *Medicine.* The examinations for medical degrees in the ensuing term will commence on Monday, November 23rd, at 9 a.m., in the Arts' Schools. Gentlemen, candidates for the degree of M.B., intending to offer themselves for examination, are required to signify the same to the Regius Professor of Physic on or before November 9th, specifying whether they offer themselves for the first or second examination, and to send at the same time their certificates. A fee of £3:3: is paid to the professor by each student when his name is sent in for the first examination for the M.B.

degree. The classical subjects for the ensuing examination for the M.B. degree are: Hippocrates, the 5th, 6th, 7th, and 8th sections of the *Aphorisms*; Aretæus, *On the Causes and Symptoms of Chronic Diseases*, the 8th to the 14th chapters inclusive of the first book; Celsus, the 3rd and 4th books. Candidates will be required to satisfy the examiners in the portions selected from each of the above authors.

Royal College of Surgeons. From the annual return of the receipts and expenditure of the Royal College of Surgeons in the year from Midsummer-day 1862, to Midsummer-day 1863, and only just published, it appears that the former amounted to £12,410 : 1, against £14,135 : 13 received in the previous year, showing a reduction of £1725 : 12 in the income of the College. The disbursements amounted to £12,418 : 17 : 1 against £14,290 : 7 : 6 of the year 1862, and an excess of expenditure over receipts of £8 : 16 : 1. The chief sources of income arose from the primary and pass examinations for the diploma of member which amounted to £9323 : 5. Rent from chambers adjoining the College (and which appears to have been a very good investment of collegiate funds) produced £678 : 11 : 6. Certificates of qualification in Dental Surgery gave £514 : 10. The Midwifery License amounted to £191 : 2. The Fellowship amounted to £409 : 10. Of the Disbursements the principal amounting to £7585 : 5, appear to be for fees to courts, boards, committees, diploma stamps, list of members, coal, salaries, wages, etc., all lumped under one head. The museum department absorbed £2324 : 18 : 3 for catalogues, specimens, spirit, bottles, salaries, wages, etc. The balance at the Bankers at Midsummer-day last, amounted to £3081 : 1 : 4.

Verdict of Manslaughter against a Herbalist. At Yeovil, last week, an inquest was held on Elizabeth Fox; and after a long inquiry, the jury returned a verdict of "Manslaughter" against a well-known herb doctor, Robert Slade Colmer. The unfortunate girl who was only 20 years of age, had remained at Colmer's house for a week, at the end of which time she had a miscarriage, and died on Sunday morning, October 4th. At the opening of the inquiry on Tuesday, the 6th inst., the wife and daughter were examined, and they stated that deceased had come to the house, complaining that she had something the matter with her liver, that she took no medicine while there, and that she died on the night after the miscarriage. The inquiry was adjourned for a post-mortem examination, which showed that the womb had been ruptured by some violent application, and death must have been almost instantaneous. Colmer, who is a well-known herb doctor, has been living at Yeovil for about twenty years. His son, Dr. Colmer, a licentiate of the Royal College of Physicians at Edinburgh, lives with him, and, although he attended the young woman at her death, he stated at the inquest that he rarely interferes with his father's patients, although he has patients of his own in the town. The prisoner, a man about 50, is said to have known something of "astrology," and was consulted on matters touching the recovery of stolen sheep, pigs, etc., but it is understood that he has refused to have anything to do with such matters for the past twelve months. However, some extraordinary revelations came out at the inquest, which prove that Colmer has not altogether divested himself of a faith in the superstitious. He states that he took the child with the after-birth, etc., and burnt them, in accordance with the idea that such a proceeding would relieve the pains of the young girl. The deceased was a domestic employed at a rectory at Rimpton, Somerset, and her parents live in Dorsetshire. She left the rectory with the avowed intention of going home. The evidence of several surgeons distinctly proved that death was caused either by an improper interference of the hand, or an unskilful use of instruments.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—October 17, 1863.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week..... { Boys..1001 / Girls.. 938 }	1939	1205
Average of corresponding weeks 1853-62	1843	1149

Barometer:
Highest (Sat.) 29.860; lowest (Tu.) 29.198; mean, 29.494.

Thermometer:
Highest in sun—extremes (Fri.) 94.0 degs.; (Th.) 64.0 degs.
In shade—highest (Wed.) 63.7 degs.; lowest (Sat.) 46.9 degs.
Mean—53.8 degrees; difference from mean of 43 yrs.+3.6 degs.
Range—during week, 16.8 degrees; mean daily, 11.9 degrees.

Mean humidity of air (*saturation*=100), 84.

Mean direction of wind, S.E. & S.W.—Rain in inches, 0.29.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

S. P.—The following is the list of names erased from the *Register* by order of the Council:—John Edward Protheroe, entry fraudulently made; Richard Organ, infamous conduct; John Burton, entry fraudulently made; John Broatch, obtaining admission by a false declaration; John Kearney, infamous conduct; Daniel de la Cherois Gourley, convicted of misdemeanour; Hugh Brown, diploma obtained by false statement of age; Daniel Dougal, diploma obtained by false statement of age; David Griffith Jones, convicted of misdemeanour; Evan Thomas, convicted of perjury; Robert Wrixon, convicted of forgery; Samuel La'Mert, for infamous conduct; Robert Jacob Jordan, name removed from the list of members of the Royal College of Surgeons of England.

Physicians' Fees.—Sir: Will you be kind enough to say in your ensuing number of the Journal, what is the customary consultation fee paid to a London physician or surgeon? I have repeatedly accompanied patients to those gentlemen, who have always accepted *one* guinea. Recently, a patient, with *quite an ordinary* case, was charged *two* guineas, to his and my surprise.

I am, etc., A Member of the Association.

[The *actual* fees taken by London physicians and surgeons are things (as Lord Dundreary would say) which no man can explain. We believe that they come under a very extended scale, varying from five shillings up to two guineas a visit. The *recognised* fee for a visit of a patient at a physician or a surgeon's house is one guinea; and two guineas for a consultation. The ordinary fee for a visit at the patient's house is the same; but there have been physicians who have refused to visit patients at their own houses for less than two guineas. And, of course, all physicians make an extra charge beyond a certain radius from their own house.]

COMMUNICATIONS have been received from:—Dr. Frederick J. Brown; Dr. Christison; The Honorary Secretaries of the Harveian Society; Mr. J. C. Wordsworth; Mr. Henry Lee; Dr. W. O. Sankey; Mr. Erasmus Wilson; A Yorkshire Member; Jew; Mr. Dolman; L.S.A., etc.; Mr. C. Cardwell; Mr. J. Pennefather; Mr. M. B. Hill; Mr. Stone; Mr. William Copney; and A Staff-Surgeon.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture I.

ON CURVATURES OF THE SPINE.

Curvatures of the spine are anterior (*lordosis*), posterior (*cyphosis*), and lateral (*scoliosis*).

These terms, lordosis, cyphosis, and scoliosis, have been applied to curvatures of the spine ever since the time of Hippocrates. They were not used then, however, exactly in the same sense as they are now understood; for the term scoliosis, which now signifies lateral curvature of the spine, was then frequently applied indiscriminately to every form of spinal distortion. Before we proceed to consider these pathological conditions, however, it may be advantageous to glance at the normal—physiological—curves of the spinal column, as they occur in the *fœtus in utero*, after birth, and in the adult; and to consider very briefly their formation and their purposes.

Normal or Physiological Antero-posterior Spinal Curves.

The spine in the fœtus is bent forwards, being moulded in its curve by the walls of the uterus; the head is bent upon the breast and the thighs upon the abdomen.

In the infant, the spine remains almost straight when in the horizontal position; the sacrum is then but little curved, and the obliquity of the pelvis is greater than in the adult.

The normal—antero-posterior—curves are developed slowly, and depend in great measure on muscular action, and on the erect position which man is destined to assume. At birth they do not exist. And in the young child, they are not constant, but disappear in the horizontal position. Gradually, however, they become more or less permanent; and before growth is complete, the spine has lost much of its flexibility, and has gained, as a constant condition, lumbar, dorsal, and cervical curves.

On examining carefully the spinal column in the erect position, it will be seen that the base of the sacrum is so placed that it is immediately above a straight line which may be supposed to pass through

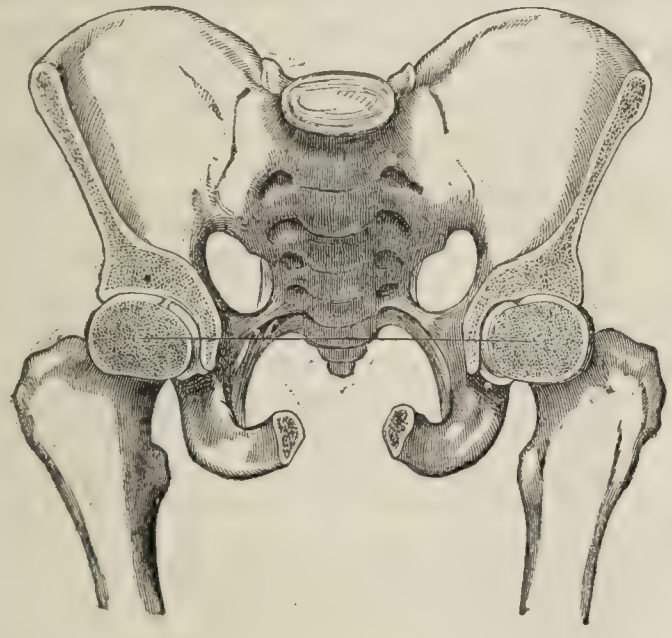


Fig. 1.

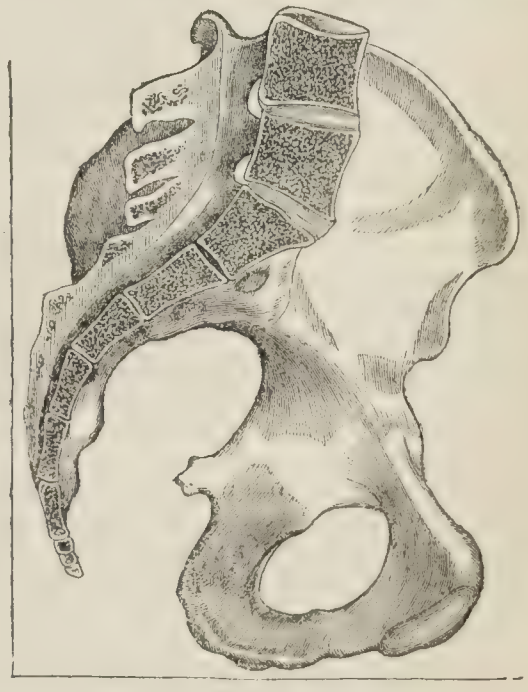


Fig. 2.

the heads of the thigh-bones, and which has been called the interfemoral line. (See Fig. 1.) This fact was demonstrated by MM. Weber. Nægele also proved the position of the pelvis. Before he demonstrated the fact, it was believed that the pelvis was more horizontal than is absolutely the case. The pelvis is so oblique that the anterior wall (pubes) presents upwards and backwards, and the posterior wall (sacrum and coccyx) downwards and forwards, as is shown in Fig. 2. Such, then, being the positions of the pelvis and of the sacro-lumbar articulation, how is equilibrium maintained?

Equilibrium is the result of certain forces acting in front of, and behind, the spinal column; namely, the action of the flexors and extensors of the trunk, neck, and head, and the resistance of the ligaments that hold together the several vertebræ which form the spinal column. In the erect posture, these structures combine to poise the head and the ver-

tebral column in the vertical line on the heads of the thigh-bones. (See Fig. 3.)

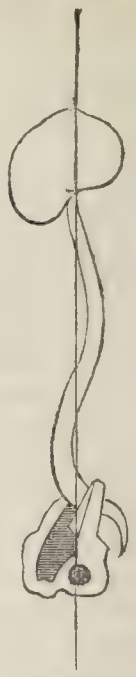


Fig. 3.

In considering this question, the weight of the viscera should not be forgotten. In this sketch, however, the chief points only will be considered.

The position of the sacro-vertebral articulation being, then, such as has been described, it becomes necessary for the maintenance of equilibrium, and that the head may be poised (its centre of gravity corresponding with a vertical line which coincides with the axis of the trunk, and which shall fall on the interfemoral line), *first, that the lumbar vertebræ shall be curved backwards.* This lumbar curve is the result of muscular action in the endeavour to maintain the erect position. It is the reverse of the sacral curve; and it springs from the sacro-lumbar articulation upwards and backwards, the sacral curve commencing at the same articulation, and presenting downwards and forwards. But the lumbar curve having been formed, it is essential that a second curve—the dorsal—shall restore the direction of the spine towards the perpendicular line; and, for the same reason, the cervical curve is formed in the same direction as the lumbar curve. These several portions of the spine differ somewhat in flexibility, the lumbar and dorsal portions possessing this quality very nearly in equal degrees; but in the cervical region the flexibility is three times that of either of the former. A structure is thus composed of segments of various circles, strong, yet elastic, fitted to bear the superincumbent weight, and to resist the effects of shock.

It would perhaps be impossible to imagine a structure more perfectly adapted to its purposes than the spinal column, formed as it is of separate pieces, severally united by discs of fibro-cartilage, bound together by numerous and strong ligaments, and surrounded and acted on by powerful muscles. Its flexibility and its curved form are points of even more importance than its great strength: these adapt the spine specially to its purposes.

Not to enter too minutely into questions of physiology, I would only allude to the opinions of some eminent physiologists, as the Webers, Cruveilhier, Bishop, and others, who have stated their belief that the normal curves of the spine depend on varying thicknesses of the bodies of the vertebræ and of the intervertebral substances. It is true, as the Webers have shown, that in the dorsal region of the spine especially, differences exist on the anterior and the posterior surfaces of the vertebræ; namely, that on their anterior surfaces—in the concavity of the curve—they are somewhat thinner than posteriorly; while in the lumbar and cervical regions, the fibro-cartilages are especially affected, being compressed posteriorly. It has been already shown, however, that the physiological—antero-posterior—curves do not exist at birth; and that, when first observed, they are not permanent, but are lost in the horizontal posture. It should also be remembered that these inequalities in the vertebræ and the intervertebral substances do not exist at birth, nor are they found until the spinal curves commence to be permanent. Such being the case, it follows as a necessary consequence, that these differences in the anterior and posterior surfaces of the bodies of the vertebræ, and especially of the fibro-cartilages, are due to the antero-posterior curves—are due, in fact, to the erect position and to the pressure from above downwards consequent on that position.

The effect of pressure on the intervertebral cartilages is shown by the loss of height which is sustained at the end of the day. Thus it is well known that a man of middle stature, who has remained in the erect posture during the whole day, will have lost nearly one inch in height; and that this will only be regained after he has been in the recumbent position for six or eight hours. It is only logical, therefore, to conclude that these varying thicknesses of the bodies of the vertebræ and of the intervertebral substances are produced by pressure as a result of the erect position; and that they would never be developed, any more than the antero-posterior curves themselves, in the horizontal position.

Thus it may be stated that the antero-posterior curves of the spinal column result from the erect position, and from muscular action to maintain equilibrium; and that unequal pressure occasions thinning of the bodies of the vertebræ and of the intervertebral substances in the concavities of the curves. This view will be confirmed by the consideration of pathological curves.

Our London Milk. Mr. Cosmo Logie, of the Horse Guards, says, that he has lately visited several London dairies. He finds that all new cows are inoculated, and in this way: a slit is made in the tail, and in the slit a bit of pleuro-pneumonic lung is inserted, and tied up. Suppuration follows; and he has seen milking going on beneath the pus-dripping tail, and asserts that pus often flies off from the wagging tail into the neighbouring milking-pail.

Age of the People. England (including Wales) was found to have in it, when the census was taken in April 1861, 593,721 babes and sucklings under one year old; 2,107,061 infants of one year but under five years old; 2,344,066 children of 5 to 10; 1,059,889 boys and 1,045,287 girls 10 to 15; 957,930 youths and 974,712 maidens 15 to 20 (though, to speak by the card, we should distinguish 29,719 as thus early wed); 1,594,497 young men and 1,804,160 young women 20 to 30; 2,947,534 men and 3,149,320 women of middle-age, 30 to 60; and 641,282 old men, and 733,515 old women, 60 to 80; and 47,260 very aged men, and 65,990 very aged women, above 80. The young population under 20 amounted in number to 9,082,666; the population 20 years old and upwards were 10,983,558. In the 10 years 1851-1861 the young population under 20 increased by 971,654, and the population 20 years old and upwards by 1,166,961. The rate of increase, though very nearly the same in both classes, was slightly higher among the young than among the older population; not only the absolute number of births, but the ratio of births to population, is increasing. The population of England divides into two equal parts in respect to age at a little over 22; and it is nearly 29 times the annual number of births. These statements do not include our soldiers, sailors, and merchant seamen abroad, so that the number of men in the middle period of life is to a certain extent unduly depressed. The very aged have not in the last ten years increased in near the same proportion as the general population.

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ON THE DERMO-PATHOLOGY OF CELSUS.

By Erasmus Wilson, F.R.S.

[*Concluded from p. 419.*]

From the consideration of warts and corns, the transition seems sudden to pustulæ, scabies, impetigo, and papulæ, which follow immediately after. We are, however, still in the chapter which treats "de interioribus ulceribus, quæ, aliqua corporum parte corrupta, nascuntur"; and the order pursued by Celsus would seem to be, to take the apparently most important diseases first, and gradually to descend to the more insignificant. Thus, from carbunculus and carcinoma, we descend to verrucæ and clavus; and now, beginning with pustulæ, we make our way downwards through scabies, impetigo, and papulæ, to the alphos, melas, and leuce of vitiligo, where the chapter ends.

"*Pustulæ* occur chiefly in the spring, and present many varieties. Some occasion a roughness or unevenness of the whole or a part of the body, such as that produced by the sting of the nettle, or by excessive perspiration. These the Greeks term *exanthemata*. They are sometimes red, and sometimes differ little in colour from the surrounding skin."

Phlyctenæ. "Sometimes a number spring up like pimples (vari), sometimes larger:—pustules which are livid, or pale, or black, or otherwise altered in colour; beneath these is a humour; and when they are ruptured, they look like ulcerations. These are the pustules which the Greeks term 'phluctanai'. They are caused either by cold or heat, or by the action of drugs."

Phlyzacion "is a pustule which is somewhat harder, whitish and acuminated, yielding a moisture when squeezed."

"Pustules sometimes give rise to small ulcers which are more or less dry or moist; sometimes they are accompanied with itching, and sometimes with inflammation and pain; sometimes also they give exit to pus or sanies, or a mixture of both. This occurs chiefly in youth, and less frequently on the trunk of the body than elsewhere."

Epinyctis. "The worst pustule is that which is called epinyctis. It is usually somewhat livid, or blackish, or whitish in colour. Around it exists a violent inflammation of the skin; and, when it opens, there is found within a mucous ulceration similar in colour to the humour which it contains. The pain which accompanies it exceeds its magnitude, which is no bigger than a bean. It occurs chiefly on the limbs, and during the night: hence the name given to it by the Greeks."

It is important to the proper understanding of the views of the ancients with regard to cutaneous affections, and the signification of the terms which they used to distinguish them, to consider well the few paragraphs in which Celsus developes the history of the group of pustulæ. Firstly, we are made aware that the term "pustulæ" is intended to signify an eruption which causes a *roughness* or *unevenness* of the surface of the integument. At a later period in the history of medicine, this quality of "roughness" became one, and the most important, of the distinctive characters of the three classes under which all diseases of the skin were assembled; namely, roughness, smoothness, and deformity. Then we are supplied with an illustration of "roughness" in the example of the slightly prominent wheals of urticaria and the small vesicles of miliaria; and, secondly, we are informed that it was on such eruptions, such pustules, in fact, as these, that the Greeks bestowed the now familiar term of exanthemata. It is also to be borne in mind, that this name was given to certain eruptions long before rubeola, scarlatina, and variola had made their appearance in Europe; which will account for their exclusion from the group.

Pustulæ, as the head of a group of eruptions, contains exanthemata, phlyctenæ, phlyzacia, and epinyctis. Phlyctenæ are large vesicles or seropustules, and the type of the herpes of our present nomenclature; indeed, we still retain the term in connexion with one of the forms of the latter affection—namely, herpes phlyctenodes.

Phlyzacion is a vesicle or sero-pustule developed on the summit of a pimple with a hardened base. Such sero-pustules are now grouped under the head of ecthyma; while epinyctis is a sero-pustule, analogous, apparently, to the pemphigus infantilis of Willan. The terms phlyzacion and epinyctis are no longer in use.

After pustulæ follows scabies, which is interesting to us as being the prototype of the eczema of the present day; in other words, the disease which the ancients described under the name of scabies is identical with that disease which at the present time we call eczema. The latter term is nowhere used by Celsus; but the disease itself was well known and well treated under its original name, scabies.

Scabies, writes Celsus, "is a harder or denser state of the skin than that which accompanies the preceding affections. The skin is red and covered with pustules, some moist, some dry, and some secreting a sanious humour; in some there is present an itching ulceration, while in others the ulceration spreads rapidly. In some persons, the disease terminates in cure; in others, it reappears at certain seasons of the year."

"When the attack is severe, the pruritus is most considerable, and the disease the most difficult of removal. This severer form the Greeks distinguished by the word *agrian*—that is, fierce."

It is worthy of remark, that in the treatment of scabies (eczema), Celsus recommends a remedy which, in certain states of the eruption, is the very best that could be employed even at the present day. It consists of sulphur, wax, tar, and oil, melted together, and in proportions such as to form a cerate of the consistence of honey.

Impetigo. "Of impetigo there are four species:—

"The milder kind resembles scabies; it is attended with hardness of the skin, redness, ulceration, and erosion. It differs from scabies in a more extensive erosion, and in the presence of pustules similar to the pimples of acne (vari); it is also accompanied with large vesicles (bullulæ), which in course of time are converted into small scales. The disease is apt to recur at certain periods of the year."

"Another kind is more severe, almost like a papula, but more rough and red, and presenting a variety of figure. It throws off superficial scales; there is more erosion; it spreads more quickly and extensively; and is more regular in its periods both of recurrence and cure than the preceding species. It is termed *impetigo rubra*."

"The third kind is even more severe than the last; the skin is more thickened; it is harder and more swollen; the surface of the skin is cracked, and more violently eroded; it is covered with scales of a black colour; is more regular in its periods both of occurrence and decline, but is not completely curable. This is the *impetigo nigra*."

"The fourth kind is wholly incurable; it differs in colour from the others; it is whitish, and resembles a recent cicatrix; it throws off light coloured scales, sometimes whitish, sometimes lentil-coloured (yellowish); and often, when the scales are removed, blood issues from the diseased skin. Otherwise the humour is colourless, the skin hard and fissured, and the disease extensively spread out."

"All these affections occur chiefly in the feet and hands, and also attack the nails."

It will have been noticed, that scabies, the representative of the most important of modern affections of the skin, is very lightly touched upon by Celsus. The reason is now apparent; the forms of disease delineated by him under the name of impetigo, are all treated of at the present day as degrees of eczema. The first kind, he observes, only differs from scabies in the superaddition of large pimples, of large vesicles, and a greater amount of erosion (ulceration). The second kind, the impetigo rubra, reminds us of our own eczema rubrum. The skin is more rough, the eruption more elevated, of a deeper red colour, more scaly, and more eroded. The third kind presents a further advanced stage of severity, of which the leading character is some degree of bleeding, and the consequent discolouration of the scales by the blood, so as to make them black. In the fourth kind we recognise, in unmistakable lines, the characters of eczema chronicum. If more were wanted to prove their identity, it would suffice to note the concluding observation as to their frequent occurrence on the feet and hands.

In modern times, we make the early presence of pus in the vesicles, the leading character of distinction between eczema and impetigo; but, as is well known, there is an intermediate degree between the ichorous and the purulent exudation, which we still distinguish by the name of eczema impetiginodes.

Papulæ. "There are two kinds of papulæ:—

"In one, the skin is roughened with very small pustules, is red, and slightly eroded; the eruption being somewhat smoother in the middle than at the circumference, and spreads slowly. This kind begins for the most part as a circular eruption, and spreads by the border."

"The other, the Greeks called *agrian*; the skin is more rough; it is ulcerated, violently eroded, more deeply red, and sometimes casts the hair. The less closely it approaches the circular figure, the more difficult it is of cure; and, unless it be soon removed, it is liable to be converted into impetigo."

The eruption described under the name of papulæ, corresponds with the local form of lichen of the present day; for example, lichen circumscriptus, and lichen circinatus and annulatus; and the term *agrius* simply distinguishes a stage of the eruption in which, there is an aggravation of the ordinary signs of the disease, and a proclivity of the disorder towards impetigo, or the pustular form of eczema; in a word, eczema impetiginodes. In this view of the tendencies of the disease, Celsus has anticipated the more advanced views of the present time, which recognise eczema as a territory intermediate between lichen on the one side, and impetigo on the other; a condition which may be better illustrated by the terms, lichen eczematosus, and eczema impetiginodes.

But Celsus also draws into his description a lichen which affects the hairy parts of the body, and which, as a consequence of inflammation of the follicles, causes the malnutrition and fall of the hair. This we call lichen annulatus solitarius when it attacks the body; and—taking the degeneration of the hair as the most prominent sign—trichosis, when it occurs upon the scalp.

A notion is given us of the little importance that was assigned to the milder forms of "papulæ," by the following remark by Celsus as to its treatment. "A slight papula will get well by rubbing it daily with fasting saliva."

Vitiligo. "This disease is wholly free from danger of any kind, but is disagreeable, and originates in a bad habit of body. There are three kinds of the affection."

Alphos. "It is called alphos when it is white, rough, and dispersed, resembling drops sprinkled on the skin; sometimes the spots have greater breadth than mere drops; and they are apt from time to time to enlarge their dimensions."

Melas "differs from alphos in possessing a deeper tint of colour; as though of a shadow thrown upon the spots; in other respects, it is identically the same."

Leuce, "at the first glance, somewhat resembles alphos; but is whiter, and implicates the skin more deeply. The hairs growing on the part are white, and are like down."

"All these affections spread; some quickly, some slowly. Alphos and melas occur at all periods of the year, and terminate with equal irregularity. Leuce is difficult of removal. The former two admit of cure without much trouble, the latter (leuce) rarely ever gets well; for if a part of the disease be removed, the entire skin never returns to a healthy colour. But whether a given example of the disease be or be not curable, is easily tested by experiment. For, if the skin be punctured or pricked with a needle, and blood flow, as it commonly does in the two former, there is hope of a remedy; but, if there issue a colourless humour, the case is incurable. Therefore, we may abstain from treating the latter."

The three names here assembled, under the common designation vitiligo, represent two essentially different diseases; although both have been erroneously treated of under the same designation. The diseases in question, are: lepra, which takes in both alphos and melas; and elephantiasis, to which belongs leuce; leuce being the morphœa alba of more modern writers. The distinctions between the two diseases are very ably put; in one (alphos and melas), the surface only of the skin is affected; in the other (leuce), its entire depth; the former when punctured yields blood, the latter, serum; one exhibits vital energy, the other, inertness and atrophy; in one there is no change in the hair, in the other, the hair has lost both its colour and its quality, and is reduced to a whitish down.

The characters of alphos are admirably given:—"White, rough, dispersed, resembling drops (lepra guttata) sprinkled on the skin; or, larger (lepra vulgaris) and spreading."

Sixth Book. The first chapter of the sixth book is devoted to the loss of hair. Celsus says: "I have hitherto spoken of complaints which, arising in the whole body, call for the use of medicines; now, I come to those which are apt to be developed on separate parts of the body; and I begin with the head. In the case of fall of the hair, the best remedy is shaving the head frequently; and the hair may be preserved by the use of ladanum dissolved in oil. I refer, of course, to those cases in which the fall of the hair is the consequence of illness; for where the loss is the result of old age, there is no remedy."

"*Porrigo* is a disease in which small scales crop up among the hair, and are thrown off by the skin; sometimes they are accompanied with moisture, but more frequently they are dry; sometimes they are produced without, and sometimes with ulceration; sometimes with a disagreeable odour, and sometimes with none. The disease commonly occurs on the head; sometimes, but rarely, in the beard, and sometimes even in the eyebrow. It does not, however, arise without some disorder of the body, nor is it without advantage in its occurrence. For if the head be sound, the disorder does not happen, and if there be any disorder of the head it is better that the superficies of the skin should suffer, than that the pec-

cant matter should be thrown upon some inward part. It is better, therefore, to help the elimination by combing, than to attempt to check it. Nevertheless, if it prove very annoying (as where there is a discharge of fluid, and particularly if it give out a bad odour), then the head is to be frequently shaved, and mild astringents applied; and if stronger remedies are called for, it is to be borne in mind that they are not applicable in a recent stage of the affection."*

Porrigo is the pityriasis of modern dermo-pathology, sometimes dry, in which case it is a chronic erythema, or a chronic eczema that has ceased to weep; and, sometimes moist; in other words, an eczema in a state of exudative activity.

Sycosis, "so named by the Greeks, from its resemblance to a fig, is an ulcer; its characteristic sign being the growing out of the flesh. There are two varieties.—One is hard and round; the other, moist and uneven; the hard ulcer secretes a small quantity of glutinous fluid; the humid ulcer, a large quantity of a fœtid odour. Both occur upon the hairy parts of the skin; the callous and round ulcer chiefly on the chin, the other principally on the scalp."

Of the two varieties of sycosis here indicated, the former is the more common; the latter, rare; at least in this country, whatever it may have been in Greece and Italy. Possibly, the difference between the two forms may have reference to the part of the skin attacked, the former occurring chiefly among the bristly hairs of the beard; the latter, upon the less hairy parts of the face and on the scalp.

And, now, as to the signification of the term sycosis—derived from *sukon*, a fig. When a fig is ripe, it is apt to burst; its coriaceous skin gives way at some point, and the ripened pulp exudes through the opening and spreads out like the broad lip of a marble tazza; if it were a wound of the flesh, it would be said to have everted edges; while, embedded in the soft pulp, are numerous whitish specks, which are the seeds of the fruit. Now, this is the appearance which no doubt suggested to the Greek physicians the name of the disease, *like a fig;* not, however, the outer surface of the fruit, but the state which I have just described. I was struck with this resemblance myself, in one memorable case of sycosis on the cheek. The occurrence happened in the instance of a medical man; he was surrounded by his medical friends, and the opinion generally held by them of the nature of the disease was, that it was a cancerous fungus. The surface was soft, reddish, and pulp-like in appearance; smooth, semitransparent and speckled with whitish points; it had all the characters of a cancerous ulcer with strongly everted edges, and projected some distance above the level of the face. I had prescribed for this gentleman on a previous occasion, for ordinary sycosis menti; and I therefore came to the conclusion that what I saw was merely an aggravated form of sycosis; and, my opinion was corroborated by my remembrance of the derivation of the term. This opinion proved to be true; and in a short time, by the use of mild remedies, the patient was restored to health.

Area. "There are two kinds of this affection; the common characters of both being, atrophy of the superficial portion of the skin and loss of hair. If the diseased skin be made to bleed, the blood is watery and fœtid; and the affection spreads, sometimes quickly, and sometimes slowly.

"The worst form is that which condenses the skin, destroys the fat, and renders the surface totally smooth.

"That which is called alopecia, spreads irregularly and without assuming any particular form. It occurs both on the scalp and in the beard.

"That form, which, from its resemblance to a serpent's trail, is named ophiasis, begins at the occiput, never exceeds the breadth of two fingers, and creeps onwards by two heads towards the ears, sometimes to the forehead, where the two heads unite over the middle of the forehead."

"The first of these forms may occur at any period of life; the latter commonly shows itself in children; the former scarcely ever gets well without treatment; the latter not unfrequently undergoes spontaneous cure."

Celsus shows a very correct appreciation of area; it is, he says, an atrophy of the skin; and then he indicates that in proportion to the degree of the atrophy, are the chances of restoration of the hair. Where the atrophy is considerable, the disorder is incurable without treatment; and he might have added, and equally with treatment.

The ophiasis is an area advancing along the course of the antero-posterior nerves of the scalp, beginning with the occipital branches of the posterior cervical plexus, travelling onwards to the neighbourhood of the temples; then following the supraorbital nerves forwards to the forehead.

Of the treatment of area, he observes:—"Some physicians stimulate the area by punctures with the lancet; some rub in caustics, and some employ turpentine. But there is no remedy better than daily shaving with a razor; for, as soon as the superficial pellicle of the skin is removed, the roots of the hairs are opened. Frequently, the mere rubbing in of writing ink after shaving is all that is necessary."

We are hereby informed, that the popular practice of smearing eruptions on the head, or supposed ringworms on any part of the body with writing ink, dated, at the least, as far back as the time of Celsus; but we also find, on looking a little further, that the ink then in use was more harmless as an application to the skin than the ink of the present day, consisting simply of vegetable carbon and gum.

At an age, when the alphabet only of pathology was known to the world, we must not be surprised at the want of a just appreciation of several forms of disease, which, although not dangerous to life, are frequently the cause of considerable vexation, and at the present day receive their proper share of medical care and attention. I refer to three disorders next to be discussed; namely, vari, or acne; lenticulæ, or freckles; and ephelis, or melasmic stains.

"It is almost absurd," says Celsus, "to treat vari, lenticulæ, and ephelidæ; but a care of personal appearance is a part of the nature of woman. Vari and lenticulæ are very well known, but there is a rarer kind which the Greeks call semeion, and which is redder and more irregular in figure than the lenticulæ."

"Ephelis, however, is not equally well known, in fact, it is nothing more than a certain roughness and hardness of the skin, of an abnormal colour."

"These affections appear only on the face; lenticulæ, however, may occur on other parts of the body, but is not worth the trouble of describing by itself in another chapter."

"Vari are best removed by applying to them equal parts of resin and powdered alum mixed together with honey. Lenticulæ is cured by galbanum and carbonate of soda, rubbed down with vinegar to the consistence of honey. The skin is to be anointed with these applications, and, after the lapse of some hours, say in the morning, the remedy should be washed off, and the surface lightly smeared with oil. Ephelis is best treated with resin combined with a third part of rock salt and a little honey."

From affections of the head and face, Celsus passes on to those of the eyes and eyelids; and, of the latter, he observes:—"There is also a disorder which the Greeks term *phtheiriasis*, and which results from the presence

* In his chapter on favourable and unfavourable signs, in various diseases, Celsus mentions porrigo of the head and a general eruption of the skin, as favourable symptoms in the fever which follows the puerperal state.

of pediculi between the eyelashes. This complaint originates in a bad habit of body, and runs on to the production of an acrid discharge from the eyelids, and ulceration of the eyes; and endangers the sight."

Seventh Book. In his seventh book, devoted to surgery, Celsus mentions, under the designation of "disorders of the head," the encysted tumours, ganglia, meliceris, and atheroma; and, in connection with the eyelids —hordeolum.

Encysted Tumours "are very small at the beginning, enlarge slowly and by degrees, and are enclosed in a special tunic or cyst. Some of these tumours are hard and resisting; some, soft and yielding; in some, the covering skin is bare; in others, the hair is not affected; and they are generally unaccompanied with pain. Their contents, although they may be predicted, cannot be ascertained with certainty, until they are brought to light. Generally, however, those that are hard and resisting are filled with a calcareous looking substance, or, condensed and matted hair; while those that are soft, are found to contain a substance like honey or pap, or something similar to the scrapings of cartilage; or a fleshy looking sanguinolent mass; or matters differing in colour and appearance. Ganglia are commonly resisting; atheroma contains a pap-like pulp; in meliceris, the contents are more liquid, and flow out on pressure; steatoma is filled with something like fat, and spreads out under the skin, producing relaxation and flabbiness of the integument; whereas, in the others, the skin is stretched."

In reference to the treatment of these tumours, he observes :—"The hair having been removed with the razor, an incision is to be made through the middle of the tumour. In steatoma, the tunic is also to be divided and the contents turned out, because it is difficult to separate it from the skin and deeper tissues. But in the other forms, the cyst is to be preserved intact; the cyst is quickly discovered, white and tense; it is to be separated from the skin and surrounding parts with the handle of the scalpel, and gradually turned out whole, without dislodging its contents. Where an adhesion subsists between the inferior part of the cyst and a muscle, it is better to cut away the upper part of the cyst than injure the muscle; and, in this latter case, where a portion of the cyst is left behind, the wound should be treated so as to promote suppuration; but where it has been entirely removed, the edges of the wound should be brought together and retained in contact by appropriate means, and subsequently dressed with some agglutinating application."

The term ganglion is no longer used in connection with encysted tumours; nor is steatoma now regarded as a tumour of that class. The true encysted tumour is simply a distension of one of the follicles of the skin, the follicle being closed at its aperture, and the contents of the tumour being some form of epithelial substance associated with other normal productions of the follicle—such as hairs.

In *Meliceris*, the epithelium is more or less dissolved and altered by decomposition; in atheroma, the epithelium is simply softened and broken up into a state of pulp; the raspings of cartilage are the harder surface layers of the epithelial mass; the colouration of the contents of the tumours is due to the effusion of blood and its changes; and the calcareous tumours to deposits of carbonate and phosphate of lime.

Hordeolum. "In the eyelids above the eyelashes there is apt to occur a small tubercle, which the Greeks name *krithe*, from its resemblance to a grain of barley. It is slow in maturating. Certain other little tumours, not unlike hordeolum, also make their appearance in the eyelids; they are somewhat different in form, and moveable, so as to admit of being rolled, with the point of the finger, under the skin; hence the Greeks call them *chalazia*."

Taking, now, a retrospect of the dermo-pathology of Celsus, it is worthy of remark that he nowhere makes mention of the terms—lepra, psora, and psoriasis. The word eczema was probably of later date, and would appear to have been first used by Dioscorides and Galen. Lepra, which occurs in the Greek translation of the Bible, and is mentioned by Hippocrates, is the name which was assigned to the leprosy of the Jews, the elephantiasis of the Greeks. Psora was, without doubt, the Greek representative of scabies, and identical with eczema; while psoriasis must be associated with its congener psora. The squamous disease, which in England and France, at the present time, is called lepra, is evidently the alphos of the ancients.

The dermo-pathologists of Germany,* headed by Hebra, confine the word lepra to its ancient signification; while to that disease which we term lepra, they give the name psoriasis. Herein arises a confusion of terms that might be obviated very easily, and which it is a part of the intention of this paper to endeavour to correct; and I venture now to propose that we admit the identity of elephantiasis and lepra, and that henceforward we call lepra vulgaris by its original, its ancient (it occurs in the Greek translation of the Bible) and very appropriate name of alphos, and leave psoriasis to the society of its congeners, psora and eczema; for psoriasis is in reality, as was admitted by Willan and Bateman, the chronic, dry, thickened, cracked, and scaly stage of chronic eczema.

It will also be perceived that, of the forty-four terms used by Celsus in relation to cutaneous affections, about two-thirds are Greek, and one-third Latin or Roman. The latter are as follows;—Area; Carbunculus; Furunculus; Hordeolum; Ignis sacer; Impetigo; Lenticulæ; Papulæ; Porrigo; Pustulæ; Scabies; Varus; and Vitiligo. Several of these are equally well known by their Greek synonyms; and it is difficult to say why Celsus should have preferred the popular terms. For example: Carbunculus is the Anthrax of the Greeks; Lenticulæ, the Phacia; Porrigo, the Pityriasis; Scabies, the Psora; and Varus, the Acne.

* Devergie (1857), while remarking that the word "lepra" should be restricted exclusively to elephantiasis, nevertheless retains the term lepra vulgaris in connection with one form of alphos. Hardy (1860) uses the term lepra vulgaris as a synonym of psoriasis circinata, and declares, as had in past long since been admitted, that the lepra and the psoriasis of the older classifications are identical. One step more is still wanting; namely, to adopt the term alphos in lieu of psoriasis, and to transfer psoriasis to chronic psora or eczema.

Origin of Parasites. Opinions upon the subject of parasitism have within recent times undergone considerable changes. Formerly medical observers attributed many diseases to the influence of animal or vegetable parasites which were even supposed by them to generate spontaneously. In time a reaction took place. Many products supposed to be parasite proved to be nothing of the sort, and a theory was broached that entozoa existed in the bodies of men and animals for some wise purpose and excited the secretions, favoured digestion, etc. Others supposed that parasites were only developed in animals previously diseased, and that for the production of any parasitic malady it was necessary that a predisposition should be acquired by a certain state of ill-health. Now, however, both these theories are exploded, and it has been ascertained that parasites are not generated in certain morbid conditions, nor do they exist in animals to excite the normal functions of their organs. ("They are offensive products) foreign to the bodies of the men and animals they afflict, and dependent entirely for their development on the introduction of germs into bodies suited to their growth, protection, and reproduction." A few parasites, it is true, exist in or on all human beings and animals; but the greater portion cause actual disease, and often produce maladies of a very fatal nature.

Original Communications.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page* 322.]

In the case last given, there was a predisposition to insanity in the patient's family. The father died of insanity, said to have been produced by drink. The next case is chosen as an instance in which the hereditary tendency was still more marked, and the evidence of its existence more positive.

Case III. A. D., a female, was admitted in December. She was 24 years of age; single; a domestic servant. The mother said that she had noticed the patient's memory to have been failing for three months; she had also complained that she felt miserable, and that "she could not think." She became gradually more depressed, and said she should become lousy—which she often repeated. She slept ill; and the mother believed that for three months the patient had scarcely slept one night, but had been restless and fidgety night and day. At intervals, she had refused food; and went without for several days together, saying she did not require food. At times, she would stand in one position for many hours together, biting her knuckles. She had also shown a great disposition to wander away, so that her friends were obliged to lock their doors; but she would stand for hours watching her opportunity to get out. She stood on one occasion at the door for three days consecutively. Throughout, she had been little disposed to speak.

The medical certificate described the patient thus:—"Found her sitting by the fire with a very melancholy aspect; and asked how she only stayed one day at her last place? She did not answer till the question was repeated three times; and then only said, 'I don't know.' Asked her why she did not take off her day clothes on going to bed? and after awhile, she replied only, 'I don't know.' Her sister has been in a lunatic asylum; and her father was subject to melancholy." It appears that, about a fortnight prior to the patient's admission, she seemed a little better, and engaged herself as a servant; but would not stay in her situation more than a day.

Her natural disposition was described to be somewhat dull and apathetic; never very lively. She had been thriftless, and unable to manage for herself; she was mild and retiring in manner. Her health had been always delicate. Her bowels were always much constipated, acting, as a rule, but once a week. Menstruation was normal.

Cause. Her father, whom the medical man described as addicted to melancholy, was reported by the mother of the patient to have died of paralysis. "The paralysis first seized him in the little finger, and it gradually spread to his limbs, which shook and trembled, and at last got so bad that he could no longer direct his fork to his mouth, and he had to be fed. He never stammered, nor was his voice affected; and his mind remained clear; for he was paralysed seventeen years, and during the first seven years he was a singer in 'the chapel'. He was a temperate person; he did not work in lead or in quicksilver."

One sister of the patient is said to have had a brain-fever, which lasted a twelvemonth (probably a case of mania). Another sister was insane, and was in Colney Hatch Asylum four years, and ultimately discharged cured. The case was considered to be hysterical mania by Mr. Marshall.

The progress of A. D.'s case was, briefly, that on admission (on about the ninetieth day), she was confused, only moderately depressed, and was tractable; pulse 104. She took an aperient on the day after admission. Though pale and thin, she took her meals well; and the bowels were regulated by an aperient pill.

114*th Day.* She was moved into a convalescent ward, room being required in the infirmary.

121*st Day.* She was moved back to the infirmary. She had scarcely eaten since her removal; she was much altered; was greatly depressed; seldom spoke; but moped, and took no heed of what was passing. She said she wanted to die. She had taken only a small quantity of beef-tea that day. The tongue was clean; bowels not open; she had neglected the aperient.

122*nd and* 123*rd Days.* She refused food and medicine, and was ordered to have an enema.

125*th Day.* She obstinately refused to take food. She had another slight action of the bowels after the enema on the previous day; but resisted so strenuously that it could not be efficiently administered. She had had no stool that day. The expression of face was that of great dejection and anxiety. She had had no sleep all the night; but stood out of bed, and would not lie. She was evidently more feeble; pulse 108. She would not show the tongue. The breath was offensive; the skin was harsh, and emitted a peculiarly offensive odour. The urine was scanty and high coloured. She was ordered to be fed by the stomach-tube with eggs and milk.

124*th to* 128*th Days.* She had taken small quantities of food only—chiefly liquids, beef-tea, eggs, wine, and tea. There had been slight action only of the bowels for six or seven days. An enema or castor oil was ordered.

129*th Day.* The enema could not be given, but she took the oil, which had not acted. She sat in an uneasy constrained position, which had the appearance as if she were resisting the disposition of the bowels to act (a perversity of instinct not very uncommon among the insane). She passed urine freely. She partook very sparingly of food; was dull, taciturn, obstinate, stubborn, and evidently weaker. The castor oil was ordered to be repeated.

130*th Day.* She had taken several doses of the oil, but had had no action of the bowels. There was no vomiting, nor tympanitis. The belly was hard; she resisted examination. She had taken only small quantities of beef-tea.

136*th Day.* The bowels continued very obstinate, and had acted once only, slightly, since the last report. She continued to refuse all nourishment; was dull, taciturn, listless, and gradually failing.

She died on the 138th day.

It must be remarked, that the obstinate refusal of food is often persisted in so long that the strength of the patient is irretrievably lost. Fluid nourishment, administered mechanically, can only postpone the event for a period. Though this gain of time is often most valuable, it is frequently ineffectual in averting the fatal termination.

With respect to the treatment, it is necessary to bear in mind that the most important part consists, not in the therapeutical, but in the moral agents. The indications are, 1, to rest the affected organ; and 2, to regulate the general health. The affected organ is rested by the withdrawal of the excitants. Its functions—that is, the mental functions—are regulated, soothed, tranquilised, by removal from the world and its turmoils; by the diversion from its accustomed track, which the contemplation of the new scene around the patient newly admitted effects. The force of example leads many to fall into the rules, who would be otherwise disposed to rebel. Long habit gives to the attendants a

manner which is calculated to gain the confidence of the patient; by long custom they have ceased to be annoyed by irritating language: and it must be said, to many patients the unexpected kindness which they receive from strangers has a favourable effect upon their minds. In the next place, the regularity of the hours, the abundance and excellence of the diet, the order and cleanliness, must be duly accredited with much of the physical benefits produced. In the infirmary ward, in which most of the cases in the acute stage of disease are, and into which all patients are first received, the diet consists of roast mutton daily, with plentiful variation of puddings, fish, broth, vegetables, etc., and other articles, according to the varying fancies or requirements of the patients. A generous diet of this kind must, therefore, be always understood as part of the treatment employed in these cases, unless the diet be specially named.

Constipation appears undoubtedly to be pretty constantly present in the cases already given. Many writers are disposed to look upon the catamenia and its disordered state as an almost equally frequent determining cause of insanity in females. There is rather a tendency in the mind of the female relations to implicate this function; and it is, therefore, somewhat difficult justly to estimate its bearing upon the mental phenomena. I have known patients in violent states of mania, and also in melancholia and chronic mania and imbecility, to menstruate regularly and normally, the general health and condition being good. There is probably, however, some coincidence between intermitting outbursts of excitement and the catamenial period. In the following case, the uterine functions were certainly complicating the case.

Case iv. A. E., aged 32, single, was first admitted in 1859. The father, a gentleman's coachman, narrated the following particulars. She had, during the last three years, been in close attendance on her mother, who was bed-ridden. The residence was in a mews, but the locality was said to be healthy. A slight altercation arose between the patient and one of the female servants of the father's master, relating to a practical joke that had been played upon a young man. The patient was accused of having divulged the name of the perpetrator of it to him. Very shortly after this, she exhibited an alteration in her manner; was agitated, forgetful, and at times almost lost; and the father believed she was worse on alternate nights. She was engaged, and had been so for some time, to a young man who had gone to Scotland; but the father thought she had become rather cool towards him, and, he suspected, preferred the other, on whom the joke was practised. She gradually began to pine away. The circumstance occurred about five weeks before she was admitted. She continued to dwell on the subject, and frequently alluded to it; was confused, abstracted, at last became agitated and nervous, threatened to destroy herself, and attempted to get out of the window. On admission, she was emaciated, very delicate in appearance. Her complexion was swarthy and dusky; the hands and feet cold, with pimples on the lips and extremities. Her bowels were constipated, and the catamenia were suppressed. She was treated with aloetic purgatives and generous diet, with the usual discipline as to air, exercise, etc. She rapidly improved, and was discharged cured three months after admission.

She was readmitted about two years afterwards. The father reported that she had remained quite well since her discharge, and returned to her former employment of nurse to her mother. About a fortnight previously to her second admission, she began to be somewhat fidgety, running about the house without object; and at length became suddenly irritable and very violent, and made a dash at the window, as if she wished to throw herself headlong into the street. The window was shut, but she broke the frame with her violence. She was attacked immediately with acute pain in the belly (a cramp). She was taken to the workhouse, and thence transferred to the asylum. At the time of the outbreak she was menstruating; and the father understood that of late the catamenia had been very irregular, and attended with pain. She had been much constipated in her bowels, for which she would not take medicine. She again quickly recovered; but was restless and fidgety at the catemenial periods, and did not regain her mental vigour for near nearly four months after the cessation of the active symptoms.

[*To be continued.*]

CASES OF GUN-SHOT WOUND.

By T. L. Pridham, Esq., Surgeon, Bideford, North Devon.

It is not often that medical men in private practice have to relate instances of gun-shot wounds; still, however, with those who have been in practice some thirty years, cases of more or less interest may be found in the notebooks of those who have kept such records.

The following three cases, as not having occurred in the battle-field or in strife, will, I may venture to hope, be deemed of sufficient interest to find a place in the British Medical Journal.

Case i. In 1845, one dark and stormy night, I received a note from my friend, the present Dr. John Thompson, requesting my advice and assistance on the island of Lundy, about twenty miles hence, in a case of gun-shot wound in a young gentleman aged 15, who was on a visit to the governor of the island. I accordingly hastened to Clovelly, where a skiff was in waiting to take me to the island. Whilst we were crossing, the wind suddenly shifted to the westward, which enabled me to land at the only point accessible to a boat. I reached the governor's house just as the day was beginning to dawn, and soon found myself by the bedside of the patient, whose appearance I shall never forget. His countenance was pale, anxious, and desponding. On removing a light covering, I beheld, with feelings somewhat approaching to horror, the whole of the forearm and the greater part of the upper arm in a gangrenous state. The poor fellow, in company with others, had four days previously been on the sea shooting wild fowl, which are numerous on and around the island. In landing from the boat, he carelessly took hold of his gun by the muzzle with his right hand, when, by some means, the gun went off, and the whole of its contents passed through the inner part of the upper arm, just midway between the shoulder and the elbow, dividing the blood-vessels and nerve in the situation I have described. A sailor, who was near at the time of the accident, immediately tied a thin silk neck-handkerchief tightly round the upper part of the arm. Little blood was lost at the time of the accident. The poor boy was removed to the governor's house, some distance off. No medical man was near. Night coming on, a large fire was lighted on a certain part of the island, which could be seen at Clovelly, and known as a signal of distress; or, in other words, that medical aid was required. The medical man of the village, Mr. Heard, reached the island during the night; and, seeing the nature and severity of the accident, despatched the vessel which had brought him over for Mr. Thompson, surgeon, of Bideford, who also reached the island as soon as the winds and the waves would permit. It was at once apparent to him that nothing short of amputation at the shoulder-joint could possibly save the life of the sufferer. Before commencing so important an operation, he was desirous that still further surgical aid should be obtained; and accordingly, on the night I have named

above, I received the note from Mr. Thompson describing the nature of the accident, and requesting me to bring certain instruments, etc., to meet the emergency of the case. I reached the island at the time I have named, on the fourth day after the accident. To all appearance, the boy was in a dying state, with but little pulse at the wrist. On his asking my opinion of his case, I first cheered him as much as I could, and then told him there was one only chance of his life, which would quickly terminate if his arm was not removed at the shoulder-joint. He was a brave boy, and said at once: "Lose no more time; let me only scratch a few parting words to my mother." He had not completed the first two words of filial affection before he fainted, and we thought all was over. By means of external restoratives, however, he breathed again; and I contrived to get half a pint of port wine into his stomach. When he had rallied a little more, my friend Mr. Thompson seized the opportunity, and in less than five minutes the operation was over, I taking charge of the subclavian artery by the usual means of pressure, which was so effectual that not an ounce of blood was lost during the operation. The arteries being secured, there was just sufficient skin to cover the wound. An opiate was given; tranquil sleep followed; and at the end of twelve days the ligatures had come away; and on that day, three weeks after the operation, he had crossed the bay, and was my guest, together with his father, who was a clergyman living in the neighbourhood of Bristol; he having, in company with the late Mr. Wilson, surgeon, reached the island about an hour after the operation had been performed. In due course the young man went to Oxford, and was ordained; and a short time since I met in the train a college friend of his, who informed me he was still alive and in good health.

It was found, on dissection, that the blood-vessels and the brachial nerve were all divided.

Case II. Robert Cann, aged 26, working in an iron-foundry, was standing on the quay at Bideford, when a boy in a boat just ten yards off pointed a duck-gun at him, not knowing it was loaded. The gun went off, and the contents took effect in the upper part of the man's thighs and scrotum. Fortunately, the abdomen escaped uninjured. The shots, which were No. 3, were, as may be supposed, deeply imbedded. The man dropped, and was afterwards carried on a shutter to his home. I was soon in attendance, and directed soothing applications, and gave an opiate, the shock to the system appearing to be very great. The shot-holes soon healed, and the case appeared to progress favourably up to the seventh day, when the patient directed my attention to a small but painful swelling directly in the course of the femoral artery, about six inches from Poupart's ligament, in which situation two of the shots had previously entered. The tumour pulsated. At once I feared these were but indications, too true, of an incipient aneurism in consequence of injury inflicted on the coats of the artery at the time of the accident. A consultation of medical friends was held; and it was agreed to wait to see a further development of the tumour. At the end of a fortnight, it had increased considerably, and the pulsation became more distinct. It was now proposed to the patient that the operation for tying the femoral artery would be necessary. He, however, was most positive in his refusal to undergo any operation, and said "he would die first". A fortnight more passed, when the tumour had become of the size of a large hen's egg. By this time the cicatrix of each shot-hole had gradually yielded, and had become almost transparent; so much so, that the pulsations could be distinctly seen beneath the thin film which prevented the stream of life from issuing forth and terminating existence in a few minutes. An assistant was left in charge, who frequently had to remind the man of his momentary danger; but no powers of persuasion of the medical man had any avail, but the curate of the parish (the Rev. Mr. Braithwate) at the last moment gained consent. He came running to my house, and begged me to hasten, as he was sure that in a few minutes the man would be dead. I at once sent to some medical friends who had been visiting the patient with me, and went myself to the house. As soon as we were all assembled, the operation of tying the femoral artery just below Poupart's ligament was commenced. Having opened the sheath, and separated the artery from the vein beneath, I was in the act of passing the ligature round the artery by means of the aneurismal needle, when the cicatrix of each original shot-hole simultaneously gave way, and two jets of arterial blood, of the size of a writing-quill, gushed forth. My assistant, Mr. Blanchard, instantly arrested the flow of blood by placing his two forefingers on the orifices whence the blood was rapidly flowing. The artery having been secured by ligature, the aneurismal sac was allowed to empty itself, the wound was dressed, and a bandage with a soft compress was applied over the seat of the aneurism. At the end of sixteen days, the ligature came away, and all appeared at this time to be doing well; the temperature of the limb, by the assistance of flannel and warm applications, not having fallen to any great extent after the operation. At the expiration of a few days, however, the patient complained of pain and stiffness at the posterior and upper parts of the thigh that had been operated on. On examination, it was found that phlegmonous inflammation had set in. A large linseed poultice was at once applied; and, after some days, a considerable abscess had formed, which I opened extensively, and in the discharge I discovered four or five shots; and for several days shots were found on the surface of the poultices. Other small abscesses formed, from all of which shots were discharged, altogether about forty in number. Sinuses formed, which were freely laid open.

The patient was well supported by means of porter, wine, and fresh meat; and, at the end of three months, the discharges had ceased, and the wounds had healed. Six months later, the man had returned to his labour as an iron-founder, in which employment, I understand, he still remains, just eighteen years after the accident and the successful operation of tying the femoral artery under peculiar and interesting circumstances.

Case III. A few months since, Edwin Elliot, a boy about 16 years of age, was walking down the High Street of Bideford, when his elder brother came behind him with a pocket-pistol in his hand, and, not knowing it was loaded, he pulled the trigger, he being about two yards in the rear of his brother. A small bullet, weighing rather more than half a drachm, passed through his coat and entered the body just below the inferior angle of the right scapula. The boy was conveyed home. I was soon in attendance; and found, by the direction that the bullet had taken, it had passed behind the vertebral column to the opposite side—four and a half inches—the extent to which I passed my probe, but could not then even detect the bullet. The boy was at the time in much pain, but no very urgent symptom arose; his easiest position being on his hands and face. I withdrew a small portion of his woollen dress from the wound on the second day after the accident. The wound was dressed with poultices of large dimensions. The discharges were considerable, dark, and offensive. After some days, the boy could rest in that position which rendered the orifice of the wound the most depending part; and, at the end of a fortnight, I had the satisfaction of finding that the bullet had gravitated to the surface, and it was easily removed. The discharge became healthy; and in a few days the wound had healed without further trouble. I record this case in order to show that, if a ball be not impacted in bone, or producing much constitutional irritation and fever, it is prudent to leave the issue to nature, provided the limb or body of the patient

can be placed in such a position that by gravitation the foreign substance may find its way out by the same track by which it has entered the body.

Reviews and Notices.

THE DIAGNOSIS AND TREATMENT OF DISEASES OF WOMEN, INCLUDING THE DIAGNOSIS OF PREGNANCY. Founded on a Course of Lectures delivered at St. Mary's Hospital Medical School. By GRAILY HEWITT, M.D.Lond., M.R.C.P., Physician to the British Lying-in Hospital, etc. Pp. 628. London: 1863.

DR. HEWITT has adopted a somewhat unusual plan in this work; inasmuch as he has divided it into two parts, in the first of which he treats specially of Diagnosis, and in the second specially of Treatment. The object which he has had in view in so doing is unexceptionable—to afford increased facilities for diagnosis.

"Very little consideration will show how completely subsidiary to questions of diagnosis are all others likely to present themselves to the student in his early attempts to investigate disease, of whatever kind, and wherever situate.... Without diagnosis no advance can be made but on the imperfect basis of surmise and conjecture. Everything, in fact, turns on the diagnosis; and, once the diagnosis has been made, the path is comparatively clear.... In the study of no class of diseases do we meet with so many practical illustrations of the truth of what has been stated in reference to the importance of diagnosis, as in that to the consideration of which the following pages are devoted. A very large proportion of the cases coming under the notice of members of the profession are cases in which diagnostic knowledge as to these particular diseases is specially called for; moreover, this is a department of practice in which mistakes in diagnosis are very frequently disastrous to the patient or destructive to the reputation of the practitioner. The very important question of the diagnosis of the presence or absence of pregnancy is, of itself, one for the practical dealing with which a very extensive and complete knowledge of the diseases of women generally is absolutely essential."

In the chapters on Diagnosis, which occupy 438 pages of the book, Dr. Hewitt bases the information he endeavours to convey on symptoms rather than on pathology. He does not, however, ignore pathology, of which, as his previous writings have shown, he has a just appreciation; and the valuable additions which have in late years been made to our knowledge of the pathology of women's diseases will be found introduced sometimes among the remarks on diagnosis, sometimes among those on treatment, sometimes separately. But what Dr. Hewitt justly argues is, that the practitioner requires to learn how to make the best use of the case as it is presented to him at the bedside—which is not "pathologically and to suit our convenience."

The subject of Diagnosis is treated of by the author under two main divisions; viz., the data obtained without physical examination; and the data obtainable by physical examination. In the first of the sections, nine chapters are devoted to the consideration, in their diagnostic relations, of the Age of the Patient; Sexual Relations; Menstrual Derangements, and External Hæmorrhages from the Generative Organs; Substances Expelled from the Generative Organs; Non-Sanguineous Discharges; Disorders of Micturition; Symptoms referable to the Rectum; Abnormal Sensations referable to the Generative Organs; and Nausea and Vomiting. The section on data obtainable by physical examination contains seventeen chapters, in which the author describes the Morbid Conditions discoverable by Examination of the External Organs, and of the Orifice and Canal of the Vagina; Tumours felt through the Vaginal Wall; the Condition of the Uterus as ascertained by Digital Examination, by the Sound, and by the Speculum; the Examination of the Abdomen and the Causes of its Enlargement; Tumours (Uterine and Ovarian) Traceable into the Pelvis; Abdominal Tumours not Traceable into the Pelvis; and the Examination of the Breasts in reference to the Diagnosis of Pregnancy. A supplementary chapter is added on the Diagnosis and Causes of Sterility.

In the second part of his work Dr. Hewitt describes, in fourteen chapters, the Treatment of the various diseases described in the first part; viz., Amenorrhœa; Profuse Menstruation and Hæmorrhages; Leucorrhœa, and various Non-Sanguineous Discharges; Pain referable to the Internal Generative Organs; Dysmenorrhœa; Sympathetic Affections arising from Disorder of the Generative Organs; Disorders of the External Generative Organs and of the Urethra and Bladder; Diseases of the Vagina; Inflammation, Displacements, Cancer, Fibrous Tumours, and Polypi of the Uterus; Diseases of the Ovaries; Periuterine Hæmatocele; Pelvic Abscess; and Diseases of the Fallopian Tubes.

A noteworthy feature of this book, and one which increases its utility, is the exhaustive manner in which Dr. Hewitt arranges, under some one symptom or sign, all the conditions known to give rise to it. Thus, in speaking of Pains referable to the Internal Generative Organs, he divides them into two classes—1. Those associated with menstruation, constituting dysmenorrhœa; and 2. Painful sensations irrespective of menstruation. Painful menstruation, again, is then described as consisting of two classes of cases; those in which there are both pain and impeded discharge; and those in which the menstruation is simply painful, the discharge being apparently free. The pains experienced irrespectively of menstruation are chiefly of the kind called reflected, being produced in more or less distant regions by uterine or allied disorders. Under this head are described, pains in the back, in the hypogastric region, and in the lower extremities.

The hypogastric pains are divided into six classes; viz., intermittent or labour-like pains; pains more or less constant; pains of inflammatory character; pains with symptoms like those of perforation; hysterical pains; and bearing-down pains.

The conditions under which intermittent pain may be observed are: mechanical retention of the catamenia; abortion; periuterine hæmatocele; blood-clots, fibrous polypi, retained portions of placenta, etc., in the uterus; tumours in the substance of the uterus; puriform or other fluid collections in the uterine cavity; flexion of the uterus; difficult menstruation; intestinal irritation; and sometimes neuralgia of the uterus. More or less constant hypogastric pain is produced by cancer of the uterus; fibrous tumour; the irritable uterus; disease of the cervix

of the uterus; and, in the ovarian region, by various causes, as subacute ovaritis (Tilt); pelvi-peritonitis (Tilt, and Bernutz and Goupil); ovarian irritation (Churchill); neuralgia (West); inflammation of the cervix uteri (H. Bennet); sexual irritation; gonorrhœa (De Méric); a kind of ovarian prolapsus (Rigby). Pain of an inflammatory character is met with in all cases in which the ordinary signs of inflammation are present, and are referable to various causes producing inflammation. Sudden acute and intense pain in the hypogastric region, with great prostration, shock, and often other symptoms of depression, excite a suspicion that rupture of some viscus has taken place. Pain of this kind is met with in intestinal perforation, in pelvic hæmorrhage from the ovaries, Fallopian tubes, etc.; in hæmorrhage in extrauterine pregnancy; in rupture of the gravid uterus; and in rupture of ovarian cysts. Hysterical pains in the hypogastric region require to be distinguished from those of inflammatory character, as well as from those produced by perforation. With regard to inflammatory pains,

"The error most liable to be committed is that of taking for inflammation what is only an hysterical condition. As a rule, hysterical pain is marked by its severity, by its variability, by the suddenness with which it appears and disappears, and by the circumstance that the patient is known to be hysterical, or to have been the subject of hysteria. The condition of the pulse is the best criterion. In cases otherwise closely simulating actual peritonitis, or inflammation of the uterus or of the adjacent organs, the frequency of the pulse in the latter affections is wanting." (P. 145.)

Then, as to the serious class of cases in which sudden pain is produced by perforation,

"The severity of the pain is, by itself, of not much value in a diagnostic point of view. In hysterical cases, there is an absence of symptoms of depression and prostration; and there is, moreover, generally, evidence of previous hysterical attacks, or, accompanying the severe hypogastric pain, there are other unmistakable signs pointing to hysteria.... On the other hand, in the really serious cases, the patient has been previously in a state of good health, or, at all events, free from attacks of hysterical character, and the positive signs of great perturbation of the system only require to be looked for to be detected. Further, examination of the abdomen gives valuable information. In hysteria, there is, together with the pain, great sensibility of the surface, the slightest touch giving rise to complaint, whereas deep, slowly increased pressure is not painful; the reverse is true of the class of cases now under discussion" (those of perforation). "It is only at the onset of the attack that there is any possibility of confounding the perforation-symptoms with those produced by hysteria." (P. 146.)

The chapter on Tumours felt through the Vaginal Walls by Digital Examination affords another instance of the complete and orderly arrangement adopted by Dr. Hewitt. These tumours are first enumerated; and then are grouped in the following way, according to the situation in which they are felt:

"The tumours which may be *felt equally on all sides* —that is to say, which are not felt exclusively in one or other position—are the following:—Enlargement of the uterus; periuterine hæmatocele; pelvic abscess; ovarian tumours; extrauterine pregnancy; fibrous tumours. Ascitic distension of the peritoneum should perhaps be added to this list, although there is no tumour in the strict sense of the word in such cases.

"The tumours which are felt exclusively *behind* the os uteri are:—Distension of the rectum by fæcal matters; cancer of the rectum; retroversion or retroflexion of the uterus.

"The tumours which are felt usually, but not exclusively, *behind* the os uteri are:—Ovarian tumours in their early stage of growth; distension of the Fallopian tube by fluid of any kind; Fallopian pregnancy; Wolffian and hydatid cysts.

"The tumours felt exclusively *in front* of the os uteri are:—Calculus in the bladder; distension of the bladder with urine; anteversion and anteflexion of the uterus.

"If for the word 'behind' the word 'laterally' be substituted in the foregoing summary, the account given will still be true; for those pelvic tumours which are lateral are generally also posterior to the os uteri, and *vice versâ*." (Pp. 197-8.)

The various pelvic tumours discoverable by vaginal examination having been thus enumerated, they are next considered in detail, and the diagnostic peculiarities of each are pointed out.

Again, in the chapter on Enlargement of the Abdomen due to the Presence of a Tumour, we find the author, after noticing the so-called "phantom tumours", and giving directions for their detection and dispersion, dividing these tumours into those which are traceable, and those which are not traceable (necessarily so at least), into the pelvis. In the first class are enumerated and described, as the more ordinary causes of enlargement: enlargement of the uterus from pregnancy, fibrous tumours, etc.; ovarian cystic disease or tumour; enlargement and distension of the Fallopian tube; extrauterine pregnancy (usually); periuterine hæmatocele; distension of the urinary bladder; pelvic abscess; and, as more uncommon causes—fæcal tumour; subperitoneal cysts; cysts in the omentum; fibrous, cancerous, or osseous growths from the pelvic bones; hydatid tumours; enlargement of spleen (when the spleen is so enlarged as to descend into the pelvis); cancer of the peritoneum; cysts or tumours connected with the kidneys; distension of the ureter; enlargement of the liver; retained encysted fœtus (which may also come under the next head).

As abdominal tumours not necessarily traceable into the pelvis, are enumerated—diseased liver; enlargement of the spleen; hydatid tumours in cavity of abdomen; fæcal tumour; pedunculated fibrous tumour of the uterus; cancer of the peritoneum; fat in the omentum; enlargement, etc., of the kidneys; and movable kidney. The diagnostic marks of each of these conditions are then pointed out, with regard to their importance. In describing the diagnosis of the uterine enlargements, Dr. Hewitt introduces a complete account of the diagnosis of pregnancy.

In the part of the work which is devoted to the consideration of Treatment, Dr. Hewitt not only gives the methods of treatment which his own experience has sanctioned, but also impartially points out those plans which have been advocated by other men of authority in the matter of female diseases. In this part of the work, the reader will find a very fair exposition of the views which have been held in late years on several important points—such as the use of caustics in chronic inflammation of the os and cervix uteri; the treatment of uterine prolapsus and flexions; ovariotomy; etc.

An easy reference is afforded to the subjects described in this work, by means of a copious table of contents and a well constructed index.

We have much pleasure in expressing our favourable opinion of the utility of Dr. Hewitt's work. As we have already shown, it does not proceed on the common plan of analysing a disease into its symptoms; but it is rather a guide to the practitioner who, meeting with a case which presents a certain assemblage of signs and symptoms, requires to ascertain what they mean, in order that his treatment may take a proper direction.

HANDBOOK OF PHYSIOLOGY. By WILLIAM SENHOUSE KIRKES, M.D., F.R.C.P., Senior Assistant-Physician to, and Lecturer on the Principles and Practice of Medicine at, St. Bartholomew's Hospital, etc. With Illustrations on Steel and Wood. Fifth Edition, carefully revised and enlarged. Pp. 774. London: 1863.

THE author of this excellent handbook has, in the present edition, made such additions as were necessary to bring the work up to the present state of our physiological knowledge. It hence maintains the position which it has long held—that of being *the* text-book of human physiology for the British student.

British Medical Journal.

SATURDAY, OCTOBER 31ST, 1863.

CATTLE-DISEASE IN TOWN DAIRIES, AND ITS PREVENTION: THE QUESTION OF LEGISLATION.

ON Thursday week last there was a large meeting in London, under the presidency of Mr. Holland, M.P., at the Marylebone Institution, to hear a lecture and to conduct a debate. The lecturer was Professor John Gamgee of the New Veterinary College, Edinburgh; the audience, the London cow-keepers; and the subject, "Disease in Town Dairies, and its Prevention." All things taken into consideration, the meeting was successful. It was a peculiar meeting—a meeting such as has not been seen in London ever before; a congress such as none but a sanitary reformer like John Gamgee could venture to summon; an assemblage which might have swallowed up, not without previous warning, the daring spirit that brought it from its milky way, but which did not do anything of the kind, but sat on its own stool, complacent throughout, self-possessed, and characteristically odoriferous; which heard its own property depicted with dead pleuropneumonic lungs budded upon its healthy living tails; which heard of said tails as, a few days later, swollen, purulent, shaky, and adding luxuriously their complement to the milk in the pail; and which under all this exposure never denied, never winced, never swore, but, charmed by the charmer, behaved gentlemanly and patriotically. Surely this was success with a vengeance.

Cui bono? What was the meaning of this meeting. In any plan of conduct a rational man always considers two things: first, the object or end which he proposes to attain by his action; and, secondly, the means by which that end is to be successfully pursued. There can be no mistake that Mr. Gamgee had both these points in view in calling the meeting as he did; and, as the question at large is one that concerns us as closely as it does any other section of the community, we may consider it from the same point as the lecturer, and with the same intentions.

One object Professor Gamgee had in view, then, was probably to inform the public of the present state of Town Dairies in such a manner as to admit of no doubts, misrepresentations, or equivocations. The Medical Officers of Health, in London at least, had faithfully exposed what they had seen: in a Government Report, Mr. Gamgee had exposed already what he had seen. At the late Social Science Meeting, in Edinburgh, a discussion had ensued in which various speakers had shown what they had seen: and Mr. Rawlinson depicted the "Slink Butchers" and the "Staggering Bobs;" while newspaper correspondents had detailed various stray facts, all confirming the general statement and comparison. But, after all, these statements, true though they might be, were *ex parte*; they were not made in such a manner as to admit of fair and possible contradiction. Cow-keepers, as a body, are not addicted to literature; the art is to them not congenial, not friendly; few of them even have excelled in poetry, that first and simplest of literary efforts. How, then, or where should they refute the magnates who were against them? All the talk, all the exposures, might be mere invention, or sensation, or exaggeration—*couleur de turnip*—standing unanswered by mere default. But Mr. Gamgee, in calling together all the cow-keepers of the metropolis, met at a single stroke and in one practical effort every objection and every difficulty. If the members of the fraternity of milk-venders cannot use the pen of the ready writer, they can all speak for themselves at a congress, and some, as it turned out, can speak fluently and with reason; they had therefore at the meeting the fullest opportunities of denying accusations, explaining away mistakes, or correcting exaggerations, and, as not a single speaker undertook for a moment to controvert the facts that were adduced as to the amount of disease extant in Town Dairies, we accept all that has been put forward as settled and proven, and may thank Mr. Gamgee at once, for this satisfactory result of his labours. It was worth his journey and his trouble to set forth in so sure a light the evidence that had been collected by himself and his friends.

The facts themselves that were elicited, have been often told, but they deserve repetition. Mr. Gamgee himself arranged them under the following heads.

"*Statement of Facts Relating to the Dairies of Large Towns.*

"Experience teaches us, firstly:—That cow-sheds are indispensable, just as much as stables for horses are indispensable, in large cities. The country supply of milk may greatly limit the number of cows kept in densely peopled districts; but the wants of the community necessitate having some cows near to the people who consume the milk. Railways have not altogether annihilated space; there are moderate sized towns where all the cow-sheds might be beyond the police bounds, but in London and other large cities this cannot be attained.

"Secondly:—The contagious diseases which have destroyed town dairy-stock to so great an extent during the last twenty years, spread independently of any local cause which might happen to militate against the health of animals. All the whitewashing, ventilation, flushing channels, and cleaning out manure heaps, so properly insisted on by medical officers of health, have tended to abate the nuisances which cow-sheds proved to be to their neighbourhoods, but they have in no way checked the mortality amongst cows by contagious disease.

"Thirdly:—Prior to the importation of foreign stock and foreign diseases, our town cows lived many months, and even two or three years, in the execrable sheds so often noticed with disgust and discontent, or with perhaps too much romance. It was no uncommon system to breed from the true dairy cow; now cows have become scarce. They cost more though they are not generally worth more; and, instead of living on in tolerable health, they die, or are slaughtered, within six months of entering the town cow-house.

"Fourthly:—On the system at present in force every dairyman must sell his diseased cow to the butcher, or be ruined; there is no alternative. Some inoculate their cows with success, but others either discountenance the operation or have it performed by ignorant persons, who destroy as many animals as they successfully operate upon.

"Fifthly:—The prevalence of disease amongst cows necessitates the use of diseased milk, or of milk largely diluted with water. Of the diseased milk much is directly injurious to human beings, and especially to infants."

This first object which Mr. Gamgee had in view, the correct enlightenment of the public in respect to the condition of Town Dairies, was, as we have seen, attained. But his intention did not stop at this one point; he had in view the further object of preventing the continuance of the diseases specified; and at the meeting to which we refer a resolution was moved and seconded, in which was indicated the direction he would take towards prevention. The movement of this proposition was a good test of the feeling of those who are most interested on the trade side, in respect to Mr. Gamgee's proposed plan: and the result showed, if ever his plan were formally brought forward, what the opposition on that side would be. The resolution was so strongly opposed, that it was withdrawn without going to the vote. Let us look at this plan for ourselves, and see how far it is likely to succeed. We may premise that, in order to secure success, Mr. Gamgee wishes to secure legislative interference. He desires an Act, and, if he has not given us the words of it, he has presented the substance. His suggestions run as follows. That we may not misrepresent him, we quote from the *Social Science Review* of Saturday last, in which his lecture is published in full, his own words.

"With a view to the prevention of disease, and therefore ultimately to the complete abolition of the traffic in diseased cows, I propose, that on a veterinary surgeon's certificate, the cows which show the first or premonitory signs of disease should be sold—such animals should never be allowed to remain a day in the dairies, as they there yield bad milk, and communicate disease. Let them be at once removed. Moreover, they should not be allowed to stand in the public market, but transferred to a near slaughter-house to be killed. I am here alluding to cows seized with the lung-disease, which in the very earliest stage can be eaten with tolerable impunity. The system of sale which I recommend has been adopted everywhere on the Continent, where efforts have been made to stop the disease, and these efforts have been crowned with success.

"During the first month or two that such a system is in force, the number of animals slaughtered as they first show signs of ailment would be considerable, but the effect would be speedily to diminish that number.

"What I am anxious to secure is a hearty co-operation between dairymen and professional men for the prevention of disease. At present they respectively engage in trials of strength, and the dairymen exult in their victories, when they see that the irresistible force of circumstances has enabled them to win a point against the sanitary reformer. I have therefore to ask the Medical Officers of Health maturely to consider the effect of thus legalising and controlling the traffic in diseased animals, and securing the co-operation of the market authorities. I regret to say that, at every visit I have paid to the Islington Cattle Market, many diseased cows have been disposed of amongst healthy animals.

"I still hope to see the day when, with the diminution of disease in town dairies, we may devise a profitable system for treating the sick in central depots; but the task is too gigantic to be hastily undertaken, and it is, I think, preferable to permit the disposal of animals at such a stage of disease as not much to interfere with the wholesomeness of their flesh. This sale, however, should only be permitted where preventive measures are carried out; and one reason for urging this is, that farmers and cowfeeders go on selling animal after animal, trusting that the disease may cease, whereas it continues.

"What is to be done next? In some cases it may be necessary to inoculate; in others, a few days tonic treatment to the still healthy animals may ward off the disease.

"The Veterinary Inspectors whom I wish to be employed by the cowfeeders should, when necessary, inoculate. I regard inoculation as best avoided when possible, but I know from experience that it can be resorted to with great benefit and with little danger; none but professional men should be employed to perform it."

Such, in general terms, is the legislation which Mr. Gamgee proposes for the dairy-stock of England. He would have all dairies registered; he would have trained veterinary inspectors; he would give to the inspector summary powers, in some cases, to inoculate, to segregate, to send to hospital, and (shall we say?) to order sale of any man's stock that may come under inspection. It is a bold suggestion; an incisive remedy. That it would go to the heart of the mischief, in a professional sense, is as clear as crystal; but the question is, Who shall do it? It is not until one sits down and begins to frame an act for the end designed that the difficulties appear; it is not until the workings of the most simple and

inoffensive act are cast up that the actual difficulties are presented; then they start forward with such force, that the argument, previously all on the side of the legislator, is pulled up to a dead stop. We feel, then, that the success of an Act such as is suggested would turn entirely, in its working, on the skill, the tact, the temper, the courage, and the forbearance of particular men, to whom the property of other men is confided—we mean, of course, the inspector. If the Government should raise up such men, how far, in the face of public opinion, would they do their duty? Or, if they did more than their duty, be it ever so little, how long would they be tolerated. There is an inspector at the present moment—a qualified inspector—at the New Cattle Market. What is the experience of his efforts? Does he enforce the strict letter of the law? Could he do so if he would?

We have put the matter before our readers in such way that they, equally with us, can consider it in all its bearings; they will, we doubt not, join us in saying that a better work, whatever may be the fruits of it, could not be done than is being done by the Edinburgh veterinary professor. Law or no law, his success is certain; for he is laying a basis of information on which the nation will build, until it proceeds to improvement, either by a temporary recourse to its legislature, or by bringing into action that nobler law which teaches the individual that he is doing best for himself when, without pressure, he is doing best for all, and which enforces fair dealing out of self and its true interests.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

That the remarks which have been made from time time in this Journal, relative to the Royal College of Surgeons of England, should be distasteful to the members of Council, we can readily believe; but we have yet to learn that anything untrue or unjust in that direction has been stated by us. We need, we hope, hardly say that our earnest desire in such matters is to be scrupulously correct; and that, should we by ccident fall into an erroneous expression, we shall only be too thankful to any gentleman who will point out the error to us. In the meantime, and until such error be pointed out, we must be permitted to say that we have written nothing respecting the Council of the College which is not, to the best of our knowledge and belief, exactly true. We would beg to suggest to those gentlemen, members of Council, who, as we have heard, think the Council has been ill treated by us, that a great public corporation like the College of Surgeons is a most legitimate subject of criticism. If its rulers have managed and do manage its affairs according to the spirit of the charter, and according to the best interests of the College, the public discussion of their operations will only make their good works the more conspicuous. But, on the other hand, if its management be defective, and inasmuch as this royal corporation is a great public body, it is simply and plainly the duty of the press to awaken it to a better life by pointing out its shortcomings. The time is gone by when men in office can effectively call out against public criticism, that it is hurtful to the feelings of those who manage public corporations. Every act committed by the Council of the College ought to bear the test of public questioning; and if it will not, we must be excused for calling that act a questionable one. We have the very highest respect for the members of Council as private individuals; but in that capacity we have here nothing to do with them. We are occupied in examining the doings of the managers of one of the most important medical corporations in the country, in trying them and weighing them in the balance of modern public opinion.

Every other medical corporation has undergone the modernising process; and most of them have had the wisdom voluntarily to undergo that process. Let our readers recollect what a character the College of Physicians bore not so many years ago for clubbism; and how unpopular the College was, as being the abode of cliqueism and retrogradism. But the College of Physicians had the good sense, and we may say the patriotism, to march with the times. It set its house in order, without waiting for the irresistible pressure of modern public opinion to open its eyes. It made great personal sacrifices; and assuredly it has had its reward, in being at this moment one of the most highly respected and popular medical corporations in the country. But the Council of the College of Surgeons has done none of all this. It has been running in the same groove as it ran in before it obtained its new charters, and has introduced none of those changes which were the very soul of the things thought to be gained under the new charter. Our duty has been to tell the Council the truth; viz., that the Fellows and Members of the College, and the profession at large, are not satisfied with its administration of affairs, and will not be satisfied, in fact, until the Council has gone through that chastening and discipline which every other corporation in the country has undergone. If the acts of the Council will not bear the force of our criticism, we suspect there is "something rotten in the state of Denmark". Moreover, no gentleman who is in a right position in office, in the Council or in the Court of Examiners, has a right, as a private individual, to take exception to our criticism. Public characters must not shrink from the trial of public criticism. It is childish to suppose that the pen of a journalist can damage the interests of a great and wealthy corporation, if all its acts be well on the

square. The discussion of the statements made in this JOURNAL, if founded on fact, and undeniable, as we say they are, must, as all impartial individuals will see, inevitably lead to the permanent good of the institution. Our business is with the body corporate; and if, in discussing its public interests, as our duty bids, we are forced to tread on private interests, it is a misfortune to us, but no fault of ours. It is the very nature of the constitution of the Executive of the College which causes our remarks to appear to fall hardly on individuals. In the College of Physicians, all the most important business of the College is transacted by the Fellows of the College; but in the direction of the affairs of the College of Surgeons, the Fellows have no power nor voice. The Council alone are the responsible managers of all its affairs; and on the Council, a restricted body, must, therefore, necessarily fall the weight—the odium and the praise—of all public criticism. Every act done by the Fellows of the College of Physicians is freely given to the profession; but the most important acts performed by the Council of the College of Surgeons—the election of Examiners and of President, the fees paid to Examiners, etc.—have heretofore been regarded by the Council as things with which the Fellows and Members of the College have not any concern. We are glad to find that these things are —some of them, at least—now to be told to the profession; and we shall, therefore, from time to time, still venture to make a few hints to the Council on matters touching the interests of the profession.

THE LATE SIR BENJAMIN BRODIE.

THE following extract from the biography of the late Sir Benjamin Brodie, which is shortly to appear, under the editorship of Mr. Charles Hawkins, appears in the introductory address of Mr. Henry Lee, lately delivered at St. George's Hospital. This excellent address has been published in full, at the request of the Hospital Board.

"In March 1808, I was elected Assistant-Surgeon to St. George's Hospital. In January 1840, after having filled the place of Assistant-Surgeon for fourteen years, and that of Surgeon for nearly eighteen years, I resigned my office. During these thirty-two years, the hospital, as far as my profession was concerned, was the greatest object of interest that I possessed. Except during the brief intervals of my absence from London, it rarely happened that I was not, some time during the day, within its walls. I was indebted to the opportunities which it afforded me for the best part of the knowledge which I had been able to attain. It had rendered my professional life one of agreeable study, instead of mechanical and irksome drudgery. Some of my happiest hours were those during which I was occupied in the wards, with my pupils around me, answering the inquiries, explaining the cases to them at the bedside of the patients, informing them as to the grounds on which I formed my diagnosis, and my reasons for the treatment which I employed, and not concealing from them my oversights and errors—and all this to kind and willing and only too partial listeners. My intercourse with the students, and I may add with the patients also, was always to me a real source of gratification; and even now (many years afterwards) these scenes are often renewed to me at night, and events, of which I have no recollection when awake, come before me in my dreams. It was not without a painful effort that I made up my mind to resign an office to which I had been sincerely attached. In doing so, I was influenced by various considerations. One of them was, that I began to feel the necessity of diminishing the amount of my labours. Then I had long since formed the resolution that I would never have it said of myself, as I have heard it said of others, that I retained a situation of such importance and responsibility, when, either from age or from indifference, I had ceased to be fully equal to the duties belonging to it; and, lastly, when I saw intelligent and diligent and otherwise deserving young men around me, waiting their turn to succeed to the hospital appointments, it seemed to me that there was something selfish in standing longer in their way, when, as far as my own mere worldly interests were concerned, I had obtained all that I could desire. I have found no reason to be dissatisfied with the resolution which I had formed and the step which I took in consequence; yet, for some considerable time after I had taken it, I had many uncomfortable feelings, and I never passed by the hospital without something like a painful recollection that my labours there were at an end."

THE WEEK.

AT the annual general meeting of the Herefordshire Medical Association, on the 7th inst., the following resolution was passed.

"That it is the opinion of this Association that the utmost caution should be used by members of the profession in expressing opinions about each other, but especially in giving evidence to the prejudice of any gentleman legally qualified to practise."

Two excellent clients, the City of London and St. Bartholomew's Hospital, are about to engage in a law-suit. The question between them is, What is the class of men eligible for election as Presidents of St. Bartholomew's Hospital? The question affects all the royal hospitals in the city. It appears that since 1549, an alderman has, until last year, always been elected President of St. Bartholomew's Hospital. Until 1854, the custom had invariably been to elect to the presidency of the city hospitals, the Lord Mayor or an alderman who had passed the chair; but in that year the Duke of Cambridge was chosen President of Christ's Hospital; and again, within the last twelve months, Mr. Cubitt was elected President of St. Bartholomew's Hospital. Taking alarm at this repeated innovation of an ancient privilege, the aldermen, backed by a vote of the Common Council, and with the purse of the corporation at their command, have thrown down the gauntlet to contest the point of right with the donation-governors at Westminster Hall. The contest is between the foundation- and the donation-governors, the latter of whom decline any longer, unless compelled by law, to limit their range of choice to the twenty-five or twenty-six gentlemen who form the Court of Aldermen.

We recommend the following extract from the war despatches from New Zealand to those noble gentlemen at the Horse Guards, who are inclined to regard the army surgeon as a sort of supernumerary, and who dub him a non-combatant :

"Surgeon-Major Carte, M.B., 2nd Battalion, 14th, the senior medical officer in the field, rendered prompt assistance to the wounded, many of whom he attended under fire."

We have always understood, that had it not been for the combatant power of a non-combatant medical officer, his Royal Highness of the Horse Guards might probably not have come out of Inkermann with a whole skin.

The waters of the Dead Sea, M. Rouse tells us, contain 20·6 per cent. of saline matters.

M. Morel-Lavallée tells the Société de Chirurgie that he has now for some time used a case of pocket instruments, which are, with the exception of the knife-blades, made entirely of bronzed aluminium. These instruments are much cheaper than silver ones, are inoxidisable, and preserve their brilliancy though in daily use. The compound contains from 5 to 10 per cent. of aluminium, and has the colour and brilliancy of gold.

Whilst in England attempts are made to restrict the liberty of curing disease by non-licensed persons, in France the tendency is exactly the reverse. The world lives by contrasts.

L'Union Médicale admires our free method of teaching in England. "All medical schools enjoy a perfect liberty ; and it is thence they draw the main source of their activity. They find in the imperious lesson of self-preservation, the most efficacious stimulant for the performance of their duties. The result is a noble rivalry between the schools—a war of progress. At this present moment, every professor on meeting asks his colleague, 'How many entries?' This stimulant of private interest it is which causes the success of all these private institutions."

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, November 12th, 1863.

SOUTH MIDLAND BRANCH: GENERAL MEETING.

The autumnal meeting of the South Midland Branch was held at the Infirmary, Northampton, on Thursday, October 22nd, at 2 o'clock; W. Paley, M.D., President, in the chair. Nineteen members and five visitors were also present.

On taking the chair, Dr. Paley made a few remarks ; and read letters from several gentlemen unable to attend the meeting; viz., Drs. Richardson and Graily Hewitt, of London; Dr. Robertson of Clifton; Dr. Barker of Bedford; H. Veasey, Esq.; F. Cox, Esq.; H. Terry, Esq.; and W. H. Day, Esq.

The minutes of the last meeting were read by Dr. Bryan.

Papers. The following papers were read :—

1. Rupture of the Axillary Vein from Dislocation of the Os Humeri into the Axilla. By H. Hailey, Esq., Newport Pagnell.

2. On the Danger of Employing Nux Vomica in habitual Aperients. By A. G. Osborn, Esq., Northampton.

3. Remarks on the Unsatisfactory State of Medical Charges. By W. H. Gatty, Esq., Market Harborough.

After this paper was read, considerable discussion ensued; and the following resolution was proposed by Mr. Gatty, and seconded by Mr. Watkins (Towcester), and carried unanimously—

"That the remuneration of the medical profession should depend solely upon the time and skill devoted to their patients, without reference to the quantity of medicines supplied."

4. Case of Idiopathic Tetanus treated with Belladonna. By C. C. Balding, Esq., Shefford.

5. Short Notes on Diphtheria. By T. H. Barker, M.D., Bedford. [This paper was read by Mr. Goldsmith.] Dr. Barker had had sixty-three cases; seven of which proved fatal.

A vote of thanks was proposed by Dr. Francis, seconded by Mr. Mash, and carried unanimously, to those gentlemen who had furnished papers, with a request that they allow them to be published in the Journal.

Medical Charges. Mr. Watkins proposed—

"That the result of the application to members respecting medical charges be referred to the next committee meeting; and that Mr. Gatty's name be added to the committee.

Vote of Thanks. Dr. Faircloth proposed, and Mr. H. Terry seconded, a vote of thanks to Dr. Paley, for his kindness and hospitality and the manner in which he has conducted the duties of president.

Dinner. The members then adjourned to the George Hotel, where a handsome dinner was provided.

N.B. Dr. Bryan will be glad to hear from each member of the Branch if he agree with the spirit of the resolution proposed respecting the remuneration of the medical profession, and will join the other members of the Branch in carrying it into effect.

The late Mr. James Price of Hereford. At the late annual meeting of the Herefordshire Medical Society, the following account of the late Mr. Price was given. "We have this year to lament the death of one member of our Association, James Price, Esq., the father of the profession for this city and county. Mr. Price was a native of Hereford, and apprenticed here. In his early professional career he saw much active service ; he was appointed surgeon in the Artillery in 1804; he was at Buenos Ayres, under General Whitelock, in 1807, and then served for a time in India; he was at Corunna, under Sir John Moore, in 1809, and subsequently in the same year he took part in the ill-fated Walcheren expedition; in 1810 he began practice in this city, and continued doing so till within a few days of his death. For forty-five years he managed the Medical Book Society, with a steady attention that calls for our lasting gratitude; he passed a long and useful life amongst us; and it is not a little to say, that he has justly left behind him the memory of a kind and genial man, ever upholding the interests of the profession, and never better pleased than when he could promote true social friendship amongst his brethren."

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

A CASE of no small interest to members of the medical profession who are engaged in dispensary practice was tried on Wednesday, October 21st, in the Edinburgh Small Debt Court, before Sheriff Jamieson.

A woman, of the name of Isabella Mackenzie, sued Dr. Gordon, the apothecary of the Royal Public Dispensary, for £12 damages for injury to her health, caused by the improper dispensing of a prescription which had been prescribed by Dr. Strethill Wright, one of the physicians to the Dispensary.

In order that our readers may understand the case in question, we must inform them that there are in Edinburgh two public dispensaries; one situated in the old town—the Royal Public Dispensary in Richmond Street; the other situated in the new town, and therefore called the New Town Dispensary. These institutions have an excellent staff of medical officers, who gratuitously offer their services, and some of whom attend daily at certain hours. They are assisted by medical students, who are usually in the third or fourth year of their studies, and who go to the houses of those patients who are unable to attend the Dispensary. There is, in addition, a midwifery department, and a pharmaceutical laboratory, where the prescriptions ordered by the medical officers are dispensed gratis. In this laboratory, all prescriptions are dispensed by medical students, under the superintendence of Dr. Gordon, who also instructs them in the performance of such minor surgical operations as cupping, tooth-drawing, etc. The institution, like its fellow in the new town, has, therefore, a somewhat important office in connexion with the Medical School, as nearly every medical student is required to attend the dispensary practice for six months, and practical pharmacy for three months.

It appears that, at the Old Town Dispensary, it has been the practice to give out the medicine without any labels; and that mistakes have been of very frequent occurrence. We have been informed of patients who have swallowed the lotions which had been prescribed for ulcerated legs, and have applied to these the cough mixtures which they ought to have taken internally.

The pursuer in the present action, a woman of delicate constitution, when suffering from some slight gastric disorder, applied to the Royal Public Dispensary, and was seen by Dr. Wright, who ordered her some powders containing ten grains of calumba and ten grains of nitrate of bismuth, of which she was ordered to take one three times a day. The student who dispensed the prescription, unfortunately, substituted ten grains of calomel for the ten grains of calumba. The poor woman took one of the powders, and was very soon severely purged, and suffered from vomiting. Not attributing the symptoms to the medicine, she persevered in its use, and took a second and a third dose. In consequence, she suffered from continued purging and vomiting, and was subjected to the annoyance of pretty profuse salivation.

Dr. Strethill Wright deposed to having written the prescription for the powders. He explained that the mistake must have arisen from ignorance or gross carelessness; for no one at all conversant with the materia medica could have read "calomelanos" instead of "pulv. calumb", however illegible the word "calumb." might have been. Dr. Wilson and Mr. Milburn testified to having seen the woman after she had taken the powders, and to have found her suffering from salivation. Dr. Wilson deposed to having ordered opium to check diarrhœa, and a borax lotion for the mouth. Mr. Milburn, her usual medical attendant, stated that the woman had been seriously inconvenienced by the powders which she had taken, although they had not caused any permanent injury. Other witnesses were called to prove the identity of the powders which the woman had swallowed, with the powders made up at the Dispensary.

For the pursuer, it was urged that she had undoubtedly suffered not a little through the mistake which had been committed; and that she had been obliged to keep her bed, and to employ some person to do her household work. It was urged that, as Dr. Gordon was the person appointed by the directors of the institution to superintend the dispensing of prescriptions, and as he received, as a remuneration for this office, one-half of the fees paid by the pharmacy pupils, he was responsible for any mistakes which might be committed.

On the part of the defendant, it was pleaded, that the number of students attending the Dispensary was so great, and the patients applying for relief so numerous, that it was absolutely impossible for one person to superintend the dispensing of every prescription. It was urged that, in such an institution, mistakes must necessarily sometimes occur; and that, in availing themselves of their aid, the public ought to make up their mind to run the risk. In conclusion, it was pleaded, that any legal responsibility which might be incurred would fall upon the directors of the Public Dispensary, and not upon Dr. Gordon.

The learned Sheriff commenced his very lucid address by stating his opinion, that undoubtedly Dr. Gordon was the person legally responsible for the mistake which had occurred. He repudiated the ideas which had been upheld by Dr. Gordon's legal adviser, that public institutions such as the Royal Public Dispensary are not to be held responsible for any injury resulting from the improper dispensing of prescriptions. Such institutions, in soliciting the aid of the public by subscriptions, incurred some responsibilities towards the public from which they could not shrink. In this case, he considered the question of legal responsibility was absolutely free from doubt. In considering the question of damages, it was important to inquire whether any permanent damage, or only temporary inconvenience, had been sustained. It had been clearly shown that no permanent damage had been inflicted. It was also important to learn what degree of blame had been incurred by those who had committed the mistake. Absolving Dr. Gordon from any personal neglect, he expressed his opinion that there had been great carelessness. Instead of a tonic

medicine, the poor woman had been subjected to the action of a fearful purgative, which had caused her great temporary suffering and great debility. Although absolving Dr. Gordon from any personal neglect, he must hold him legally responsible, and give a verdict for the plaintiff. Damages £3 : 3, with costs.

Reports of Societies.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

Meeting at Edinburgh, October 1863.

DEPARTMENT OF PUBLIC HEALTH.

R. Christison, M.D., F.R.S.E., President, in the Chair.

Medical Reform. By W. Ogle, M.D. Dr. Ogle's motto was, "Prevention better than cure"; and his object was to show how easily this maxim might be reduced to practice by making the medical man as much as possible responsible for the health of his patient. In order to this, a change was necessary in the *form* of the remuneration given to the medical men for their services. He pointed out the defects of the "fee" and of the "contract" systems—the two extremes; and argued that the truth in this, as in other cases, consists in an adoption of that which is good in each, and the rejection of that which is faulty; and that this is easy, for that the faults of the one are corrected by the excellencies of the other. The plan recommended was to make the fee the exception—to pay the doctor an annual sum for all ordinary work, with additional fees for extraordinary work. Ordinary work was defined to mean all such work as might be notified to the doctor at an early hour of the day in which his services were required, leaving it to him to arrange the time of the visit to fall in with his other engagements. Extraordinary work was held to be such exceptional services as calls to attend immediately or at a time fixed absolutely by the patient. This arrangement, it was considered, would enable the doctor to take charge of the health of the patient, and would, even in time of sickness, make the interests of the physician and his patient one and the same. Dr. Ogle argued, from the almost universal repudiation of the system of "payment per bottle", and from the dislike manifested both by patient and doctor of a rigid adherence to "payment per visit", that the time has come when such an alteration as the one proposed would be generally acceptable.

On the Contamination of Water by the Imperfect Drainage of Towns and Villages. By Stevenson Macadam, Ph.D. He said that for some years back he had been engaged in investigations relating to the sanitary conditions of towns and villages; and his attention had been especially directed to the influence of the want of drainage on the water employed in drinking and for culinary purposes. The majority of towns and villages carried out a system positively unwholesome and detrimental. In the better class of dwellings, each house was provided either underneath it or in a small back garden with two holes. One was a well with a pipe leading to the house with drinking water; and the second was a cesspool with a pipe leading from the house. The well was for the most part dependent for its supply of water on the percolation of water through its sides or bottom; and as the cesspool was not many yards off, the liquid which it contained would ooze through the sides, and enter the well. The injurious effects of this were obvious. There was not much danger whilst the drainage from the houses was fresh; but when putrefaction set in, it became directly injurious to health. The surface drainage of towns and villages had also a very evil effect, both upon water and the atmosphere. As a means of remedying these evils, the writer proposed that the Police Act of 1862 should be made compulsory, so far as regards these matters.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, October 7th, 1863.

Henry Oldham, M.D., President, in the Chair.

Communications. Mr. Sequiera exhibited an Anencephalous Monster, with photographs.

Dr. Druitt read a case, and showed drawings, of Secondary Syphilis after Vaccination.

Dr. Leishman read a note of Associated Hydrocephalus and Spina Bifida in a child nine months old.

A case of Dilatation of the Os Uteri by the Sea-tangle (Laminaria digitata) to procure Abortion was read by Dr. Prichard.

Diseased Cervix Uteri Removed by Ecraseur. Dr. Greenhalgh exhibited two specimens of diseased cervix uteri, which he had removed that afternoon with the wire *écraseur* of Weiss. The first, a specimen of epithelial cancer, involving the whole of the posterior, and extending to the anterior lip of the womb, was removed from a married woman, under the influence of chloroform, and scarcely any blood being lost.

The second was a specimen of simple hypertrophy of the neck of the womb, two inches and a half in length, and five and a quarter in circumference, taken from a married woman, aged 41 years, who had one child twenty years ago. Her labour was lingering, and her recovery protracted. She complained that about seven years ago her "womb gradually came down," since which it had never returned, whether in the upright or recumbent position. She had experienced so much local discomfort, and it was such a barrier to sexual connection, that she begged that something might be done for her relief. No blood was lost during or after the operation.

Dr. Greenhalgh remarked that this affection, uncomplicated with procidentia uteri, is of rare occurrence, and is frequently taken for and treated by pessaries as the latter affection, to the great annoyance of the patient and aggravation of the disease. He had now operated upon four such cases with perfect success.

Dr. Barnes had used the instrument of Mr. Weiss for the removal of fibroid polypi in several cases very successfully; but he preferred the instrument of Dr. Hicks, which was less cumbersome. With regard to the method of removing the vaginal portion of the cervix uteri, he thought the operation of Dr. Marion Sims—which consisted in amputating by a cutting instrument, and covering the stump by flaps of mucous membrane brought from behind and before—had a considerable advantage over ablation by the *écraseur*. By Marion Sims' operation the healing was much accelerated, and a better os was preserved. He (Dr. Barnes) had performed the operation with a most satisfactory result.

Dr. Routh had also operated, and successfully, in several cases; but while he admitted the usefulness of the *écraseur*, and its advantages in preventing hæmorrhage, he doubted if it might not subsequently preclude impregnation. The cicatrising always left the os puckered and contracted, so as to give rise occasionally to dysmenorrhœa. None of his patients, nor of those whom he had seen operated upon, so far as he knew, had had children or even miscarriages afterwards. This might be accidental, on which the experience of Fellows might throw a new light. If, however, barrenness followed the use of the *écraseur*, Dr. Sims's operation, which enabled the accoucheur to retain the os in a patent condition, was to be preferred.

Dr. Braxton Hicks, in the course of construction of his instrument, had adopted the drum and endless screw as used by Weiss, but had afterwards discarded it, because it was found that the length of wire-rope which could be used by his was practically as long as required. He had also removed many times the cervix uteri by different *écraseurs*, without any untoward symptom. He thought that the occlusion of the os uteri, if it occurred, might be overcome by a bougie as easily as in the operation of Marion Sims.

Dr. Graily Hewitt considered the *écraseur* objectionable in cases of hypertrophy of the cervix where the bladder was drawn downwards with the cervix, inasmuch as there was a liability to injure the bladder. He had seen cases where the portion of the cervix situated above the vagina was greatly elongated, and in which the *écraseur* could not have been used, for the above-mentioned reason. In the other class of cases, where the hypertophy was limited to the vaginal portion of the cervix, the *écraseur* could be safely and advantageously used.

CASE OF CHRONIC HYDROCEPHALUS.

BY HENRY MADGE, M.D.

The subject of the notes was the seventh child. Of the six brothers and sisters, five died from convulsions before they were a year old. The surviving sister is troubled with scrofulous sores. After birth the patient thrived very well up to the ninth month. Teething then commenced, accompanied with convulsions. There were severe brain and meningeal symptoms for several weeks; and, on their subsidence, the head was perceived to be enlarging. Measurements of the head were taken from time to time, which showed that in three months its circumference had enlarged from nineteen inches to about twenty-three inches; the other measurements, from ear to ear across vertex and from root of nose to occipital protuberance, undergoing corresponding changes. Measurements of the fontanelles were also taken, and observations made on the cranial sutures. After arriving at the above dimensions, the head gradually lessened in size, and became stationary at about twenty-one inches in circumference. Before the illness, the child showed signs of intelligence in the usual childlike way; subsequently the little intelligence she had entirely disappeared, reappearing after a blank of several months in a low form—namely, that of imitating sounds, followed, at a later period, by mental manifestations of a somewhat higher order. The general health throughout was but little affected. She is now three years and a half old. The size and shape of the head have remained the same for some time past; but the body grows rapidly. Some of the faculties are particularly active. The treatment most relied on was the administration of short courses of mercury with chalk, and the application of blisters to the nape of the neck and behind the ears, kept open for a very long time.

The paper was accompanied by diagrams showing the changes effected in the size and shape of the head during the progress of the disease.

Dr. Ballard did not agree with the author in attributing the disease to any diathetic error inherited from the parents, neither did he believe that the irritation of teething had any effect in causing the disease. He believed that œdema of the brain, which was the pathological condition of convulsive diseases of infants, resulted from a state of malnutrition, the consequence of a disorder of the stomach and intestines, which was caused by an excessive secretion of gastric juice, continually produced by reflex action when a child has to suck excessively to obtain its food, and which effort he designated "fruitless sucking." The green diarrhœa of infants, and the chronic state of diarrhœa which always precedes hydrocephalus, are the evidences of the existence of this injurious condition. The treatment consists in arresting the diarrhœa by attention to the sucking, feeding the child well upon milk, and treating the symptoms of pressure on the brain in their early stages by the abstraction of blood by leeches; the symptoms indicating the use of leeches being repeated acts of vomiting, or vomiting during sleep or any form of fit. He was of opinion that had the case described in the paper been treated on similar principles the result would have been as favourable.

Mr. Owen, in agreeing with Dr. Ballard in regard to some of the points on the feeding, differed from him in the suggestion of free and continuous leeching in a case like this, where a tubercular diathesis evidently existed.

Dr. Barnes submitted that an absolute etiological theory ought to apply to all the cases of the disease. Now, the accoucheur knew well that hydrocephalus was a congenital disease; that it arose *in utero*.

Dr. Routh believed Dr. Ballard's views to be important and true in many cases. He had repeatedly seen fruitless sucking from an exhausted mother, or from the sweetened piece of flannel to keep them quiet by ignorant nurses, produce diarrhœa and green stools, and, after a time, head-symptoms and hydrocephalus. But he did not say this was *always* the result observed. Dr. Madge's paper was important as illustrating—first, the effect of a strong tubercular diathesis in inducing hydrocephalus, spite of his skilful supervision and treatment; secondly, as proving by actual measurement the marked diminution of the fluid effused. The diminished size of the head (as indeed at one time was stated by the parents of this very girl) is too often erroneously inferred, because, owing to the growth of the other parts of the body, it seems to be smaller. He thought, however, these cases would bear calomel to a larger extent than given by Dr. Madge. He (Dr. Routh) instanced an example similar to the present, in which idiocy was impending, where ten grains of calomel one day and five the next were given successively for three weeks. A cure resulted. The young man was now alive and full grown, and with intellect unimpaired. Without recommending these excessive doses, still he thought full doses of calomel were often well borne in chronic hydrocephalus, appearing to act in this affection chiefly through the kidneys.

Dr. Graily Hewitt congratulated Dr. Madge on his paper, and on his success in the treatment of the case. Some years ago he had himself succeeded in arresting the disease in its acute stage, and the patient completely recovered. The remedies he had used were very extensive counterirritation over the scalp by means of tartar emetic, and liberal administration of stimulants.

Dr. Madge, in reply, wished to state that he had not brought the case forward as anything extraordinary, but simply as an illustration of a rather common form of disease. Dr. Ballard had given an opinion that the condition of the patient was caused by "fruitless sucking" and by "overlooked or neglected diarrhœa," and that the treatment had been altogether wrong. Dr. Madge considered there were no grounds whatever for such an opinion. It would be difficult to say what amount of so-called "fruitless sucking" had taken place in this or in any case, but it was a mere assumption to say that it had taken place at all, and a still more groundless assumption—as it was removed from all scientific and reasonable probability—that "fruitless sucking" could have caused such grave symptoms as those recorded in the paper. These symptoms could be explained on much more rational principles. The evils of fruitless sucking, he thought, had evidently been greatly exaggerated. The theory had doubtless been erected on a few exceptional cases. As to diarrhœa, there was a marked absence of it in this case; aperients had been frequently necessary—a state of things usually accompanying nervous disorders, or a predisposition to them. He had heard nothing that evening which would induce

him, in a similar case, to deviate much from the plan he had adopted. There was no doubt much to deplore in the present condition of his patient, but the result was better than could have been anticipated under the circumstances.

LIVERPOOL MEDICAL INSTITUTION.

October 13th, 1863.

R. Gee, M.D., Vice-President, in the Chair.

New Splint. Dr. Rawdon shewed a splint he had contrived for fractured thighs and legs. It was made of iron, and so arranged that the foot-board, the thigh-piece, and the part that supported the leg, could all be lengthened as much as might be necessary, and the knee could be adjusted to any angle.

Poisoning by Bites of Flies. Mr. Hakes referred to a Circular of the French Government to the Prefects of Departments, concerning poisoning by flies, and mentioned a case he had recently had in which a lady had suffered from severe inflammation after a sting on the knuckle from a fly.

Dr. Barrett had also recently had a case where erysipelatous inflammation with some constitutional disturbance arose from the same cause.

Mr. Bailey and Dr. Skinner mentioned similar cases.

Disease of the Elbow-Joint. Mr. Fletcher showed two specimens of disease of the elbow-joint, removed by excision. In one case, the cartilages were nearly destroyed, and in both there was a considerable degree of anchylosis. In both cases the separation of the ulnar nerve gave him some trouble. The cases are doing well.

Diverticulum of the Bladder. Mr. Hakes shewed a bladder with a large diverticulum from an old man who had undergone the operation of lithotrity at the Northern Hospital. He had been admitted on account of great irritability of the bladder; the stone was detected, and after gradually dilating the urethra, Mr. Hakes partially crushed the stone in the usual manner. The patient gradually sank, and died about ten days after the operation. The bladder was found, after death, to be slightly inflamed, and excessively thickened, and connected with it by an opening that would admit the little finger was this large diverticulum, larger than the bladder itself. Mr. Hakes read some extracts from Rokitansky, on the nature and causes of these diverticula. The stone had been broken into three portions, and one of these into smaller fragments; the greater part of the stone was found in the bladder, a small fragment only in the diverticulum.

Dr. Nottingham said that long before Rokitansky's work appeared, Civiale had written fully on this subject. In some of these cases we find that, when the patient has passed all the urine he can by his own efforts, if even pressure be made on his abdomen he will soon afterwards pass a great deal more. This state of things increases the difficulty in cases of lithotrity, and a great deal of the fluid injected escapes into the diverticulum. Again, if the stone had lain in the diverticulum itself, neither aperture nor stone might have been detected; in such cases it has even happened that the opening has closed, and the symptoms of stone have disappeared.

Mr. Fletcher, on examining the specimens, perceived another and very much smaller diverticulum near the neck of the bladder.

The Chairman questioned very much whether the great thickening of the bladder was entirely due to muscular hypertrophy, and not in part to a degeneration of the tissues that might have something to do with the formation of these pouches.

Excision of the Knee. Dr. Nottingham shewed a specimen of disease of the knee-joint, which he had excised. The patella was the portion most affected, being scooped out into a mere shell; the ends of the femur and tibia were comparatively sound, and the cartilages not very much affected. The patient, aged 8, is doing very well.

Amputation of the Thigh for Malignant Disease. Dr. Nottingham also shewed the thigh-bone of a patient who had undergone amputation of the thigh on account of a large malignant tumour growing in the upper part of the popliteal space. The artery and vein were found running through the diseased mass. The tumour had been of rapid growth and accompanied by much pain although the knee-joint was not affected. In the veins below the tumour many firm fibrinous plugs were found. There was a great mass of blood in the tumour. The patient is going on well at present. His family had a decidedly tubercular taint, but there was no history of hereditary cancer.

Tape-Worm Expelled by Goose Oil. Dr. Skinner shewed a tape-worm which had been passed by a child about seventeen months old, after a dose consisting of two dessertspoonfuls of goose-oil administered by some old woman. The dose was given at night, and the entire worm, ten feet and a half long, with its head, was expelled dead next morning.

Mr. Bailey had heard of goose-grease being so used before; but never of its having been successful. Might not its success in this case have been a mere coincidence?

In answer to Mr. Steele, Dr. Skinner did not know whether the child had ever sucked or eaten raw meat.

Dr. Rawdon, considering the size of the worm and the age of the child, thought Dr. Skinner ought to be well assured of the credibility of his informant.

Dr. Stookes once had a child brought to him, three months old, that had passed seven and a half feet of tape-worm; the child had never had anything but its mother's milk.

Dr. Nottingham said there was an old Lancashire song in praise of the virtues of goose-grease. Might not the depraved appetite caused by the presence of the worm in these cases lead to the sucking raw meat, etc., and thus cause the disease to be attributed to that habit?

Dr. Barrett said the opportunity of tasting seemed to have more to do in these cases than the depraved taste. Butchers and small shopkeepers seem very subject to this complaint; as an illustration, he had had the three assistants of one butcher under his care with tape-worm.

Mr. Bailey had seen these entozoa in slaughter-houses in young calves, lambs, etc.

Wound of the Knee-Joint. Mr. Lowndes read a case of wound into the knee-joint. A man, aged 29, was admitted into the Northern Hospital on September 8th, 1863, with a small contused wound, just on the outer side of the ligamentum patellæ of the right leg, caused by a blow from a winch handle. The knee-joint was rather swollen, and when it was pressed a sero-sanious, fluid escaped freely from the wound. The wound was about an inch and a half in length, and ragged, and its edges were bruised; a probe passed into it buried itself in the middle of the joint. The wound was covered with a double layer of lint smeared thickly with Canada balsam, and this secured with strips of plaster. The leg was then placed on a Macintyre's splint; and he was ordered to have half a grain of acetate of morphia night and morning. Low diet and beef-tea were ordered. September 9th, he was going on well; there was no pain, and very little swelling; the skin over the knee was rather hot. Some of the balsam having oozed out, a fresh piece of lint smeared with more of the balsam was laid over the other dressing. No inflammatory action came on. The leg was taken off the splint at the end of a fortnight, and gentle motion used. The original dressing was not removed until October 5th, eleven weeks after the accident; the wound was found to be completely healed, and covered with a smooth delicate cuticle; there still seemed to be some slight effusion into the joint. On

October 9th, the man was allowed to go home; he was free from pain, and able to walk without a stick. Mr. Lowndes said in this case we had to deal with a ragged wound into a joint, with a thin sanious fluid oozing from it. There seemed no hope of obtaining union by the first intention, and the only chance of excluding air from the joint seemed to be by excluding air from the wound entirely, and trusting to the process of healing under a scab. Mr. Lowndes shewed the scab formed by the original dressing. He alluded to the great importance in cases of compound fracture and dislocation of closing, when possible, the external wound; for this purpose lint dipped in blood is often sufficient and has long been in use, and in severe cases this balsam might also be tried; it adheres firmly to the surface around the wound, excludes the air, and allows the effused fluids to concrete into a scab. He concluded by some extracts from Mr. Paget's *Surgical Pathology*, on the process of healing under a scab.

Mr. GILL mentioned a case he had had in which a gentleman received a compound fracture of the leg, from the kick of a horse; he applied lint soaked in blood to the wound, and placed the limb on a Liston's splint; at the end of four weeks the dressing was removed and the wound found healed, covered over with a delicate film. The bones united quickly, and a good recovery was made, although its progress was interrupted by a fall down stairs which re-fractured the bones.

HARVEIAN SOCIETY OF LONDON.

OCTOBER 15TH, 1863.

HENRY W. FULLER, M.D., President, in the Chair.

Proposed Court Medical. Dr. STEWART brought forward a notice of motion, to the effect—"That the President, Vice-Presidents, and Council of the Harveian Society, for the time being, shall be, and hereby is, constituted a Court Medical, for the hearing, consideration, and determination of all questions of professional status or etiquette, affecting any member or members of the Society; and of such questions as shall be specially referred to it by any member or members."

Leucocythæmia. The PRESIDENT mentioned that there is at present in the wards of St. George's Hospital a patient who is a well marked example of the disease called leucocythæmia. He invited any member desirous of seeing the case to visit the wards.

Dilatation of Pupil from Henbane. Mr. CURGENVEN mentioned a case of dilatation of pupil in a patient of his who was taking tincture of henbane.

Mr. HART remarked that this was a well-known property of the family of *Solanaceæ*.

Reflecting Ophthalmoscope. Mr. J. Z. LAURENCE exhibited his recently invented reflecting ophthalmoscope. Mr. Laurence first showed on the eye of a rabbit that the luminosity of the fundus oculi may be readily observed by interposing a sheet of plate glass at the proper angle between the eye and a lamp-flame. An observer regarding the surface of the glass at the proper angle sees the illuminated pupil. It was then shown that the aerial image, formed in the focus of a convex lens, may be at once rendered obvious by its reflection from a plate of glass placed beyond the focus of the lens. In this way, Mr. Laurence succeeded in demonstrating the optic nerve, retinal and choroidal vessels of the rabbit's eye, by the reflection from a sheet of glass of their real image formed by a convex lens (of two or three inches focus). An ophthalmoscope on this principle consists, then, chiefly of two parts: 1. Of a convex lens; and 2. Of a plate of glass. In this way, Mr. Laurence stated he had observed the minutest details of the human fundus oculi; but, at the same time, he wished to impress on the members of the society, that he had only succeeded in establishing the principle of his instrument; there remaining much to be done in the details of its construction before it would become of general practical utility. Mr. Laurence stated that the reflecting ophthalmoscope possesses also autophthalmoscopic properties.

Mr. LAURENCE exhibited, in a patient, a very striking instance of pulsation in the retinal veins, of which, in a less degree, he had latterly observed several other instances.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, OCT. 16th, 1863.

A. W. BARCLAY, M.D., President, in the Chair.

INAUGURAL ADDRESS.

THE PRESIDENT congratulated the members on the commencement of another session, expressing his hope that the meetings of the Society would tend to the development of the warmer and more kindly feelings of professional brotherhood in the prosecution of scientific research. He then referred to his own position as medical officer of health for the same district; and went on to select from the sanitary department two subjects for their consideration that evening. In speaking of this department of practice, he wished to protest against the idea that there was anything antagonistic or uncongenial to ordinary practice; and to express his conviction that the best practitioners were the best sanitarians, and that, in fact, all that had been done was only the carrying out of principles in which all had been educated and all had believed. There was, on the one hand, the great disadvantage that the so-called sanitary reformers rode their hobby to the very verge of charlatanry; but, on the other, it must be admitted that their earnestness and zeal had hastened forward the adoption of measures which might otherwise have been indefinitely postponed. The first subject was small-pox and its prevention by vaccination. The speaker asserted broadly his conviction that the benefit of vaccination was not wearing out or becoming less operative. He called the attention of the meeting to what may be called, in the language of Sydenham, "the epidemic influence"; contending that to the greater or less intensity of this influence is due the more or less spread of the epidemic. He cited the instance of cholera as a type in which, whatever the theory of its propagation, every one admitted, whether they believed in atmospheric influence or in accumulation of dirt, foul privies, and bad drains, as being chiefly concerned in its spread, or looked to the water supply as the medium; yet the very same conditions of air, earth, and water, are found without the spread of cholera when the epidemic influence is absent. In the same manner, proof of such an influence was seen very distinctly in the rise and fall in the number of patients in the Fever Hospital suffering from true typhus or epidemic fever, while the number of those labouring under typhoid or endemic fever was comparatively stationary. He further stated, from his own knowledge of the fact, that Chelsea parish was much better prepared against small-pox last year than it was three or four years ago, when an epidemic threatened; but that the cases had been far more numerous now then they were then. He expressed his conviction that the Compulsory Vaccination Act failed entirely as a measure of compulsion, and regretted that the labours of a committee which had sat for some time, and suggested very slight emendations which would have made the Act perfectly workable, had been entirely ignored. The second subject was the adulteration of bread, which had recently attracted much attention in the district of Chelsea, in consequence of a report which he (the president) had made to the Board of Guardians about the adulteration of the workhouse bread. He explained the evils arising from the adulter-

ation; and detailed the method which he had adopted for its detection. At the same time, he exhibited a colour-test, which was, to a certain extent, useful as a rapid mode of raising a suspicion of the presence of alum. A portion of the bread which had been the cause of his first report was submitted, along with other samples, to the test, and indicated a very remarkable change of colour.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—1. You have invited discussion on the subject of Iridectomy in Glaucoma; and Mr. Syme, after what he no doubt regards as a full consideration of this important question, has "no hesitation in saying, that it has always seemed to him an entire delusion accepted for the cure of blindness"; that the operation has been proposed "in a hopeless disease" "as promising merely to afford some chance of relief"; and that, therefore, the terrible consequences so often resulting from the operation have not been "held to counterbalance the benefit claimed by patients so fortunate as to escape these dangers; benefits alleged, but illusory, like those which the incurably deaf may fancy for a time they receive, when they have paid their money and suffered pain, and do not like to confess that their object has not been accomplished." "Iridectomy will, therefore," he adds, "I trust, soon disappear, not only from surgical practice, but from surgical language."

2. The reputation of a man so eminent as Mr. Syme is, in some measure, the property of his countrymen; and I may, therefore, be excused if I endeavour to explain that some part of this hard language, directed apparently against one of the very chiefest improvements in modern surgery, may be acquiesced in by those who prize the operation most; and if I also express a hope, and even a confident expectation, that when the distinguished Scotch surgeon shall have more fully considered the subject, he will acquiesce in the retention both of the name and the practice of iridectomy in glaucoma. I shall expect this hereafter, from his well known honesty, candour, and courage, in the avowal of his convictions.

3. His whole misconception lies in a single word, but an important one, *glaucoma*. By *glaucoma*, Mr. Syme means the *last, hopeless, absolute stage, when all perception of light is lost and the tissues of the organ are spoiled*. This is probably what most medical men reading these lines would also imply by the term. I never heard of any proposal to perform iridectomy in such cases *under an expectation of restoring sight*. In Mr. Syme's view, therefore, of the worthlessness of iridectomy for the cure of glaucoma, all surgeons may agree.

4. By *glaucoma*, however, the modern school of practitioners understands something *not different, but much more comprehensive*. We include under this term, what as men of science and as practical men we are bound to embrace; viz., *the whole course and the several varieties* of disease, leading to *that last hopeless stage* of extinguished sight and disorganised tissues. We include these stages, more or less rapid, complicated more or less with inflammation, or with other varieties of ocular disease, and we include also Mr. Syme's "glaucoma", the hopeless "absolute glaucoma" of Von Graefe, the "glaucoma" of our forefathers.

5. Mr. Syme seems to ignore the idea that glaucomatous diseases are *a class comprising various types, all characterised by augmented tension of the eyeball, under which the retina is compressed and destroyed;* that to lessen this tension is to allow the nerve to retain, often to recover, some of its decaying function; and that the *most positive proofs are daily occurring, that iridectomy has this effect of relieving tension.* I need not say how much pleasure it would give me, should Mr. Syme be in London, to show him cases of this description.

6. I cannot charge myself with having omitted to call the attention of medical men to the recent all-important advances in our knowledge of glaucomatous diseases. A paper of mine, read before the meeting of our Association in London in 1862, and published in this JOURNAL on the 11th of October in that year, will show what has been done in this direction, and it contains references to previous writings. I now venture to repeat, that it becomes the duty of all medical men who, from the nature of their practice, are liable to be consulted by patients suffering from impairment of sight which may be glaucomatous, to acquaint themselves with the subject, so far as to be alive to the danger threatened, that a timely remedy may be applied. Not a week passes, but I have to deplore the absence of this knowledge on the part of practitioners whose attention does not yet happen to have been called to the point; and I propose, with your permission, at an early day, to state, in a simple form, what are the symptoms, and that state of the eye which should awaken their suspicions.

7. Every candid and liberal mind must rejoice to think that a real remedy has at length been found for arresting a disease hitherto producing a large proportion of the blindness from which mankind suffers; and instead of obstructing the path of those who are honestly working out an important question of science and humanity, will encourage them to define still more the natural history of the disease, and the indications for the operation under its various stages and complications.

The question is no longer, Does iridectomy arrest glaucoma? but, Under what limitations and at what stage is it to be performed? and how best are its advantages to be secured? These must remain the questions until some other and better remedy shall be discovered. Meanwhile I may add, in the emphatic language of Professor Donders of Utrecht, "Humanity urgently requires that prejudice and ignorance should no longer oppose the use of iridectomy in glaucoma."

I am, etc., W. BOWMAN.

5, Clifford Street, W., October 28th, 1863.

[We need hardly say that we shall gladly receive any communication on the subject of iridectomy from the pen of Mr. Bowman. We must, however, observe, that Mr. Bowman's letter bears in it proof enough for the necessity of the discussion of the subject of iridectomy which has been invited by this JOURNAL. Mr. Bowman tells us that every week he has to deplore the consequences of the ignorance of practitioners concerning the conditions of the eye which demand this remedy; and he admits that the "natural history of the disease and the indications for the operation" have yet to be fully worked out. From this admission two important conclusions clearly follow: 1. That the conditions of the eye which demand (as it is asserted) the performance of iridectomy are unknown to practitioners at large, and are, therefore, we may suppose, not very patent to, not easily recognised by, ordinary observers; and 2. That as iridectomy is manifestly a very serious operation, involving the possible destruction of the visual apparatus, it seems certain (reasoning on the data of its warmest supporters) that it is not, in the present state of our knowledge, an operation which can be safely trusted to to the hands of other than the most skilful and experienced observers. In other words, the profession as a body have yet to learn the true meaning and value of the operation. EDITOR.]

SIR,—I clapped my hands with delight when I saw this subject lately started in our JOURNAL; for I hoped

that it would be well discussed, and that I should learn on what grounds it is practised. After all, it is the *rationale* that we want; for the "results", as they are called, are not enough by themselves, in such a disease as glaucoma; one in which there can be no cure, and the most that can be said is, that more or less benefit was got.

I can suppose that many of your readers feel as I do in the matter; especially if there are any among them who, like myself, treat many eye-diseases in general practice.

I have asked in vain among many of my brethren for the solution of this glaucoma riddle; and I do wish that Mr. Wordsworth had given the solution, and not referred your readers to the German oculist, and, as appears to me, evaded the question. Let me beg you, sir, to try and prevail on some London man who practises iridectomy, to give us the facts, pathological and physiological, on which the operation is founded. Surely this can be done without altercation and hard words.

The general impression among those in my immediate circle respecting the operation, is tolerably expressed in Mr. Syme's letter; but really we are open to conviction.

I find that Mr. Wordsworth contradicts two of your correspondents in their statement, that iridectomy is the same operation as excising a portion of the iris for an artificial pupil. This is a strange difference of opinion on a plain matter of fact. Soon after iridectomy was taken up in London, I had occasion to write to a London surgeon about a patient. I asked him, "What is iridectomy, and how does it act?" He answered, "It is a remarkably simple operation and a great discovery. We remove a portion of the iris, as we do when we want to make a large lateral pupil, generally, however, taking more." But the principle was not alluded to.

Perhaps the term glaucoma is used in a different sense from what it used to be. I was taught to consider it in an advanced state, as disease of the retina, the choroid, the vitreous humour, the iris, and often of the cornea and the lens; also, that the sclerotic coat was generally affected.

I am, etc.,

A General Practitioner.

Exeter, October 28th, 1863.

ARMY MEDICAL GRIEVANCES.

Sir,—In the impression of the British Medical Journal for Oct. 17th, there is an article entitled "Army Medical Grievances explained away," and a review is given of the statements made by a Deputy Inspector-General.

In order to save the medical department of the army from being regarded by their civil brethren as a corps of discontented grumblers—whose grievances, according to the Deputy-Inspector, are all groundless, and whose career is all *couleur de rose*—I venture to make a few remarks upon these causes of discontent, which are unquestionably sapping the foundations of the Army Medical Service, and bringing it into such disrepute, that it is with great difficulty candidates can be found to enter its ranks.

The principal cause of this discontent is undoubtedly a want of confidence in those who govern the department, and the conviction based upon facts that their interests are disregarded. The Warrant which was believed to be the Magna Charta of the Medical Service, was granted in 1858; it was but short-lived; a storm was raised against it by the executive; naval authorities complained that the surgeons' rank interfered with that of commander; they prevailed upon the War Office to reconsider the Warrant. The Horse Guards no sooner saw it than they issued memoranda and confidential instructions to commanding officers, which virtually explained away the obvious meaning of many of its clauses; and the result was, that a mutilated Warrant appeared in its place, which placed every surgeon promoted after its promulgation *junior* to the executive officer of corresponding rank. This created great discontent; and it was again reconsidered, and a *third* Warrant was issued, in which the position of the surgeon was restored, but in which other important items were omitted.

The medical officers of the army naturally expect that the clauses of the Warrant will be rigidly and literally adhered to—else it is a useless document. Now, it is a notorious fact that this is not the case. In India it is a dead letter; at home it is tampered with daily, and construction given to its clauses far different from the plain meaning of the text. Surgeons have struggled for its just administration, and, having failed, have retired in disgust from an unseemly and useless agitation. Take for example, the seventeenth clause of the Warrant of 1858, which states "that such relative rank shall carry with it *all precedence* and advantages attaching to the rank with which it corresponds, except as regards the presidency of courts martial, and shall regulate the choice of quarters, rates of lodging money, servants, *forage*, etc.

The very first sentence of this clause is in reality a *nullity*. Relative rank does *not* carry with it all precedence or the advantages which belong to the corresponding rank. The present position of the regimental surgeon at his own mess-table is a direct contradiction to this clause. His relative rank gives him *no* precedence there, as a matter of right, though it may be conceded to him as a matter of courtesy.

If guests are entertained at mess, the senior executive officer plays the part of host, and takes the lead; while the surgeon, who may be one or two grades above him in rank, looks on in silence. When the band-master is called in according to custom to receive his orders for playing any additional music during the evening, he takes his instructions from the executive officer, no matter what his rank may be. I speak from my own personal knowledge of facts. I have seen young lieutenants assume this position as a right, in the presence of the surgeon ranking relatively as a major.

These may be small matters, but it is trifles which make up the sum of life; it is matters of detail of this kind which, by daily constant repetition, gall and wound a body of gentlemen, whose education and attainments should shield them from such petty annoyances.

Gutta cavat lapidem non vi sed sæpe cadendi. They feel these things acutely, and wince under a system which compels them to a humiliating position in the presence of their juniors, which forbids them to assume the privileges which the Warrant plainly authorises, but yet has no compunction in stopping from the surgeon's pay the heavy subscriptions which tend materially to keep the mess and band in existence. There is no difficulty whatever on the part of the authorities respecting the relative rank of the medical officer, *when they are about to mulct him of his pay.*

The remedy for this grievance is simply this. Let the surgeon occupy his rightful place at the mess-table according to seniority of rank.

The uniform of the medical officer is another matter which created great discontent. It is very right that the surgeon should wear a distinguishing dress; but why distinguished for its ugliness? Why mark him by surrounding his body with a hideous black strap, not nearly so ornamental as that worn by a railway guard? In cavalry and artillery, the only officers who are not permitted to wear the gold belts of their corps, are the surgeons. Even the veterinary surgeon, the quartermaster, and riding master wear gold belts, while the surgeon parades in his black strap.

The remedy for this, too, is simple. Give the medical officer a distinguishing uniform by all means, but let it be such as will not make him ashamed to appear among his fellow-men.

Surgeons of cavalry and horse artillery have a clear cause of complaint in the fact that they receive no allowance for forage for their horses, and have to pay 8½*d.* per day for each horse they keep. It is true their executive brethren are subject to the same rule, but while so-called combatant officers receive additional regimental pay proportionately to officers of infantry, the surgeon receives no such advantage. The advantages of relative rank affecting the question of forage, have been carefully suppressed in the mutilated Warrant now in force; the word "forage" is omitted entirely.

Here, again, the remedy is simple. Give medical officers *free forage* for their horses, in these branches of the service, and in the same proportion as officers of corresponding rank. The surgeon attends quite as many parades as the major, is quite as much in the saddle, and wears out his horses quite as rapidly, even without hunting them twice a week like his gallant comrade.

Very great discontent has been produced by the present system of compelling medical officers to pay all the expenses of rejected recruits. No doubt cases of great carelessness and neglect have occurred, but in many instances it is a matter of professional opinion. If medical officers are to be subject to this tax, then let them be paid for each recruit they pass. At present, every individual with whom the recruit comes in contact, from his enlistment to his final approval, receives special remuneration; the surgeon alone excepted.

Another cause of discontent has been the promulgation of a Horse Guards' circular stating that, when soldiers are sentenced to be marked under the letter D. or B. C. (bad character), the operation of tatooing the culprit is to be performed *under the direction* of the regimental surgeon, and by the hands of the hospital sergeant. It is very right that medical officers should be present to see that the soldier is not injured, but as well might he instruct the drummer in his infliction of the lash, as to take any directing part in an operation so revolting. Surely this is a legitimate cause of complaint.

There are others which I could mention, small perhaps, individually, but all making up the weight which hangs on the back of the department.

Beyond all question, the greatest boon which could be granted to the medical department of the army is *an early retirement*; and it is refreshing to find that on this point even the Deputy-Inspector agrees. No wonder candidates are reluctant to come forward, with the prospect before them of serving twenty years as assistant-surgeon. If the unquestionable right to retire after twenty years' service were granted, and the grievances I have mentioned, with perhaps a few others of minor importance, were abolished—I will venture to say, the highest class men will seek the service as an honourable and desirable career of life. It is an ominous fact, and one which the authorities would do well to consider, that there has been a marked depreciation in the qualifications and acquirements of the candidates at each successive competitive examination for the last two years, *pari passu* with the increasing want of confidence in the fickle promises of the Warrant.

In asking for these things, medical officers make no unreasonable demands. They wish only to be treated fairly, and justly, and in good faith. If so, these murmurs of discontent, now both loud and deep, would soon disappear. I am, etc.,

A Staff-Surgeon.

The Lambeth Degree. His Grace the Archbishop of Canterbury still retains his medical-degree-giving power. He may, if he please, to-morrow dub his butler doctor of medicine; and his butler may practise medicine, if he choose, like any other person in the country. But he could not get registered; that is all the obstruction he would meet with.

Medical News.

Apothecaries' Hall. On October 22nd, the following Licentiates were admitted:—

Barrow, Thomas Samuel, Halsey Terrace, Chelsea
Clifton, George Herbert, Burwell, Cambridgeshire
Evershed, Arthur, Billingshurst, Sussex
Evershed, Montague Frederic, Billingshurst, Sussex
Knight, Charles Frederick, Brill, near Thame, Oxfordshire
Lucas, Thomas, Burwell, Cambridgeshire
Morton, Selby Mars, Haverstock Hill, Hampstead
Smith, Joseph, York

Passed as an assistant:—

Gowland, George Robert, Sunderland

APPOINTMENTS.

Henderson, William, M.D.
Kerr, David, M.D.
Williamson, William, M.D.
} appointed Examiners in Medicine in the University of Aberdeen.

Fawcett, Francis M., Esq., elected House-Surgeon to the Scarborough Dispensary, in the room of J. Horne, M.D.

Johnston, W. W., M.D., elected Physician to the North London Consumption Hospital.

M'Gill, Andrew, M.D., elected Physician to the North London Consumption Hospital.

Poor-Law Medical Service.

Allanson, James, Esq., to the Greatham District of the Hartlepool Union.

Butler, Thomas M., Esq., to the Shalford District of the Hambledon Union, Surrey.

Collingwood, Joseph, Esq., to the Castle Bytham District of the Bourn Union, Lincolnshire.

Davies, Daniel, Esq., to the Western District of the Gower Union, and the Union Workhouse in the parish of Penmaen.

Duchesne, Robert, M.D., to the Chingford District of the Epping Union.

Griffiths, William H., Esq., to the Stoke Golding and Wolsey Districts of the Hinckley Union, Leicestershire.

Leadam, William W., M.D., to the Iver District of the Eton Union.

Martin, Robt., M.D., to Districts 1 and 3 of the Warrington Union.

Page, Alexander H., M.D., to the Tamar and Stoke District of the Stoke Damerel Union, Devon.

Richards, Henry E., M.D., to the Misterton District of the Gainsborough Union.

Tweddle, John, Esq., to the Keswick District of the Cockermouth Union.

Indian Army.

Baillie, Assistant-Surgeon G., M.D., Madras Army, to be Surgeon.
Clifford, Surgeon F. M., Bengal Army, to be Surgeon-Major.
Craddock, Surgeon W., M.D., Bengal Army, to be Surgeon-Major.
Hilliard, Surgeon J., M.D., Bengal Army, to be Surgeon-Major.
Linton, Surgeon R. P., Madras Army, to be Surgeon-Major.
Mackenzie, Assistant-Surgeon D., Madras Army, to be Surgeon.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Stark, J., Esq., to be Surg. 1st Lanarkshire Engineer Volunteers.
Stewart, D. P., Esq., to be Assistant-Surgeon 1st Lanarkshire Engineer Volunteers.
Walker, T. J., M.D., to be Lieutenant 6th Northamptonshire R.V.

MARRIAGE.

*Perry, Marten, M.D., of Evesham, to Harriet H., second daughter of S. Smith, Esq., of Upton Snodsbury, Worcestershire, on October 27th.

DEATHS.

Lidderdale, John, M.D., at Kintbury, Berks, aged 60, on Oct. 22.
Lovegrove. On October 22nd, at Kensington, aged 60, Elizabeth, wife of Joseph Lovegrove, Esq., Surgeon.
Sheppard, W. M., Esq., Surgeon, at Geelong, Australia, aged 37, on September 16.
Wilmans, A. A., M.D., at Colesberg, Cape of Good Hope, aged 37, on September 3.

The Prince of Wales has been elected President of the Society of Arts.

Prince Alfred is, we are informed, to study Chemistry in Edinburgh, under Dr. Lyon Playfair.

Guy's Hospital can boast of upwards of two hundred students this year. We need hardly say that no other hospital has as many. St. Bartholomew's comes next to it in number.

Mr. Belfour has been connected officially with the College of Surgeons upwards of fifty years.

The Medical Council. Dr. Apjohn has been re-elected representative of the Dublin University in the Medical Council for a further term of five years.

The Pharmacopœia. It is the business of the Lords Commissioners of the Treasury to fix the selling price of the forthcoming *Pharmacopœia*.

The King of Saxony has made Mr. Dale of Scarborough Knight of the Order of Albertus, as a mark of his estimation of professional services rendered by Mr. Dale to some members of the royal family during their late stay at Scarborough.

University of Cambridge. The examination for the degree of Master in Surgery will commence on Monday, November 23rd. Candidates for the degree are requested to send the necessary certificates to the Regius Professor of Physic on or before November 9th.

The Meteorological Society have determined to admit into the pages of their *Quarterly Journal* a series of observations on climatology, regarded mainly from a medical point of view. This excellent movement has been initiated at the instance of Dr. Scoresby-Jackson.

Donation to the Glasgow Infirmary. Dr. Macfarlane has presented to the Museum of the Glasgow Royal Infirmary a valuable collection of coloured models, "which represent most faithfully all the internal diseases of the human body".

Increase of Typhus Fever. On account of the increase of typhus fever in the metropolis, Drs. Murchison and Buchanan, physicians to the Fever Hospital, have called the attention of the medical official of the Privy Council to the necessity of preparing for a possible serious outbreak of the fever during the winter.

Royal College of Physicians. After a long correspondence, the Commissioners of Woods and Forests have agreed to grant the College of Physicians a lease of their premises in Trafalgar Square for 999 years. This is a happy conclusion of what once seemed to be a serious affair to the College.

University of Cambridge. Dr. Clark, Professor of Anatomy, has offered the University the loan of £2364 : 14 : 3, for ten years, at 1½ per cent. interest, for the purpose of completing the New Anatomical Museum. The Syndicate have recommended that the offer be accepted, and that the necessary contract be prepared for the approval of the Senate.

Death of Sir John Spencer Login. This gentleman, who passed many years of his life in medical and political employ in India and Persia, died suddenly on the 18th inst., at Felixtowe, in Suffolk, at the age of 54. On the annexation of the Punjab to the British dominions he became guardian and superintendent of the Maharajah Dhuleep Singh. He was knighted in 1854, and retired from the Bengal service in 1858.

University of London. The Council have given notice that the examination for the degree of Bachelor of Medicine will commence on the 2nd of November, and terminate on the 9th. The subjects of examination are forensic medicine, general pathology, surgery, midwifery, practical examination in obstetrics and surgery, reports on medical cases, pharmacopœias. The examination for honours in connexion with this degree will commence on the 11th of November. For the degree of Doctor of Medicine the examination will commence on Monday, November 23rd. The examinations will be conducted by Professor James Ferrier, LL.D.; Professor Guy, M.B.; Dr. Odling, F.R.S.; Mr. Curling, F.R.S.; Mr. Hilton, F.R.S.; Dr. Tyler Smith; Dr. C. West; Dr. Parkes, F.R.S.; Dr. Sibson, F.R.S.; and Mr. Edward Poste, M.A.

Royal College of Surgeons. The Council of the Royal College of Surgeons have determined, we need hardly say not without a severe fight, that minutes of their proceedings shall be published for the benefit of the profession, and, we trust, for their own. We are happy to be able to bear testimony to this advance in liberality of sentiment on the part of the College, and augur good things from this favourable sign.

Old Plate Wanted. Dr. J. J. Chisolm, Medical Purveyor of the rebel army at Charleston, publishes the following card:—*Silver Plate Wanted.* To be converted into caustic for the use of the sick of the army. Eight dollars per ounce will be paid for all prime plate. Old spoons and old plate will answer the purposes of the medical department as well as new. Apply at Medical Purveyor's office, opposite Congaree House. (*American Medical Times.*)

Medical Programme. We call the especial attention of those of our readers who are interested in Military Surgery, to the article on gunshot wounds of the chest by Dr. B. Howard, Assistant-surgeon, United States Army. We understand that the Surgeon-General has ordered, at the next engagement of the army of the Potomac, that a hospital shall be organised under charge of Dr. Howard, for the sole purpose of treating gunshot wounds of the chest by the sealing process. The results of his experience will be of great interest to the profession. (*American Medical Times.*)

A Charitable Gin Distiller. At a late meeting on the subject of Dwellings for the Poor in Bethnal Green, Dr. Moore stated that the other day he had come in contact on an omnibus with a very extensive distiller of gin, who stated that, having in past years drawn a large amount of money from the poor, he now wished to give a portion of it back, and he accordingly authorised him to state that, should houses be erected for the accommodation of the poor artisans and labouring men some six or seven miles out of town, he would subscribe 1000 guineas to form the nucleus of a fund for carrying them to and from their work every day.

Volunteers for New Zealand. A most important proclamation has just been issued by Sir George Grey. It is the intention of our Ministers to enrol, if possible, 5000 men in Australia and elsewhere, to take service in New Zealand. The plan embraces, besides the regular pay for military service, a free grant of land in the Waikato district. Thus, a field officer will be entitled to 400 acres; captain, 300; and surgeon, 250. No man above forty years of age will be accepted; and every one thus enrolled will have to serve as a volunteer militiaman for three years, when, at the expiration of that period, he will be relieved from actual service, and become entitled to a Crown grant for the said land.

Effects of Good Drainage and Water. During the quarter just ended the rate of mortality in Salisbury has been extraordinarily low, the deaths out of a population of over 9000 having been only 20; while the average number of deaths in the corresponding quarter, for many years previous to the introduction of a proper system of drainage and water-works was 50, and since these works, for the last eight years, the average has been 37. The average annual number of deaths for the eight years preceding the completion of the drainage (excluding the cholera year) was 243, or 27 in 1000, and for the same period since 193, or 21 in 1000, an actual reduction of almost one-fourth of the whole number. With just 50 deaths per annum less than usual during the last eight years, Salisbury is now looked upon as one of the healthiest cities in the kingdom. If an equally low rate of mortality had prevailed in London during the last quarter only about 450 persons would have died each week, instead of the numbers actually recorded—about 1250.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Epidemiological Society, 8 P.M. Dr. B. W. Richardson, "On the Present Position and Prospects of Epidemiological Science."—Medical Society of London, 8.30 P.M. Mr. De Méric, "Occasional Non-Transmission of Syphilis to the Offspring."

TUESDAY. Pathological Society, 8 P.M.—Entomological.—Photographical,

WEDNESDAY. Obstetrical Society of London, 8 P.M. Mr. Hardey, "Retroversion of Uterus"; Dr. Braxton Hicks, "On his Method of Turning"; Mr. I. B. Brown, "Vaginal Lithotomy."—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Mr. Ernest Hart, "On the Diseases constituting the Condition commonly called Amaurosis (with Ophthalmoscopic Demonstrations)."—Linnæan.—Chemical.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M. Practical Evening for the Narration of Cases and the Exhibition of Specimens.

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—OCTOBER 24, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys ..1003 / Girls.. 948	1951	1246
Average of corresponding weeks 1853-62		1889	1188

Barometer:

Highest (Fri.) 30.100; lowest (Sun.) 29.886; mean, 29.982.

Thermometer:

Highest in sun—extremes (Sun.) 91 degs.; (Sat.) 57.3 degs.

In shade—highest (Th.) 63.5 degs.; lowest (Sat.) 34 degs.

Mean—52.5 degrees; difference from mean of 43 yrs.+3.8 degs.

Range—during week, 29.5 degrees; mean daily, 12.9 degrees.

Mean humidity of air (*saturation*=100), 89.

Mean direction of wind, S.W. & S.E.—Rain in inches, 0.03.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

STONEWALL.—An assistant-surgeon in the navy has to go through much the same curriculum as the army assistant-surgeon. He has to produce his license to practise, and also all his certificates. The examinations in anatomy, surgery, medicine, and chemistry, are held at Whitehall. Latin is especially required; translations from Gregory's *Conspectus* must be satisfactorily given. This is indispensable.

S. M.—The King and Queen's College of Physicians in Ireland grants the licence to practise physic; and, more than this, they also claim the right under their charter of granting degrees in medicine. If their view of their rights be correct, there is no doubt that their recently made claim of granting degrees, removes their Licentiates from the class of Licentiates who take title of Doctor by courtesy.

THE ASSURANCE OFFICES AGAIN.—A correspondent writes:—"An Assurance Company asks me to examine for them at a half-guinea for sums under £150. I have replied, that if they will give two, three, four, five guineas, for sums up to and above £10,000, I am agreeable, but not otherwise. A second letter has been sent, which gives me no hope of their accepting my terms. Can I accept their terms? There are plenty of my brethren who will take them if I do not. What should be the rule of practice in such a case?

I am, etc., P. A.

[There can be no doubt that P. A.'s offer to the Assurance Company is a fair one. We believe that there are some offices which do a deal of small business in the manfacturing districts, who give a fee of 5*s.* for the examination in cases of sums assured under £100. The proper mode of settling such a difficulty would be for the office to appoint their examiner, with a fixed annual salary. It seems impossible to lay down any definite rule as to the fees of medical men. We know that, practically, men who call themselves, and in reality are, physicians, take 5*s.* fees; and that again there are physicians who never touch less than £1:1 fees. It is, therefore, impossible to lay down any definite rule in the case before us. If only every doctor would refuse to take less than the good old guinea-fee, we should obtain our rights. EDITOR.]

THE APOTHECARIES' HALL.—SIR: In reading the account of the late "mysterious death of a young girl at Yeovil", I was much surprised at the following remarks, which are alleged to have fallen from Dr. Wybrants, the coroner, during the adjourned inquest (which, however, I should hope is not correct): "That many eminent surgeons—Sir Astley Cooper, Sir Benjamin Brodie, and others—would not *degrade* themselves by passing the Hall." Perhaps Dr. Wybrants will explain himself more fully, and point out why and wherefore the Hall Licentiates should be regarded as degraded members of the profession?

I am, etc., L.S.A.

REGISTRATION OF VACCINATION.—SIR: As the registration of a child's birth is a requirement of the law, and neglect thereof incurs a penalty, it is, I believe, pretty generally attended to. It would, I think, be very easy to procure a registration of vaccination at the same time, for which purpose it might be proper to lengthen the time allowed for registration of birth and vaccination to the end of the third month. By this method, the parents' trouble would be lessened, and a very slight addition made to the registrar's duty, in having to insert in an additional column the letter V, signifying the vaccination. This modification of Mr. Fawssett's plan would also lessen the number of certificates required from the medical man, and would also be a benefit to the party vaccinated in future life, as the register of vaccination as well as birth could be presented in one and the same document.

October 20th, 1863. I am, etc., A YORKSHIRE MEMBER.

COMMUNICATIONS have been received from:—THE HONORARY SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Dr. SANKEY; Mr. LOWNDES; Mr. T. L. PRIDHAM; Dr. A. SAMELSON; Dr. GRAILY HEWITT; Dr. KIDD; Mr. J. B. CURGENVEN; THE HONORARY SECS. WESTERN MED. AND SURG. SOCIETY; Mr. R. W. DUNN; Dr. W. S. KIRKES; Mr. C. J. EVANS; Mr. R. JONES; Mr. J. C. S. JENNINGS; Dr. KITCHING; Dr. PERRY; Dr. MORGAN; Dr. BRYAN; Mr. HAILEY; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. C. B. RADCLIFFE; Mr. W. BOWMAN; A GENERAL PRACTITIONER; and Mr. O. PEMBERTON.

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Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in BRISTOL, AUGUST 5th, 6th, and 7th, 1863.]

PRACTICAL HINTS ON THE TREATMENT OF NERVOUS PAIN AND NEURALGIA.

By C. B. RADCLIFFE, M.D., Fellow of the Royal College of Physicians; Physician to the Westminster Hospital, and to the National Hospital for the Paralysed and Epileptic.

In the few remarks I have to make, I do not propose to suggest a particular plan as applicable to the treatment of all kinds of pain. I propose merely to speak of the kinds of pain which are known as nervous pain and neuralgia, and which are sufficiently well known to need no formal definition; and upon this small part of a wide subject I do not propose to do more than read the rough notes of three or four cases, with a few paragraphs of preliminary observations. And in doing this, I feel no little hesitation, Mr. President, in speaking before you upon a subject which you yourself have elucidated, in one of its most important bearings, in so satisfactory a manner.

The outline of the plan of treatment which I have to propose is this:—to take care that the diet does not contain too much lean meat and too little fatty and oily matter; to look upon the properly regulated use of alcoholic drinks as essential to success in treatment; to avoid tea altogether; to be very chary in the use of sugar; to give some preparations of phosphorus, with or without cod-liver oil, as nutrients for a starved nerve-tissue; to avoid the habitual employment of aperients; and, as a rule, to eschew the use of sedatives in sedative doses. This plan is, indeed, that which I have carried out for four or five years in many cases in which the primary indication of treatment was to remedy an asthenic condition of the nervous system—various convulsive maladies, many forms of paralysis, and so on.

In the few minutes at my disposal, it is impossible for me to do more than hint in the most cursory manner at the reasons which have dictated this plan.

I have used fatty and oily articles of food, and cod-liver oil, on the supposition that these substances might be essential to the proper nutrition of nerve-tissue; for this tissue, in the main, is built up of fatty and oily matter.

I have used some preparations of phosphorus, with a view to promote the nutrition and functional activity of nerve-tissue; for phosphorus, like fat, is an important ingredient in this tissue. I have given the phosphorus for the same reason as that which would induce me to give iron in cases where I wanted to favour the nutrition of the red corpuscles of the blood. For the last seven or eight months I have used the hypophosphites as a means of giving phosphorus; and the results at which I have arrived would seem to show that these salts are quite as effectual as, and much more convenient than, the phosphorated oil of the Prussian *Pharmacopœia*, or the ethereal tincture of the French *Codex*—preparations which I had been using on a somewhat extensive scale for the three or four years previously. I find, indeed, that the hypophosphites are almost as effectual remedies in the treatment of nervous pain and neuralgia, and of various other asthenic conditions of the nervous system as Dr. J. F. Churchill of Paris would have us believe them to be in the treatment of phthisis; and I think that the science of healing is indebted in no small degree to Dr. Churchill for having brought these salts into the service of medicine.

I do not take upon myself to explain why an excess of lean meat should do harm in the cases under consideration. I do not profess to know. It may be, in some cases, that it favours a gouty condition of the system—a condition which is at the foundation of many kinds of pain; but, whatever be the explanation, I have no doubt that excess of lean meat does do harm in many cases of nervous pain and neuralgia; and that the common notion, not always confined to non-medical circles, that lean meat is the one nutrient substance, is a mischievous fallacy. In the lectures which I had the honour of delivering before the College of Physicians a few months ago, and which have recently been occupying a place in the pages of the *Lancet*, one great point was to show that pain was the sign of depressed, and not of exalted vitality; and that alcoholic drinks, properly administered, were the natural anodynes. And to these lectures I must refer for my reasons for arriving at these conclusions. Indeed, here I will only say, that experience has taught me to look upon the properly regulated use of alcoholic drinks as essential to the successful treatment of nervous pain and neuralgia.

Why tea should be unsuitable as a common beverage, in the cases under consideration, may also be a difficult and complicated problem. I am, however, disposed to think that tea must be hurtful if alcoholic drinks are required, except it be to correct the results of excess in the use of such drinks. Tea—cold tea, for the action of hot water must be separated, if we would know the true action of tea—would seem to be not remotely analogous in its action to digitalis, and therefore only tolerable when there is an active condition of the circulation to subdue—a condition which is not often met with in cases of nervous pain and neuralgia. But, be the reason what it may, I am perfectly satisfied that it is a matter of vital importance to eschew tea as an habitual beverage, if we would fight successfully against nervous pain and neuralgia.

As to sugar, I am disposed to think that this substance does harm in cases where a rheumatic habit is at the bottom of the trouble; and that it may do harm by favouring the formation of that substance which, upon very good grounds, is believed to have much to do with the production of rheumatic fever—viz., lactic acid. At any rate, I have now seen several cases in which a patient, who had taken a good deal of sugar, was much more free from pain upon taking this substance in moderation.

Aperients will scarcely ever be wanted, if a sufficient amount of fatty and oily matter be introduced into the diet; and this, I take it, is a very great advantage; for, in my opinion, there is no one practice which so much tends to keep up a habit of nervous pain and neuralgia as that of using aperients and purgatives habitually.

With respect to the use of sedatives in sedative doses for the relief of pain, I will only say this, that this practice seems to be cutting the Gordian knot, instead of untying it—a plain confession, in fact, that treatment has failed.

It is, however, more than time that I bring these prefatory hints to a close, and proceed to the cases of which I have spoken. I read the notes taken at the time; and I leave unread many similar notes, at least tenfold in number.

CASE I. Jan. 8th, 1863. Mrs. W., aged 36, the widow of a clergyman, complained of distressing headache, low spirits, and sleeplessness; and said that she had suffered in this manner almost incessantly for the last five years. Trouble connected with the death of her husband was

the primary cause—not privation, for her circumstances were tolerably easy.

There was nothing remarkable in her appearance, except that she was very thin. Pulse 86; the hands and feet were habitually cold; there was complete want of appetite; the bowels were exceedingly constipated. For the last two years she had lived almost entirely upon the lean of mutton-chops and strong beef-tea. Butter and fat had been avoided, from a fear that they would cause biliousness; and tea had been taken at least twice a day, because it was liked. Alcoholic drinks had been not entirely abstained from; but a wineglassful of very weak brandy and water would be the maximum quantity allowed during the course of the day. All light and noise had been intolerable for some months past; and her time had been spent chiefly in a darkened room upon a sofa.

She had had no treatment during the last two years, except occasional doses of quinine and eight grains of compound rhubarb pills every other night. She had previously tried arsenic, quinine, valerian, and "everything", without any permanent benefit. Change to the seaside had been the only thing that had done any good.

She was recommended to use weak coffee for breakfast, instead of tea, with an egg or a little fat bacon; a little milk and cream and brandy at 11 A.M.; a light early dinner, with a glass of sherry; a little coffee and bread and butter at 5 P.M.; and an hour before bedtime, a good supper, something like the dinner, with a full glass of Bass's ale or Guinness's stout, in place of sherry. She was also recommended to take as large an amount of oily and fatty matter as she could, and to diminish the amount of lean meat. She was ordered to take ten grains of hypophosphite of soda and a drachm of tincture of hops three times a day.

January 16th. She was better; had more animation and freshness in the countenance. She slept four hours continuously last night. There was less excitability. The medicine was continued.

January 30th. There was a great change for the better: she said that she had scarcely had a headache for the last week. Yesterday she had a walk of two miles without bringing on headache—a most unwonted thing with her. The bowels had acted every day for a week without aperients. The medicine was continued.

March 1st. She looked ten years younger than when I saw her last; slept well; and ate well. The bowels acted without aperients. There had been no headache to speak of since the last visit.

June 2nd. She brought her daughter to see me. She herself continues quite well.

CASE II. February 6th, 1863. Mr. J. W., aged 52, occupied in the Custom House, very thin and spare, walked with great difficulty by the aid of a stick, and complained of constant sciatica in both legs. He had lumbago three years ago; and this pain, after troubling him for some weeks, shifted first into one leg and then into the other, and from that time to this had been progressively getting worse. He had rheumatic fever when 25 years of age.

His pulse was 70, and very weak; the appetite very bad. For a long time, almost all his life, he had lived upon a very dry diet, disliking fat in any form, and taking very little butter. He had been a teetotaler for fifteen years. Three years ago he took hydrochlorate of ammonia for several months, with some benefit. Since this time he had been under homœopathic treatment, without any benefit. Part of the latter treatment was a permission to take fifteen drops of Battley's sedative solution every night on going to bed.

I put him on the same plan of treatment as that described in the first case, with half an ounce of cod-liver oil twice a day in addition. The sedative at night was discontinued, and some stout ordered to be taken in its place.

February 16th. There was no change for the better; but, on examination, it appeared that he had yet to begin the treatment recommended at the first visit. He would have it that the fat and oily matters would make him bilious. The treatment was ordered to be continued.

March 2nd. He was better. For the last week he had slept better than he had done from the commencement of his illness. He found that oily and fatty matters did not disagree with him, and that his bowels for the last week had acted without medicine. The pain was somewhat relieved, but not so much as could be wished. He told me that he was in the habit, and had been for years, of taking three or four times a day, with his meals or between his meals, *café noir*, without milk, but with as much sugar as the coffee would dissolve; and, therefore, I recommended him to leave off sugar as much at possible, and to diminish the amount of coffee. The treatment was continued.

April 16th. He walked into the room without any apparent stiffness, and without his stick. He had lost the pain in the legs altogether for the last fortnight, and had gained ten pounds in weight during the last month. He was hungry now, and slept very easily at night. He had never required any aperient medicine since the adoption of this plan of treatment.

CASE III. Mrs. T., aged 38, the wife of an artist, was admitted under my care into the Westminster Hospital some time ago, for tic douloureux in the right side of the face. She was tall and flabby in build, without family, and, as it appeared, had been the subject of much privation and misery for the last four years, during which time she had scarcely ever been free from the tic. At present, the pain, which was almost incessant, was brought on by any attempt to masticate or swallow; and she appeared to have very little relief, except when she was stupified by opium. She confessed to having taken half a teaspoonful of laudanum every night at bedtime for two years, and a "little extra" now and then in the course of the day. Bread and tea appeared to have been the principal articles in her dietary.

She was recommended to have a chop, two eggs, and a pint and a half of stout, the greater part of the pint to be taken at bedtime; also coffee, in place of tea; and, for medicine, cod-liver oil in three-drachm doses, and hypophosphite of soda in seven-grain doses three times a day.

March 7th. She slept four hours in the night continuously.

March 8th. She had a good night, upon the whole; and took her breakfast with some appetite. The pain was more tolerable.

March 10th. Yesterday she found herself able to eat and swallow without bringing on the pain. She asked for more food.

March 20th. She had been progressively improving since the last report. There was no tic yesterday. The bowels now acted regularly without medicine. She had a long walk yesterday, without bringing on pain.

March 30th. She was now suffering from severe pain in the face, which was referred to a wetting in the rain yesterday. A hot bath was ordered, and the medicine continued.

April 3rd. She was well again. The treatment was continued.

April 15th. She was discharged cured. She had no pain on eating or swallowing; no pain at any time for the last fortnight, or, at any rate, no pain to speak of. She looked stronger and fresher; and was so in fact.

May 6th. I saw this patient accidentally in the ward. She considered herself well, but had been taking oil and hypophosphite almost regularly ever since her discharge from the hospital.

Case iv. March 16th, 1863. M. Adolphe B., aged 40, a musician, was suffering from severe tic in the right cheek, and had the muscles of this side of the face drawn and contracted to a considerable degree. With few intervals, he had suffered from the pain for three and a half years. The face became contracted on the painful side two years ago. Before the pain began, he had been treated for three months with iodide of potassium for constitutional syphilis. He smoked excessively, and allowed that he had for many years been very intemperate in sexual matters. His dinner consisted chiefly of a beef-steak and a pint of stout, taken at a chop-house. He drank tea in large quantity, taking it cold with his tobacco. He never drank any spirits. He had had nearly all his teeth drawn, in the hope that the pain in the cheek might be referred to the irritation from some diseased tooth.

He was recommended to smoke less, and to try a mild tobacco when he did smoke; to take coffee in place of tea; to eat oily and fatty matters, and less lean meat; and to take three drachms of cod-liver oil and ten grains of hypophosphite of soda three times a day.

March 23rd. For the last three days he had been almost altogether free from pain; and last night he slept for several hours continuously (he had been recommended to take a glass of stout shortly before going to bed). This—*i. e.*, sleeping satisfactorily—for several years had been unknown to him.

March 30th. He had had no pain whatever since last visit, and considered himself quite well.

May 19th. Except an occasional pang, for which he said there had been generally good reason, the tic might be said to be altogether at an end. He had lost altogether the anxious nervous look which he had when I first saw him; and the contracted facial muscles had almost altogether recovered their natural condition.

Case v. M. W., aged 28, a lady's maid, suffered from almost constant nervous headaches. She had never been quite free from these pains for two years, but lately they had been much worse—so much worse, that she was now compelled to leave a good situation. A great moral shock, arising from the discovery of a fellow-servant dead by her side on waking in the morning, was referred to as the cause of the pain.

She had had a great deal of medicine; but did not know what kind of medicines were given, except that they were generally intended to act on the bowels, and to promote menstruation, which was always very scanty and painful, and which was once, six or seven years ago, often accompanied with a great deal of hysterical agitation. She was ordered to take cod-liver oil and hypophosphite of soda, with middle diet and porter.

April 4th. The oil made her sick. She was ordered to take the hypophosphite by itself.

April 6th. She slept much better, and woke this morning without headache—a thing she had not done for two years. She was ordered to resume the oil.

April 8th. She was evidently gaining ground. She had a bad headache now, brought on, it appears, by a violent altercation with another patient in the same ward. The medicine was continued.

April 15th. She had been improving progressively since the last report. There had been no headache for the last three days. The treatment was continued.

May 2nd. There had been no headache at all since the last report. The bowels now acted regularly without medicine. She was much improved in general health.

Effect of Sugar and Tobacco on the Teeth. Parents and guardians will be pleased to hear that, at the Congress of Odontologists lately held at Frankfort, it was decided that sugar and tobacco, when taken in a pure state and in moderation, are not injurious to the teeth.

Illustrations of HOSPITAL PRACTICE:

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ST. GEORGE'S HOSPITAL.

OBSERVATIONS ON CEREBRAL HÆMORRHAGE, FROM AN ANALYSIS OF FORTY FATAL CASES.

By Thomas Jones, Assistant Resident Medical Officer at the Hospital.

[*Continued from page* 82.]

b. Partial Paralysis. The sudden supervention of hemiplegia is, of all others, the most sure symptom of hæmorrhage into the brain; and this is the most common symptom, for, as seen by the foregoing table (page 82), it occurred in 54 per cent.

In paralysis of one side of the body, the arm and leg are almost always simultaneously affected: this was observed in 16 out of the 31 cases. When any difference existed as to the degree of paralysis, the arm was the limb most completely affected; for, of the 16 cases, the arm was *completely* paralysed in all except one; whilst the leg was but *completely* paralysed in 11. When the paralysis was confined to one extremity, this was found in all the cases to be the arm, as was seen in 3 out of the 16 cases. In my last paper, I related a case of cerebral hæmorrhage, in which the paralysis was confined to the lower extremities; but in the following three cases the paralysis was confined to the arm. I shall give a short summary of each.

Case ii. *Paralysis confined to the Left Arm and Left Side of Face: Intellect Clear until the Sixth Day, when the patient died comatosed; Hæmorrhage into, and Disintegration of, the Right Optic Thalamus: Escape of Blood into the Right, and a small quantity into the Left, Lateral Ventricles.* A cab-driver, 50 years of age, was admitted into St. George's Hospital on the 26th of May. He stated that he went out after tea feeling quite well; but soon afterwards, whilst on the box, he was seized with vertigo. He immediately came to the hospital. On admission he was quite sensible—able to give a clear account of himself. There was convergent strabismus of the left eye, and complete paralysis of the left upper extremity. He had perfect power over his legs, and was able to walk upstairs. The face was flushed; the pulse was full and bounding. He was cupped to fourteen ounces, a turpentine injection administered, and ten grains of calomel and a drop of croton oil were given. On the morning of the second day his pulse was still very full and bounding; he was therefore bled to sixteen ounces, and repeated in the evening to twelve ounces; ice was applied to the scalp. In the evening his bowels acted freely. On the third day there was well marked facial palsy of the left side, and convergent strabismus of the *right eye*. Three grains of calomel were given every six hours; leeches ordered to the temples; and a blister to the nape of the neck, which was dressed with mercurial ointment. Urine could not be obtained for examination, as he passed it with his motions. On the fifth day he remained much in the same condition—still sensible; but on the sixth day coma supervened, and, while in this state, he died in the evening.

Post Mortem Examination, twenty-three hours after death. The body was extremely fat. The arteries at the base of the brain were highly atheromatous. The right lateral ventricle was filled with a very large loose clot of blood. A part of the blood had also passed into the left lateral ventricle. The right optic thalamus was

extensively disintegrated; the corpora striata were quite healthy. The right optic thalamus contained a very minute clot of blood. The heart was large, weighing one pound and half an ounce. The wall of the left ventricle was very thick, while that of the right was much diminished in thickness, and the muscular substance partly replaced by a layer of fat. The lungs were healthy in structure; they contained a good deal of blood. There was a white patch on the surface of the spleen, and a small block of fibrine in its substance. The kidneys were rather large, soft in substance, and somewhat congested; their cortical structure was somewhat of a mottled hue, apparently from fibrinous deposit in the parenchyma. The surface was quite smooth. The liver was healthy.

Case III. *Paralysis of Left Upper Extremity; Complete Unconsciousness: Enormous Effusion in the Arachnoid Cavity over the Right Side.* Mary M., aged 32, was admitted with a history that twelve days since she had a "fit", and that she had been since almost entirely unconscious. She was able, however, to put out her tongue when spoken to loudly. There was an obscure history of her having received a blow over the right eye from a man. On admission, the *right* arm was quite useless, and the right pupil was dilated much more than the left; and she was almost completely unconscious. She was well purged with calomel and jalap; a mixture was given of compound decoction of aloes, tincture of cantharides, and acetate of potass in nitre draught three times a day; and a blister was applied to the nape of the neck. On the second day the *left* arm was completely paralysed, and the patient could move the right freely. The urine was free from albumen. Croton oil was administered; eight leeches were applied to the right temple, and a blister placed behind the ears. This treatment, however, was followed by no improvement. She died the same evening comatosed.

Post Mortem Examination, fourteen hours after death. The body was in good condition. The skull-cap was very thick. On removing it, the dura mater was seen raised on the right side by an enormous effusion of blood into the arachnoid cavity. This effusion was strictly limited to that side of the head; it extended to the bone, and covered the whole hemisphere. The blood was partly fluid, partly clotted, and adhering pretty firmly to the parietal arachnoid; but none was decolorised. The source of this hæmorrhage remained obscure. The vessels of the brain (both at the base and vertex) seemed quite healthy. Most of the branches of any considerable size were followed as far as possible, but no lesion was discovered. The capillaries of the pia mater were examined microscopically, but were found to be quite healthy. The substance of the brain was healthy, and quite free from ecchymosis. The convolutions on the opposite side (left) were flattened, and the cerebral substance pale. On section, the left lateral ventricle was found much enlarged and distended with clear serum. The right lateral ventricle was nearly obliterated by the pressure from without; the central bodies being almost brought into contact with the septum. The latter, also, was pushed considerably beyond the middle line. The central parts of the brain were healthy. Some vascularity was noticed in the scalp on the right side; but there was found no trace of injury, either to the soft parts or the bones, though it was carefully looked for. All the viscera were examined and found healthy.

Case IV. *Paralysis of Right Arm: Ptosis of Left Eyelid: Partial Loss of Speech: Coma on the Fourteenth Day: Death on the Fifteenth: Hæmorrhage into the Right Corpus Striatum, escaping into the corresponding Lateral Ventricle: an older Clot in the Left Optic Thalamus.* William P., aged 48, by occupation a stone-mason, was a patient in the hospital during part of June and July, suffering from rheumatic gout and albuminuria, but without dropsy. He left on the 15th of July, but returned in a fortnight, still suffering from his old complaint—rheumatic gout. On the 26th of August he was discharged in a fair state of health. On the 29th, whilst at home, he was seized with an apoplectic fit and partial paralysis. He was conveyed into the hospital on the 1st of September. On admission, there was ptosis of the left eyelid; both pupils were remarkably contracted. The right arm could only be raised with very great difficulty, although the motion of the corresponding leg was perfect. The right arm and hand were very œdematous, and also the right leg. There was slight swelling of the left leg. He was conscious. His urine was loaded with albumen, had a specific gravity of 1018, and contained granular casts containing oil-globules. He was purged with calomel and compound jalap powder; he took a draught containing nitrate and bicarbonate of potass in water every six hours; and two ounces of gin daily. A blister was applied to the nape of the neck. He remained in much the same state until the 11th of September, when his speech became somewhat affected. On the following day he was seized with a "fit"; after which he gradually became unconscious and semicomatose. He was attacked by convulsive movements, which recurred frequently, and died on the 13th of September, the fifteenth day of the attack.

Post Mortem Examination. There was much œdema of the lower extremities. The skull was very thick. The convolutions were flattened, and the surface of the brain pale. The right ventricle was much enlarged, and its cavity partly occupied by blood and serum, but for the greater part by a very large clot of recently effused blood. This blood had passed into the ventricle from an extensive laceration of the corpus striatum, through which a clot, of the consistence of currant jelly, was projecting. This clot filled the body, and the anterior and descending horns of the ventricle; and in the anterior part it had encroached considerably on the substance of the brain, which was lacerated and softened. It had not, however, reached the surface of the organ. There was, in the optic thalamus of the left side, an old clot of a light tawny colour and very lax consistence, enclosed in thickened cerebral substance, but without any distinct cyst. The substance of the thalamus was much encroached upon; but the effusion had not penetrated into the ventricle, from which it was still separated by a thin layer of white matter. The heart seemed in structure healthy; it weighed twelve ounces and a half. There was, however, some calcareous deposit in the substance of the anterior flap of the mitral valve. The margin of the liver was rounded, and its surface puckered and thickened; it weighed three pounds twelve ounces. The kidneys were pale in colour; their surfaces excessively granular. Scattered through the cortical substance were numerous yellowish-white deposits of very small size, which, when examined microscopically, appeared to consist chiefly of fat; and the kidney-tubes contained also much fat. The radial and iliac arteries were found to be excessively atheromatous, with numerous calcareous deposits.

It should be noted that, in two of the above cases, the lesion existed in the optic thalamus of the opposite side. Doubtless the paralysis of the right arm, in the last case, depended upon the older clot in the left optic thalamus, and that the hæmorrhage in the right corpus striatum occurred on the day before he died, when he was seized with his fatal attack.

In all the cases of *complete hemiplegia*, which were at first marked by improvement, the lower extremity recovered its power partially, and oftentimes completely, whilst the upper remained paralysed to the last. It should have been stated, that not unfrequently it was observed that the patient was at first seized with *general* paralysis, but that the power of one side was soon regained, hemiplegia remaining.

Coincidently with hemiplegia, there existed loss of consciousness more or less complete. Of the 21 cases,

this was observed in 18; in one case consciousness was clear; in the remaining two, no note was made on this point. Of the 18 cases, there existed complete loss of consciousness in 9; and partial loss was observed in the remaining 9. In several of those cases with complete loss of consciousness, this symptom came on gradually. Although not stated in any of the cases, I have no doubt that it is a fact that, in the nine cases of partial loss of consciousness, the patient gradually recovered from a state of complete unconsciousness. It is an interesting fact to observe that, in the three cases in which the paralysis was confined to the arm, there existed complete unconsciousness; thus showing that there is no correspondence between the extent of paralysis and the degree of loss of consciousness. And this is more strongly proved by the fact that in nine cases, in which there was complete unconsciousness, there existed no paralysis of any part.

Paralysis of other parts may occur at the same time as hemiplegia. These are: the muscles of the tongue; the muscles of the face; the lips; the muscles which move the eyes; the eyelids; the rectum and bladder; the pharynx and œsophagus; the muscles of respiration; the muscles of the neck and larynx; etc.

Paralysis of these parts is not nearly so frequent as that of the extremities; it constantly occurs on the same side as the paralysed limbs.

The *tongue*, with respect to its movement, is affected in various ways. Sometimes it cannot be protruded at all; in such cases articulation is generally considerably affected. Some persons, again, after frequent attempts at protruding this organ, suddenly recover the power over it, and it is abruptly protruded; when this is effected, it generally deviates to one or the ther side. I find that in all the cases in which this deviation was noted, it was towards the paralysed side. That this should be the case, is curious. The explanations proposed to account for it are nothing more than hypotheses; but the most feasible is that which regards the tongue as being *pushed* to the affected side by the action of its unparalysed muscles of the opposite side. In some instances the tongue is protruded perfectly straight.

Paralysis of the *muscles of the cheeks* is very perceptible; for, every time the patient expires, one or both cheeks is observed to be passively distended: and, when food is introduced into the mouth, it is found that the paralysed buccinator is unable to act upon it during mastication, therefore the morsel collects between the cheek and the teeth. In almost all the cases in which there existed complete state of unconsciousness and general paralysis, the cheeks of both sides were paralysed. This symptom is one indicative of extreme danger; for the patients presenting this died very rapidly. In those cases of hemiplegia in which the cheek was paralysed, that was always on the same side as that of the limb.

Considerable discrepancies are frequently committed in noting the state of the commissure of the lips, owing to the difficulty of detecting it; for, so long as the muscles are kept quiescent, no paralysis is perceived, but the instant the muscles are thrown into action, as when the patient opens his mouth, speaks, or smiles, the deviation becomes most perceptible. This will account for the fact that, of the forty cases, the state of the lips is stated in only three; and of these it is distinctly noted that the deviation was towards the *side of the body paralysed*, and the side on which the other muscles were stated to be paralysed; and in the other case—of general paralysis—the lips were drawn to one side. From notes I have taken, however, of cases not included in these forty, I find that the muscles which move the lips are much more frequently affected, and that always on the side of the body paralysed; so that the commissure of the lips was drawn to the opposite side, inclining sometimes upwards and sometimes downwards.

Paralysis of the eyelids, or ptosis, was observed but in four cases: in two, in which the paralysis was confined to one side of the body, the ptosis existed on the same side; in both of these extensive hæmorrhage was found on the opposite half of the brain, in a situation such as would not readily affect the third nerve after its exit from the brain. In another the ptosis was on the opposite side to the one paralysed (Case IV). In the other case there was drooping of both eyelids, and the paralysis of the body was on both sides.

The *muscles which move the eyes* are occasionally paralysed. Deviation of the eye in one direction, as strabismus, is a symptom of rare occurrence in cerebral hæmorrhage; for, of the forty cases, two only are mentioned in which this phenomenon was observed. In one case of hemiplegia, there existed convergent strabismus of both eyes; in the other, on the contrary, there existed internal strabismus of the right eye, with a state of complete unconsciousness and general paralysis. In the former, the lesion was in the lateral ventricles; in the latter, in the pia mater, about the base.

The *respiration* may be variously affected. Sometimes the respiratory muscles of one side are paralysed, and that side of the chest in consequence is seen to expand insufficiently, and the air entering the corresponding lung very feebly; sometimes the respiration is very deep and slow, accompanied with a noisy inspiration, or stertor. I find that stertor existed in more than half the cases; and that the site of the hæmorrhage in all of them was either in the central ganglia at the base, the pons, or the medulla, or some other part in the immediate neighbourhood of the base. It is a symptom of most serious omen. The patients that presented it generally died, and that very rapidly. In one case of cerebellar hæmorrhage, however, this symptom was well marked, but the patient recovered; but was readmitted for a second and a fatal attack. Cerebellar hæmorrhage is considered more fatal than cerebral hæmorrhage, because the former is more frequently attended by stertor. Paralysis of the muscles of the pharynx and œsophagus, causing dysphagia, is very rare; for it was only observed in three cases, all of which proved rapidly fatal. I have seen a case in which the power of deglutition was so lost that the patient was fed by means of the stomach-pump, the paralysis ceased, and the patient recovered with perfect power of deglutition; thus showing that those cases are not altogether hopeless which present this symptom. Vomiting occurred in seven, and nausea in three of the forty cases. This is considered to be a constant symptom of *cerebellar* hæmorrhage. In two only of the seven did the hæmorrhage involve, besides other parts, any portion of the cerebellum; and in one case, in which there existed two or more large clots in one of the cerebellar lobes, there was no vomiting.

Paralysis of the *sphincters* is noted in eight of the cases; paralysis of the *bladder* is not a very common phenomenon after the first shock of the attack has passed off.

Even the *arteries* are not exempt from the paralysing influence of hæmorrhage into the brain. I found in one case visible pulsation in all the principal arteries of one side of the body, whilst those of the opposite could not be felt. This visible pulsation was on the same side as the principal clot (which was very large) in the brain; but there was also hæmorrhage in the ventricle of, and the subarachnoid space over, the left side. Paralysis of the limbs was complete on both sides. This condition of the pulse has not been frequently observed. Whether the visible pulsation was caused by the obstruction to the circulation of the blood on the right side of the brain, or by paralysis of the vaso-motor nerves, I shall not attempt to discuss until I see more of such cases. It is important, therefore, to ascertain, before we adopt our treatment, the condition of the pulse *on both sides*, as collapse may coexist with a *full* pulse on one side of the body.

In cerebral hæmorrhage, what is the state of the *pupils?* These present a variety of modifications. The following table shows the relative frequency of the different alterations of the pupils as observed in twenty-nine cases, in which notes on this point were recorded.

Condition of Pupils.	No. of Cases.	Per Cent.
Both contracted . . .	9	31·034
One only contracted .	4	13·75
Total contracted -	—13	———44·784
Both dilated	5	17·24
One only dilated . . .	5	17·24
Total dilated . .	—10	———34·48
"Inactive"	2	6·87
Natural	4	13·75
	29	99·88

Thus we find the pupils much more frequently altered than natural: this was observed in 86 per cent. But it should be remembered that the size of the pupil is extremely variable, even within the range of health. We may, however, confidently assert that inequality in the size of each pupil, or inactivity of the same, are never phenomena attending sound health; and this condition is positively stated to have occurred in about 39 per cent. of the cases. Although small and dilated pupils are frequently seen in healthy persons, yet these states in the degree noticed in the above cases, their permanency, together with their sluggishness, mark them at once as depending upon the appreciable lesion found in the brain in each case. After excluding all sources of fallacy, these facts show that modifications of the pupils occur, in by far the majority of the cases, as the effect of cerebral hæmorrhage.

Now, what relation do these several conditions of the pupils bear to paralysis of the extremities, etc.? Of the nine cases in which both pupils were contracted, there existed hemiplegia in five, paralysis of both sides of the body in one, and in the remaining three there was no paralysis. Further, of the four cases in which one *pupil only* was contracted, there was hemiplegia in two; in one of which the paralysis of the extremities was on the same side as the contracted pupil, and in the other on the opposite side; in one there was paralysis of the limbs on both sides of the body, and in the other there was no paralysis. Thus, in contraction of one or both pupils, paralysis is more frequently present than absent, for this was observed in about 70 per cent.; and paralysis of one side more frequently than that of both, for hemiplegia existed in about 54 per cent., while general paralysis only in about 15 per cent. There does not seem to exist any relation between the contracted pupils and the site of the paralysis in different parts.

Of the ten cases in which one or both pupils were *dilated*, there was paralysis of the limbs in all except one. Of the five in which *both* pupils were dilated, there was hemiplegia in three, paralysis of both sides in one, and no paralysis in the other. Of the five cases in which *one* pupil was dilated, there existed hemiplegia in three; in two of which on the corresponding side to the dilated pupil, and in the other on the opposite side. In the other two there was general paralysis.

The foregoing seem to point that paralysis is even more frequently associated with dilated than contracted pupils; for with the former state of the pupils paralysis occurred in 90 per cent. It also shows that *general* paralysis is more frequently observed with dilated pupils than with the contracted state, as it occurred in 30 per cent. as compared with 15 in the latter. Again, as to the relation of these various modifications of the pupils and the *site of the hæmorrhage* in the brain, it seems that, in by far the majority of cases of contraction of the pupils, the *membranes* of the brain are the seat of the hæmorrhage: this was observed in 61 per cent. But to particularise. Of the thirteen cases in which the pupils were contracted, the hæmorrhage was found in the membranes in eight, or 61 per cent.; in the lateral ventricles in three, or 23 per cent.; and in the hemispheres in two, or 15 per cent. In the nine cases in which *both* pupils were contracted, the lesion of the membranes existed in those of both sides of the brain in five, and on one side only in one. In one the hæmorrhage was in the lateral ventricle, and in the remaining two in the substance of the hemispheres; in one of which the clot was situated very near the base, so as to encroach very materially upon the membranes. Of the four cases in which *one* pupil only was contracted, the hæmorrhage was in the membranes on both sides of the brain in one; on one side, which was opposite, in another; and in the lateral ventricle in two—in one on the opposite, and in the other on the corresponding, side. In those cases in which the lesion was in the membranes, it was either in the cavity of the arachnoid, or in the subarachnoid tissue, within the meshes of the pia mater.

The above points to an important fact, that in almost all cases contraction of the pupils is almost always associated with hæmorrhage in contact with the *membranes*, either on the surface of the brain, which is more frequently, or when these extend into the lateral ventricles. To these points I shall have occasion to refer further on. In the ten cases in which the pupils were *dilated*, the following shows the several sites of the hæmorrhage in the brain, and their relative frequency.

Seat of Lesion.	No. of Cases.	Per Cent.
Membranes	3	30
Lateral ventricles . .	6	60
Hemisphere	1	10
	10	100

Thus it is interesting to note the complete reversion of the order of the parts affected in the latter, as compared with what was observed in the cases of contracted pupils. In the cases of *dilatation*, the membranes were the seat of lesion in 30 per cent.; whilst in those of *contraction*, they were affected in 61 per cent. In dilatation, the ventricles were the site of the hæmorrhage in 60 per cent.; whilst, in contraction, these were observed to be but affected in 23 per cent., and in those cases the hæmorrhage was found in very inconsiderable quantity, such as would not cause much pressure.

Of the five cases in which *both* pupils were dilated, the lesion was found in both lateral ventricles in four, and in the membranes covering both sides of the brain in the other. In the other five cases, in which *one* pupil was dilated, the lesion was in the membranes in two—in one of which on both sides of the brain, and in the other on the same side; in the lateral ventricles in two—on the corresponding side in one, and on the opposite in the other; and in the other case the lesion was in the substance of the opposite hemisphere. The following are the main inferences which the above data seem to warrant us to draw.

The pupils are altered in the majority of cases of cerebral hæmorrhage.

Of the modifications, contraction is the most frequent variety.

Contraction of the pupils coexists with paralysis, of which hemiplegia is the most frequent form.

Paralysis is more frequently associated with dilatation of the pupils, and that more frequently *general* in its extent.

Alterations of the pupils bear no relation to the seat of the paralysis when partial.

Contraction of the pupils almost always depends upon lesion in the membranes; dilatation upon lesion in the substance of the brain, when sufficient to exert a considerable degree of pressure.

[*To be continued.*]

MANCHESTER EYE HOSPITAL.

TOTAL ABSENCE OF THE IRIS IN BOTH EYES.

By A. Samelson, M.D., Surgeon to the Hospital.

R. L., of Bradwell, in Derbyshire, born before wedlock, unmarried, 38 years old, six feet high, of swarthy complexion, otherwise healthy, and rather stout, consecutively employed as labourer on farms, railroads, waterworks, and as shepherd; was "always considered to have weak eyes, as the cold always flew to them," but could see to thread a needle, holding it as far as a foot distant from the eye, as well as "a sheep half a mile off on the hill side." There had been no marked sensitiveness to light. The patient, very intelligent for his station, had not been taught to read. His parents, brother, and sister, had never anything the matter with their eyes.

In September 1861, whilst almost always working in water, he got one day wet through, and could next morning see nothing but "same as ribs of fire over each eye, from temple to nose, all red." He put himself under medical treatment in February last, and was twice salivated. I saw him first in the month of July. A seton was then placed in his neck; and iodide of potassium ordered him for internal and external use. All this has been continued to the present time. The eyes, most restless before, have since become much more steady; the sun, as well as a flame, are now by the patient seen "in their natural colours," whilst previously they had appeared to him "like blood." The dizziness, formerly much complained of, has abated. The difficulties of ophthalmoscopic examination being also considerably lessened, the symptoms at present observable are as follow.

The eyes present a peculiarly dark aspect, and within the corneal area generally a deep slate colour. A gleam, as from a polished copper plate, is seen to issue from the right eye, especially when looked into from above or sideways; the reflexion from the left eye is of a paler hue. Linear greyish streaks of a fatty appearance appear along the upper margin of each cornea; the corneæ themselves are irregular in outline, acquiring a more elliptical shape with a transverse long diameter. No rudiment of the iris is visible. A milk-white dot of the size of a pin's-head, near the anterior as well as the posterior capsule, is centrally situated in the left lens, apparently higher in the right; and there are five or six equidistant curved striæ resembling the spokes of a wheel nearer the posterior surface in each lens; the rest also of the lenticular mass is not uniformly clear. The right lens is somewhat displaced, its inferior edge being fully three lines distant from and raised above the lower circumference of the cornea; whilst upwards the lens very closely approaches the cornea, and the top of the former is, as it were, hidden behind the limbus. The border of the lens being slightly jagged, this latter appears somewhat reduced in volume; the space for the aqueous humour is likewise diminished in size. Of the ciliary processes no trace can be detected by any method of examination. In the right eye, the optic nerve entrance is seen to be abnormally small, not quite regular in contour, of a chalky hue, frankly excavated; the vessels upon it are thin, scanty, bent over the edge, and almost limited to the outer portion of the disc (inverted image). The vessels and pigment of the choroid appear to be uniformly wasted. In the left eye, nothing can be discerned of the fundus, except occasionally the wavy glare of what resembles a bright fold of detached retina. The size and tension of the eyes are noways abnormal; the sensibility of the corneæ is perfect; no remarkable sclerotic injection is observable; the perception of light is moderate, the flame of an argand burner, raised one inch, being seen at twenty feet distance. There is still some nystagmus, with every now and then a more clonic rotatory jerk in either eye.

The patient states that there is "always a mist like steam before him, same as if it made him drunk"; that he can see better for an hour in the morning; and that his left eye is by far the best of the two.

HULL GENERAL INFIRMARY.

CASES ILLUSTRATING THE TREATMENT OF JAUNDICE.

Reported by C. J. Evans, Esq., House-Surgeon.

Case I. *Organic Disease of the Liver, with Intercurrent Inflammatory Attacks.* W. B., aged 35, by occupation a groom, and of good constitution, was admitted under the care of Sir H. Cooper on January 16th, 1863, with symptoms of jaundice strongly marked. The conjunctivæ were of a bright yellow colour, the skin possessing rather more of a tawny hue; it was cool and moist, and the adipose tissue was scanty. The urine was dark coloured, like porter, containing a considerable amount of bile-pigment; when tested with sulphuric acid and sugar, scarcely any purple colour was produced. The stools were of a perfectly pipe-clay colour, and had been so for many weeks.

The symptoms had commenced about ten or twelve weeks before admission, and he had been under medical treatment. Immediately before the yellowness of the skin showed itself, he had fasted for some hours, and then had eaten a heavy meal. At the commencement, he had occasional vomiting, with a constant feeling of nausea, and this continued for about three weeks. He also complained, in the early stage, of general pains, not located in any particular part, accompanied with considerable itching of the skin, and this latter symptom existed in some degree at the time of admission. He had had no previous attacks of jaundice. He was ordered to take night and morning a pill containing one-third of a grain of podophyllin and two grains of extract of hops; and three drachms of compound decoction of aloes, with five drachms of camphor mixture, three times a day; and to have common diet.

Jan. 23rd. No improvement having taken place in any of the symptoms, the above treatment was discontinued, and the following prescribed instead:—Benzoic acid ℈ss; camphor mixture ℥viij; an ounce to be taken three times a day.

Jan. 30th. Ten additional grains of benzoic acid were added to the mixture.

Feb. 1st. A relapse in the symptoms had now taken place. He complained of severe pain in the region of the liver; the yellow colour of the skin had become intensely bright, and the urine much darker, depositing abundant sediment. Six leeches were ordered to be applied to the region of the liver, and a calomel and antimony pill to be taken three times a day. The benzoic acid mixture was ordered to be omitted. Much relief followed the application of the leeches.

Feb. 7th. Rather more pain was complained of, and six leeches were again applied, and followed in a similar manner by marked relief. The leech-bites bled very freely, and required continued pressure with the fingers to stop the flow. He had no rigors. Considerable improvement was manifest also in the general symptoms about this time. The bright colour of the skin faded to a great degree; the stools became browner; and the urine assumed an almost natural colour. He was ordered to take an ounce of nitrate of potass mixture three times a day; and ten grains of Dover's powder at bedtime.

Feb. 11th. The gums were rather sore; and the calomel and antimony pill was ordered to be taken at night only. He appeared to be progressing favourably, though slowly; and was ordered to take, on the 19th, infusion of quassia with nitromuriatic acid every four hours.

Feb. 21st. Severe pain was again complained of in

the region of the liver; and this part was tender on pressure. It was evident, too, that he was becoming thinner; the skin still retained its tawny hue; and he slept badly at nights. Six leeches were ordered as before; a grain each of calomel and opium to be taken night and morning; and a pint of beef-tea daily.

Feb. 25th. Full diet was ordered.

March 2nd. The mixture was ordered to be omitted.

March 11th. He was ordered to take, three times daily, one ounce of an eight-ounce mixture, containing a drachm of iodide of potassium, an ounce of liquor taraxaci, and water.

March 17th. The compound iodine ointment was directed to be rubbed over the region of the liver twice a day.

No further improvement in the symptoms took place; and the man left the hospital, at his own request, on March 21st.

The following cases were also under the care of Sir Henry Cooper.

Case II. J. P., male, aged 20, of healthy constitution. The urine had been dark coloured about five days; and the skin yellow, and the stools pipe-clay, somewhat less than that time. There was no sickness nor pain, and the size of the liver was natural. The jaundice had probably come on after exposure to cold. This case was uncomplicated. The skin was of a deep yellow, and the stools very light coloured. The urine was not tested for the bile-acids. He was ordered a third of a grain of podophyllin three times a day. It acted favourably; and he was cured of the disease. There had been no previous attacks of jaundice.

Case III. P. S., female, aged 26, of healthy constitution, was suckling at the time; and was subject to "sick headaches," but had no pain whatever. The urine had been dark a week, and the skin yellow about the same time. There was no enlargement of the liver. It was a first attack. She took five-grain doses of benzoic acid; and a cure resulted in ten days.

Case IV. J. B., male, aged 30, of enfeebled constitution. He had been ill about a week; the characteristic symptoms of jaundice showing themselves from the first. He complained of pain in the right side. The size of the liver was natural. He was a soldier, and had been in India; but he had not had a previous attack. The present one was ushered in by shivering. There was only a slight indication of bilic acids in the urine. A grain of podophyllin was given three times a day for ten days, without any good result; then benzoic acid, under which treatment a cure was effected in sixteen days.

The above three cases were out-patients of the Infirmary.

Case V. — T., male, aged 63, of weakly constitution (a private patient); had been a very active man, and much exposed; was a drinker; and had been ailing many months. He had pain in the right side, and sickness; and the liver was larger than natural. The urine had been dark coloured for nearly a month; and it showed the presence of bile-acids. He was treated with mercurials and decoction of aloes. The case terminated fatally; and the liver was found to be cirrhosed. He had had no previous attacks of jaundice.

The following cases were admitted under the care of Dr. Daly.

Case VI. C. B., aged 74, a tall, well-built man, was admitted on December 24th, 1862, with symptoms of jaundice. His constitution, he stated to be pretty good. The arteries at the wrist were hard and cord-like. He had always enjoyed good health, and had never had an attack of jaundice before. He had had pain, or rather a feeling of weight, in front of the chest about a month; but it had not been at all severe. He also complained of nausea, with a nasty taste in the mouth. The urine was dark coloured, and had been so about a fortnight; the skin was yellow, though not of a bright colour; and the stools were like pipe-clay. When the abdomen was examined, the liver was found to be of about the natural size. The urine was tested with sulphuric acid and sugar, and no bile-acids were found to be present. This was a mild case, and there were no complications. He was ordered a grain of podophyllin in a pill twice a day, and ordinary diet, with three ounces of wine daily.

He quickly improved under the above treatment; lost the yellowness of skin, which only remained of a slight tawny colour; the urine and stools regained their natural appearance; and he was discharged cured on Jan. 26th.

Case VII. J. P., aged 19, a farm-labourer, healthy-looking, was admitted on February 5th, 1863, with symptoms of jaundice of long-standing. The skin and conjunctivæ were of a decidedly yellow tinge, and had been so for the long period of four years, according to the lad's own statement. The urine was high coloured, but had never been very dark; there was not a great amount of bile-pigment in it. The stools had been light coloured some months. The size of the liver could not be well ascertained, on account of the great distension of the abdomen which existed, especially in the seat of the transverse colon. This troubled him much, and had existed some time; he had also suffered pain in that region for a long time past; and he occasionally had a feeling of nausea, but never any vomiting. He had not had any previous attacks of jaundice.

He was ordered to take half a drachm of the compound jalap powder the next morning; and was put on common diet.

Feb. 6th. He was now directed to take a grain of podophyllin and two grains of extract of henbane, in a pill twice a day.

Feb. 9th. The region of the liver was ordered to be well rubbed with the compound iodine ointment night and morning.

Feb. 16th. No perceptible change for the better had at present taken place. He was ordered to continue the above medicines; and to take, in addition, five grains of iodide of potassium and ten drops of liquor potassæ in an ounce and a half of compound decoction of sarsaparilla three times a day. Having no appetite for meat, he was put on milk diet, with a pint of beef-tea daily.

March 18th. The urine and stools were improved; but the colour of the skin remained much the same; and the flatulent distension of the abdomen caused him considerable distress at times. The appetite was better. He was ordered to omit the podophyllin, and take occasionally two pills of colocynth and blue pill. Common diet was ordered.

March 28th. He was ordered to continue the mixture, but omit the use of the ointment; and to take a tablespoonful of cod-liver oil three times a day; and to have full diet.

He was discharged as an out-patient in April.

The exact size of the liver could not be ascertained; but that it was very much enlarged, especially the left lobe, there could be no doubt. Dr. Daly considered the case to be a good example of what Dr. Budd has described under the head of scrofulous enlargement of the liver.

The termination of the case would appear to strengthen this view; for the size of the liver and the enlargement of the abdomen gradually lessened; and the lad recovered, after taking cod-liver oil and iodide of potassium, with ammoniocitrate of iron, for between two and three months. The jaundice was probably caused by pressure upon, and obstruction of, the minute bile-ducts.

Case VIII. H. S., aged 43, by trade a draper, addicted to drink, and had been laid up with delirium tremens. Four years ago he suffered from abscess in the right loin, which confined him to bed six months. He was admitted under the care of Dr. Daly on May 14th, 1863.

At that time he was in a nervous, tremulous condition, the result of intemperance; besides which, the ordinary symptoms of jaundice were present, though not in a severe form. They had existed about a month or five weeks. The abdomen was full and distended. He had some pain, chiefly marked under the right ribs, and occasionally at the pit of the stomach. There had been much nausea and vomiting when the jaundice first appeared, but they had since subsided. He had had a previous attack, five years before. The stools were rather loose, quite clay-coloured; the urine high coloured, showing the purple colour in a marked degree with the acid test, indicating the presence of bile-acids. He was ordered two compound colocynth pills occasionally, and a dose of a mixture containing solution of acetate of ammonia, tincture of orange-peel, and chloric ether, three times a day; common diet, and half a pint of porter daily.

He quickly improved, lost his yellow colour and trembling condition, and was discharged cured on June 15th.

Case ix. B. D., aged 50, female, was admitted on May 14th, 1863, with symptoms of jaundice to an extreme degree. The skin was of an intense greenish yellow hue, dry and harsh; urine as black as porter, depositing sediment; bowels costive. She did not complain of any pain, but was in a very low, weak state. The jaundice had been coming on about two months, and had been preceded by an attack of "slow" fever. She had vomited very much at first, but not latterly. She had not had a previous attack of jaundice. The urine, with the sulphuric acid test, showed distinctly the presence of bile-acids. She was ordered to take a grain of podophyllin, and two grains of extract of henbane in a pill, twice a day; and to have milk diet, and three ounces of wine daily.

May 19th. She remained much in the same state. The stools were perfectly clay-coloured. She was ordered a mixture containing chloric ether, tincture of orangepeel, and liquor ammoniæ acetatis. Sago or arrowroot was also ordered.

May 25th. Five grains of iodide of potassium were ordered to be taken three times a day in a decoction of sarsaparilla. The woman was becoming weaker; and the colour of the skin, if anything, darker than ever. There was also some distension of the abdomen. She was ordered four ounces of brandy, in addition to the wine; and a pint of beef-tea daily.

June 4th. The abdomen was more distended; she complained of great pain in it; and there was occasional sickness. A large blister was ordered to be applied to it.

She died the next day.

At the autopsy, the abdomen was found full of serum and flaky lymph. The liver was rather contracted, and hobnailed in places; of a dark green colour throughout. The gall-bladder contained extremely viscid bile and a few calculi. The common gall-duct was pervious; but the cystic duct was obstructed in one part.

The Greek Fire Bubble. We believe that what people call Greek fire is nothing more than a strong solution of phosphorus in bisulphide of carbon. The employment of this compound in some way or other against any enemy has, we believe, been often suggested to our own War Department; and during the Crimean war Captain Disney invented some sort of shell to enclose the fluid. It does not appear, however, to be so destructive as is generally supposed. The phosphorus, of course, takes fire when the sulphide of carbon has evaporated, but it only ignites very inflammable substances. We are strongly disposed to doubt the spontaneous inflammability of the original Greek fire. It seems to us more probable that "naphtha" was thrown from engines, and was afterwards ignited by the balls of "sulphur and pitch from evergreen firs," projected ready lighted on arrows and javelins. (*Chemical News.*)

Original Communications.

ON ULCERATIVE INFLAMMATION OF THE VALVES OF THE HEART, AS A CAUSE OF PYÆMIA.

By W. S. Kirkes, M.D., Assistant-Physician and Lecturer on Medicine at St. Bartholomew's Hospital.

Among the more formidable evils sometimes resulting from that very common disease acute rheumatism, a poisoned state of the blood, analogous to pyæmia, and brought about by suppurative or ulcerative inflammation of the cardiac valves, must certainly be included. There are on record numerous instances of death, with all the signs and *post mortem* proofs of a purulent or contaminated state of the blood, occurring in the course of rheumatic fever, which clearly demonstrate the truth of this statement. But although the fact is well proved, and although most systematic writers on diseases of the heart allude to the occasional vitiation of the blood by the products of endocardial inflammation, yet the association in question is by no means generally recognised; and when a case of the kind occurs it is apt to perplex and mislead even the most practised observers. The following instance furnishes a striking illustration of this.

Case.* J. W., a picture-frame maker, aged 28, was admitted into St. Bartholomew's Hospital, under the care of Dr. Burrows, on October 15th, 1862, suffering from ordinary rheumatic inflammation of several joints of the upper and lower extremities. He was a fairly nourished, dark-complexioned, man, with a peculiar, anxious, and depressed aspect. The face was flushed; the skin hot and perspiring, free from eruption; tongue much coated with moist yellowish-white fur; pulse 80, of good volume; appetite bad; thirst considerable; bowels relaxed from medicine; urine high coloured, with a sediment of urates. A slight systolic murmur was heard at the base of the heart. These, of course, were ordinary symptoms and signs of rheumatism; yet there was a something in the appearance of the man which was unsatisfactory, and suggestive of failing power. This was the more significant since the patient was a very temperate man, in good circumstances, and had never been laid up with any previous illness. The attack began with pain in one hip eight days before admission, and the symptoms had gradually increased. There had been no rigor. The alkaline treatment for rheumatism was adopted, and a pint of beef-tea added to milk and arrowroot diet. He had no sleep the first night of his being in the hospital, but his condition next day (16th) was not materially altered. The bowels had acted five times, the motions being pale and relaxed; he felt sick occasionally. An aromatic draught with twenty minims of tincture of opium was administered, and the alkaline treatment continued.

On the 17th, he had had another bad night; being frequently disturbed by action of the bowels; the joints were better.

On the 18th, his bowels were still much relaxed. The tongue was more coated and very red. He had frequent nausea and vomiting of greenish fluid. An aromatic draught with half a drachm of aromatic spirits of ammonia, and ten minims of laudanum, three times a day, was now substituted for his alkaline mix-

* I am indebted for several particulars of this case to the daily notes of Mr. Connell Whipple, the clinical clerk in charge of it.

ture. Three ounces of brandy, and soda-water, were also ordered.

On the 19th, the amount of brandy was doubled, on account of the continuance of the vomiting and diarrhœa.

On the 20th, the bowels still continuing profusely relaxed, his aspect assumed the character of that of cholera, the eyes and cheeks being deeply sunken, and the bones of the face prominent; his speech was weak, and he appeared much exhausted; the feet and hands were cold; pulse 110, very small and feeble; tongue red and dry. The rheumatic affection appeared to have quite disappeared. He was ordered five grains of sesquicarbonate of ammonia, ten minims of chloric ether, a drachm of compound tincture of cardamoms, five minims of tincture of opium, and a drachm of mucilage, in peppermint water, every four hours.

On the 21st, he had suffered profuse diarrhœa during the night; the motions were very offensive, some passed involuntarily; he was frequently sick, vomiting a thin green fluid. His aspect was more indicative of exhaustion; there was a dark areola around the sunken eyes; the feet and hands were cold, the latter rather livid; pulse 90. He was ordered a starch and opium enema, continuance of the draught, and two grains of calomel and a grain of opium at bed-time.

On the 22nd, he passed a better night; the bowels acted twice only; extremities warm; tongue less red, and inclined to moisture; he still vomited occasionally; thirst great. Although the choleraic symptoms were thus subsiding, a new feature presented itself, viz., considerable swelling of the left parotid gland.

On the 23rd, the general symptoms continued to improve; the bowels acted only twice; the motions were dark green, with fæcal matter; the urine was clear, of natural colour, slightly acid; the sickness had ceased. The other parotid was now affected, both being much swollen. The draught was continued, and a poppy fomentation ordered for the inflamed parotid.

On the 25th, there was no material change; some tincture of bark was added to the mixture.

On the 26th, he had passed a restless night; the conjunctivæ were injected; the face and hands very red, as if from a diffused eruption, being like that so frequently observed in the reaction after epidemic cholera. The left parotid was more swollen; the swelling of the right had almost disappeared. In other respects, his condition was much the same.

On the 28th, he had had good sleep from a dose of morphia. The redness of the face had diminished, but there were several irregular bright-red slightly elevated spots on the hands and arms; none on the abdomen. During the next five or six days, the patient's general condition remained about the same; occasional diarrhœa and vomiting; the tongue constantly red, and thirst great. The eruption gradually disappeared, and the cuticle of the hands desquamated. The man's appetite improved a little, yet his aspect retained the same haggard sunken character; the left parotid suppurated, and the matter was evacuated. The strangeness of the symptoms and the continuance of the signs of irritation of the stomach and bowels, without obvious cause, led Dr. Burrows to suspect the possibility of some irritant poison being administered by the man's relations. Every precaution was accordingly taken to guard against this occurring.

On November 3rd, another change ensued. The man, after a restless night, was found to be completely hemiplegic on the right side; consciousness was obtuse, but not lost. The heart, ausculted again to-day, as it frequently was during the progress of the case, yielded no signs of increased mischief. The view now taken of the case was, that pyæmia existed—occasioned either by absorption of matter from the suppurating parotid, or, possibly, from suppuration of the left valves of the heart; and that purulent deposit had occurred on the left side of the brain. It was also suggested, that possibly, some obstruction had occurred in one of the left cerebral arteries. The parotid was punctured again, and much matter let out. During the next three days the patient gradually sank, no noteworthy change in the symptoms occurring, and died quietly on the 7th.

The case was full of obscurity and anomalies, almost from the commencement. As the rheumatic symptoms subsided, those of choleraic diarrhœa or of irritant poisoning set in, and continued, with occasional abatement, to the end; then unintelligible inflammation and suppuration of the right parotid; then hemiplegia terminating in death. What was the cause? The autopsy explained it, and cleared up the mystery.

The left middle cerebral artery and its principal branches were found obstructed by firm fibrinous clots. The left corpus striatum was reduced by pale softening almost to the consistence of pulp. This explained the hemiplegia. But what occasioned the arterial obstruction? Numerous granular vegetations were found on the auricular surface of the mitral valve just above its free border, also along the tendinous cords, especially at their junction with the valve. Similar granules, though fewer in number, existed along the festooned borders of the aortic valves; and traces of them were also found on the tricuspid and pulmonary valves.

The mitral valve was especially diseased. Besides the granules, films of soft fibrinous material could readily be scraped from the surface, leaving the endocardium beneath red, rough, and granulated. The tissue of the valve was highly vascular; several minute vessels being clearly visible by the naked eye, still more with the microscope. The vessels were very tortuous, gorged with blood, and several of them could be traced almost to the edge of the valve. The tissue of the valve, especially where most granular, presented, when examined with a lens, an uneven, jagged appearance, very much like that of the surface of an ulcerating wart. Here there were unmistakable signs of recent acute inflammation, exudation, and slight superficial ulceration, of the mitral valve, and commencing similar mischief in the other valves. Part of the granular matter was readily separable after death; and it is reasonable to believe that some had been washed off during life, and that its arrest in the smaller branches of the left middle cerebral artery had, by obstructing the channels there, occasioned obstruction and coagulation in the main channel behind it, and also in the corresponding carotid, which was likewise found occupied by mixed yellow and red coagula. This view was strongly supported by the existence of two wedge-like masses of yellow fibrinous matter in the spleen; and by a similar large mass, surrounded by a dusky red zone, in the cortex of the left kidney. Such masses are now well-known attendants on these cases of blood-vitiation from diseased cardiac valves. Another common attendant on such cases also existed here; namely, a greatly congested state of the intestinal mucous membrane, with considerable enlargement of the solitary and agminate glands of Peyer. Much of the left parotid gland was found in a state of suppuration. Nothing else noteworthy was discovered in the body, except a few small greyish deposits in one lung, near the surface; the pleura over them was vascular, and coated with recent soft lymph.

Surely the pathology of this case is quite clear; ordinary rheumatism in the first instance; then acute ulcerative inflammation of the mitral valve; then contamination of the arterial blood by lymph, pus, and other inflammatory products from the valve; then the signs of general blood-poisoning—namely, febrile disturbance of a low typhoid form, nausea, vomiting, profuse diarrhœa, and erythematous eruption; then local suppuration in the parotids; lastly, obstruction of the cerebral

vessels, with consequent softening of the brain-substance and hemiplegia; all terminating in death, and revealing proofs of blood-poisoning in various parts of the body. Such, manifestly, are the main links and their real sequence, in this chain of morbid phenomena; and this interpretation of them is, I think, of great importance in regard to the whole of this obscure subject.

Until of late these fearful results of acute suppurative endocarditis have not attracted much notice, although particular attention was drawn to the subject by myself in 1852 (*Med.-Chir. Trans.*, 1852, page 316). Casual allusions to them, however, in various works, show that their import has not been altogether overlooked. Dr. Watson, for example, after alluding to the separation of fibrinous particles from inflamed valves, as among the accidental results of rheumatic endocarditis, and remarking that the primary effects of such detachment are mechanical, pointedly continues, "but it is very conceivable that the whole mass of the blood may, in certain cases, be contaminated by the admixture of some of the fluid products of endocardial inflammation." (*Practice of Physic*, 4th Edition, vol. ii, p. 315.) He then gives the particulars of two fatal cases of rheumatic endocarditis, in which extensive ulceration of the aortic valves was discovered after death; and observes that, "with such mischief in rapid progress within the heart, it is easy to see how the blood may be polluted and charged with a new poison in its very fountain."

Friedreich, too, among other recent writers, specially draws attention to these pyæmic effects of ulcerative endocarditis. (Virchow, *Handb. der Path.*, Bd. v, s. 323.) His observations confirm what the researches of Rokitansky (*Handb. der path. Anat.*, 1st Edition) and others, including my own (*Med.-Chir. Trans.*, 1852), had already established. Although we thus meet with occasional references to this subject, yet, as already observed, it is only of late that it has been fully worked out. In June 1862, appeared a masterly essay on the subject, by MM. Charcot and Vulpian (*Gaz. Méd. de Paris*); and this was followed, in October of the same year, by another clever paper by Lanceraux (*ib.*). In these two essays, and in an able paper by Leudet, on Aortitis and Purulent Infection thereby occasioned (*Archiv. Gén. de Médecine*, 1861, p. 575), may be found a summary of nearly all at present known on the subject, together with several illustrative cases, and ample references to modern and former observations on ulcerative endocarditis. It is therein shown that, as in the case I have just narrated, suppurative and ulcerative inflammation of the valves of the heart may contaminate the blood with inflammatory products, and thus occasion the ordinary signs of pyæmia, such as febrile disturbance of a low typhoid character, occasionally complicated with jaundice, and followed by purulent deposits and death.

It may seem curious that common rheumatic inflammation of the valves of the heart does not produce similar grave results, for the blood in such cases must be largely contaminated by inflammatory products. No doubt, such contamination does exist, and probably explains many of the febrile symptoms in acute rheumatism; but, in order that the more serious pyæmic effects should result, it is probably requisite that ulcerative destruction, with suppuration, should exist. Why such extreme effects should happen in some rheumatic cases, and not in others, is by no means clear. Recorded cases, however, seem to show that ulcerative destruction is especially liable to occur in those who have been greatly debilitated, who have led intemperate lives, or who are peculiarly cachectic. The mischief in such cases usually runs a very rapid course, and in nearly all cases seems to be fatal.

Generally, this ulcerative inflammation of the cardiac valves seems to occur in association with rheumatism. Not always, however, is this the case. Charcot, Vulpian, and Lanceraux, refer to instances in which no rheumatic or other attendant morbid condition existed to account for the affection. Dr. J. W. Ogle's analyses of cases of ulceration of the cardiac valves is confirmatory of this (*Pathological Transactions*, vol. ix); and several instances of acute ulcerative destruction of the valves independent of rheumatism have come under my own observation.

Usually such cases seem to occur in debilitated cachectic subjects; in those who have been depressed by intemperate habits, exhausted by mental anxiety, or who exhibit signs of imperfect nutrition of their tissues, with commencing fatty degeneration. In such cases, the tissue of the valves, whether in consequence of a low inflammatory process or of mere degeneration, seems to undergo a kind of acute atrophy, softens, breaks down, and leaves an ulcerated surface with rough jagged edges, to which fibrinous concretions from the blood adhere. In several instances, this form of ulcerative destruction has been met with in pregnancy.

Another form of ulceration occurs in connection with softening of atheromatous material in the substance of the valve, and subsequent destruction of the superjacent endocardial membrane. Death, ensuing rapidly and under very obscure conditions, has not unfrequently been thus brought about.

Examples of these several forms of non-rheumatic ulceration of the cardiac valves have fallen under my notice, and may furnish the subject of another communication.

Mortality in the Army in Various Stations. Dr. Franklyn gives the following comparison (from published statistics) between the health of the army before and after the Crimean war. Commencing with the West Indies, one of the most unhealthy stations for white troops, we find, by statistics compiled up to 1860, that in Jamaica the mortality ran as high as 260 in 1,000 of strength per annum, or a British regiment was entirely destroyed in about three and a half years. At a later period, the mean of four healthy years gave in the same colony 67 deaths in 1,000 of strength per annum. Up to 1855, it was as high as 60.8 per 1,000 of strength; it is now reduced to 20.4 per 1,000. In Trinidad, the mortality was 106.3 per 1,000 of strength. A regiment was destroyed in seven years. In 1859, with an epidemic of yellow fever, it was reduced to 89 per 1,000 of strength. In 1860, there was not a single death. In Barbadoes, the mortality was 58.8 per 1,000; it is now 6.36 per 1,000. In St. Lucia, the mortality was 122.8 per 1,000; in 1859, not one death occurred; in 1860, one only occurred. In British Guiana, the mortality was 74 per 1,000; in 1859, it fell to 13.9 per 1,000; in 1860, it went down to 6.6 per 1,000. In Canada, the mortality was 16.1 per 1,000; it is now 10.1 per 1,000, including invalids who may die at home. In Nova Scotia, the mortality was 15.1 per 1,000; now it is 7.23 per 1,000. In Newfoundland, the mortality was 11 per 1,000; it is now 4.8 per 1,000. In Bermuda, the mortality was 28 per 1,000; now it is 8.55 per 1,000. In Gibraltar, the mortality was 11.1 per 1,000; now it is 7.18 per 1,000. In Malta, it was 18.2 per 1,000 men, and sometimes went as high as 40.3 per 1,000; now it is reduced to 10.5 per 1,000. In Ionia, the mortality was 15.5 per 1,000; now it is only 7.08 per 1,000. In the Mauritius, 17 per 1,000 is about the average mortality. In Ceylon, about 19 per 1,000. In India (Bengal), the Medical Department has not been assisted sufficiently yet, nor have the changes recommended been carried out; but all is progressing slowly towards a better state of things. In Australia, the mortality generally is 11 to 14 per 1,000 men. In New Zealand, 13 per 1,000.

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

ON THE TREATMENT OF BRONCHITIS AFTER MEASLES.

By Frederick J. Brown, M.D., Rochester.

[*Read September 25th*, 1863.]

Many years ago, I attended a child for what I believed to be pneumonia after measles; but I found bronchitis, with collapse of a portion of lung, on a *post mortem* examination. I used antiphlogistics in that case. Under a different kind of treatment, cases that have presented grave symptoms have recovered.

The remedies that I employ are the liquor ammoniæ acetatis internally, and spirits of turpentine externally. I give the liquor ammoniæ acetatis every hour in doses of two drachms, in an equal quantity of water. The spirits of turpentine I order to be mixed with equal quantities of hot water, and to be rubbed over the entire trunk every four hours. Amelioration of the symptoms takes place within twenty-four hours, and the child is out of danger in the course of a few days. It is useful to give tartar emetic in small doses after the child has been under the foregoing treatment for three or four days, but not sooner.

I have lately saved, by the treatment that I have related, two children, who would most surely have died under my usual antiphlogistic treatment.

Rebiews and Notices.

On the Arcus Senilis, or Fatty Degeneration of the Cornea. By Edwin Canton, F.R.C.S., President of the Medical Society of London, etc. Pp. 228. London: 1863.

Mr. Canton is well known to have paid considerable attention to the remarkable appearance known as the arcus senilis; and he has now collected into a volume the various papers on the subject which he had previously placed before the profession in the pages of the *Lancet*.

The book is divided into eight chapters.

In the first chapter, Mr. Canton gives a General and Microscopical Account of the Arcus Senilis. He refers to the notices of this appearance which occur in various authors—it having been described as far back as the beginning of the eighteenth century; and describes the mode of its formation. Microscopical examination shows, as has now for some years been recognised principally in consequence of Mr. Canton's statements, that the arcus consists in a fatty degeneration of the cornea; and still more, that it is associated often with degenerative changes in the heart and arteries. The arcus senilis would appear to be confined to man; at least, Mr. Canton has not been able to find any proof of its occurrence in horses or birds, although some observers have described its occurrence in these animals. Nor is it congenital, although certain authors have described arcus in newly-born infants. What has been described as arcus in these cases is, according to Mr. Canton, the remains of the intrauterine opaque covering of the cornea.

In the second chapter, the author treats of the Hereditary Occurrence of the Arcus. That it is hereditary in some cases, appears proven; but, as has been already said, it does not appear to be congenital. The author relates the case of a lad aged 16, under his care at the Westminster Ophthalmic Hospital, in whom the corneal arcus was strongly developed in both eyes. The lad's father, aged 56; his mother, aged 53; and two brothers, aged 20 and 12, all had arcus in both eyes; while in a sister aged 6, it was absent. In another instance, a gentleman who had had the arcus or annulus in both eyes from the age of 22, informed Mr. Canton that his father and grandfather had both presented it at as an early an age as himself. The early occurrence of the arcus is spoken of also as having been observed by several authors.

In the third chapter, the author speaks of the Formation of an Arcus or a Circulus, the Result of Disease or Injury of the Eye. Some cases of corneal degeneration arising from inflammation of the eye are referred to. The chief peculiarity in these instances is, that in general the arcus is not developed in both eyes, as in cases where it is the result of a constitutional or hereditary predisposition.

In the fourth chapter, Mr. Canton notices the occasional Non-occurrence of the Arcus in Old Age. After some general and interesting remarks on longevity, Mr. Canton notices "cases which present us with instances of those who have lived more than a hundred years without the establishment of the arcus"; while, on the other hand, there are instances "where it has shown itself as a complete circle on the eyes of those who have not attained to the moiety of that age."

"In the latter case, likewise, I have proved by dissection that the same form of change—when it has invaded the eye to the extent I have now mentioned—has also involved important internal organs. Beyond this, it will be shewn, in one example of a centenarian, that, with the absence of the sign *without*, the changes *within* were wanting; whereas we well know that, under the ordinary circumstances of age, a definite set of senile metamorphoses may be almost confidently looked for on *post mortem* examination."

Among several instances of the absence of the arcus in old age, Mr. Canton refers to some of the oldest inmates of Chelsea Hospital, whose eyes he had the opportunity of examining a few years ago. He found the arcus entirely absent in fifteen instances, where the ages varied from 68 to 96 inclusive. In one man, who had reached his hundred and fifth year, a very slight circle only was presented in each cornea.

In the fifth chapter, there is an Account of Fatty and Calcareous Degeneration of the Costal and Laryngeal Cartilages associated with the Arcus. The ossification of the cartilages, commonly regarded as a phenomenon of old age, is believed by Mr. Canton to be less a consequence of senile than of pathological changes. For his arguments on this point, however, we must refer our readers to the book.

In the sixth and seventh chapters, we have remarks on the Formation of the Arcus in the Intemperate and in those of Gouty Habit.

The last chapter consists of General and Additional Observations on the Arcus; and its Disappearance under Constitutional Treatment. As to the real value of the arcus as a pathological sign, Mr. Canton coincides with Mr. Paget, whose remarks he quotes.

"The arcus," says Mr. Paget, "seems to be, on the whole, the best indication which has yet been found of proneness to an extensive or general fatty degeneration of the tissues. It is not, indeed, an infallible sign thereof; for there are cases in which it exists with clear evidence of vigour in the nutrition of the rest of the body; and there are others in which its early occurrence is due to defective nutrition consequent on purely local causes, such as inflammatory affections of the choroid or other parts of the eye; but, allowing for such exceptions, it appears to be the surest as well as the most visible sign and measure of these primary degenerations."

With regard to the removal of the arcus, Mr. Canton observes:

"There can be no doubt that much may be accomplished, in process of time, by means of medical treatment, where it is ascertained that such conditions are present as tend towards a general or systemic decadence; and in which is not uncommonly implied an atrophising state of many and diverse tissues. Numerous cases of this description have come under my observation, during the past twelve years; and it is extremely interesting to have occasion to notice that *pari passu* with amendment of health has been the *disappearance of the arcus*, in those instances where this symptom was present, and by its presence had afforded the clue to the peculiar character of the mischief in progress." (P. 226.)

Before concluding our remarks on this work on a pathological subject, we must direct Mr. Canton's attention to a pathological phenomenon presented by his book itself. We refer to a morbid deposit of commas, which pervades it, and interferes with the easy reading of it. Sentences punctuated in the following manner are not rare in the work:

"When we reflect on the gross, and, artificial life led by the, habitually, intemperate man: the wear, and, tear to which his constitution is subject through the continued antagonism between lethargy, and, stimulation, induced by the introduction of narcotic, and, irritant fluids: the constant excitation of thirst, and, sure subdual of hunger: the waste of nervous energy, and, loss of muscular power, etc., can we wonder that he should, as a common rule, fall an early, and, easy prey to this self-inflicted, slow poisoning; and, might we not, fairly expect that, after death, the circulating fluid, with the various tissues of the body, would afford abundant evidence of chemical, and, physical changes, stealthily, but, surely wrought by this toxæmic power?"

We point this blemish out to Mr. Canton's attention in good part, and in the confidence that he will procure its removal in another edition. That it is not his error, but rather has been committed by some one to whom the revision of the book has been entrusted, appears likely from the fact, that the words derived from αἷμα (blood), as toxæmia, hæmorrhage, pyæmia, are constantly spelled with œ—thus, toxœmia, hœmorrhage, pyœmia, etc.

These minor defects, however, are no drawbacks to the general excellence of the book, in which, we can assure our readers, will be found the most complete and instructive account that has yet been given of the arcus senilis, written by a surgeon who has made this condition the object of long and careful study.

Society for Relief of Widows and Orphans of Medical Men. We have been requested to state that the present collector of this Society is Mr. C. J. F. Renton, who has been appointed in the place of Mr. Cheshire, who has resigned.

Progress of Medical Science.

State of the Eyes in Progressive Muscular Atrophy. A man aged 44, a morocco-leather manufacturer, was admitted on September 19th, 1862, into the Charité Hospital, under the care of M. Bouillaud, on account of an affection which he had had during seven or eight years. His illness began with a sense of numbness and weakness in the little finger of the left hand. The whole hand gradually became the seat of analogous symptoms, which also extended to the forearm. At the same time, both the dorsal and the palmar regions of the hand became emaciated; and the muscular power became diminished, until, during the last two years, it was completely lost. The wasting extended along the inner side of the forearm. The right hand also became affected; and on this account he came into the hospital. On admission, the dorsal aspect of the forearm presented along its whole length a depression which terminated at the level of the lower end of the radius, and was bounded by the radius and ulna; no muscular mass could be felt in it. The back of the left hand presented a flat surface. The hand was in the same axis as the forearm; but the fingers were semiflexed. The muscular masses to the external side of the radius, in the upper half, were nearly normal; while those on the anterior and posterior aspects and external edge of the ulna were quite wasted. The palm of the hand was much emaciated; and the anterior aspect of the thumb was entirely deprived of muscles. The movements of flexion of the fingers and abduction of the thumb were completely abolished. Involuntary contractions and spasms often took place in the muscles of the arm and forearm. In the right arm, there was wasting of the ulnar edge of the forearm; the hand was in a state of semiflexion; there were no muscular contractions; flexion and extension of the elbow could still be performed. The movement of abduction of the thumb was limited. The electro-muscular contractility and cutaneous sensibility were preserved.

During three or four weeks, the patient had perceived twitchings at the external angle of the left upper eyelid, and said that he could not see so well nor at so great a distance as before. At the first view, the right eye appeared to project rather more than the left. The two palpebral apertures were equal in size; the contractions occurred with equal force on both sides. The left pupil was less by half than the right; the diameter of the latter was three *millimètres*, while that of the left was only two *millimètres*. The pupils contracted well under the influence of light, but the left always became narrower than the right; both were notably dilated when any point of the body was pinched. The culminating point of the convex surface of the left cornea was less distant from the plane of the iris than in the right eye.

The treatment consisted in the application of cold douches every morning, with Bordeaux wine, lactate of iron, and electrisation of the limbs. The patient left the hospital, and was readmitted, several times; but his condition was scarcely altered. When last seen, his pupils had the same diameter; they were both considerably contracted, even in the dark; they scarcely showed any movements under the influence of light or of pinching parts of the body. Their diameter was about the same as that of the left pupil when the first examination was made. Both corneæ were equally flattened; and vision was weak in both eyes.

M. Voisin, who relates the case, gives the following interpretation of the phenomena. The atrophy affected principally the flexor muscles—that is to say, those which receive their innervation from the median and ulnar nerves. Now the median nerves arise from the

seventh and eighth cervical, and the ulnar from the eighth cervical and first dorsal. On the other hand, modern researches have shewn that the nervous fasciculi become atrophied by diminution in the calibre of the nerve-tubules, and that the anterior roots of the corresponding spinal nerves present the same lesion. The existence, in the patient, of the oculo-pupillary phenomena above described, appears to M. Voisin to be a probable consequence of the lesion of the anterior roots of the first dorsal nerves on the left side; the fact being absolutely indentical with what is observed in the dog after dividing the anterior roots of the first two dorsal nerves. The anatomical connection of these nerves with the cornea and iris is, M. Voisin observed, established in two ways; by the filaments which the first dorsal nerve supplies to the vertebral artery, and which anastomose within the skull, with the filaments of the carotid nerve, one of the three roots of the ophthalmic ganglion, which is the source of various nerves supplied to the cornea and iris; or, more probably, by the anastomosis of the first dorsal nerves with the cervical ganglia of the sympathetic. If, on the other hand, we take into account the well known influence of the two dorsal spinal nerves on the movements of the iris—their dilating action on the pupil, opposed to that of the motor oculi—we have almost all the elements necessary for solving the problem. M. Voisin believes that the following was the order of the morbid phenomena in the case related: atrophy of the left anterior root, or rather roots, of the first or first two pairs of dorsal nerves; diminution or absence of the nervous influence on the ciliary nerves; paralysis of these nerves; loss of equilibrium between antagonistic action of this nerve and that of the cervical sympathetic; predominance of action of the motor nerve of the eye; and consequent contraction of the pupillary aperture.

M. Voisin points out also two interesting facts in this case. He first refers to the absence of elevation of temperature in the atrophied limb; which would indicate, according to M. Cl. Bernard, that the great sympathetic and its ganglia were uninjured, and that the vasomotor nerves were consequently not paralysed. The second fact noticed is the production of dilatation of the pupil by irritation of the skin of any part of the body. It seems to show that, in this patient, the atrophy of the anterior roots was not complete; the experiments of M. Cl. Bernard having shewn that dilatation of the pupils completely ceases when the anterior roots have been completely divided.

M. Duchesne of Boulogne has made some remarks placing slight limit on the deductions of M. Voisin, regarding the probable lesion of the anterior roots of the nerves; and has stated that he has observed similar phenomena in several cases of wasting palsy. (*Gazette des Hôpitaux*, 19 Sept., 1863.)

Cysts in the Vagina. Dr. Saexinger relates three cases of cysts in the vagina as having occurred within a short interval of time in the clinical wards of Professor Seyfert of Prague. The affection is a rare one; but few instances having been previously recorded.

The first case occurred in a domestic servant, aged 23, unmarried. She had never borne children, and had always menstruated regularly. She had been admitted into hospital on account of some internal disease; and, during her convalescence, she complained of having had for a year, especially after menstruation, a discharge which left a yellowish stain on her linen. On examination, there was found to be slight anteflexion of the uterus with uterine blennorrhœa; and on the left side of the vagina, about half an inch behind the entrance, were two round smooth distended tumours of the size of chestnuts; they were not tender on pressure. These cysts were punctured and emptied on the next day; their contents consisted of a clear albuminous fluid. The punctures were enlarged, and the walls of the cyst were found to be smooth and thick. Nitrate of silver was applied several times to the cavities of the cyst, with the effect of causing their disappearance; and the patient was soon discharged cured.

The second case was that of a woman aged 32, who had been treated in the syphilitic ward for vaginal blennorrhœa, and was transferred into the gynœcological department. The patient stated that for a year and a half she had been aware of the existence of a tumour in the vagina, but that it had never given her the least trouble. On examination there was found, about an inch behind the entrance of the vagina, on the posterior wall, a perfectly round, firmly distended, smooth swelling, of the size of a walnut; its colour was the same as that of the vagina; and it was not in the least painful to pressure. Professor Seyfert punctured the cyst with a pointed bistoury, and gave exit to a fluid of the same character as in the preceding case; he then enlarged the opening and excised a small elliptical piece of the wall of the cyst. The cavity of the cyst was smooth, and its walls were firm and thick. Repeated applications of nitrate of silver soon caused its disappearance.

The third patient, a woman aged 21, had a smooth, firm, round cyst, as large as a walnut, situated high in the upper part of the vaginal wall. It was punctured, and gave exit to fluid of the same character as already described. An elliptical piece was removed; and a cure was effected, as in the other cases, by the application of nitrate of silver. (*Spitals-Zeitung*, 26 September, 1863.)

Syrup of Copaiba. Dr. Trideau has recently, in a memoir laid before the Academy of Medicine, spoken of the treatment of croup and diphtheritic angina by copaiba; and has referred to a preparation by which he was enabled to overcome the dislike of children to the medicine. M. Du May, *pharmacien* at Laval, has since published the formula for the syrup. It is made with balsam of copaiba, 167 *grammes*; calcined magnesia, 9 *grammes*; simple syrup, 320 *grammes*; and the yolks of four eggs. The yolks are triturated with the magnesia; the copaiba is then added and intimately mixed; and then the syrup. The preparation is said to be capable of being well preserved, to have no taste, and to agree well with the stomach. M. Du May suggests that, in order to obviate repugnance to the use of the medicine arising from the known ordinary application of copaiba, the preparation should be called syrup of Brazil balsam. (*Bull. Génér. de Thérap.*, 30 Août, 1860.)

Treatment of Nervous Vomiting by Electricity. Dr. Bricheteau has published three cases of nervous vomiting, which had resisted all ordinary treatment, but were cured by electricity.

The first case was that of a hysterical girl, under M. Monneret's care in the Necker Hospital. She had had dyspepsia for some time, and during a month had become worse, and vomited her food after each meal. Independently of the disorder of the digestive functions, she had general anæsthesia and all the signs of chlorosis. In spite of the use of Seltzer water, cold douches twice daily, and tonics, the state of the patient was the same at the end of a month. A part only of the food was vomited after each meal. Blisters were applied on two occasions; the actual cautery was applied twice; syrup of sulphate of strychnia, iced milk, and subnitrate of bismuth, were all tried; but with no better result. The vomiting, on the contrary, became more abundant, and the patient began to grow thin. Pepsine, tincture of iodine, and powder of nux vomica, all were useless. Dr. Bricheteau then tried electricity. The two moistened conductors of Legendre and Morin's apparatus were applied to the epigastrium at each meal-time, a quarter of an hour before the meal was commenced, then about the middle of the meal, which was interrupted for five minutes for the purpose. The current was at first

applied feeble, and gradually increased in intensity. When the electricity had been applied, the patient digested well. If the current were not strong enough, or the application of sufficient duration, the vomitings returned; they occurred also whenever the electrisation was suspended. Those alternations of relief and distress, which could be produced at will, left no doubt as to the value of the electricity. It was not until the end of two months of treatment that the vomiting completely disappeared; but the cure was complete, for at a later period other hysterical symptoms appeared, but were not attended by vomiting.

The second patient, also under M. Monneret's care, was a hysterical female, who vomited after every meal; the vomiting, as in the first case, being unattended with pain or efforts. Milk diet, iced drinks, tincture of iodine, and powder of nux vomica, all failed in this case as in the other. Electricity was applied, but more decidedly than in the first instance; and the vomiting was definitely arrested at the end of six weeks.

The third patient was a chlorotic and scrofulous female under the care of M. Natalis Guillot. She vomited, without pain or effort, all the ingesta, about an hour or two after each meal. Drink especially was immediately rejected. Almost all the remedies referred to in the preceding two cases were tried unsuccessfully. Electricity arrested the vomiting on the first day of its application; and the cure was complete in a fortnight.

Dr. Bricheteau also relates a case which occurred in the practice of M. Oré of Bordeaux; who obtained the best results from electrisation of the epigastric region, not only in arresting vomiting, but in preventing painful distention of the stomach with gas after the ingestion of liquids, in a nervous patient.

The application of electricity to the epigastrium may be also tried in vomiting arising from other causes than hysteria and chlorosis; especially in the obstinate vomiting which sometimes attends pregnancy. It might also be employed in the vomiting which sometimes occurs in the first stage of pulmonary phthisis; the progress of which disease is accelerated by the previous impairment of nutrition. (*Bulletin Génér. de Thér.*; and *Gazette des Hôpitaux*, 5 Sept. 1863.)

Spontaneous Cure of Fæcal Fistula. Peter C., aged 44, a man of lymphatic temperament, was seized in December 1861, after exposure to cold, with *malaise* and nausea. The same evening, a spherical enlargement, of the size of a hen's egg, was observed to be suddenly produced in the right groin, during attempts at defecation. During the night and the next day, he had colic, diarrhœa, hiccup, and vomiting, in spite of the application of fifteen leeches and of poultices to the tumour. On the third day, the swelling was opened by a medical practitioner, when, according to the patient's account, there escaped some black fœtid blood. He subsequently had two or three stools; and it was not until a day or two afterwards that he observed stercoraceous matter to escape through the opening. From this time the food escaped undigested through the wound, two or three hours after being taken. The patient, tormented by insatiable hunger, entered the civil hospital at Algiers on December 29th. The most pressing indication was to restore the regular course of the food, so that nutrition which was seriously compromised, might be effected. Having discovered the two ends of the intestine, and dilated the fistulous orifice with prepared sponge, M. Bertherand sent for Dupuytren's enterotome, in order to remove the projection which prevented the contents of the intestine from passing into the lower end. During, however, the delay in the arrival of the instrument, the edges of the wound came together, and the food (laxative injections being given) passed in part by the natural passage, and the patient regained strength and flesh. Cauterisation with nitrate of silver, followed by moderate compression, aided the process of cicatrisation; and on March 7th, the patient was discharged cured, wearing a supporting bandage. (*Gaz. Méd. de l'Algérie*; and *Bull. Génér. de Thér.*, 30 Sept. 1863.)

Uterine Hæmorrhages: their Relations to Menstruation. M. Gubler says that sanguineous discharge from the uterus, taken for premature menstruation, at the commencement of and during acute diseases, is merely a flow of blood comparable to the epistaxis which occurs in the early stage of fevers.

The doctrine generally taught concerning menstruation is, that at each monthly period, there is an action on the part of the ovary on the one hand, and of the oviducts and apparatus of gestation on the other. In the interval between the catamenial periods, an ovule, with its enclosing vesicle, is gradually developed in one of the ovaries. In about a month, the ovule has arrived at maturity; a flow of blood then takes place towards the generative organs, especially on the side on which the matured ovum lies. The Graafian vesicle swells up, becomes thinned at a point on its free surface, bursts, and discharges the ovum. At the same time, the corresponding Fallopian tube is erected and applied to the ovary, where it receives the ovule, and, if there be no obstacle, conducts it to the uterine cavity. The uterus participates in the congestion, and, under the influence of this hyperæmic state, its mucous membrane exudes blood in greater or less quantity. But, M. Gubler observes, this latter part of the phenomena is not indispensable to the regular accomplishment of the generative function; all obstetric authors, in fact, cite examples of females who have never been regular—that is, who have never observed the catamenial discharge, and who have yet become mothers. He has also met with a case shewing that ovulation may normally take place without any sanguineous discharge.

A woman aged 23, of strong constitution and general good health, died in the Beaujon Hospital from acute meningitis. She had never had any menstrual discharge; but, at the *post mortem* examination, the ovaries were found well developed, and containing corpora lutea as in females who have distinctly menstruated. There were eleven in the left ovary, and six in the right. In the left ovary, there was a quite recent corpus luteum; and the vesicle still contained a small clot of blood.

Thus the sanguineous discharge is merely an accessory circumstance of menstruation; and, on the other hand, it may take place independently of ovulation, or continue beyond it, in the physiological as well as in the pathological state. Discharges regarded as menstrual occur, in fact, in circumstances where evidence shews that ovulation is impossible; as in girls not arrived at puberty, who, at greater or less intervals of time, have discharges of blood simulating menstruation. M. Gendrin has observed a curious example of this in a family, in which all the female children had uterine hæmorrhage. The same peculiarity is often observed at the other extreme of life, in aged females who have long passed the period of cessation of the catamenia.

M. Gubler relates a case which seems to shew that in some circumstances the same cause may bring about ovulation and the discharge of blood, without one of these being necessarily subordinate to the other. A young woman, attacked with diffuse cerebro-meningitis, was taken in an insensible state into the Beaujon Hospital. The menstrual discharge began with the commencement of the symptoms of her disease, and continued till her death, which took place on the second day after admission, and the tenth of her illness. The autopsy shewed perfect cicatrisation of the follicle, and the formation of a corpus luteum, corresponding with the presence of recent clots in the uterine cavity. Thus was shewn the separation of the two orders of menstrual phenomena; the evolution of the Graafian vesicle, and its rupture, with the dis-

charge of a mature ovum; and on the other hand, the congestion of the utero-ovarian vascular plexuses and of the uterine cavity, with the discharge constituting the menstrual flux. On the one hand, the Fallopian tubes and uterus were still congested, and the latter was filled with blood which had recently escaped from the vessels; on the other hand, the Graafian vesicle was sufficiently advanced in its transformations to have ceased for ten days to be the seat of active phenomena. The ovary had accomplished its functions in the early part of the menstrual period; while the rest of the generative apparatus continued to be the seat of active hyperæmia and abundant sanguineous exhalation during a week. (*Gazette des Hôpitaux*, 26 Sept. 1863.)

Combination of Lithotomy and Lithotrity. M. Alquié of Montpellier sums up a memoir on this subject with the following conclusions. 1. Where lithotomy appears to be indicated, in adults or old men affected with calculus of moderate size—from three to five *centimètres* (1.2 to 2 inches) in thickness—the stone should be also crushed. 2. The same thing should be done in the case of children and young persons in whom the stone is of similar size; if the stone be small and the case uncomplicated, lithotomy may be practised at once. 3. When the stone is of large size—six *centimètres* (2½ inches) or more in thickness—or in special cases, lithotrity should be performed through the opening in the perinæum. This may also be done when there is an urinary fistula in the perinæum, which can be conveniently dilated. 4. But when the stone is of moderate or large size, lithotrity should be first attempted through the natural passages; by which, in some circumstances, any further operation may be avoided. (*Bull. Génér. de Thér.*, 15 Sept. 1863.)

Cephalhæmatoma in an Infant, successfully treated by Puncture. Dr. Isnard of Gemenos relates the case of a child, aged fourteen days, which had a large subpericranial cephalhæmatoma. While the infant was asleep, Dr. Isnard rapidly introduced an exploratory trocar into the apex of the tumour. No pain was produced, as the child was not awakened. About forty-five *grammes* of blackish slightly thickened blood escaped through the cannula. When the child awoke, it took the breast without crying or hesitation. When the instrument was removed, the puncture was almost imperceptible. Some agglutinative bandages were applied over the right parietal eminence (the seat of the tumour), so as to maintain the walls of the cavity in contact without exercising undue pressure on the bones. Six days afterwards, the walls of the tumour had become completely adherent; there had been no local nor general disturbance. Sixteen days after the operation, the cure was complete. In order that the operation may be successful, M. Isnard observes that it should be performed early; *i.e.*, near the commencement of the second week, when the tumour has gained its full size, the vessels which were the source of the hæmorrhage have been obliterated, and the blood has not become too thick to escape through the cannula. (*L'Union Méd.*; and *Bull. Génér. de Thér.*, 15 Juillet 1863.)

A similar case has been recorded by M. Barrallier of Toulon. On October 15th, 1856, he was called to a male infant eleven days old, in whom nothing abnormal was observed at the time of birth. At the above mentioned date, however, there was on the right parietal eminence a tumour, which had been observed for the first time on the preceding evening. It was round, fluctuating, without pulsation, and had a diameter of six *centimètres* from before backwards, and five from above downwards. It was covered by healthy skin, and surrounded by a bony rim which was more prominent above. It did not seem to give any trouble to the child, in whom all the functions were normally performed. In spite of pressure, the size of the tumour had become much greater on the next day. Dr. Barrallier then opened it with an exploratory trocar. A large quantity of dark blood escaped through the cannula with the aid of moderate pressure. The child then became pale, its head lay on its shoulders, and its eyes closed; but stimulating frictions soon brought about reanimation, and it took the breast with avidity. Over the site of the tumour, the limits of which could now be determined only by the presence of the osseous ring, pressure was established by means of disks of agaric. Two days afterwards, a few drops of pus appeared at the point of puncture. The suppuration, however, was not of long duration; the wound rapidly healed; and the child was discharged cured at the end of October. (*L'Union Méd.*; and *Bull. Génér. de Thér.*, 15 Août 1863.)

British Medical Journal.

SATURDAY, NOVEMBER 7th, 1863.

DISEASED MEAT; ITS EFFECTS ON MAN.

The readers of the daily papers, no doubt, every week notice the fact that a quantity of meat "unfit for food", as it is stated, is seized in the public markets of London, and condemned and destroyed by authority. We need hardly say, that the fact is indicative of a state of things of serious importance to the public health. Professor Gamgee has for a long time past, in an especial manner, pointed out the great importance of this subject, on account of the enormous quantity of diseased meat which not merely finds its way into the market, but which is also actually consumed as human food. It has been again and again asserted, that by this consumption of diseased meat great injury has been done to the health of the people of this country; and that, in fact, the bills of mortality have been thereby increased.

The subject is therefore one, the consideration of which belongs immediately to our profession; and we would consequently invite especial attention to it, and ask our brethren to give us the benefit of their experience in the matter, so as to enable us to judge (if so it may be) what real amount of injury may be fairly attributed to the effects of this ingestion of "diseased" meat. We ask for an accumulation of facts on this point, because we are satisfied that many of the statements hitherto made respecting the injurious effects on the human economy of "diseased" meat are not supported by satisfactory evidence. We do not deny that such injurious effects may be produced; but we object (for the sake of the credit of our profession) to their being accepted and publicly declared to be positive facts, until such time as we have satisfactory evidence of their really being so. Those of our professional brethren, therefore, who have any facts at their disposal touching upon this point, will do great service by bringing them forward.

Considerable confusion has, we have no doubt, prevailed in discussions on the subject, in consequence of a want of clear definition of the term "diseased" meat. The Inspector of Markets may have a ready method of settling the question, and of pronouncing judgment; but, regarding the matter from our point of view, there is clearly required something more distinct than the mere terms "diseased", or "unfit for food", which are used indifferently.

We apprehend that the meat which is termed "diseased" or "unfit for food" must, for our better consideration of it in respect of its influence on man's health, be brought under at least three separate heads. In the first place, we have meat which is rendered "unfit" from the fact of its having undergone putrefaction; this meat may have been originally first-rate, or it may have been "diseased"; but it is now unfit solely by reason of its putridity. Next, we have meat which is, to all appearance, excellent meat, but being the meat of animals which have died of, or have been killed whilst suffering from, pleuropneumonia, or some other acute febrile disease, is in consequence thereof condemned as unfit for food, although it may, to all appearance, be in itself perfectly sound and good meat. Then, again, we have meat which is the product of animals which have died of chronic disease—pale, wasted, sickly-looking meat. And, lastly, we have that especially important class of "unfit" meat, which is rendered unfit by the presence in it of parasitic animals.

Now, a little consideration will, we think, satisfy our readers that some definition of this kind, of "meats unfit for food", is absolutely necessary for a scientific consideration of this matter. When we learn (as we do from Professor Gamgee) the enormous amount of "diseased" meat which comes into our market, it becomes a matter of serious importance to the community at large, that we should know whether or not the whole of this diseased meat is unfit for food; whether the whole of the enormous quantity which we are told is being daily consumed in this country, is or is not injuring the health of the people; or, again, whether any, and if any, what portion of this "diseased" meat is and may be eaten with impunity; and whether, again, cooking does or does not destroy any of the deleterious agencies which may be present in the meat.

If all this enormous amount of meat, which is pronounced as diseased, be really unfit for human food; if its consumption really act injuriously to the public health; then it is certain—if Professor Gamgee's statistics are correct—that a very large portion of the supply of meat produced for consumption in this country must be cut off, at least so long as diseases rage among our cattle. Indeed, the quantity of meat so cut off would really be a great national loss and injury, and, in fact, an irreparable loss; for it would appear that foreign countries could not actually supply us with the equivalent quantity of meat required.

We see at a glance, therefore, the serious importance of the subject. We are placed on the horns of a dilemma. If it be clearly shewn by facts, that the consumption of all this "diseased" meat is injuring the community, then, of course, the sale of diseased meat must be prohibited. But, if the sale of "diseased" meat be prohibited, then an enormous amount of animal food will be immediately withdrawn from the sum-total of our "meat", and consequently much injury, as we may fairly suppose, be in another way inflicted on the health of the community.

Our business, therefore, is clear in this matter. The facts which we require to know are plain enough. We want to know, for example, whether the meat of animals which have been killed, whilst suffering from pleuropneumonia or other acute inflammatory disease, is "unfit for food"; *i.e.* is incapable of nourishing, or capable of producing disease in man; or whether such meat may, when properly cooked, be safely used as food. We want to know whether or not the existence in the body of the animal of that essential element, whatever it be, which produces the febrile disease, can so affect the "meat" as in any way to render its consumption, when it is cooked, injurious to the health of man; whether or not, for example, the flesh of a splendid well-fed ox is rendered "unfit for food" by the fact of the animal having been attacked with the febrile disease; whether the essential elements of the disease, or any of the abnormal products resulting from its presence in the body, do actually survive the cooking of the meat, and so possibly pass into the human body; or whether their presence in the animal so alters as to deprive its flesh of nutritious properties?

Then, again, in respect to that other very different class of "diseased" meats, which are so called from the presence of parasites in the body of the animal, we have to inquire whether the presence of the parasites has really injured the flesh in any "essential" manner; or whether their presence is to be regarded as acting injuriously only mechanically, and in so far as, by living upon, they waste the body of the animal; whether, in fact, the flesh of animals in which such parasites exist is, *minus* the parasites, healthy and nutritious food. And then, if we can satisfy ourselves that such flesh, *minus* the parasites, is nutritious food, we have to consider the very serious point: Are these parasites destructible and actually destroyed by due and proper cooking? This question is one of the gravest importance, because we have now the most positive proofs that parasites are introduced with food into the body of man and animals; and it is a well known fact that the quantity of "measly" parasitic pork, etc., which is eaten in the country is very considerable indeed. If it be really true, as seems indeed almost certain, that

the proper cooking of parasitic meat destroys the vitality of the parasite, then we have manifestly a certain and simple cure for the prevention of those evils which result from the eating of such vile meats; and if we cannot arrest the sale of such meat, we can, at all events, enlighten the community as to the proper mode of preventing the evils which may result from its consumption.

With regard to that other class of meat "unfit for food"—viz., that which has undergene putrefaction—we need make no remarks, as the fact speaks for itself plainly enough.

We call the attention of the profession to the consideration of these questions, because their due solution is manifestly of great importance to the well-being of society at large, and because they have assuredly not yet obtained from the profession that degree of attention which they clearly demand; and we feel bound, in doing so, to acknowledge the great labours, in this direction, of Professor Gamgee, who has certainly here been the foremost of inquirers and observers. We do not agree with all the deductions arrived at by Mr. Gamgee; but we gladly seize this opportunity of stating that in this matter the veterinary professor has supplied the profession with a most valuable amount of information, and that his investigations have opened up in an especial manner for our consideration that most important subject, the effects of "diseased" meat on the health of the community.

IRIDECTOMY.

It may be well that we should state in a few words the reasons which have induced us to call the attention of the profession in so particular a manner to the subject of iridectomy. It is impossible to converse on this operation with any half-dozen surgeons without at once discovering that it occupies in the opinion of the profession a most anomalous position. Thus, for example, we find, that some surgeons consider the operation as one of the greatest blessings bestowed on modern surgery; and that other surgeons of the highest authority deem it an operation not only useless, but worse than useless. More than this, iridectomy seems to occupy this remarkable position in the history of modern scientific surgery, viz., that the principles upon which it is founded are not capable of clear and simple definition, as they are in the case of other recognised surgical operations.

Ask the surgeon why he cuts off a leg, ties an artery, or extracts a cataract; and he will give you a plain and ready answer, comprehensible to every medical mind. But it is not so with iridectomy.

The morbid conditions which are said to demand the performance of the operation; the mode of action of the operation itself—that is to say, the theory of its beneficial mode of action—are still overshadowed with difficulties; at least, not one surgeon in fifty can give you any plain and satisfactory explanation of the thing. Moreover, when we come to interrogate eye-surgeons themselves upon the subject, we find amongst them, also, the greatest, and, indeed, the most remarkable, discordance of opinion. We find oculists of the highest celebrity who consider iridectomy a most invaluable discovery, and who daily practise it; and then, again, we find others who, after having practised it and given it a trial, conclude it to be an inadmissible operation, and have determined never to resort to it again; and we also find specialists—eye-surgeons—of no mean understanding, who have never resorted to iridectomy, and who utterly condemn the operation—not blindly and out of mere stupid opposition; but on three grounds: 1. From what they can judge of the operation on general principles of surgery; 2. From what they have witnessed of the effects of the operation done by the hands of other oculists; and 3. Because they have a firm belief that many of the cases of defective vision which have been subjected to iridectomy would have recovered better had they been left to nature's own method of cure.

But we need do no more than refer our readers to Mr. Bowman's letter published in the Journal of last week, in order to obtain the full assurance of the necessity for a further investigation of this subject. Mr. Bowman tells us, that every week he has to deplore the consequences which ensue from the ignorance of practitioners respecting the conditions of the eye which demand the performance of iridectomy. From this we must conclude, that the great body of the profession are really completely ignorant "of the state of the eye, which should awaken their suspicions, so that a timely remedy may be applied." And, again, Mr. Bowman tells us, that we have yet fully to work out the problem; viz., "Under what limitations, and at what stage is it to be performed, and how best are its advantages to be secured?" We have "to define still more the natural history of the disease, and the indications for the operation under its various stages and complications."

Hence, then, we have, it appears, an operation which, in the hands of the most skilful oculist, is found to be a blessing to humanity; but whose value is seriously depreciated, or rather overlooked, by the profession at large, because practitioners in general are ignorant of the conditions of the eye which require its performance; and, moreover, we find that "the natural history of the disease, and the indications for the operation under its various stages and complications," have still to be defined. We have still a large body of the profession who cannot comprehend the theory and principles of the operation; and we have a large body of practitioners who overlook the conditions of the eye which require

the operation; and we have authorities, eye-surgeons, who repudiate the operation as worse than useless.

We, therefore, as promoters of scientific medicine, have been forced to the conclusion, that further investigation is required on this subject, and that light may perchance be thrown by discussion into the complication above described; and have, consequently, called especial attention to the operation of iridectomy, prompted, we will confess, by this serious consideration—that scarcely can it happen, that an operation like iridectomy should be always performed without serious consequences to sight; and that, therefore, as the cases in which the operation is required are still in want of a full definition, it must be a matter of grave doubt whether an operation of such a character is one which could, under present circumstances, be safely entrusted to the hands of the profession at large. Admitting that the statement alleged is correct, that there are early conditions of glaucomatous disease which are greatly alleviated or removed by iridectomy, we have still a great difficulty to overcome, according to Mr. Bowman's own showing; viz., we have yet to define more clearly what these conditions are; and we have his word for it, that practitioners in general are at present incapable of appreciating those conditions.

Such being the position of the case, it does seem to us, that as iridectomy is a surgical manœuvre which may produce most serious results—even total destruction of vision—and as the indications for its performance are still far from being defined and settled, it behoves the promoters of it to popularise and lay down the principles and the rules which guide them in the performance of it.

Moreover, it should be noted that iridectomy is now an operation practised by surgeons in maladies totally different from that—viz., early stages of glaucoma—for which, as we understand Mr. Bowman, it is alone especially applicable. We have now iridectomy for recurrent iritis, and we have iridectomy associated with extraction of cataract. But recurrent iritis and cataract have clearly no necessary connection whatever with glaucoma; although assuredly, when the profession hear of the operation of iridectomy they invariably connect it in some manner with glaucoma. Nothing, therefore, is more evident than that this operation requires elimination from the confusion and obscurity in which it is at present involved.

Mr. Bowman, it is true, tells us of the excellent results of the operation in his hands; but then other observers give a different account of the operation; and we therefore ask for further information on behalf of the profession.

VITAL STATISTICS OF IRELAND.

The Commissioners appointed to take an account of the population of Ireland for the year 1861, have presented their report upon the Vital Statistics of Ireland; and give us the following information:—

THE DEAF AND DUMB.

According to the provincial summaries, the proportion of the total deaf and dumb were to the population—in Leinster, 1 in 1,301; in Munster, 1 in 1,098; in Ulster, 1 in 1,123; in Connaught, 1 in 1,256; and for the kingdom in general, 1 in 1,176. The proportions, however, vary somewhat, both as regards the congenital and acquired cases, also with respect to their civic and rural distribution. Of the true amount of deaf-dumbness arising from what may be termed natural causes, such as hereditary predisposition, consanguinity, etc., the proportion afforded by the present census is 1 in every 1,370 of the population, or 1 in every 1,983 in the civic, and 1 in every 1,274 in the rural districts—the sexes being 100 males to 80·58 females. Among the acquired cases produced by accident or disease occurring after birth, the proportion is only 1 in 8,307, varying so slightly as from 1 in 8,158 in the civic to 1 in 8,345 in rural districts—the sexes being 100 males to 102·34 females. The transmission of mutism by hereditary taint or family peculiarity has been fully established by these returns. The tables show that the morbid action was transmitted with greater intensity through the father than the mother. It is remarkable that, while mutism is often found in several members of a family derived from a common stock, the defect is comparatively seldom transmitted direct from parents to children. There has been a great increase of education amongst this class of afflicted persons. The Commissioners, who were anxious to obtain general information upon this part of the statistics, addressed letters to the chiefs of several of the statistical bureaus of Europe and America, asking for particulars upon the matter. The replies shew that in a population of 144,424,107, the sexes being 71,896,750 males and 72,527,357 females, and comprised of a great variety of races—Celts, Saxons, Normans, Anglo-Saxons, Anglo-Americans, Sclavonians, Norse, Scandinavians, Italians, French, Germans, Flemish, Dutch, free coloured races, slaves of African origin, North American Indians, and even Lapps—the total number of deaf and dumb was 94,670, or in the proportion of 1 in every 1,526 of the population, and that the proportion of the sexes of this class was 78·06 females to 100 males. This ratio to the population varies from one in 443 in Savoy to 1 in 2,714 in Holland.

THE BLIND.

There were as many as 6,879 persons totally deprived of sight, of whom 3,149 were males and 3,730 females, or in the proportion of 100 males to 118·45 females. Of these persons 1,393 were in the civic districts—in which localities most of the institutions for the blind are situated; 4,566 persons were in the rural districts; and 920 were inmates of workhouses. The number of blind is less by 708 than in 1851. But in consequence of the decrease of the people during the last ten years, from 6,552,385 to 5,798,967, the absolute proportion of the blind to the population is now somewhat greater than at the former period, being 1 in 843. The corresponding members of the different statistical societies state that, in a population of 144,424,107 spread over 21 different countries, the total number of blind was 114,002, or 1 in every 1,267 persons. But this proportion varies from 1 in 2,489 in the States of America to 1 in 540 in Norway. More than one half of the blind of all ages and sexes were married, viz: 3,690 to 3,179 unmarried, the sexes of the former being 1,811 males and 1,879 females;

these results correspond in a remarkable manner with those obtained in 1851, and show that the marriage state among the blind is, compared with a similar number of the seeing population, above the average. The years 1844 and 1845 marked the commencement of that great "epidemic constitution," during which both vegetable and animal life throughout Europe and America suffered so severely, and in which the order of events was as follows: Epizootics, epiphytics, epidemics, and finally all these contemporaneously for several consecutive years. Epidemic ophthalmia broke out among the paupers in the Athlone Union Workhouse in April 1848, cases being at the same time observed in the surrounding country parts, and in the town of Athlone. This was the first indication of that wide-spread inflammation of the eyes which formed a portion of the great "epidemic constitution," so marked in Ireland by the failure of the potato from 1845 to 1852.

LUNATICS, ETC.

The immense emigration during the last twelve years has, by diminishing the number of the healthy, young, and adult portion of the population, increased the ratio of the aged and decrepit, the lunatic and idiotic, the deaf and dumb, the sickly, the weak, and the blind left in the country; the latter class not being receivable by emigrant vessels. The total number of lunatics and idiots was 14,098, 4,118 more than those afforded by the inquiry in 1851. The returns for 1851 were probably in part deficient, the inquiry being then novel. But the increase of lunatic asylums from thirty-three in 1851 to forty in 1861, with an addition of 1,580 inmates, affords a more enlarged field for investigation as regards this class; and as to the greater proportionable number of lunatics and idiots, the remark made with respect to the deaf and dumb and the blind being relatively increased by the falling off of the population by as many as 753,418 persons during the past decade, is even more applicable in considering the circumstances of this class; for in the exodus of the Irish people, neither lunatics or imbeciles were included among the emigrants. According to the returns, the total number of lunatics in Ireland, on April 7th, 1861, was 7,065, the sexes being in nearly equal proportions. This is an increase of 1,991 over the returns for this class in 1851. The number of lunatics, idiots, and epileptics in gaols in 1851 was 286; at the time of taking the present census it was 299, of whom 188 were males and 111 females.

THE REGISTRAR-GENERAL'S RETURNS.

THE sickliness of the past quarter has been very remarkable. In the three months ending at Michaelmas last, 23,000 persons died, who, if the year had been as healthy as 1860, would have been living still. The deaths in the quarter were very nearly as numerous, as those of the summer of 1854, when cholera was slaying its hundreds daily. The returns for that season gave 113,843 deaths; those for last summer give 112,384.

The mortality was almost universally diffused. It was also mainly confined to children of tender years. The diseases which became so unusually active were the special diseases of children—scarlatina, measles, and *cholera infantum*. The whole year has been unhealthy; but the last quarter especially so, although the third quarter in the year is naturally the healthiest.

Very little is suggested in explanation of these facts. The season was a peculiar one; but not apparently conducive to sickness. In respect of temperature, the Report of 1863 is hardly to be distinguished from the Report for 1860. Yet 1860 was one of the healthiest years known of late; whereas 1863 has been one of the unhealthiest. The price of food had nothing to do with this result. Wheat and potatoes were both cheap; nor was pauperism at a high standard. What then is the cause of this great mortality?

THE WEEK.

THE Manchester and Salford Sanitary Association is doing excellent service to society; for its weekly returns show at a glance the state of health of the population. This Association has existed for three years. Twenty-seven members of the profession have been engaged in giving the data from which the returns are compiled. The thanks of society are due to those gentlemen for their most useful labours. It has been resolved to issue in future quarterly reports, being an analysis of the weekly returns for the three months; and the first of these has just been produced by Dr. J. E. Morgan, the Honorary Secretary. From it we learn that the public health of Manchester is in a very unsatisfactory state. Scarlatina, small-pox, measles, hooping-cough, and fever are greatly in excess of what they were in 1862—in fact, about one-fifth more numerous. In the September quarter of 1862, there occurred 58 cases of scarlatina; whilst in the quarter just ended, the number is 602! Dr. Morgan concludes that

"The hard times through which the people have passed are beginning to tell upon them. That a population long accustomed to live well on high but hard earned wages will not flourish beyond a certain time, at any rate in full physical vigour, under the various depressing influences which have combined to assail them. And what are these influences? Poor fare, mental depression, crowded dwellings, and a sickly season. That the food upon which the poorer portion of the factory operatives have been forced to subsist was not such as they were brought up on and accustomed to none will deny. It seems reasonable, likewise, to suppose that inability to obtain full employment among a population little disposed to shirk the calls of labour, by depressing the spirits, has a tendency also to lower the health. As a natural consequence of low wages, houses and lodgings have been more densely occupied, and the never excessive supply of fresh air in the dwellings of the poor has been still more vitiated."

EVIDENCE which satisfies the Bethnal Green Guardians is not enough for the Poor-law Board. It is a happy thing that there is some check upon the outbreaks of local tyranny. The Guardians demand that the Poor-law Board shall dismiss Dr. Moore; but the Poor-law Board reply: "Your reasons are unsatisfactory, MM. Guardians. Whatever you may think about the value of the statements made by

you touching Dr. Moore, we don't think them enough to act upon." Mr. Fleming, the Secretary of the Board, thus addresses the local Guardians.

"The Board request that they may be furnished with more specific information as to the case referred to in your letter, and as to the connexion of Dr. Moore with it. The Board also request that the cases may be specified on which the Board of Guardians ground their charges against Dr. Moore: 1. Neglect of patients; 2. Making extraordinary claims for vaccination, and extra medical fees; 3. Determined opposition to, and public slander of, the Board of Guardians; 4. Getting up unnecessary inquests, for the purpose of degrading the parish, and bringing contempt on the poor-law system by public appeals to the benevolent; 5. Neglect and refusal to keep his books as ordered by the Poor-law Commissioners. Upon receiving this information, the Board will consider what course to pursue; namely, either to communicate with Dr. Moore, or at once to institute an official inquiry."

We have been requested to publish the following correspondence between Mr. Syme and Mr. Bowman.

5, Clifford Street, October 24th, 1863.

My dear Mr. Syme,—I fear your note in the British Medical Journal of this week is calculated to add seriously to the numbers of the blind in this country, unless you modify the expression of your opinion. I hope you will accept my personal assurance as worth something, that iridectomy is the certain and the indispensable method of arresting the glaucomatous state. The facts are *most positive* and most numerous which prove this, and do not admit of doubt. It has, therefore, given me real pain to see your great authority marshalled against it; as it is quite evident from your letter itself, that by "glaucoma", you mean the *last stage to which the disease has run*, when recovery is utterly hopeless, and sight extinct; whereas the operation of iridectomy is performed while it is in progress, and before the eye undergoes the destructive changes. These changes it arrests, and thus saves more or less sight, according to the stage the disease has reached; and according also to the variety or type of the disease, for there are several. All these have been so much elucidated within the last few years, that the indications for iridectomy have become very precise, and the results capable of being anticipated with as much certainty as can be done in any department of our uncertain art.

Pray, therefore, in the interest of those who are becoming blind through glaucomatous disease, relieve this inestimable (and, at present, the sole) remedy of the discredit which your high name must tend to throw upon it. Always believe me,

Yours most sincerely, W. Bowman.

2, Rutland Street, Edinburgh, October 26th, 1863.

My dear Mr. Bowman,—As my opinion of iridectomy was deliberately formed from a serious consideration of the anatomical, physiological, and pathological conditions in question, I am glad to learn that you agree with me in thinking this operation of no use for the remedy of confirmed glaucoma. But, with regard to its employment as a preventive, or means of arresting the early symptoms, I would beg to suggest that in hands less respectable than your own, such an application might, and in all probability would, lead to the most unwarrantable interference. Indeed, if this were to become the established practice, no elderly dark-eyed lady or gentleman who experienced difficulty in reading small print after dinner, would be secure from the charge of incipient glaucoma, and be able either to deny the imputation, or reject the remedy.

I had no desire to obtrude my opinion on the profession; but, when asked by the Editor of the British Medical Journal to express my sentiments on a subject of public discussion, did not feel at liberty to decline doing so. I remain, my dear Mr. Bowman,

Yours truly, James Syme.

5, Clifford Street, October 28th, 1863.

My dear Mr. Syme,—I confess I confidently hoped that on learning under how great a misconception of the subject you had written your note on iridectomy in glaucoma, you would yourself have been forward to correct in the same channel the expression of your opinion; but your reply of the 26th shows that I was mistaken. You do not seem to be aware how many persons are constantly losing their sight from the several forms of glaucomatous disease, or to credit my statement as to the accuracy with which these cases may in general now be recognised, or to have a thought of the reality of the remedy in question. So that I have no alternative, in the interest of truth and of those who suffer, but myself to explain in the same medium what I should very much rather have seen modified by yourself.

Of course, I have not a wish to influence your opinion otherwise than by sound reasons; but my letter of the 24th was written under the impression of the pleasure I had always had in our personal intercourse. I hope, and quite believe, that some day you will freely admit yourself to have been in error in this matter. How I wish you could see some of our cases!

Yours very sincerely, W. Bowman.

2, Rutland Street, Edinburgh, October 30th, 1863.

My dear Mr. Bowman,—As you wish the members of our profession to be acquainted with the sentiments which we entertain upon this subject, I have transmitted both your letters and my own to the Editor of the British Medical Journal; and now bid adieu to iridectomy, in the hope that, whatever may be its value for the cure of blindness, it will never interfere with the respect and regard which I entertain for yourself.

Yours very truly, James Syme.

In the despatch of Admiral Kuper, describing the late naval operations in Japan, praise is bestowed on all branches of the service except the medical. This is all the Admiral has to say under this head.

"Their lordships will observe the testimony borne by Mr. Morgan, surgeon, to the able assistance rendered him by Mr. Charles R. Godfrey, assistant surgeon to the *Vulcan*, who at the time of the engagement was on board this ship, waiting a passage to Shanghai."

The following is the part of the report of Mr. Morgan referred to.

"I would beg to bring to the notice of the Commander-in-chief the able assistance rendered me by Mr. Charles R. Godfrey, acting-surgeon of Her Majesty's ship *Vulcan*, who was awaiting passage to that vessel, trusting the Commander-in-chief will be pleased to bring the same before the favourable notice of the Lords Commissioners of the Admiralty. Mr. Edward A. Birch, acting-assistant surgeon, I would beg also to mention, who was untiring in his attention to the wounded."

New medical journals spring up weekly in Italy. The last one announced bears the title, *The Italian Archives of Nervous Diseases and of Lunacy.*

The venerable Professor Maggiorani, who has been expelled from Rome, under suspicion of being guilty of desiring an united Italy, has been inducted into the clinical chair at Palermo.

THE LATE ALLAN WEBB, M.D.

The medical profession and the Bengal Medical Department have sustained a great loss in the premature decease of this gentleman. The distinguished author of the *Pathologia Indica*, after an arduous professional career of above thirty years, of which twenty-seven had been devoted to the Indian medical service, succumbed on September 15th, at the comparatively early age of 55 years, to disease brought on by the arduous nature of his duties. He was a pupil of the late Mr. Haden of Derby; then of Mr. Jennings of Leamington; afterwards, of the late Mr. Thomas Alcock, lecturer on surgery, in London, whom he assisted by drawing, dissecting, and modelling; and, at this period, he obtained from the Society of Arts the large silver medal for anatomical drawing. Subsequently, he was clinical assistant at the Westminster Hospital. His remarkable qualifications as a surgical anatomist and an artist attracted the notice of the late Sir Robert Peel, no mean judge of merit; and it was through his influence, we believe, that Dr. Webb obtained an Indian medical appointment.

After his arrival in Bengal, he did not remain long on general duty; for his superior attainments induced Government to appoint him surgeon to the Bishop of Calcutta, and in his company he traversed most parts of our Indian empire. During these years, his opportunities for observing the varieties of tropical disease were almost unlimited; and so well did he use them, that the views on their pathology and treatment which he embodied in his principal work, the *Pathologia Indica*, have had a marked effect in modifying the views and influencing the practice of our medical brethren in the East. Ever on the look out to render professional aid where it was most wanted, he worked energetically in support of a hospital at Simla, to which he devoted all the time he could spare. Government employed him to report upon an outbreak of cholera which had destroyed large numbers of native convicts upon portions of the Grand Trunk Road, then being constructed. His recommendations were acted upon; and a stop was put to the outbreak. Eventually, he was appointed Professor of Military Surgery in the Calcutta Medical College; and, in course of time, Clinical Professor of Surgery at the College Hospital, and surgeon to the Native Hospital. Fortunate it was for the present race of native practitioners, as well as for Indian medical science, that his great attainments as an anatomist and scientific surgeon, combined, as they were, with his abilities as an artist, were thus made available; and that he was enabled to become one of the most successful operating surgeons of the day. He first carried out systematic courses of surgical anatomy in the College; and from his immense surgical experience, he was enabled to lay down rules for operating, more precise than had before been attempted. These he afterwards embodied in his *Field Notes for Surgical Operations*. He was also curator of the College museum; and for some years laboured with indefatigable industry to collect specimens of all the forms of disease most prevalent in India, and thereby was enabled to lay the foundation of a rational system of pathology and treatment. In accordance with his system of applying the humoral pathology to many Indian diseases, he looked upon cholera as an exhausting disease, in which there was an excessive elimination of disintegrated blood; and advocated the use of opium and stimulants, in opposition to the plan of treating it by depletion, salines, etc. In abscess of the liver, he advocated a modification of the plans adopted by Graves, Alcock, and others, of promoting adhesions between the hepatic lining and the abdominal parietes, with the view of facilitating the outward evacuation of matter and preventing introduction of air into the cavity.

Great as were his labours as an Indian physician, probably those which he undertook in the character of surgeon were of more importance. We believe that no European surgeon had ever more experience in operating upon cases of elephantiasis of the scrotum. He instituted researches into the nature of these tumours; and the results were embodied in a paper which was read by him and discussed, not long ago, before the Royal Medical and Chirurgical Society of London.

In the midst of his toils, he could always spare time to do a beneficent act; to aid a professional brother in his researches; or to investigate the causes of phenomena himself with the scalpel or microscope. Few men were more esteemed by their patients than Dr. Webb; he was always looked upon as the personal friend as well as the medical attendant. For very many years, he was the medical adviser and chosen friend of the Bishop (Daniel Wilson). His name is now to be added to the list of those who, having served their country long and well in the East, have only returned to commence their long rest in their native land.

Association Intelligence.

ROYAL COLLEGE OF SURGEONS: ELECTION OF MEMBERS OF COUNCIL.

The following memorial has been forwarded to the President and Council of the Royal College of Surgeons of England, in consequence of a recommendation made by the Council of the British Medical Association at the meeting in Bristol.

To the President, Vice-Presidents, and Members of Council of the Royal College of Surgeons of England.

The memorial of the President and members of the British Medical Association,

Sheweth,—

That the British Medical Association numbers more than two thousand medical practitioners in the metropolis and the provinces, including many Fellows and Members of the Royal College of Surgeons.

That the mode of election of the Members of Council of the College of Surgeons has been brought under the notice of your memorialists.

That your memorialists understand it to have been the intention of the charters granted to the College, that the opportunity of voting in the election of Members of the Council of the College should be afforded equally to all its Fellows.

That, under the present bye-laws of the College, personal attendance on the day of election is required; whereby many Fellows residing in the country, and prevented by their professional duties from going to Lon-

don, are prevented from recording their votes, although desirous and justly entitled to do so.

That, in the Universities of Oxford and Cambridge, the voting at the election of members of Parliament is conducted by means of voting-papers, filled up by the non-resident electors and sent by post; proper provision being made for their authenticity.

That your memorialists are of opinion that the adoption of some such method would remove the dissatisfaction at present felt by the profession as to the mode of election of Councillors of the Royal College of Surgeons, and would entitle the result of the election to be considered a more correct expression of the wishes of the Fellows than it now is.

Your memorialists therefore earnestly request that you will be pleased to take into consideration the propriety of altering the bye-laws of the Royal College of Surgeons of England in regard to the election of Members of Council, or, if necessary, of obtaining the legal powers for doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of Members of Council, in accordance with the principle which has already been advantageously adopted in the Universities of Oxford and Cambridge.

(Signed)

J. A. Symonds, M.D., etc., *President.*

T. Watkin Williams, M.R.C.S.Eng., *Gen. Sec.*

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, November 12th, 1863.

EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Fountain Hotel, Canterbury, on Thursday, November 26th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Thomas Boycott, M.D., *Hon. Secretary.*

Canterbury, November 2nd, 1863.

SHROPSHIRE SCIENTIFIC BRANCH.

"*Felicitas infelicibus adjuvante scientia.*

The members of this Branch held one of their periodical evening meetings at the Raven Hotel, on September 22nd last; Robert Blaikie, Esq., President, in the Chair.

Communications. 1. A Paper, illustrated by Diagrams and Experiments, on the Cause of the Deformities of the Skulls found in Excavating at the Ancient Roman City of Uriconium (Wroxeter). By H. Johnson, M.D.

2. A Paper on some Cases of Poisoning by the Administration of "Bear's Foot" (*Helleborus Fœtidus*) as a Vermicide to Children. By T. B. Barrett, Esq. It appeared probable that the *Helleborus Niger* had been the plant used.

3. Some Mineral Waters, strongly impregnated with Salts, from Natural Springs near to Llanrwst, were exhibited by R. Blaikie, Esq.

4. A number of New Preparations were exhibited.

5. A present of the Patent Oxygenated Water, prepared by the Patented Oxygenated Water Company, was received and tasted. A report was suggested to be made of its value as a remedial agent, after trial.

6. Mr. Barrett showed a number of beautiful and interesting Photographs.

7. Microscopes and Preparations were on the tables; and amongst other interesting things exhibited was a case of Roman Surgical Instruments, Charms, and Relics, relating to the profession, and discovered at Uriconium (Wroxeter), which had been used by our professional forefathers more than 1300 years ago.

Business. T. B. Barrett, Esq., of Welshpool, was unanimously elected Vice-President for the ensuing year, and three new members were added to this Branch.

The members then partook of coffee, and the meeting closed.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary meeting of the Bath and Bristol Branch was held at the York House, Bath, on Thursday, October 22nd; F. K. Fox, M.D., President, in the chair. There were also present thirty-seven members and six visitors.

Cases. The following cases were read:—

1. Spasmodic Affections of Children: 1. Pertussis. By E. L. Fox, M.D.

2. The Nature and Treatment of Non-Syphilitic Psoriasis. By J. K. Spender, Esq.

3. Case of Congenital Deformity of Foot. By A. Prichard, Esq.

4. Dr. Falconer exhibited a patient with well marked Wasting Palsy of the Upper Extremities.

Correspondence.

FEVERS AND THEIR CAUSES.

Sir,—An accurate knowledge of the laws of epidemic disease, so long needed, now appears to be one of the advances in medicine most nearly "looming in the distance". To exclude all erroneously supposed modes of causation, is the first step towards ascertaining the true cause. Dr. Christison has done good service in publicly expressing his conviction that foul air and sewage emanations cannot of themselves generate typhus or typhoid fever. The occasion seized by Dr. Christison, and the authority of the speaker, will do more to direct general attention to this question than could have resulted from cursory papers in the medical journals, however reiterated. And as a certain amount of impulse is necessary for sanitary action, as for every other action on a large scale, one may perhaps rejoice that the anti-foul-air movement has so long been looked upon as a vital point in the eradication of fevers, before the reaction of opinion touching its share in causing fevers becomes general. Antisanitary sluggishness stands in need of no support from a feeling that bad drainage does not do *quite all* the evil with which it has been credited. Granting that a bad drain cannot become a fever-poison factory, so long as the specific poison of fever cannot gain admission into it; yet facts innumerable prove that a bad drain may become a fever-poison receptacle, carrier, and general distributor. And, although a nauseous drain-smell may not be competent to induce disease, yet the gaseous drain emanations, whose presence the bad smells indicate, may convey volatile germs of disease, whether diphtheria, cholera, dysentery, or continued fever. Such volatile germs may be in the air without any odour; or they may be in the air which causes a bad smell. The only connection of the smell with them seems to be, that it itself proceeds from, and points out, a source from which these germs may proceed, and one, too, which is avoidable or removeable. Some facts connected with cholera leave it rather doubtful whether the unknown cholera-poison (or ferment) may not breed and increase itself in putrescent matter; or, if not that, may not, at all events collect by preference, and so accumulate there as to make the place a virulent focus of the disease.

How far this may be true of fever-poison, is neither

proved nor disproved at present; but in any case, extensive drains belong to large towns, and large towns are now never quite free from typhoid fever; and if the alvine dejections of typhoid patients really be the most direct of the several possible means of conveying and communicating contagion, the question of the share of sewers in spreading typhoid fever must be very important, when the other unknown conditions which favour an epidemic concur. Facts during the invasions of cholera, during the fever at Croydon and at Windsor, and elsewhere, crowd upon one's memory in illustration of this. Indeed, it is impossible to assert that the sewers of a large town are ever free from specific fever-poison directly imported into them. It is, therefore, impossible to aver that a given sniff of sewer air *may* not happen to contain an adequate dose of fever-poison at any time, although, in ordinary times, too diluted to do harm. Nothing in medicine is more established than that bad drainage is in every way a bad thing, and to be opposed and rectified in every way possible. And nothing is better supported by facts (apparently), than that, *during the prevalence of a fever epidemic*—when we may suppose that the quantity of fever-poison is too large to be rendered innocuous—bad drainage is a most prolific means of circulating and communicating the fever-poison. Whatever, therefore, science may decide as to the causation of fever, sanitarians need not imagine that the importance of their labours, even were the question limited to the instance of fever, will be lessened, or less appreciated. Look at the reduced death-rate at Salisbury, for example, as referred to in the same number of the *Times* as that containing a reference to the Social Science meeting.

Still, if we are to advance, we must make our knowledge precise; and this can only be done by cutting off all false causes one by one. Now, should it prove that typhus and typhoid fevers cannot be spontaneously generated, in any case, more than a lichen or a maggot can; that in every case it can only be "like which produces like" in these diseases; then, I think, there is one man to whose labours this first fruit of the inquiry will be preeminently due, and to whom the credit which attaches to him who *works out his problem* will always be given by those who accept his conclusions. I need not say that I mean Dr. William Budd, whose aim for the last twenty years has been to prove, by the particular facts of every epidemic as it occurred, this very conclusion. I venture to congratulate Dr. William Budd on the circumstance, so pleasing to himself, that the views he has so long espoused, and from time to time brought before the notice of the profession, have been endorsed on independent testimony by a professor of his own Alma Mater so esteemed as Professor Christison.

I am, etc., M.D.

Torquay, October 28, 1863.

[It must be highly gratifying to Dr. Budd to find the views concerning the origin of enteric fever, which he has so long maintained, and upon which he has bestowed so much and such careful investigation, sanctioned by so great an authority as Dr. Christison. EDITOR.]

THE AIR-PESSARY IN PLACENTA PRÆVIA.

LETTER FROM WILLIAM SANKEY, ESQ.

SIR,—Having very recently had a case of placenta prævia, in which, at the suggestion of my partner, Mr. Barton, I employed the air-pessary as a plug (as recommended by Mr. J. J. Murray), I lose no time in calling the attention of my professional brethren to this most valuable instrument; feeling convinced that by its adoption in the present instance, I owe the successful result; viz., safety of mother and child—a very unusual occurrence in placenta prævia complicating a first labour.

I am, etc., WM. SANKEY.

Dover, Nov. 3rd, 1863.

THE PAY OF GRATUITOUS LABOUR.

SIR,—The petition, of which a copy is sent herewith, has been transmitted to the Privy Council. The object of the petition is to show one at least of the departments of the Government that medical men ought not to be called upon to give their attendance without pay. No public office treats lawyers thus.

I inclose also a copy of the reply from the Privy Council. Of course this is what one expected. I wonder how much work Mr. Simon considers his medical brethren should perform for nothing. How much extra work does he himself do gratuitously, because it is incidental to his appointment? His allusion to our want of public spirit is simply absurd.

I am, etc., AN UNION SURGEON.

1. *Petition.*

The petition of certain public vaccinators in the —— Union to the Right Honourable the Lords of Her Majesty's Privy Council,

SHEWETH,—

That the undersigned, being vaccinators appointed by the Board of Guardians, were summoned "to attend on an inquiry on the subject of vaccination", held on the 16th inst. by Dr. Stevens, who had been appointed by your lordships.

That the undersigned did so attend the inquiry, at great inconvenience and loss of time, all except one living from seven to nine miles from the place where the inquiry was held.

Your petitioners therefore pray your lordships to grant them such compensation as you may think fit for the loss of time they incurred in attending the inquiry of your lordships' appointee, more especially as their attendance was voluntary, and the inquiry not one that was beneficial to them.

(Signed)—H. S.; N. R.; J. B.; C. A. M.; C. J. R.

October 20th, 1863.

2. *The Reply from the Privy Council.*

Medical Department of the Council Office, Oct. 30th, 1863.

SIR,—I am directed by the Lords of Her Majesty's Council to acknowledge the receipt of a petition signed by you with other public vaccinators of the —— Union, stating that you recently attended an inquiry, held under their lordships' direction, into the state of vaccination in the —— Union; and praying that their lordships will grant you such compensation as they may think fit for the loss of time incurred by you in this attendance.

My lords direct me to say, that they have not at their disposal any funds out of which they can make any such payment as you desire; and as it was incidentally to your filling the paid office of public vaccinators, that you were invited to confer with their lordships' inspector as to the state of vaccination in your Union, their lordships hope that you will not regret to have rendered this unpaid service in furtherance of an important public object for which you are officially engaged.

I am, sir, your obedient servant,

JOHN SIMON.

[This is only another example of the results of the general practice adopted by the profession of doing work gratuitously. If there is one thing more certain than another, it is this: that whoever does the work of the *public* gratuitously is lowered in public estimation, and receives snubs instead of pay for his labours. EDITOR.]

WAR-MORTALITY. The general mortality rate of the armies of the United States during the first year of the rebellion was 67·6 per thousand of mean strength, including with deaths from disease those from wounds and injuries. The mortality from disease alone was 50·4 per thousand, that from wounds and injuries of every kind 17·2 per thousand.

Medical News.

Apothecaries' Hall. On October 29th, the following Licentiates were admitted:—

Gervis, Frederick Hendebourck, Tiverton
Leach, Matthew, Wisbech, Cambridgeshire

At the same Court, the following passed the first examination:—

Henderson, Roderick William, Guy's Hospital
Iles, Daniel, St. Thomas's Hospital
Milburn, Frederick Le Feve —, Charing Cross, Hospital
Reed, Walter Hugo, St. Thomas's Hospital
Wells, James, Bristol Medical School

APPOINTMENTS.

Blasson, Thomas, Esq., has been appointed Medical Officer to the House of Correction at Falkingham, Lincolnshire.

Cooke, Robert T. E. B., L.R.C.P.Ed., elected Consulting Medical Officer to the Royal Sea-Bathing Infirmary, Scarborough.

Horgan, William C., M.D., has been elected Coroner for the Borough of Drogheda.

King, Charles C., M.D., has been appointed Medical Inspector under the Poor-Law Commission, Ireland.

*Rowe, Thomas Smith, M.D., has been elected Surgeon to the Royal Sea-Bathing Infirmary, Margate, in the room of *G. H. Hoffman, Esq., resigned.

Taylor, William, Esq., elected Consulting Medical Officer to the Royal Sea-Bathing Infirmary, Scarborough.

Tyndall, George H., Esq., has been appointed Surgeon to the Peninsular and Oriental Steam Navigation Company's steamer *Ceylon*.

Poor-Law Medical Service.

Bournes, William H., M.D., to the Ballycastle Dispensary District of the Killala Union, co. Mayo.

Bradley, John D., M.D., to the Kilbeggan Dispensary District of the Tullamore Union, King's County.

Land, John F., Esq., to part of the West District of the Patrington Union, Yorkshire.

Lumley, Bartholomew, Esq., to the Osmotherley District of the Northallerton Union.

Macmanus, Thomas A., Esq., to the Middle District of the Patrington Union, Yorkshire.

May, Henry, Esq., to the Ashted District of the Aston Union, Warwickshire.

Shepard, Henry C., Esq., to the Raglan District of the Monmouth Union.

Wigg, Thomas C., Esq., to the Southminster District of the Maldon Union, Essex.

Indian Army.

Macpherson, Surgeon H. M., Bengal Army, to be Surgeon-Major.

Royal Navy.

Fisher, John, Esq., Surgeon, to the *Royalist*.

Georges, Thomas E., Esq., Assistant-Surgeon, to the *Tamar*.

Long, James, M.D., Surgeon, to the *Tamar*.

Way, John P., Esq., Acting Assistant-Surgeon, to the *Royalist*.

DEATHS.

Bain. On October 12th, at Suez, Elizabeth Piper, wife of James Bain, M.D., 6th Bombay Native Infantry.

Barker. On October 31st, at Dorchester, aged 26, Mary Esther, wife of Joseph Barker, Esq., Assistant-Surgeon Royal Horse Artillery.

Bishopp. On October 26th, at Thornby Hall, Northamptonshire, aged 88, Mary J. W., widow of Thomas Bishopp, M.D.

Bland. On October 31st, aged 86, Emma, widow of Thomas Bland, M.D., of Melton Woodbridge, Suffolk.

Dighton, Christopher, Esq., Surgeon, at Northallerton, aged 74, on November 2.

Jones. On November 2nd, at Sydenham, Mabel Eveline, infant daughter of *Sydney Jones, M.B., of St. Thomas's Street.

Warren, Henry, Esq., Surgeon, late of Oswestry, at Park Road, Regent's Park, aged 44, on November 2.

Collodion and Glycerine. Two parts of glycerine, mixed with one hundred parts of collodion, form an application which, when spread on the skin, will not crack.

Expenses of Poor-law Guardians. Last week, the Poor-law Guardians of Bethnal Green successfully sued a person, whose son had been sent into the Small-Pox Hospital by them, for the admission-fee of one guinea paid by them and costs.

Legacy. A Birmingham paper states that the magnificent legacy of £10,000 has just been bequeathed to the General Hospital in that town by the late Mr. Daniel Darbey, who died a few days ago at Rowley. By the law at present in operation respecting legacies, half this sum will have to be invested; but the remaining half will clear the hospital of its present debt, and the invested half will add some £200 to its regular income.

Medical Ethics. The following resolutions have been carried at annual meetings of the Herefordshire Medical Association:—"That this meeting disapproves of the system of giving certificates in favour of any particular line of practice, medicine, or article of diet, as derogatory to the profession; and hopes that in future the members of this Association will abstain from lending themselves to such a course. That this Association strongly disapproves of medical men publishing scales of charges, or otherwise advertising for practice, the more particularly so when done for private motives under the guise of charity."

Edinburgh University. The winter session of the University of Edinburgh was publicly opened in the Music Hall, on Monday, with an inaugural address by Principal Sir David Brewster. The learned Principal was accompanied on the platform by their Royal Highnesses Prince Alfred and Prince William of Hesse, the members of the Senatus Academicus, and the University Court. Their Royal Highnesses, who received a most enthusiastic welcome from the audience, occupied seats at the right hand of Sir David Brewster during the delivery of the address. Among those on the platform were Lord Llanover, Lord Elcho, Major Cowell, and Capt. Zangen.

Aldershot Hospital for Soldiers' Wives. The third annual report of the committee of the Aldershot Hospital for the wives and children of soldiers has just been issued. The hospital was established in September 1861, and has afforded relief to some thousands of persons. During the past twelve months 809 cases have been treated in the hospital—namely, confinements, 331; sick women, 232; sick children, 246. Out of that number there have been only 23 deaths—women 7, and children 16. The report, which is signed and "approved" by Lieut.-General Sir J. L. Pennefather, K.C.B., contains the expression of the committee's thanks to Mr. D. P. Barry, secretary and medical attendant, and to Major Smith, treasurer, to whose persevering exertions the very satisfactory state of the hospital is, in a great measure to be attributed.

A Fight with a Monkey. A Bordeaux journal states that a medical student of that town last week narrowly escaped being strangled by a female baboon which he had received as a present from a friend. It appears that the animal, which was of large size and savage, had always been kept chained up, but its new master set it loose in his room. The monkey leaped on its master's shoulders and attempted to strangle him by clasping him round the neck. The young man vainly endeavoured to shake the animal off, and even stabbed it several times with a bistouri, but this only rendered it more furious. It is impossible to say how the struggle might have ended, if a brother student had not opportunely entered the room and despatched the monkey with an amputating knife. The student was severely bitten and torn about the neck and breast, but his wounds are not likely to be followed by any serious consequences.

University of Edinburgh. The annual meeting of the Edinburgh University Council took place on October 30th; and a rather breezy kind of meeting it was, as, indeed, what else could it be among several hundred old students, who grow young again at the sight of each other, and ready for mischief? They have, however, done one good thing; and that is, elected Mr. Muir, D.C.L., the founder of the new chair of Sanscrit, as

their representative in the University Court. This gentleman, besides being an eminent Sanscrit scholar—he was once of the Indian Civil Service—is a most accomplished man, and so rational in matters of religion as to be a regular hearer of Dr. Robert Lee. The University Council did another thing, which was questionable; they refused to pass a vote of thanks to Lord Barcaple, the retiring assessor, chiefly because he had supported the exclusion of reporters from the University Court.

University College, London. The surviving founders of University College will remember the hearty co-operation which they met with in their project to create the University of London from several opulent merchants of India, and notably from Sir Jamsetjee Jejeebhoy, and others, of Bombay, for shares in the institution. It will now gratify them to find that for several years past the College has had a constant succession of students from the Presidencies, mostly Parsees. Of the estimation in which intelligent and distinguished Indians hold these advantages substantial proof has just been afforded by the munificent gift of £1000 for the hospital, and by the terms of a letter addressed to Dr. Walshe from the eminent firm of Cama and Co.:—"London, Oct. 20. Dear Sir,—Referring to the conversation we had with you, we now beg to enclose a cheque for £1000, as a donation to the University College Hospital, in gratitude for the instructions and assistance received by our countrymen in this excellent institution, and we feel it a pleasure to give this amount through you, in token of friendship, and successful studies of our countrymen under your former professorship. We remain, dear Sir, yours faithfully, Cama and Co."

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Mr. Wm. Adams, "On the Treatment of Disease of the Spine, and Angular Curvature."—Royal Geographical.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Rowand, "On Treatment of Frost-bite by Friction with Snow and Incision"; Mr. Holmes Coote, "Cancerous Infiltration of the Penis"; Mr. A. Durham, "Mucous Cyst of the Epiglottis, treated by Incision."—Zoological.

Wednesday. North London.—Microscopical.

Friday. Astronomical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—October 31, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys.. 962 / Girls.. 873	1835	1252
Average of corresponding weeks 1853-62		1882	1224

Barometer:
Highest (Mon.) 29.878; lowest (Fri.) 21.109; mean, 29.521.

Thermometer:
Highest in sun—extremes (Sun. & Mon.) 84 degs.; (Fri.) 55 degs.
In shade—highest (Wed.) 56.2 degs.; lowest (Tu.) 34.7 degs.
Mean—45.7 degrees; difference from mean of 43 yrs.—1.3 deg.
Range—during week, 21.5 degrees; mean daily, 14.8 degrees.
Mean humidity of air (*saturation* = 100), 88.
Mean direction of wind, S.W.—Rain in inches, 0.47.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, *37, Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Medical Schools.—In our last number, we announced the fact, that Guy's Hospital could boast of more than two hundred students in attendance this year; and that no other hospital had so many. We have since learnt that St. Bartholomew's Hospital has one hundred and ninety-six registered students in attendance this year; and that with other occasional students perfecting themselves in different branches of professional knowledge, the whole number of students at that great medical school also exceeds two hundred.

The Speculum.—Sir: Having repeatedly, in reading your valuable periodical, seen observations regarding the use of the speculum, tending to bring it into discredit and disuse, I would wish simply to state that the insinuations against its use are so derogatory to the honour of the profession and the dignity of science, that they ought really only to be treated as utterly unworthy of note or comment. Insinuations of this kind can only tend to lower the character of its members, excite the suspicion and disgust of the public, and bring into disuse the application of this almost invaluable instrument. I think no unprejudiced mind can but allow that, since its introduction into practice in demonstrating the existence and character of very obscure and otherwise utterly unattainable phases of disease, it has undoubtedly indicated the successful application of remedies; in many cases affording immediate and permanent relief, and in others performing an absolute cure, restoring back to society and to happiness many valuable lives, otherwise rendered miserable to themselves by pain and suffering, and lost to their families, by their necessary withdrawal from social intercourse. I can truly say, that in my own practice I have found the speculum an almost invaluable adjunct in relieving an immense amount of human suffering, entirely unattainable by any other agency. I am, etc.,

Enfield, October 27th, 1863. George Kitching, M.D.

[No one doubts the use of the speculum; and we are sure our correspondent will not deny that the instrument has been abused, and that no instrument is more capable of being readily abused. If so, clearly its proper application requires the attention of the profession. Editor.]

Chloroform.—Sir: As the problem of why we have deaths from chloroform has been at length worked out, I wish you would let me say, that in a French *annuaire* (equivalent to our "Braithwaite"), just published, there appears a most important case of chloroform accident in France, in which life was restored by the "Faradisation" plan, as recommended so strongly by me, as founded on numerous experiments on animals, and in one remarkable case in a female patient in a London hospital.

As I am made the depository in some measure of these cases, perhaps I may say, I heard of two deaths from chloroform last week; two the week before, in London alone; and six in the summer, all not published. I am, etc.,

Sackville Street, Oct. 25th, 1863. Charles Kidd, M.D.

Communications have been received from:—Dr. Thomas Boycott; Mr. Ashby G. Osborn; Mr. W. H. Gatty; Mr. J. Kent Spender; Dr. F. J. Brown; Mr. R. S. Fowler; Mr. J. C. Wordsworth; Mr. Jas. Syme; Mr. Soper; Mr. S. Wood; Mr. William Bowman; Dr. T. J. Walker; Dr. T. S. Rowe; Mr. T. Jones; Dr. H. Munroe; Mr. W. Sankey; Mr. Hugh Robinson; Mr. J. Vose Solomon; Mr. G. F. Helm; Dr. Candy; Dr. Thomas Skinner; Dr. J. E. Crook; Mr. G. H. Hoffman; The Hon. Secretaries of the Royal Medical and Chirurgical Society; An Union Surgeon; Mr. W. Marsden; Dr. A. Samelson; The Registrar of the Medical Society of London; and Mr. C. F. Hodson.

BOOKS RECEIVED.

1. Notices of Pulmonary Lesions associated with Syphilis. By W. Aitken, M.D. London: 1863.
2. Report of the Royal Lunatic Asylum, Infirmary, and Dispensary, of Montrose, for 1863. With an Appendix. Montrose: 1863.
3. Urine, Urinary Deposits, and Calculi. By Lionel S. Beale, M.B., F.R.S. Second edition. London: 1863.
4. On Glycerine, and its Uses in Medicine, Surgery, and Pharmacy. By W. A. Smith, M.D. London: 1863.
5. On the Influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases. By John Hilton, F.R.S. London: 1863.
6. Introduction to Anthropology. By Dr. Waitz. Edited by J. F. Collingwood. London: 1863.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture II.

ON CURVATURES OF THE SPINE.
(*Continued.*)

Pathological Spinal Curves.

The antero-posterior pathological curves are, for the most part, merely exaggerated conditions of the physiological curves; thus we find lordosis to exist especially in the lumbar region, and cyphosis in the dorsal region. It will be shown further on, however, that these conditions are not absolutely limited to a given region; but that the vertebræ above and below may be involved in the curve, so as to reverse the normal curve of any region. These curves are rarely congenital; but they are induced through ignorance or neglect on the part of the nurse, or otherwise through deficient nutrition.

Lordosis.

Lordosis, or anterior curvature of the spine, affects for the most part the lumbar region, it being an abnormal increase of the physiological curve of that region.

In the cervical region, a similar abnormality is occasionally found to exist as a primary condition; here it is transitory, however, occurring in infants, and being due to want of muscular power.

In the lumbar region, this distortion varies from a slight increase of the normal curve of that region to a development which is a source of great weakness. The normal condition has already been shown. Through increase of this curve, the obliquity of the pelvis is augmented; the anterior wall being carried backwards, and the sacrum and coccyx being raised, so that their concavities present more directly downwards; the superior portion of the pelvis inclining forwards or moving on the heads of the thigh-bones. The sacro-lumbar articulation, consequently, is no longer found immediately above the interfemoral line, but in advance of that line. Equilibrium is disturbed; and that it may be restored, it is necessary that the weight of the upper part of the trunk be thrown behind the vertical line of the body; and thus a compensatory antero-posterior dorsal curve is induced.

The *external appearances* presented by this distortion, then, are such as are indicated by the changes in the skeleton above mentioned. The nates are raised; the lumbar region is rendered remarkably hollow; while the dorsal is rounded, and the head is thrown back. The abdomen is unusually prominent. The stature is necessarily stunted: when the distortion occurs in childhood, the growth is impeded; and when it takes place in the adult, much loss of height is incurred.



Fig. 4.

The drawing from which the woodcut was made, was taken from a young person in whom rickets was the cause of distortion.

The *causes of lordosis* are numerous. As a congenital affection, it is combined with monstrosity and with spina bifida. It is seen in childhood as a result of rickets. And whatever tends to increase the obliquity of the pelvis, will give rise to this form of distortion. Thus, it is a necessary consequence of congenital dislocation of the heads of the thigh-bones (upwards and outwards). In some instances arising from this cause, the distortion is very remarkable. A child is at the present time under my care for congenital dislocation of the thigh-bones, in whom lordosis was very marked; so much so, indeed, was it, that the congenital dislocation was entirely overlooked and never suspected, while the child was treated during three years for lordosis—a consequence merely of congenital dislocation. It is unnecessary to speak of results when treatment so abortive is followed. Unfortunately, it is too common in orthopædic surgery.

Lordosis may be induced equally by unreduced non-congenital dislocation of the thigh-bones. Thus, it exists in a very marked degree in a young man, 20 years of age, who has suffered successively in each hip-joint from rheumatic inflammation and subsequent dislocation on to the dorsum ilii; and in whom it was impossible, notwithstanding every care, to arrest the disease. In these cases, as in those last mentioned, a great effort is made to sustain equilibrium; the extensor muscles of the trunk are tense and prominent, and standing out firmly, they

leave, especially towards the lower part of the spine, a sulcus in the median line.

I lately saw, together with Mr. Brookes, a similar form of distortion arising from a totally different cause, at Shaldon in Devonshire; and I allude to the case, not because it is one commonly to be met with, but because it is exceedingly rare. Fatty degeneration of the muscles of the abdomen having occurred, the abdominal viscera hung suspended in a huge, tumid paunch; the weight of which had, in part, occasioned the distortion in question. This distortion was one of the most remarkable that I ever witnessed. The effect was increased, also, by fatty degeneration of many other muscles, such as the trapezii, rhomboidei, serrati, latissimus dorsi, the pectoral muscles, and those of the lower extremities. Many of these muscles were so far destroyed that they could not even be traced. In this instance, the unsupported pendulous belly, together with the loss of muscular power, seemed to give rise to lordosis, in a somewhat similar manner to that in which the gravid uterus is sometimes known to act.

Bearing heavy weights round the neck and shoulders will also occasion lordosis. That a considerable burden may thus be slung, borne upon the neck and shoulders and suspended in front, it is necessary that the shoulders shall be thrown back, and that, consequently, the loins shall be projected forwards. And this practice being continued, the increased lumbar curve becomes more or less permanent. I have known gymnastic exercises produce a somewhat similar result.

The *pathological changes* which are induced are chiefly as follow. The lumbar spines are approximated; the articulating processes of the vertebræ are pressed forcibly into contact one with another; the posterior ligaments become somewhat shortened, and the ligamenta subflava lose something of their elasticity; the bodies of the vertebræ undergo absorption, and the intervertebral substances are compressed posteriorly; while expansion of these substances takes place on the anterior surface in the convexity of the curve. The extensor muscles of the trunk are strongly developed. Anchylosis of the articular processes of the vertebræ, with or without fusion of the bodies, may at last take place, through which the spine is rendered immovable and the distortion permanent.

Anterior curvature is, for the most part, limited to the lumbar region of the spine; the dorsal and sacral regions being implicated only so far that their normal curves become exaggerated. Occasionally, however, some few of the lower dorsal vertebræ may become involved, together with the lumbar curve; or, indeed, the entire dorsal curve may be reversed, and the anterior curvature will then consist of the lumbar vertebræ, together with the dorsal. This is, necessarily, a very rare form of distortion; and it indicates great weakness of the anterior ligaments of the spine. In an instance which I lately saw, the sacrum was almost horizontal, and the head was thrown forcibly back.

Treatment. From what has gone before, it is evident that lordosis is seldom a primary affection; but that it is consequent on disease or position of parts entirely independent of the lumbar region itself. It is usually developed in childhood; and at this early period, it disappears in the horizontal position, let the cause of the affection be what it may other than rachitis. This rule is sufficient for practical purposes; there should be added to rickets, however, the other very rare forms of this affection which are due to monstrosity, and to deficiency or excess in formation of the bodies of the vertebræ. It is not necessary to say, however, that the cause remaining, the effect will return, and that, therefore, it is of the utmost importance to discover and remove the cause. This may be said of every disease; but it is especially true of every form of spinal curvature. It was to illustrate this that I alluded to the case of lordosis which had been treated for three years without the cause having been discovered. In this case, while the child remained in the horizontal posture, the spinal curves were effaced; but so soon as she stood, lordosis returned in as marked a manner as before. And notwithstanding, the cause could not be discovered; but for three years, this child was held in a painful position uselessly. It is only necessary to see congenital dislocation once to recognise it for ever after; and, therefore, it is the more surprising that I should be able to adduce such an example as the one before us, of insufficient attention to the cause of curvature. Happily, it was of less importance that an oversight should have been made in this instance than it might have been in some others. When I come to treat of lateral curvature of the spine, I shall have to draw attention to the great importance of attending to the cause of distortion, and to insist on the removal of the cause.

The treatment of lordosis is the treatment, in the horizontal position, of the several affections which give rise to it. With a properly inclined couch (having a hinge to correspond to the pelvis), the prone position may be observed. The supine position is more effectual, however, for the removal of lordosis; by gradually raising the shoulders and flexing the thighs upon the pelvis, cyphosis even may be substituted for lordosis.

Gymnastic exercises may be employed with advantage when the curve is slight; and the form of exercise which is most beneficial is that which is indicated by Andry, who said: "Si la taille fait un creux, en sorte que l'épine soit courbée en dedans, ce qui est le contraire de la bosse du dos, faites souvent courber l'enfant. Jettez-lui pour cela des cartes ou des épingles sur le plancher, il se fera un plaisir de les ramasser. La situation qu'il sera obligé de prendre pour en venir à bout, contraindra, à la longue, l'endroit creux de son épine à revenir en devant." (*L'Orthopédie.*)

The same exercise is better accomplished by means of elastic bands, the handles of which are fixed near to the floor; so that in using them the same movements must be accomplished (only with more regularity and more continuously) as in the mode indicated by Andry. Exercises, however, should be used sparingly and with great care. They are only admissible when distortion is slight: when it is severe, they should be entirely prohibited.

The recumbent position is the most powerful means we possess for the removal of lordosis; the muscles of the back are then relaxed; the normal spinal curves are then in part effaced, and cyphosis even may be induced if this position be long continued. Cases, however, occur in which it is not practicable to observe constantly the recumbent position, and then it is necessary to substitute a portable instru-

ment, which, receiving the weight of the head and shoulders, transmits it to the pelvis. The spinal column is thus relieved, and the extensor muscles are less violently thrown into action.

Original Communications.

THE LARYNGOSCOPE AND ITS CLINICAL APPLICATION.

By Thomas James Walker, M.D.(Lond.), etc., Surgeon to the Peterborough Infirmary and Dispensary.

V.—Cases Illustrating the Practical Value of the Laryngoscope.

Doubtless there will recur to the recollection of every experienced practitioner, who has now made himself acquainted with the facility with which a view of the larynx can be obtained, cases which have occurred in his own practice, in which he would gladly have availed himself of the means of diagnosis and treatment which the laryngoscope affords, had he at the time that the cases were under hand been acquainted with the instrument: and it is, therefore, not my intention to do more now than to allude very shortly to a few cases illustrating the practical value of an instrument which, in its simplest form, should be in the hands of every practitioner.

The acute affections of the larynx are accompanied by such characteristic symptoms, that their diagnosis is usually comparatively easy without the aid of the laryngoscope; and in some of these maladies in which it might be desirable, the examination would not be practicable. Thus, doubtless, in cases of croup, it would be satisfactory were we able to define exactly the limits to which the false membrane extends; but the incidental circumstances of the disease, more especially the tender age of the patients in whom it usually occurs, almost necessarily preclude the possibility of our making use of the instrument: and again, in diphtheria, where it would frequently be a matter of much importance to ascertain the extent to which the air-passages are affected, the state of the fauces gives no chance of our seeing into the larynx. In ordinary acute laryngitis, I have never at present made any use of the laryngoscope; but I believe that it would be quite applicable in any such case where we were anxious to obtain a view of the parts—as, for instance, to assist us in determining upon the propriety of resorting to the operation of tracheotomy. I do not believe that the inflammation of the pharynx, which frequently accompanies laryngitis, would cause any insurmountable intolerance of the laryngoscope, as I have used the instrument in very acute cases of pharyngitis, where the symptoms threw a suspicion on the larynx, and rendered a view of this part desirable, not only for my own satisfaction, but for that of my patients, who, in two cases, were medical men, and were only relieved from a nervous fear as to the state of the larynx, by having it thus made palpable to the sight.

Of the utility of the instrument in *œdema glottidis*, there can be no doubt; unless, indeed, those practitioners who are in the habit of examining the larynx with the finger believe that a digital is equally satisfactory with an ocular examination. The parts most seriously affected in this malady, are those situated high in the larynx, and therefore most easily seen in the laryngoscope. In the following case of a closely allied if not identical affection, the effusion affected so much the floor of the mouth, the root of the tongue, and the fauces, as to render the patient unable to open his mouth to any considerable extent; but even with this disadvantage, the eye saw certainly as far as the finger could reach, and the aid afforded by the laryngoscope in diagnosing the state of the larynx, was most satisfactory.

Case I. W. G., aged 34, a groom, of fairly temperate habits, and usually enjoying very good health, applied to me on February 1st, 1863. He had been quite well up to the previous day, when he began to feel pain and stiffness about the lower jaw and the fauces. When I saw him, the pain had increased; there was considerable difficulty in swallowing; the voice was changed, sounding thick, not husky; respiration was quiet. The fauces were reddened; there was fulness of the salivary glands below the jaw, and some difficulty in opening the mouth and protruding the tongue. An astringent gargle and wash for the mouth, with the application of a turpentine epithem externally, were ordered. On the evening of the same day, the pain and swelling having increased, and a feeling of suffocation having supervened, the acetum lyttæ was applied externally, and an emetic administered.

February 2nd. The feeling of choking was somewhat relieved by the remedies employed on the previous night; but this morning, the œdema about the floor of the mouth was so considerable, as to give the appearance under the tongue of a double ranula. The tongue could not be protruded; the pulse was feeble and rapid; the skin relaxed. The laryngoscope, which was used with difficulty owing to the inability of the patient to open his mouth, showed the epiglottis reddened and somewhat swollen, and the back of the aryteno-epiglottidean folds scarcely affected. An incision was made on each side of the frænum linguæ into the cellular tissue of the floor of the mouth; the use of the astringent lotion continued; and fifteen minims of tincture of sesquichloride of iron administered in a mixture every four hours. Beef-tea and milk were ordered to be given in as large quantities as possible.

Evening. The œdema of the floor of the mouth was relieved by the scarification; there was still considerable pain in swallowing, and an occasional sense of choking and suffocation.

February 3rd. The symptoms depending on œdema were improving; but at the site of the incisions on each side of the frænum linguæ was a small superficial slough. The epiglottis was still comparatively slightly affected. The use of the chalybeate mixture was continued; and a lotion made with Condy's disinfecting fluid was ordered for the mouth.

February 4th. The progress of the case from this date was, with slight fluctuations, gradually towards recovery. The small sloughs separated; and the œdema subsided. The laryngoscope was daily employed; and at no time was the œdema of the epiglottis found at all considerable. By the time that the swelling about the mouth had sufficiently subsided to enable me to get a full view of the larynx, no trace of diseased action remained there; indeed, although I give the notes of this case, in connection with what I have said as to the utility of the laryngoscope in œdema glottidis, it can hardly be called an example of that malady, although closely allied to it.

Of the use of the speculum in other acute affections of the larynx, in injuries or in the passage of foreign bodies through the larynx into the trachea, I can give no examples from my own practice. The value of the laryngoscope is, however, greatest in the diagnosis and treatment of chronic affections of the larynx; and the instances are now numerous, where a patient having been treated during many years for various supposed affections of the larynx or of the general constitution, a laryngoscopic examination has disclosed a totally unsuspected cause of the aphonia and other symptoms.

In all forms of *chronic laryngitis*, whether severe or slight, leading merely to congestion or to ulceration, the

aryngoscope can be used with advantage; and the characteristic appearances of the various affections are exemplified in the following case.

Case II. *Chronic Inflammatory Congestion accompanying Follicular Pharyngitis.* Miss C., aged 24, had for years suffered from dryness and occasional soreness of the throat, with frequent hacking cough and occasional sense of choking. Patches of redness, with distension of the mucous follicles, were observed in the pharynx. The laryngoscope showed the vocal cords healthy; but small congested patches, with dilatation of the minute vessels, were scattered over the mucous membrane, lining the interior of the larynx and covering the epiglottis. There was no thickening of the mucous membrane, nor any of the follicular distension which existed in the pharynx. In most cases of folli cular pharyngitis, accompanied by the usual symptoms, where I have examined the larynx, its appearance differs but little from what is normal in the healthy organ.

The treatment in this case consisted in the application to the interior of the larynx of a solution of nitrate of silver a (scruple to the ounce), and the symptoms have been greatly relieved.

Tubercular Inflammation, and Ulceration of the Larynx. Examples of this malady are, of course, constantly occurring; and I have under my care cases, where the benefit derived from the local and general treatment is much more marked than in the following case, which standing, however, first in my note-book, I give here.

Case III. C. C., aged 36, a butcher, consulted me in 1861, when his case was evidently hopeless. He had for eighteen months suffered from symptoms of pulmonary phthisis, and for five months had been more or less hoarse. He was now much distressed by pain and choking when he swallowed either liquid or solid food. On examination, the epiglottis was found thickened, and the left side affected by ulceration, which had destroyed a considerable portion of its substance; the interior of the larynx was red and œdematous, and the vocal cords were thickened. The application of the solid nitrate of silver to the ulcerated margin of the epiglottis relieved the pain in swallowing, but did not, of course, prevent the rapidly fatal termination of the case.

In most cases of tubercular ulceration of the larynx, there is considerable inflammatory redness and œdema, either general over the whole larynx, or more decided at the points where the ulcers with the sharply defined edges which they usually present are situated; immediately around the ulcers there is thickening of the parts, probably from tubercular deposit, and occasionally patches of tubercle may be seen which have not yet ulcerated. Not unfrequently, the mucous membrane appears to be eroded from the vocal cords, without these being at all thickened by deposit; even where the vocal cords themselves are healthy, the œdema and deposit about other parts of the larynx prevent the free action of the arytenoid cartilages and their vocal processes, and thus partly prevent the closure of the vocal cords, and give rise to the clanging voice or complete aphonia which accompanies the malady.

Syphilitic Ulceration of Larynx and Trachea. I have not at present examined, or met with any case of very acute syphilitic inflammation, and most of the cases I have examined, have been characterised by the presence of comparatively small ulcers without much œdema or redness. I do not think it necessary to quote any cases, as the treatment I have adopted, has always been constitutional and unmodified by the laryngeal examination. In one case, that of M. S., aged 20, wife of a shoemaker, suffering from other symptoms of constitutional syphilis, I could readily see an ulcer about the size of a fourpenny piece, situated on the left side of the windpipe over the upper rings of the trachea and the cricoid cartilage.

Malignant Disease of the Pharynx and Larynx. I have examined two cases of this kind laryngoscopically; in one, there was always such an accumulation of discharge about the parts, as to prevent my being able to say what was their actual condition. In the other, notes of which I subjoin, the laryngoscope certainly aided the diagnosis.

Case IV. Mrs. M., aged 56, wife of a farmer, consulted my father and myself, in December 1860. She had for some time previously felt a pricking sensation in the throat, which led her to imagine that she might have swallowed a pin, which had got fixed in the gullet. She had now great difficulty in swallowing, and almost every attempt to eat caused a fit of choking. There was slight fulness and tenderness over the œsophagus, about the level of the cricoid cartilage. Laryngoscopic examination, made with some difficulty, from the extreme irritability of the fauces, showed irregular ulceration of the whole of the lower part of the pharynx, thickening and ulceration of the interior of the larynx, the summits of the arytenoid cartilages being especially affected. There was not much inflammatory redness; but both the ulcers and surrounding parts were covered by a considerable amount of purulent discharge. The constant choking, which was a distressing symptom in the case, depended probably on the special affection of the mucous membrane covering the summits of the arytenoid cartilages; as, when the epiglottis is sound, ulceration in this particular situation seems the most frequent cause of that symptom.

Of course, in this case, the laryngoscope gave no aid in the treatment of the malady; and only enabled us to give with more confidence an opinion, at which, we should probably have arrived without its assistance. The hopeless view which we gave of her case to our patient, induced her to place herself in the hands of a practitioner of the homœopathic system of quackery, who held out hopes to which the patient clung almost to the hour of her death.

Tumours of the Larynx are now known to be far from uncommon; and since the introduction of the laryngoscope, several cases have been reported, but none of these illustrates more forcibly the great utility of the instrument, than the following, which I reported at length in the *Lancet*, of November 9th, 1861, and which was, I believe, the first case in which a polypus of the larynx was removed by any form of *écraseur*, with the aid of the laryngoscope. Recently, Dr. Gibb has reported cases in which he has successfully adopted a similar operative procedure to that which I employed; and from the claims he makes for his instrument, he appears to have overlooked the account of this case which I had previously published.

Case. R. P., aged 14, smith's workman, was first seen by me August 12th, 1861. *History.* When he was six or seven years old he was first perceived to become hoarse and rather short of breath; and for the last six years he had never been able to speak but in a whisper. About eighteen months since, he became incapable of doing any but the lightest jobs, in consequence of the distressed breathing induced by exertion. Six months ago, he was compelled to give up work altogether; and for the last three months he had been unable to move across the room or to make the slightest exertion without help. He was of a highly strumous family, and had cicatrices from old strumous ulceration about the neck. He had been frequently under medical treatment; and, apparently, all the medical men who had had him under their care had used remedies for chronic laryngitis, and had probably suspected phthisis laryngea. His countenance was anxious, pale, and bathed with perspiration; his lips livid; the pupils somewhat contracted; hands cold; respiration very laboured, all the accessory muscles being thrown into action, and each inspiration being accompanied by a loud laryngeal murmur; the least

draught of wind blowing on the face stopped the breathing, and caused the greatest distress. The pulse was very rapid and small. His whole appearance was such that, before going into the history of the case, I got my instruments ready in case of tracheotomy being at once required. A laryngoscopic examination, made without the least difficulty, revealed at once the cause of the dyspnœa. The epiglottis and upper part of the larynx were normal, with the exception of slight œdema of the aryteno-epiglottidian folds; but growing from the anterior wall of the larynx, immediately above the anterior attachment of the right vocal cord, was a polypoid growth, presenting an irregular mulberry surface, which, being of about the size of the tip of the little finger, and ten lines long, acted as a valve. At each inspiration, it was seen drawn down on to the rima glottidis, which it would completely close, were it not that the end of the growth was drawn slightly through the wide posterior part of the rima, so as to leave a small chink at the back through which air could enter. In expiration, the growth was thrown upwards, so that the exit of the air was not impeded. At the base of this, and occupying a similar position on the left side, was a small growth similar in character, and of about the size of a split-pea. The nature of the case being thus cleared up, and the friends of the patient stating that for about a week he had seemed in the same imminent danger as to-day, I decided to incur the risk of delay, and, if possible, to relieve my patient without tracheotomy. I accordingly wrote at once to Messrs. Weiss of London, a description of a pair of vulsellum-scissors, curved sufficiently to admit of their being used in the larynx, which seemed to me the most feasible instrument to remove the growth.

August 14th. The symptoms during the last ten days having been very urgent, I endeavoured to relieve them by passing a tube through the rima into the trachea. To my surprise, however, when the tube was introduced, respiration seemed impossible; and, being compelled to withdraw the tube at once to avert suffocation, I found that the end of the tumour had happened to catch in the fenestrum, and that a piece of about the size of a pea had been torn off, and, becoming fixed in the tube, had completely obstructed it. This unexpected result of the introduction of the tube not only afforded very considerable relief to the patient, but also proved the great friability of the tumour, and induced me to have an instrument made by which a wire loop might be made to encircle the growth, and, being tightened, to crush through its base. This laryngeal *écraseur* consisted simply of a strong silver tube like Gooch's double cannula, but longer, and curved at one end almost at right angles; the other extremity being furnished with two strong rings or loops; a piece of thin iron wire, such as is used for sutures, or, as I have since used it, a chain made of two such wires closely twisted together, is passed through one side of the tube and returned through the other, so as to leave a loop. One end of the wire is twisted into the eye at the end of the cannula, so as to fix it firmly, and to the other is attached a small cross-bar of wood. By pulling this end firmly, one has sufficient power to crush through and separate growths of a cellular nature, such as this proved to be.*

August 18th. The patient had seemed much better since the removal of the small portion of the tumour by the cannula. With the aid of the laryngoscope, I succeeded three times in catching the tumour in the *écraseur*, which I received from town this day; and each time I removed a portion of about the size of a pea, giving immediate relief to the patient, who, having for three months previously to the removal of the small portion of the tumour by the tube, been unable to walk across a room, was now, with assistance, able to walk some little way from the infirmary towards his own home.

August 19th. On calling to-day, I found my patient out walking a quarter of a mile from the house. Laryngoscopic examination showed that the larger growth was sliced off on a level with the lesser, leaving the whole of the posterior part of the rima free for respiration. I to-day failed altogether in seizing in the noose of my *écraseur* any part of the growth; the whole of the pendulous portion of the tumour being removed, and its wide base alone remaining.

August 24th. The patient was greatly improved in general health and strength, and respiring with ease.

For some time after this the treatment consisted in the internal administration of cod-liver oil, and the topical application at first of solid nitrate of silver, and afterwards of a strong solution of sulphate of copper; but the patient getting so well that he was able to work extra time—that is, from six in the morning until half past eight in the evening—I did not see much of him until he again applied to me in 1862, labouring under severe catarrh, and with some return of the laryngeal symptoms, which a laryngoscopic examination showed to depend upon a return of the growth, which was, however, this time much smaller, and was situated higher up, at the root of the epiglottis, just within reach of the finger. I again removed some portions with the *écraseur*, and the patient himself scraped some portion away with his finger; the difficulty in breathing was quite relieved, but the voice remained husky. From this time, there has been no necessity for treatment, and the patient met me the other day, and very exultingly told me that he "could *halloo* quite well"; certainly his breathing seems as good as can be desired, but his "*halloo*" would not yet, I think, be of much service at the cover side.

Nervous Affections of the Larynx constitute another class in which the laryngoscope is absolutely necessary for a correct diagnosis, and consequently for suitable treatment. The following case, of which I have but very short notes, illustrates the difficulties which may surround a diagnosis, and the power of the laryngoscope to clear them away.

Case. E. P., aged 40, wife of a farmer, was first seen at the Dispensary in July 1861. She was stout, of a pallid complexion, and had a history leading to a suspicion of a syphilitic origin of her symptoms. She complained now of rheumatic pains, especially in the left shoulder, of sponginess and tenderness of the gums, difficulty in diglutition, and respiration. The voice was nasal, and there was laryngeal wheezing in respiration, with a clanging cough. The symptoms and the history made it probable that there was some syphilitic inflammation or ulceration of the larynx; but a laryngoscopic examination showed the entire absence of any such malady, and the dependence of the symptoms upon some affection of the nervous system causing partial paralysis. The progress of the case confirmed this opinion. On August 13th, she was no better; complained of deafness, swimming in the head, and sickness. On September 23rd, she was completely deaf; had noises in the head; her voice was very nasal. She had great pain in the head, accompanied with giddiness; the sight of the right eye was failing, but was better. Her general health was

* I am particular in describing this instrument, as Dr. Gibb, in the number of the *Lancet* for May 9th, 1863, describes a laryngeal *écraseur* which he has had constructed by Messrs. Weiss; and although he expresses himself as not unmindful of the instruments used on the Continent, makes no allusion to the fact that I had contrived and used an instrument (made for me by Messrs. Weiss) which in principle exactly resembles, although I believe it is a less manageable instrument than his. This omission, no doubt, arose from Dr. Gibb's having overlooked or forgotten the case which I published in the *Lancet* of November 1861; and I therefore at once wrote a letter for insertion in the *Lancet*, calling attention to the fact of my having described a laryngeal *écraseur* in the pages of that journal eighteen months before Dr. Gibb described his. That this letter should have been placed among the notices to correspondents instead of with the correspondence of the *Lancet*, does not appear to me to show any anxiety on the part of the editor to allow the public to put in force the sentiment, *audi alteram partem*, which he affixes at the head of the division "Correspondence" in that journal.

improving. The treatment at this time consisted in the internal administration of iodide of potassium, and counterirritation to the temples and the head. Slow improvement took place; and as her residence was at a considerable distance from the Dispensary, she took her discharge, partially relieved, on March 29th, 1862.

In the form of nervous aphonia, commonly termed hysterical, in like manner we might frequently suspect some organic lesion; but we have in the larynx-speculum a ready means of satisfying ourselves of the true nature of the case. As to the local treatment which the laryngoscope enables us to apply for these nervous affections, I need merely refer to Dr. Morell Mackenzie's very interesting paper, read at the annual meeting of the Association, as showing the practicability of the application of galvanism; although I confess my belief that, in the great majority of the cases there related, the benefit was derived more from the powerful mental impression caused by the operation, than from any special effect of the galvanism upon the local nerves or muscles.

I might readily multiply examples, from my own practice, of the utility of the laryngoscope in dealing with real or supposed affections of the larynx; but I think that already sufficient must have been said to excite a desire on the part of all practitioners, anxious to keep pace with the progress which medical science is making, to acquire a practical acquaintance with the simple instrument which yields such great results, and I shall, therefore, merely add one case, illustrative of the benefit likely to be derived from the practice of rhinoscopy. As I have already stated in a former paper, the examination of the nares presents greater difficulties to be overcome than does that of the larynx; in the subjoined case, however, I had but one interview with the patient, and yet was able to get a view of the parts. I have been baffled in several cases, in attempts to make a rhinoscopic examination, where, I believe, I might now succeed, owing to a little addition I have made to my globe condenser, whereby a patient is enabled during examination, to watch in a mirror the movements of the throat, and to keep them under control.

Ozæna. Necrosis of the Vomer. Case. Miss G., aged 35, confectioner, consulted me in October 1862. She was of a strumous constitution, and had never been very strong, but for the last few years had been greatly distressed by the extremely disagreeable odour of her breath; perceived, of course, more by others than by herself. She had also considerable discharge from the posterior nares, which she swallowed or hawked up. This was usually muco-purulent, occasionally bloody. Rhinoscopic examination showed the surrounding parts healthy, but the posterior edge of the vomer bare and white; and a discharge, principally mucous, clinging to the spongy bones.

The treatment recommended, was the internal administration of cod-liver oil; and the use two or three times daily of a lotion, consisting of Sir William Burnett's solution, diluted with about one hundred and forty parts of tepid water, to be sniffed up through the nostrils and spat out of the mouth.

I have not seen the patient since, but she has sent messages to me, expressing her great gratitude at being relieved from a complaint of so disagreeable a character. I may state that, I have adopted the same treatment in several other cases where fœtidity of the breath had been most abominable, and after trying other disinfectant and astringent lotions, I have invariably found Sir William Burnett's solution, greatly diluted, the most efficient.

Without occupying space by describing the cases, I may state that I have been able to detect syphilitic ulceration of the mucous membrane covering the spongy bones, incipient polypoid growth, and other affections of the pharynx and nares. In all these maladies, and also in those affections of the hearing dependent on abnormal conditions of the Eustachian tubes, the rhinoscope will, I am convinced, yield the practitioner valuable information.

Before concluding these papers, I wish to add, as an appendix to Part II, a description of an addition which I have lately made to my globe-condenser and stand; and which, I feel confident, renders this by far the most convenient illuminating instrument, not only for examining the larynx of a patient, but also for observing and demonstrating to others one's own larynx.

A small plane mirror, three inches and a half long by two inches and a half wide, is attached, by a stiffly working hinge, to a small horizontal arm four inches long; at the opposite end, this arm is attached by a sliding collar to the right hand pillar of the stand, a thumb-screw being adapted to fix it at whatever height we please. The small mirror must be raised or depressed according to the height at which we place the globe; its position when we are using the instrument should be immediately below and partly in front of the bottom of the globe, and its face should be inclined upwards at a slight angle, so that the person under observation casting his eyes down can see the reflection of the fauces when his mouth is open. By this arrangement, the patient himself can, if it be thought desirable that he should do so, see his own larynx, at the same time that the practitioner observes it in accordance with the rules laid down in Part IV, section B, and at least two other individuals, can, without crowding, by looking over the patient's shoulder into this mirror, see the parts equally clearly with the mirror, while another person, looking from before, his head being on the opposite side of the globe to that of the operator, can see directly into the laryngoscope. Thus, by using the mode of illumination, which, on other grounds, is so far superior to that by any of the reflectors, we are able, not only to get a view of the larynx ourselves, but to demonstrate it, at the same time, to the person under observation and to three other individuals, or, with a little crowding, to many more. Again, the apparatus so constructed is a more perfect and more convenient form for observing and demonstrating one's own larynx than that of Czermak, Moura-Bourouillou, or any other of the special autolaryngoscopic apparatus with which I am acquainted. The operator, seating himself in the position of the patient, clearly sees his fauces with the laryngoscope, all brightly illuminated, reflected in the mirror, and as many persons as can crowd their heads round his so as to look over his shoulder, may get the same view; while others, again, can look straight into the laryngoscope from the front. I would, therefore, recant the advice given at the conclusion of my second paper to those who wish to practise autolaryngoscopy, as to the purchase of Czermak's apparatus; my globe condenser, as now constructed, costing less, being more convenient, and answering, also, as the illuminating apparatus for the observation of others. The stand which I use myself was constructed for me in the country; but as I have several times had inquiries made of me as to where such an apparatus is to be procured, I have given the model to Mr. Matthews of Portugal Street.

I have now carried out the plan which I laid down for these papers in my introductory remarks; and although, from the difficulty of finding time for writing when busily engaged in other duties, I have allowed so long an interval of time to elapse between the appearance of the various parts, that they may give the impression of being detached and unconnected papers, they will, I think, when collected, be found to constitute a complete manual of the art of laryngoscopy. I have avoided as much as possible all superfluous or collateral matter, adhering strictly to what is implied under the heading, "The Laryngoscope and its Clinical Application".

In conclusion, I may state my hope that, as I was one of the few who first worked with the instrument in this

country, I may, by means of our widely circulating JOURNAL, have contributed something towards placing the laryngoscope in the hands of the bulk of our profession.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. SANKEY, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page* 470.]

THE last case narrated was one of melancholia connected with disorder of the catamenia. The outbreak was in that case somewhat sudden and violent. The next case is similar. Griesinger, in his work on *Mental Diseases*, has a section on Melancholia attended with Excitement or Agitation; and he further divides the section into one in which the patients are violent towards external things or persons, and a second in which the violence is directed against themselves. These cases are attended with depression; yet in many instances they have been classed under Manias, on account of the mental agitation and the violence.

CASE V. A. F., female, was admitted in June. She was 41 years of age; single; a domestic servant. She had lived in service, holding excellent situations, and retaining them for long periods, since the age of 17 or 18. On admission, the disease was described to be of about one month's duration. She was out of place at the time, on account of a housemaid's knee; and was residing with her brother. The knee was going on favourably; but she had gradually become more and more depressed; said "she was sure she should come to want". She complained of a sense of pressure in the head; she wrung her hands, and showed other indications of mental anguish. On one occasion, she went into her brother's bedroom, and took up his razor; but it was immediately taken from her. On a subsequent day, she went up stairs and tied her garter tightly round her neck. Her sister-in-law was below, and heard her fall heavily on the floor, and reached her in time to cut the ligature before life was extinct. After this, or about this time, the symptoms became somewhat changed. She sang almost constantly, day and night; and never slept. She endeavoured to injure herself on a third occasion by beating herself on the head with a poker. She had throughout eaten very badly. The catamenia were entirely suppressed.

She was described, on admission, to be tall, with dark hair, of gaunt figure, spare habit, and pale. Her general health otherwise was not visibly affected. She complained of constipation. She was quiet and tranquil, and submitted herself to the rules of the asylum without complaint. Her manner was tranquil. She had an expression of melancholy. She said she dreaded poverty, and was somewhat reserved.

(From memory, and noted about five months subsequently to the occurrence.) She continued to go on quietly and orderly; was rather retiring, and appeared to shrink from observation, and was indisposed to employ herself. My attention was directed one day to the patient by one of the female officers of the establishment, as a patient who appeared to have very little the matter with her, and one who ought to be occupying herself usefully. This conversation was overheard by the patient, and she was visibly affected by it. For several days afterwards she was more restless and fretful, and more dull. This happened about the middle of August, or two months after A. F.'s admission.

September 18th (or four months after admission). She made another attempt on her life, by tying a handkerchief around her neck, and stuffing another into her pharynx; the attempt was again nearly successful.

October 3rd. The following note was entered. She was depressed, but occupied herself, and had become industrious. She said that her bowels were much confined, and that they never acted without medicine. She had taken frequent aperients. She was thin. She said her appetite was good, but her nurse reported that she ate indifferently. The tongue was moist and clean. She had not menstruated. She was ordered to have aloes and mastich pills daily, and fish diet.

October 21st (five months after admission). She continued in an improved condition; was tolerably cheerful, but was depressed at intervals. The bowels acted regularly, by taking the pills. She had not menstruated.

November 6th (six months after admission). She continued to improve; took the pills; and the bowels acted daily. She was not so frequently depressed. She was employed in the bakehouse, making bread for the establishment, and worked well. She had had for some days mutton chop daily, in lieu of fish.

December. She was visited again by her relatives, who requested that she might be discharged. She had become quite cheerful, and had not shown a suicidal propensity for three months. She had worked freely among knives, etc.; and had been thoroughly trusted, and appeared trustworthy. Her mother, a very aged person, was desirous that the patient should be allowed to reside with her; and the brothers agreed to find the means. The patient was much delighted with this arrangement. The friends voluntarily undertook that the patient should never be left alone. She quitted the asylum in their charge on December 19th.

January 3rd. From a letter from the relatives, the following facts were learnt. She continued quite well up to the above date. On the morning of this day, she complained of headache; and her mother, with whom she slept, advised her to take her breakfast in bed. The old woman went down stairs to make the tea; and, on bringing the breakfast up, found the patient hanging by the neck, quite dead. She had hung herself by the bar of the bedstead.

All the suicidal attempts of this patient were made suddenly. Sometimes this kind of melancholy is attended with sudden attempts directed against others. It constitutes the homicidal insanity of authors. It is, fortunately, a description of case which is rare. My experience extends over about 2400 cases. I have not had a genuine instance in my own practice with homicidal propensity.

In the cases already related, there have been present morbid apprehensions and anticipations of evil, yet scarcely strongly enough marked to amount to distinct possession of the mind—to a belief, which is necessary to constitute a true delusion. In the present day, every one is aware that delusion is by no means a constant symptom in insanity. There may exist illusions simply and alone; or both illusion and delusion may be present together. If a digression be permissible, it is here the place to mention that although authors, at least English authors, describe three kinds of symptoms—viz., illusions, delusions, and hallucinations—there appears really no necessity for such complication; and I believe that all the phenomena may be brought under two divisions, and that the three have arisen from some confusion in terms. Esquirol was one of the earliest writers to point out the existence of the two classes; and, as he wrote in French, he used the two French terms *illusion* and *hallucination*. There is no such French word as *delusion*: the English, in fact, of the French word *illusion* is *delusion;* and the English of *hallucination* is *illusion*. This difference in the prefixes between the two languages is very common, as in *reclusion* for *seclusion*, *contraint* for *restraint*, etc.; and hence has arisen the confusion.

If a patient hear a voice proceeding up the wall, con-

stantly addressing him, it is a false perception; and it is, therefore, an illusion or hallucination, which are synonymous terms. If the patient believe that he is a king, it is a delusion; and if the former patient believed that the voice from the wall proceeded from people actually in the wall—that is, if he believed there were people imprisoned there—it would be a delusion. The two conditions are, in fact, distinct, and yet in some cases approach or merge into one another; but the two terms appear ample to include all the phenomena which are met with. In brief, the one is a false perception, and the other a false belief. In the next case, the existence of these phenomena in various forms was manifested. The case is narrated in a very condensed form.

Case vi. A. G., married, aged 56, had been six weeks insane on admission. *Predisposing Cause.* Her father committed suicide. A brother was at present an inmate of an asylum. The *exciting cause* was reverse of circumstances, and poverty.

The attack commenced by a strangeness of conduct and depression. She said "they were going to hang her, and to take her to prison." She had numerous other apprehensions of being injured in various ways. She was always "worreting". A few days prior to admission, she secreted a razor about her dress; became rather violent and excited; and was taken to the workhouse.

The medical certificate states: "She says that a large clot came away from her five months ago. She feels ill all over; says her womb is affected; and frets that she did not tell the doctor so five months ago. Has attempted to cut her throat, and her husband's also. This statement is made by her husband; and the razor was taken from her by her son."

On admission, she was thin and feeble, and had several slight bruises about the chest, and a mark across the throat. Two days afterwards, or on the forty-fourth day, she was in a constant state of action, and in great mental distress; was rubbing her knees with an agitated, restless, rapid movement; fidgeting in her chair; and expressing a constant apprehension of being about to be burnt alive. She said, "Surely they might kill her without that." She could see the men burning people. She was thirsty; pulse 120. She took her food well, and slept pretty well on the previous night.

45th Day. She had an anxious expression; was still very restless; was under a constant dread of being burnt. She would not show her tongue. She took her food well. An ordinary cathartic pill and draught were prescribed.

50th-55th Day. There was slight improvement in her mental state. She was still apprehensive of imaginary dangers, and regretting various trifling things in her past conduct. The tongue was red; the bowels confined; appetite good. She was ordered to have carbonate of magnesia mixture three times a day.

63rd Day. She fretted less, and was looking better. She took food well. The bowels acted, but not daily.

94th Day. She had begun to occupy herself. She had gradually ceased her restlessness and agitation, and had lost the feeling that she was going to be burnt. The bowels continued to be confined. An aloes and mastich pill was ordered to be taken an hour before dinner.

120th Day. She had a visit from the husband, who reported that she was much improved, and had been conversing quite rationally. Her spirits were good; but he thought he perceived some difference in her manner from the natural.

150th Day. She was occasionally a little dull. She, however, alluded to her former fears, and spoke of her illness as a family complaint.

She was discharged on trial on the 164th day; and finally on the 192nd day, recovered.

The note scarcely expresses the strength nor the permanence of the belief that she was about to be tortured, which amounted to a fixed delusion; nor the reality with which she imagined she saw the preparations making for her injury, both of which were frequently repeated, and their reality strenuously asserted for some time. The gradual growth of a notion (at first springing from an uncomfortable condition of mind, as when it is querulous, when it finds relief in grumbling or complaining) into a fixed illusion appears to be merely a process of maturation, or a transition. A state of feeling in which it is a relief to grumble is the first stage, when every trivial circumstance is converted into a source of complaint. The mind is then led to look on the black side of affairs; next, perhaps, to assert an habitual or continual flow of ill luck; to imagine all sorts of new disasters; to invent all kinds of uncomfortable catastrophes; and at last to begin to believe in their actual occurrence or presence. These morbid apprehensions originate from within; they do not arise in a logical series of mental reasoning, but are of centric origin—excited by a morbid action, probably, and thus are "the very coinage of the brain".

The reality of these convictions to the patient is very great. Another melancholic at present under treatment imagines she hears the voices of persons confined in dungeons below, and, it would seem, at some distance off. The voices appear to vary at different times; sometimes it is the voice of a friend, sometimes of a child, the clergyman of her parish, etc. "What a shocking thing it is," she says, appealing to me, "that all those dear people should be imprisoned down there. They have wives and children. Do, for heaven's sake, come and release them." In asking her to indicate the spot where they are, and giving her full scope to follow the sound she thinks she hears, she leads one through ward after ward, down one staircase after another, stopping frequently and anxiously to trace the sound; often stooping down to any small aperture, as that of a ventilator; wanting every door, every cupboard, to be opened; still going lower down, till she goes on her knees to listen at the cellar windows, and crying out frequently, "Mr. A., are you there?" and listening anxiously for a reply, and entreating our silence in order that she may catch the sound, but which is continually retreating from her; and then again rising and saying, "It's gone further off;" and repeating this as long as she would be allowed. The mental pain and anguish in such a case appear very great.

When a true delusion exists, the intellect proper is clearly involved. In few cases only, in the first stage, is there an impaired condition of the understanding. There may be slight alteration in memory, in judgment, and powers of reasoning; but the main symptoms are connected with the feelings and instincts, or the moral faculties, as they are called. The progress of the phenomena appears first to be towards the perception, as denoted by illusion or hallucination; and then to the intellect proper, giving rise to actual delusion. In other cases, the progress is in another direction; commencing in the moral faculties, it gradually involves the motor functions. The motility and volition are affected; cases illustrative of which will form the subject of the next paper.

The Medical Profession in Virginia. The following is extracted from a letter received from a physician in Norfolk, Virginia, by a Confederate officer now in London. "I am now a gentleman of elegant leisure, not being allowed to practise my profession upon innocent women and children without swearing true allegiance to the Yankee Government. While you are abroad, do go to the Feejee and Sandwich Islands, and let me know if there is anything like this there." Our correspondent adds: "The people are dying in numbers from want of medical attendance."

Transactions of Branches.

MIDLAND BRANCH.

CASE OF FIBROUS TUMOUR OF THE ANTRUM, IN WHICH THE JAW WAS EXCISED.

By S. W. Fearn, F.R.C.S.E., Surgeon to the Derbyshire General Infirmary.

[*Read at Derby, July 2nd*, 1863.]

The notes of the following case are transcribed from my hospital case-book almost as they were written; and as they were not at the time intended either for publication, or to be made use of as I am now using them, I fear you will think them meagre, and hardly of sufficient interest to warrant me in taking up the time of the meeting by their perusal. They relate, however, to a disease of rather uncommon occurrence, and to an operation but rarely witnessed in the provinces; and as I shall, moreover, exhibit to you the morbid growth, a preparation of which is on the table, and bring before you the patient for your examination, I hope to be able, for a few brief moments, to secure your attention.

Mary Rogers, aged 15, was admitted into the Derby Infirmary on July 7th, 1862, presenting the following appearances. There was a tumour occupying the site of the right antrum. It had been growing about two years, and did not seem to have originated in any injury. It was externally ovoid, and produced a marked bulging of the cheek. Several of the molar teeth on the same side had been extracted; and within the mouth there was a broad ulcerated surface about two inches in diameter, the inner margin of which approached the middle line of the palate, and it extended backwards to the pterygoid processes of the sphenoid bone. This ulcerated surface covered the mass of the morbid growth within the mouth. Her general health was feeble, and she suffered at times a good deal of pain in the swelling.

On July 22nd, in the presence of a considerable number of medical men, I operated upon her in the following manner. An incision was first made through the cheek, from the middle of the malar bone to the angle of the mouth. The flap was dissected upwards to the margin of the orbit, and as far forwards as to open thoroughly the nasal cavity. The malar bone was next cut through with strong forceps into the spheno-maxillary fissure; the muscles were carefully detached from the floor of the orbit; the ascending ramus of the upper maxilla was divided into the orbit; and after cutting with the forceps through the alveolus and hard palate, the whole mass was wrenched downwards with the lion-forceps, and, with a little careful dissection, detached. The jaw was divided into the palate through the socket of the canine tooth, which had been previously extracted. There was very free bleeding; but only one vessel required ligature. The parts were brought together with interrupted wire sutures and strips of plaster; the cheek having previously been supported with pledgets of lint. The patient was unfortunately conscious during the greater part of the operation, the effect of the chloroform having very soon gone off; and it was impossible to repeat it on account of the danger of suffocation from the hæmorrhage. She was seated in a chair during the operation.

In the evening, I found her pretty comfortable. There had been a good deal of oozing, and the pulse was somewhat quickened. She was ordered a third of a grain of morphia and twenty drops of spirits of nitre.

July 23rd. She had had a good night, and had slept from the opiate. She was feverish; pulse 120; bowels not open yesterday or this morning. She was ordered to have an injection of gruel and castor oil; and tea or arrow-root for food; and the cheek to be kept wet with cold water.

In the evening, the bowels had acted twice freely. Pulse 116. She was ordered to repeat the morphia. The case altogether was very satisfactory.

July 24th. She had had some sleep in the night; and was rather feverish. Pulse 92. Her bowels were not open. She had had twitchings of the limbs when raised up, and complained of pain in the head. She was ordered to have a saline fever medicine every four hours, with an eighth of a grain of morphia in each dose; and to repeat the injection.

July 25th. The twitchings of the limbs continued. There was decided tetanic threatening. The injection had acted only slightly on the previous day. She was unable to take the medicine, on account of the smarting it occasioned. She was ordered to have an injection of castor oil and turpentine (an ounce of each) with a pint of gruel, and to take a sixth of a grain of morphia every four hours.

In the evening, she was rather better. Her bowels had been open once, not very freely.

July 26th. The wound was dressed. It had united throughout by the first intention. The patient was rather flushed; pulse 96. The discharge from the mouth was offensive. The bowels were confined. She was directed to repeat the castor oil and turpentine injection; to continue the morphia; to use a chlorinated lotion to the mouth occasionally; and to have mutton, tea, or other nourishment *ad libitum*. There was much less twitching.

July 27th. From this date, recovery went on rapidly. The sutures were removed, and union found to be perfect. The bowels required the daily use of the injection. The twitching had nearly subsided by the 28th; and on the 31st, nine days after the operation, she was allowed to get up.

Aug. 2nd. She was ordered a mixture containing quinine and small doses of morphia; and on the 24th, was discharged cured.

I shall not think it necessary to trouble you with many remarks on the foregoing case. As I said at the commencement, we but seldom see jaw cases in our provincial hospitals. Four years ago, when the Branch met in this room, I had the pleasure of bringing before you a similar case in which I had operated; but with these exceptions, I have known but of one instance during nearly forty years in which this operation has been attempted. This occurred in the practice of my predecessor, Mr. Douglas Fox; and although, from the malignant nature of the disease, his efforts were not crowned with success, I well remember the skill and boldness he evinced in the performance of one of the most formidable operations I have ever witnessed. It is now an admitted surgical axiom, that all attempts to remove malignant growths from the bony structures of the face are worse than useless.

The case of my patient was to me very interesting, from the completeness of the recovery and the rapidity with which it took place. I have often observed how quickly wounds of the face heal, especially in young subjects; and, indeed, in my previous case to which I have alluded, though the patient was forty-four years of age, she walked from Spondon, a distance of four miles, five weeks after the removal of the jaw.

When the disease is confined to the antrum, there is one point in the operation which I think of importance I mean the preservation of the incisor teeth on the affected side. In my last case, I made the cut into the nostril and palate through the alveolus of the canine tooth, which kept me quite clear of the antrum and left a better support for the upper lip. So, also, I think it desirable, when the disease is similarly limited, to avoid, as much as possible, the malar bone.

With regard to the external incision, I think, in all

ordinary cases, the single incision, from the os malæ to the angle of the mouth, amply sufficient to give room for the after steps of the operation; though, in my first case, I made, in addition, the usual incision by the side of the nose and through the centre of the upper lip. Mr. Fergusson, I believe, has accomplished the operation, making only an incision through the centre of the lip; but in the hands of most surgeons, I apprehend this would add considerably to the difficulty.

There is only one other point to which I will advert. We are told in works on operative surgery, before clearing the floor of the orbit, to separate from its attachments the infra-orbital nerve, so as to avoid its division; but as it ordinarily runs through a bony channel, it will be found by no means easy to do this. In both my patients, the nerve was divided; and though for a time there remained a little numbness, no other evil has resulted.

The tumour, as you will see from the preparation, entirely fills up the cavity of the antrum, and, besides the bulging it has occasioned in the palate, has begun to encroach on the orbital cavity and the pterygo-maxillary and spheno-maxillary fissures. It is of the fibro-cartilaginous kind.

[The patient was brought into the room, and examined by the members; and Mr. Fearn afterwards introduced a man upon whom he had, three years before, performed the operation of excision of the os calcis. The whole of the bone, with the exception of the articulating attachment to the astragalus, had been removed; and the recovery was so complete, that the patient has since walked as much as twenty miles in a day. Out of three cases in which Mr. Fearn has excised the os calcis, two have been successful.]

British Medical Journal.

SATURDAY, NOVEMBER 14TH, 1863.

PROFESSOR CHRISTISON AND HIS CRITICS.

DR. CHRISTISON has run his head into a hornet's nest. He has ventured to doubt the fallibility of Registrar-General's statistics. He has not been able to connect typhoid fever with bad drains and foul sewers. He has ventured to assert that epidemics of typhus fever are connected with low wages, and short commons, and bad ventilation; and that he cannot account otherwise for their origin. He has suggested that ague may possibly have some other cause than marsh malaria. He has recommended master-tradesmen, and other authorities, to work the sedentary lower class population fewer hours, and give them more air and exercise. And he has thrown out a few very philosophic and suggestive hints on other points of public health. In doing this, he has, it appears, trampled on the corns of some of our standard sanitarians, who have laid down laws respecting the origin, and progress, and consequences of certain diseases, founded on the infallible (?) method, numerical or statistical. There is really something quite amusing in the manner in which Dr. Christison has been overwhelmed by our two weekly cotemporaries, the *Medical Times and Gazette* and the *Lancet*. One week these journals belauded his address to the skies; and on the following week condemned it to ruin. The praise was evidently the effusion of generous spirits; the attacks we may designate fairly enough by the term of a deliberate after-thought. To prevent any mistake, we will just give the very words of these medical critics.

The *Medical Times and Gazette*, for example, in two consecutive weeks, turns out the two following exactly opposite opinions of Dr. Christison's address. We hope that on another week the journal will tell which is its real opinion.

Med. Times and Gazette, October 24th, 1863.

"Dr. Christison, by his recent address, has added another to the many services which the medical world owes him. He has struck a just and decided blow at the dogmatism which has recently prevailed in respect of some febrile diseases, and has entered a judicious protest against that over-narrowness of view which is no uncommon accompaniment of advancing pathological research. It is the tendency of all observers, in the presence of new, striking, and precise facts, to contemplate them too exclusively, and to move in too small a sphere, from which vaguer and less understood, but not less real influences, are unconsciously shut out. But theories precise and restricted are as great a hindrance to science as laxity and diffuseness; and the pedantic adherent of cramped systems is perhaps a worse practitioner than one who occasionally indulges in unrestrained speculation."

Med. Times and Gazette, October 31st, 1863.

"Dr. Christison has taken our breath away, and, now that we are beginning to recover from the shock, we are disposed to look round to the bystanders, and ask if his blow was a fair one. For a long time past we have been striving with might and main to inculcate and enforce the doctrine that dirt in all forms—dirty air, dirty houses, dirty food, dirty water, dirty clothing, and dirty skins—were among the most influential of the causes which promote the spread and fatality of disease. And now we are told almost in so many words that we might have saved ourselves all this trouble; for if Dr. Christison be right, we have most assuredly been labouring under a delusion, which has, moreover, cost the metropolis the expenditure of a kingdom's income."

The *Lancet* has followed suit, as will be seen from the following opposites contained in its pages:

Lancet, Oct. 24th, 1863.

"The address of Dr. Christison on Public Health is peculiarly worthy of careful perusal. Unlike most addresses of the kind delivered before a lay audience, it deals with questions in State Medicine not yet decided, and expresses opinions adverse in many respects to those which are commonly entertained. The ability, experience, and authority with which the orator delivers his views, give them great importance in

Lancet, Nov. 7th, 1863.

"The importance of the views propounded by the President of the Sanitary Section of the Social Science Congress in the address which we have published in our two last impressions, is very great; we could wish that they were of equal soundness..... If Dr. Christison was wishful to teach amateur sanitarians a lesson of humility, his address might be regarded as a masterly example of irony. .... The reader who regards

the eyes of the nation; and for this reason, as for *the intrinsic scientific value of the conclusions** which Dr. Christison now draws from a life-time of observation, we commend to the thoughtful consideration of our readers the discourse, which we publish in full. It will be observed that Dr. Christison admits the extreme, nay, vital importance of the removal of all forms of sewage, and the abolition of overcrowding; but he contends that these are not agents of primary importance or of immediate action in exciting fever."

it as a grave exposition of matured opinions is plunged into a maze of inconsistencies and contradictions; and physic must, we fear, perforce, despite its just reverence of Dr. Christison, repudiate his opinions on this subject, and decline to accept his statements of the present position and prospects of sanitary science... Dr. Christison's positions will remind many of the civilian disputants in the celebrated discussion on the nose of Slawkenbergius, whose objections, if anything, proved that the subject in debate was neither true nor false."

Thus, as our readers will see, the *Lancet* and *Medical Times and Gazette*, speaking in the first instance, we may suppose, the natural sentiments excited in their literary and scientific breasts by a perusal of the professor's address, laud his eloquence and philosophy to the seventh heaven of praises. But, alas! for human praise and human wit, scarcely was the pæan sung, than the antistrophe had to be croaked forth, after the fashion of an old Greek chorus. Too late for their own consistency, these sanguine editors learnt, or were taught, that the doctrines, and views, and opinions of the Edinburgh professor, were not the doctrines, and the views, and the opinions of the A 1 London division of our sanitary police. They have, however, it must be confessed, done their best to repair the original error committed by them. And we will certainly do them the credit of saying that they have worn the white sheet and made their public *confiteor* in a most creditable manner. They have cast from them their idol of a week, and trod him under foot most unsparingly. May the sacrifice not be in vain! Let it be a lesson to them in future never to praise a great man without sufficient knowledge or authority.

Now, as we were the first to lay before the profession a summary of the masterly and eloquent address of Professor Christison, and have had no occasion to reverse our estimate of it, perhaps we may venture to make a few remarks on the extraordinary literary fiasco exhibited as above to the profession. Moreover, we had the pleasure of hearing the professor deliver his address, and have read it carefully since; and we will venture to say, on the strength of such knowledge of the matter, that never has man been more thoroughly, and perversely, and stupidly misinterpreted, than he has by our clever cotemporaries.

No doubt the worthy professor was well aware that in his address he was touching upon irritable soil; but he will hardly have been prepared for this lesson from the original programmes first issued by the *Medical Times and Gazette* and *Lancet* in his favour.

Let us follow out his critics. In the first place, the Statisticians are down upon him, and why? Because he said, and proved, that the Registrar-General's returns of deaths are, in many particulars, very faulty, and, therefore, very misleading. It is true, he only stated what we all know to be a fact; but still he made the statement, and must bear the consequences; and if such be the case, what is more certain than that "the statistical method of settling them may be quite as open to fallacy as any other?" What is more certain than that data drawn from false statistics are "more fallacious than any other?" What Dr. Christison really and simply said and suggested was this: your statistics are, in many particulars, manifestly fallacious; try and reform your method of taking them. This was his first crime. Again, he has been jeered at because he stated there were grounds for believing that agues and marshes were not of necessity joined together as effects and causes. Now, what the Professor really did, was to throw out, under this head, a most philosophic suggestion. There are grounds, and good grounds, he said, for believing that agues disappeared from some parts of Scotland before the country underwent draining. But let our readers refer back to his account of the matter. And then, said he, if this be so—if there really be other causes in operation effective of the removal of ague, of which we have not yet taken account—let us try and find them out, and then give our colonies, etc., the benefit of the advice. But it is thrown in his teeth, that Professor Christison said, draining is of no avail in stopping ague!

Then, again, the Professor is attacked because he does not hold orthodox—*i.e.*, some other people's—views respecting the origin of typhus and typhoid fevers. And not only this; his views, and even words, are misinterpreted. For example, the *Lancet* says:

"When he deprecates the idea that it may be generated by 'foul air', he confounds different forms of foul air under a common designation."

Now, Dr. Christison does nothing of the kind. His words are:

"I do not mean to deny that foul air of some kinds may sometimes cause typhus. But there must be better proofs than now exist before this can be admitted as the constant or even general fact."

The truth is, that Dr. Christison, instead of raising doubts, and difficulties, and scepticism, as he is accused of, teaches conclusions of the most practical value. He wants to get medicine out of the old groove of error. He says:—

"The great lesson to be learnt from my investigations into the history of the causes of typhus, etc., is this:

* The italics are our own. EDITOR.

That typhus never can prevail in the epidemic form in face of employment for the working classes and ventilation of their dwellings."

Now, we will venture to say, that these words are golden words—though they may be called commonplace and "not practical" by his critics—when spoken to the country at this time. Dr. Christison said no single word in disparagement of draining, etc., let it be remembered; but what he did say was this: Do not you municipal authorities and great sewerage men think you will have done all when you have laid down perfect drains. Drains are good, and good drains absolutely necessary; but you seem to think that drains are everything. Now, I, Professor Christison, who have had half a century of experience of Edinburgh fevers, tell you this, as the wind-up of my experience on the subject; that typhus fever will not prevail in an epidemic form, so long as your people are well fed and their dwellings well ventilated; and, *per contra*, despite your good drainage, that typhus will prevail if your people are ill fed and their dwellings ill ventilated. Now, why is Professor Christison to be attacked right and left, reasonably and unreasonably, simply because he ventures to express his own opinion, and to teach and to enforce upon authorities such an important lesson as this, the result of his great experience? The only answer which we can suggest is, that he has committed the crime of venturing to doubt the complete overwhelming efficacy of good drainage as a preservative against fever.

Of course, also, Dr. Christison's remarks on enteric fever do not please his critics either. He gives his assent to the theory of the origin of this fever, which—whether true or otherwise—has been so acutely and philosophically illustrated by Dr. Wm. Budd; viz., that it may be traced to some specific source; to some particular and essential ferment—just as admittedly specific diseases, small-pox, etc., are traceable. But he admits, what his critics do not do him the justice to state, that "foul air favours its invasion."

"We do well" (he adds) "to encourage better drains, more and better water-closets, and better ventilation of dwellings, still we must not count upon thus extirpating enteric fever."

Now, we should like to ask these fierce critics of his this question—Are you ready to assert, that enteric fever would be utterly extirpated if drainage was absolutely perfect; that is, if no foul air could ever escape from drains? But if not, in what particular, then, do you practically—*i.e.*, as regards the preventive measures to be taken against the occurrence of the fever—differ from the Professor?

Again: his critics tell us that the advice he gives concerning tubercular diseases is "not a whit more satisfactory or practical." Now, truly, these gentlemen must be positively blinded with mental emotion. That our two weekly cotemporaries—the *Medical Times and Gazette* and the *Lancet*—should on two consecutive weeks, as we have shown, call the professor's address first of all most white, and then most black, seems curious enough; but boldly to state that Dr. Christison's remarks on the head of tubercular diseases were not "practical" was a feat left for the *Lancet* alone. Our readers shall judge. After a most careful analysis of the tale told by the Registrar-General's mortuary returns, Dr. Christison recorded, or rather told a large body of the assembled wealth and intelligence of Scotland, what seemed to him the right cure for the deplorable loss of life from tubercular diseases, as shown by those returns. And there is nothing "practical" in his suggestions! We have the word of the *Lancet* for it! Let us see.

"The discovery of the necessary measures," he says, "for the abatement of the ravages of tubercular diseases, is a duty which it peculiarly becomes this Association to press upon the Government of the country, and also upon the great, the wealthy, and especially those whose business of life it is to amass wealth through the labour of the working classes, and whose requirements have occasioned the concentration of the people in overgrown towns, with all its concomitant evils."

He then goes on to say that his investigations drive him to the conclusion that, as a general rule, "defective exercise and exclusion from the open air are the chief causes of tubercular diseases in large towns;" and he calls and urges upon the wealthy and the powerful the duty which devolves upon them of making systematic provision for these wants, costly though such provision may be in large cities. Moreover, he boldly calls upon employers to yield up to the working classes "a proportion daily of that time which is now too entirely demanded of them for the toils of their craft, etc." Such like lessons, read to the intellect and wealth of Scotland, are, the *Lancet* assures us, "neither satisfactory nor practical."

We have, however, said enough to show the character of the criticisms which have been let thus prominently loose upon what we shall still venture to call a most able, masterly, philosophic, and practical address. And of its critics we will only further remark, that we trust, as they advance in wisdom, they will enlarge their sphere of critical considerations, so as to be able to embrace and fairly estimate the value of conclusions and opinions which do not happen to coincide with the conclusions and opinions of their own private and individual experience; and, above all, that they will curb that ordinary result of anger which brings men, through its blinding influence, to criticise with passion, and, of course, to criticise unjustly. Truly we regret that they have not been equal to reach to the height of the professor's argument.

FATAL CHLOROFORM.

Some of our readers may have been struck by the number of deaths which have occurred in London through the administration of chloroform for surgical purposes during the last two or three months. Six are recorded. There is really something extremely deplorable in these frequently recurring calamities; and we cannot help thinking, from the very fact of their frequency, that there must be some degree of blame attaching to the administration of the narcotic instrument. We do not hear, in any other city or country, of such wholesale (if we may use the term) loss of life from the inhalation of chloroform. We refer to the subject for the purpose of asking whether all that due care and solemn preparation, which the gravity of the affair actually requires at our hands, are made and practised in the administration of chloroform. The number and the constant repetition of successful administrations of chloroform are, we fear, apt to engender in the surgeon's mind a certain degree of confidence and consequent carelessness concerning the use of chloroform. We cannot but suggest that surgeons in general are too apt to relieve their own shoulders of the responsibility attaching to the giving of chloroform; and this, too, without making proper provision for its administration by capable and trustworthy hands. What do we find is the preparation made as regards the management of this important affair? Are there attached to all our hospitals proved and experienced medical men, told off for the express duty? Certainly not. The business is allowed to fall, with few exceptions, into the hands of almost the first comer, as if it were really a matter of very secondary significance, instead of being, as it is in truth, a most serious operation—of far more danger and importance often than the actual surgical manœuvre itself which the patient is about to undergo. We have heard, indeed, even of the operator himself administering the chloroform in private practice! We must confess that we think surgeons are to blame somewhat in this matter for not insisting that the chloroform shall be administered only and solely by those gentlemen who have given a special attention to the subject, who have been selected for the purpose for their special knowledge of it, and who assume the whole responsibility of giving it.

We believe, in truth, that the actual number of deaths which occur is really only a very partial indicator of the number of cases in which the chloroform is improperly administered. Every one's experience must have brought him acquainted with, we might say numerous, instances in which the patient was "almost gone", was "never expected to come round"; and where, in fact, the patient was recovered only through the most energetic efforts of the attendants. The truth is, that if the number of deaths go on increasing, a reaction will be setting in against the use of chloroform, and the use and value of one of the greatest of modern medical blessings will be much interfered with. The sooner, therefore, the Chloroform Committee enlightens us on the subject, the better. It is evident enough to us that some sort of authoritative declaration is required in reference to the right method of dealing with this beneficent though deadly weapon. At present we find, as regards its mode of administration, no kind of uniformity; although every one's common sense must tell him that one particular method must be the best of all, and therefore is the right one. Moreover, no regulations have been yet generally adopted as guides to its administration; no rules laid down and accepted as to the best way of reviving those who have been poisoned by it. We deal with a most fearfully powerful agent—deadly poisonous, as it so often proves itself to be—really in a sort of rule-of-thumb fashion, and without any proper consideration—*i. e.*, without making any due allowance for the possible occurrence of its deadly properties. Of course we are writing of what seems to us to be the general misuse of the substance. We know perfectly well that, by certain parties, the greatest care is on all occasions used in its administration; that the administrators feel all the time the responsibility which rests upon them—never taking their finger from the pulse of the patient, nor ceasing to watch the play of the features and the respiratory movements. But such careful dealing with the matter is, we fear, quite exceptional; and we cannot but regard the fact of the occurrence of so many fatal cases as a proof that the general rule is a careless administration of the chloroform. No doubt, considering that a Chloroform Committee has taken the matter in hand, we must wait for their report before we can expect any general distinct rules to be laid down or accepted; but in the meantime we do call upon surgeons to take the needful steps, which they can take, for procuring the administration of the chloroform by experimented hands. It is not right, in our opinion, to trust the matter to the hands of house-surgeons and advanced students. The operation ought to be entrusted solely to those who are capable of bearing the responsibility which may attach to the administering of chloroform. We are satisfied that, if surgeons themselves do not take the subject up in this way, it will be taken up for them by the coroner's jury. The coroner and his jury, under the pressure of these numerous deaths from chloroform, will begin to make "further" inquiries into all the circumstances of the case; and we may be very sure that the first question to which they will demand a satisfactory reply will be: By whom was the chloroform administered? And they will not be contented with the answer, that "it was given by Mr. X., our house-surgeon, who has had

much experience in the matter." They will demand (and most properly demand) that it ought to be administered by some regularly appointed and responsible individual, who has given proofs of his capacity for the office. The number of deaths from chloroform lately recorded are, as we think, a demonstration of the fact that the administration of it is not at this present time entrusted to fitting and the most capable hands, and that the operation of giving chloroform is too lightly considered by our surgical authorities.

THE WEEK.

Our readers will have observed, in our last week's Journal, that a petition has been presented by the British Medical Association to the Council of the Royal College of Surgeons of England, asking the Council to take means to enable Fellows of the College residing in the country to record their votes at the election of Members of Council by voting-papers, as is done at the elections of Oxford and Cambridge Universities. The petition has been presented at a very favourable moment; for we believe that there is rife in the Council at this moment a strong desire of doing justice and meeting the requirements of the profession of 1863. The prayer of the petition in question is most reasonable. Fellows were created to elect the Council. But Fellows who reside in the provinces cannot attend and vote personally, for obvious reasons. The majority of Fellows are, therefore, virtually deprived of their greatest and most important privilege; and the election of Council consequently falls almost wholly into the hands of the metropolitan Fellows. But this is neither fair to the Fellows at large, nor, as we believe, favourable to the interests of the Council and the profession. Manifestly, the wider the electing constituency, the less chance is there of elections being made through favour or cliqueism; and the very fact of the residence of the Fellow in the country lessens the chance of his being influenced by private motives of personal friendship and acquaintance. Indeed, we may truly say that Fellows in the country are much more likely to take a dispassionate view of a candidate for the Council's real merits and fitness, than are Fellows his friends, neighbours, and local admirers. Moreover, the election by voting-papers would enable the country Fellows to obtain due consideration for the interests of the country surgeon. And such an enlarged constituency would probably have another good effect: it would prevent any possible jobbing and canvassing and by-play which is at present supposed to be a necessary part of these College elections, and which make some surgeons declare that they will never offer themselves for the Council membership.

The two actions of Beck *v.* Farey and of Beck *v.* Sterne have been again under the notice of the Court of Queen's Bench. On the last occasion, Dr. Snow Beck lost one cause and gained the other. The results, consequently, were unsatisfactory to the defendant Farey in the one case, and to the plaintiff Beck in the other: hence these applications for new trials. As far as Dr. Beck is concerned, his dissatisfaction will be doubled by the result of the applications; for Farey has obtained a new trial, and he himself has been refused one. The report runs as follows.

"Beck *v.* Farey. This was one of two rather remarkable actions brought by the plaintiff, a medical man, against two persons named Farey and Sterne, to recover fees for alleged medical attendance so long ago as 1859, and for which no claim was made until after a quarrel between them and the plaintiff. The cases were both tried at the last assizes at Croydon. The former resulted in a verdict for the plaintiff; but in the other action, against Sterne, the plaintiff failed. In the present case, as in the other, there was strong evidence that the alleged attendance by the plaintiff had been friendly visits, or gratuitous attendance on the occasion of such visits; but £10 was paid into court; and, as the learned judges now observed, this probably explained the verdict in favour of the plaintiff in this case. The learned judge stayed execution; and Mr. Serjeant Petersdorff, on the part of the defendant, moved to set aside the verdict, as against evidence. The Court said they would consult the learned judge, Mr. Baron Channell; and, having done so, they to-day said that they should grant a rule *nisi* to set aside the verdict.

"Beck *v.* Sterne. This was the other of the two actions above mentioned; and it was a claim for £559 for alleged medical attendance during a lengthened period of time, some years ago, between November 1856 and July 1859. The case was tried before Mr. Baron Bramwell and a special jury. The case for the defence was, that the "attendances" were really gratuitous, and took place in friendly visits, for which it was never intended or understood that there should be any charge; and further, that for any services really rendered, the plaintiff had received payment, or presents. The jury, having heard the plaintiff and his witnesses, at once made up their minds against him, and, without requiring to hear any evidence for the defence, found a verdict for the defendant, upon which the learned judge expressed a strong opinion against the action.

"Mr. Serjeant Shee, on the part of the plaintiff, moved for a new trial, on the ground that the verdict was against evidence. The learned serjeant said that the case had been really blown out of court by judge and jury. They laughed the case away. [*Laughter.*]

"The Lord Chief Justice. I am afraid you would not wish us to refer to the learned judge.

"Mr. Serjeant Shee. Oh, no! my lord. I know well what he would say. [*Laughter.*]

"Mr. Justice Mellor asked when the first account had been sent in.

"Mr. Serjeant Shee said certainly no account had been sent in until no long time before action.

"The Lord Chief Justice said the Court would consult the learned judge; and the Court, having done so, refused a new trial."

A Committee was lately formed at Vienna, consisting of Professors Dlauhy, Hebra, and Sigmund, to point out, if possible, how prostitution might best be brought under municipal regulation. We recom-

mend the conclusions of this Committee to the consideration of the editor of the *Saturday Review*, and of those other editors, medical or other, who think that the proper way to deal with the evil here is to introduce into the country a governmental regulation of it. These are the results of this Committee's labour; and it may be remarked, that most assuredly neither respect for the liberty of the subject, nor any great horror at making prostitution a state affair, were the reasons which led to the conclusions. They were the plain teachings of common sense and experience.

"1. The supervision of houses of prostitution does not answer its object, because experience shows that in other cities, where such supervision exists, prostitution is carried on in unlicensed houses.

"2. The examination of prostitutes by physicians at their own houses, or at established places, does not answer its object, as infection may take place immediately after the examination; and the woman may then ply her trade still more effectually, as she bears with her a certificate of cleanliness."

The Committee then go on to recommend that, in all quarters of the city, medical men should be appointed to give gratuitous advice and physic to diseased women. In this way the Committee hope to induce the women to take care of their own health. This proposal is based on the principle of equal dealing, as the means of obtaining medical aid at their own houses should be offered to the poorer as well as to the richer classes, and compulsory residence in hospital in this way be avoided. It is added, that compulsory residence in the syphilitic wards of the hospital tends to the demoralisation of the women, rather than to their moral improvement. Such is the method authoritatively recommended to the notice of the paternal Austrian government.

We believe it is the intention of Mr. Coulson, High Sheriff of Cornwall, to offer himself as a candidate for the honour of representing West Cornwall in Parliament.

At a meeting of the Senatus Academicus of the Edinburgh University, held on the 7th instant, Mr. Syme was reappointed their representative in the Medical Council.

Our readers will be pleased to hear that the attempt to procure a new action in the case of Morgan *versus* Lingen has completely failed. Dr. Lingen will, therefore, be relieved of all further trouble in the matter. On the application for a new trial the other day:

"The Court, after hearing the case argued at considerable length, were of opinion that there was no ground for disturbing the verdict. Baron Martin added, that he never heard anyone give evidence in a more satisfactory manner than the plaintiff had done; and he could hope that the matter might be allowed to rest where it was, without calling upon her to pay the costs of the action. The rule was refused."

Why Dr. Lingen, after being most unjustly (as proved by the result) subjected to a very expensive and annoying law-suit, is not to call upon the plaintiff for his costs, is a matter quite inexplicable to us. We think Dr. Lingen will be very wrong to follow the Baron's opinion.

The Police Reports inform us, that a woman was last week charged "with stealing a gold watch and chain from a young woman in the waiting-room of Guy's Hospital." Of course persons who wear gold watches and chains are "proper objects of the charity".

A child, 2 years old, was, on August 12th last, presented to the Academy of Surgery by M. Chassaignac, as an example of syphilis communicated by vaccination. The child was examined by MM. Cullerier and Guersant, and the disease declared by them to be a typical specimen of syphilitic vaccination.

The French Medical Association has just held its annual meeting in Paris, under the presidency of M. Rayer. The society is five years old; and already numbers 5,746 members, having from its birth gone on gradually increasing. It consists of ninety local societies; and has at its disposition a sum of about £12,000.

M. Frary, writing of the bad pay of the doctors of the poor in France, says: "Have they not a just right to complain that society leaves entirely and most unjustly to their charge the obligations which ought to be borne by all? Why should they be called upon to give gratuitously their time, which is necessary to them in order to procure the material resources required by themselves and their families? People think they have paid them well for their devotion and their sacrifices by telling them: 'Happy are you to render such services. You are heaping up for yourselves treasures of thanks! The poor will ever bless you!'"

The death of Dr. Chrestien, "the veteran of military surgery", at 90 years of age, is announced. He died at Lyons "full of honours and of years."

The Faculty of Medicine of Paris commence operations on the 17th instant, with the following programme:—Histology is professed by Robin; Medical Physics by Gavarret; Medical Pathology (medicine) by Guillot; Operations by Malgaigne; Medical Chemistry by Wurtz; Anatomy by Jarjavay; Pathology, etc., by Chauffard, in place of Andral; Surgical Pathology (surgery) by Denonvilliers; Clinical Medicine by Bouillaud, Piorry, Rostan, and Trousseau; Clinical Surgery by Jobert, Langier, Velpeau, and Nélaton; and Midwifery by Depaul. Supplementary clinical courses will be given on Diseases of Children by Roger; on Mental Diseases by Lasègue; and on Ophthalmology by Follin.

M. Zepuder of Vienna pretends that he can tell the sex of the fœtus by counting the number of the cardiac pulsations, which in boys are 120 to 122, and in girls 144 to 150, per minute. He says that he was wrong only five times out of sixty.

Syphilis (writes a foreign journalist) is the order of the day; it is the grand term of the moment, although doctors cry out in all directions that they have a specific for it. This is the only disease which kills, according to them; gout, rheumatism, and scrofula, are trivial affairs. "If a man has had syphilis fifteen years ago, and followed a proper treatment, and if no accident have since appeared, I ought to forbid his marrying; if he have a child, I ought to prevent its being suckled by a nurse, for fear of being punished by the law."

"LEAVE OF ABSENCE."

[*Communicated.*]

The loss to the Indian public and to the medical profession recorded in the obituary notice, in a recent number, of the late Dr. Webb of Calcutta, following as it does upon the premature termination of the career of so many meritorious and distinguished officers connected with our Indian empire, including a Governor-General, Lords Elphinstone and Clyde, and Sir James Outram, suggests to us some reflections as to whether those who have suffered from the effects of a tropical climate, generally take the course most suitable to reason and common sense, to promote their restoration to health, or their chances of attaining a prolongation of life and comfort.

It seems to be the usual custom for those who have been only slightly affected by the Indian climate, to be allowed leave for a short period, to reside in some hill station, or to take a sea-voyage; but that those whose constitutions have become seriously affected by long continued functional or organic disease, are recommended to proceed to Europe. A long sea-voyage, such as that from India round the Cape of Good Hope, which takes about two months in a steamer, or by a sailing vessel something approaching four months, may be the most beneficial remedy in many cases, where there is no suspicion of organic disease. Many persons enjoy a life at sea, and would be willing that the voyage should be prolonged as much as possible; to others, the confinement and monotony of life even in one of Green's or Wigram's best ships are irksome, and are not even compensated by the prospect of revisiting one's home and country, seeing the exhibitions of civilised power, etc.: in fact, of attaining the enjoyments which a highly cultivated mind, on return from exile, may reasonably anticipate. We think that this plan, however, is the best to be adopted by those who are somewhat advanced in middle life, and who have become only climate-worn from long Indian residence, particularly if they have the prospect of retiring from the service and remaining at home. With the young, however, and those seniors who are not only climate-stricken, but seem to be suffering from organic disease, we think other plans are preferable. The young may with advantage try the short route to Europe. It will do him the most good in every way, to get home as soon as possible, to revisit his home and friends, renew old associations, and to see every thing, etc. The excitement of this, with the view of the most interesting scenery in the world, sporting, geological, or other explorations of a scientific character, will renew his health and vigour more or less rapidly. The only drawback would be, the too short time allowed for his absence from India, and Indian exhausting work. Formerly, almost every official returning to Europe on ordinary or on sick furlough, took three years' leave of absence; but since the issue of the new Furlough Regulations and of the rules respecting the retention of staff appointments, a few months probably is all the time the invalid can spend at home, *i.e.*, in Europe. We are inclined to think that two years at home (this not to include the voyage to and fro), are not more than sufficient to give the climate-stricken young man the best chance (and it will be a very good one), of weathering the tropical influences attending his subsequent Indian career. The short allowance of time for those who hold staff appointments, within which they must be back, in order that they may not be deprived of them, is a serious evil. The system tends to depress the earnest, hard-working man, who has expended his energies in an exhausting climate, first of all, in qualifying himself by study for staff employ, and subsequently, in assisting with all his might, to keep the great Indian machine in harmonious action. It is these men who, with suitable time allowed them for refreshing their minds and bodies, will find means to improve themselves in such a way, that their services on their return, will become doubly valuable to the State. With the seniors, who have become affected by the climate, the case is different. Whether governors, statesmen, judges, engineers, or doctors, all going out comparatively late in life, they have, on arrival, gone through an *acclimatising* process. Their faculties, bodily and mental, have always been kept on the stretch; often has depression been induced by their surrounding influences. If to all this be added a severe dysentery, or attack of cholera, or series of agues, or an enlarged liver, we think that no plan can be more unsuitable than to make the weakened, and probably altered constitution undertake another attempt at acclimatisation, in the colder regions of the earth. The difficulties and dangers of this trial have been so well exhibited in the pages of Sir Ranald Martin, in his *Observations* on the diseases of those returned from tropical climates, and in the practice of those amongst us who are in the habit of treating such cases, that it seems unnecessary to dilate upon them. For these cases, we do not think even a long sea-passage of fifteen thousand miles is the best way of commencing the cure. A residence in the often cold and damp hill sanitaria of India, where a difference of altitude only is the chief recommendation, is quite out of the question; but we are of opinion that, the desideratum is to obtain change of air by a sea-voyage of moderate length, followed by residence in a climate approaching to the tropical, in point of warmth and dryness. These requisites may be secured by a voyage to, and residence at the Cape of Good Hope; but better still perhaps, if not at the present moment—yet we trust at no great interval of time—by visiting one of our Australian colonies. Of these, either Western Australia or Queensland, we believe, would give the "old" Indian invalid the best possible chance, as far, at least, as change of air and scene are concerned; but we constantly hear of Anglo-Indians of a mature age, who have been so far affected by the climate that their systems can hardly have escaped organic change, leaving their quiet, almost sedentary habits in India, to undergo the fatigues and privations of the Red Sea route, then to traverse the cold mountainous regions of Europe, or the miasma-laden shores of the Mediterranean, in fact, various seas and continents, with the prospect of commencing, in the ensuing winter, the second great acclimatising experiment of their lives. We much fear that the neglect of reasonable precautions, such as we have indicated, may have led to some, at least, of the serious loss of valuable lives, which the public service has lately sustained. The subject is so important, that we may probably recur to it on a future occasion.

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

THE quadrangle of our University is again thronged with busy students; and the steady stream of young men passing down Infirmary Street as twelve o'clock strikes, tells us that the Session has fairly commenced.

As has always been the custom in our University, the Session was opened by an Introductory Address by the Principal, Sir David Brewster. Those of our readers who have been students in Edinburgh, will remember how stormy and clamorous these annual meetings have always been. The students of the Junior Humanity Class, just emancipated from the thraldom of school discipline, vie with the many schoolboys who join them on the occasion, in the ardour for throwing peas, and making unearthly noises; and no one can remember an Introductory Address which was not interrupted by such unseemly conduct. Supposing that the disturbances had been, in former years, in no small measure due to the insufficient accommodation afforded by the very spacious Chemistry Class room, in which the addresses had been delivered, the Senatus determined this year to remedy matters by choosing the Music Hall as the place for the ceremony. Their anticipations as to the success of the experiment were, however, doomed to be disappointed, as Sir David Brewster was interrupted frequently during the course of his most eloquent address, which he had, owing to the disturbance, to bring to a premature close.

If I have mentioned these disturbances, it has been for the purpose of vindicating the medical students of our University from the charge which has been brought against them, of taking an active part in them. They are, as the most superficial observer may easily satisfy himself, due entirely to the junior students of the literary classes, who, coming to the University at an age when they would in England be more profitably engaged in the lower forms of a grammar school, carry to it the boyish and unmanly conduct more fitted to the playground.

Sir David Brewster addressed his audience on the former benefactors of the University of Edinburgh. The universal opinion seems to be, at present, that the time has come for offering, in our Northern universities, a greater premium on talent and industry than has hitherto been the custom; and Sir David Brewster's lecture was evidently a hint thrown out to testators, that their money could not be left for a better purpose than the foundation of a scholarship, or the endowment of a new chair.

In the course of his address, Sir David alluded to a subject which has of late attracted much attention. He mentioned that "next in importance to the endowment of new chairs and scholarships, is the establishment of a College Hall, where students can be boarded and lodged, with increased facilities for pursuing their studies, under judicious superintendence and control." There is considerable difference of opinion on this point amongst the professors. Some, who advocate it strongly, have formed themselves into a committee for effecting their purpose, and have so far succeeded that an establishment, such as they desire, will probably be opened in Edinburgh at the commencement of next Session.

The Extra-Academical School was opened at Surgeons' Hall by an address delivered by Dr. Warburton Begbie, who chose as the subject of his discourse "The Requirements for the Proper Study of Medicine". Those of our readers who have been students in Edinburgh within the last few years, will call to mind how large a share of esteem and popularity Dr. Begbie enjoys, and will not feel astonished that he lectured to a very numerous and attentive audience.

An enthusiast in the study of the history of medicine, it is not to be wondered at that Dr. Begbie should have chosen as a text for his discourse, the passage from one of the Hippocratic writings, the NOMOΣ, in which the requirements for the successful study of our profession are so admirably summed up. "Χρὴ γαρ ὅστις μέλλει ἰητρικῆς ξύνεσιν ατρεκέως ἁρμοζεσθαι τῶνδε μιν ἐπήβολον γενέσθαι· φύσιος· διδασκαλίης· παιδομαθίης· φιλοπονίης· χρόνου· τόπου εὐφυέος."

The lecturer insisted upon the necessity for natural taste and ability for the study of medicine, and warned those who lacked either to be careful before attempting to pursue it. In the course of his remarks, Dr. Begbie said, "In the practice of medicine there must be φύσις. Without the natural disposition, with the fruits it yields, what is there either to stimulate or to encourage? Ours, assuredly, is not a calling which the man ambitious of acquiring wealth, or even great worldly distinction, should embrace; the honours and rewards medicine holds out are not such as usually offer any attractions towards it. Nevertheless, it may without hesitation be affirmed, that the profession of medicine, properly discharged, affords as much real happiness to its cultivators as any other; it being always held in remembrance that the enjoyment of such happiness is only consistent with the being personally deserving of it; 'Est demum vera felicitas, felicitate dignum videri'." Glancing next at those conditions which may be considered favourable to the acquirement of medical knowledge, Dr. Begbie pointed out how in every sense the Edinburgh Medical School, comprehending in this term both the University and Extra-Academical School, might be considered as "τόπου εὐφυέος". He expressed his belief in the advisability of commencing early the study of medicine, and advised his hearers to frequent the hospitals, from the very commencement of their curriculum, "in the observation of patients at the first, perhaps more than in the observation of diseases."

The lecturer next insisted strongly on the advantages of a liberal preliminary education, and advised his hearers not to consider that there existed any incongruity between a study of chemistry and anatomy and a taste for classical literature. After commenting at length on some of the other clauses in the passage which we have quoted, he referred to some of the illustrious men who first added to the glory of medicine, and concluded in these words: "Yes, gentlemen, by the founders of our noble profession its true aims and legitimate objects were clearly recognised, and have been distinctly set forth. Should not their opinion and conduct exercise a salutary influence on us their descend-

ants? We have, indeed, every incentive of this kind to the earnest and honourable discharge of our responsible duties. If you consult the roll of that body of distinguished men in the profession, of which we have so much reason to be proud—I mean the Royal College of Physicians of London, from the period of its foundation by Henry the Eighth in 1518, at the instance of the illustrious Thomas Linacre, down to this day, when Dr. Thomas Watson fills so worthily the chair—you will, I am sure, be forcibly struck by observing how very frequently scholarly attainments, extended professional knowledge, and true nobility of character have blended in the persons of England's foremost physicians."

Having noticed at considerable length the general introductory lectures delivered at the College of Surgeons and University, we cannot attempt to give a sketch of all the addresess delivered by the several professors in their class-rooms. We shall confine our notices to Professor Syme's introductory lecture, and to those of the new lecturers in the Extra-Academical School. Old Edinburgh men will remember how pithy and meaning have been the sentences with which our distinguished professor of clinical surgery has usually commenced his sessional course of lectures. Essentially a man of few words, Mr. Syme scarcely ever extended these remarks beyond a few sentences, preferring at once to illustrate the object of his course by a display of the ordinary work with which it had to deal. This year, however, he has thought fit to be more lengthy in his introductory address; and I am sure all our readers will be interested by a short summary of his remarks.

Reviewing the different branches of study comprehended in the present medical curriculum, he stated his opinion that these were perhaps too numerous. He insisted strongly on the study of anatomy, as the science which forms the groundwork of all the knowledge which a student must acquire. Anatomy can only, Mr. Syme remarked, be learned by dissection. Not only must the relation of parts be seen, but felt; for upon such knowledge the surgeon is often almost entirely dependent; many operations being practised upon parts which can only be felt, not seen. A knowledge of physiology he considered as essential as of anatomy. In this science, as in anatomy, it is now too much the fashion, Mr. Syme said, to direct the student's attention to the microscope. The object of physiological study ought to be, not so much how organs work, as what they do; *e. g.*, we ought to study not so much the mode in which the muscular fibres work, as the action which the muscle exerts. Mr. Syme stated he did not wish, as some had represented, to run down the microscope, which he thought a most useful and interesting instrument; but he was certainly of opinion that it should be studied in spare movements, and after the termination of student life; while the sciences which it was often made to supersede could only be thoroughly acquired during its progress. Mr. Syme expressed his conviction that students ought to attend the hospital from the very commencement of their studies; for many things at first not thoroughly understood will afterwards prove of the greatest value.

He then adverted to the method of clinical instruction which he had so long carried out, and remarked that by it alone could the thorough discussion of a case be rendered beneficial to a large number of students. Mr. Syme's admirable clinical lectures we hope in a future communication fully to explain.

Mr. Syme then urged upon his hearers that seeing an operation would prove of very little use to them, if they were not thoroughly acquainted with the case to be operated upon. The wish to see merely operations, he remarked, was dictated by the same feelings which led men to go and see an execution.

Mr. Syme then pointed out the essentials for a good surgeon. A good surgeon ought—1. To be able to recognise disease accurately, for without this knowledge no treatment could be with certainty adopted; 2. To know what to do; 3. To know how to do it. This demanded a certain amount of manual dexterity, which all can by practice and perseverance acquire. He insisted that facility in operating upon the living body did not so much depend upon having practised operations upon the dead subject, as upon having cultivated with zeal and earnestness the study of practical anatomy.

With the opening of the session there is generally the *début* of some new lecturers in the Extra-Academical School, and this session has proved no exception to the rule.

Dr. Handyside, formerly a very successful teacher of anatomy, after an interval of many years has resumed his lectures; and his first lecture was attended by many of his old pupils and colleagues.

Dr. Grainger Stewart, pathologist to the Infirmary, has also commenced lecturing on general pathology.

Dr. Joseph Bell, lately a most popular demonstrator of anatomy in the University, has commenced lecturing on surgery; whilst Dr. Crum Browne, a most distinguished graduate of our own and the London University, has opened a course of lectures on chemistry.

In conclusion, we are glad to be able to state that a session never opened more prosperously than the present one. The number of medical students who had, on the evening of November 9th, matriculated in the University, was 353, being several in advance of the same period last year.

The African Coast. Assistant-surgeons are not readily found to serve in the regiments on the Gold Coast; and no wonder. The temptations in many ways are great; but the danger to life of the service seems to be still greater, for, in truth, the supply is at present short. Sierra Leone, the Gambia, and the Gold Coast are the dangerous districts. The regiments serving there are West India regiments and the Gold Coast Artillery Corps. Only volunteers, who are not required to go through the Army Medical School, are sent out there; but they are under the orders of the Director-General. Each year of service there counts as two years for promotion and retirement; and for each year's service a year's leave of absence is granted—pay being continued. The senior assistant-surgeon is entitled to his surgeoncy when a vacancy occurs. The surgeon, again, who has served longest on the Coast is entitled to surgeoncy of either of the four West India regiments when a vacancy presents. Any assistant-surgeon or surgeon who has served three full years on the Coast (which count for six years) may be transferred to the general service of the Army Medical Department.

Association Intelligence.

EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Fountain Hotel, Canterbury, on Thursday, November 26th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

THOMAS BOYCOTT, M.D., *Hon. Secretary.*

Canterbury, November 2nd, 1863.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE second meeting for the Seventh Session (1863-4) was held at the Town Hall, Maidstone, on October 30th; JOHN ARMSTRONG, M.D., President of the Branch, in the Chair. There were present sixteen members and visitors.

New Member. Dr. Charles Henry Allfrey, of Chislehurst, was admitted a member of the district. He was elected a member of the Association and of the Branch, at the annual meeting of the Branch in June.

The Discussion of Dr. F. J. Brown's Paper, on the Interment of Still-born Children (adjourned from the last meeting), was resumed. The following points were discussed.

1. Age at which a fœtus is regarded as a dead body, and subject to the laws relative to interment. It appears that in England fœtuses are distinguished into "mature" and "immature"; but that there is no law that enjoins the burial of a fœtus that is still-born, whether it be mature or immature. In Prussia a fœtus of one hundred and eighty days, viz. six calendar months, is considered to be a dead body in the Rhenish provinces; and one of two hundred and ten days, viz. seven calendar months, in the rest of the monarchy. The Roman law recognised the viability of a fœtus at the age of one hundred and eighty-two days. Whether interment was regulated by the division of fœtuses into viable and non-viable does not appear.

2. Mode of disposing of fœtuses of three months and under. This was stated to be by burning, by burying in gardens, by throwing into latrines and sewers, etc.

3. Mode of disposing of fœtuses of four months and upwards. This was stated to be by burial by the sexton in the first grave that might be dug in the cemetery.

4. Mode of burial of full-grown children, whether in other persons' graves or in separate graves. The custom appears to be to avoid the expense of a separate grave in the case of unbaptised children dying shortly after birth. It is not known how far this custom extends, whether to children under one month of age, or even still further.

5. Certifying the birth of a still-born fœtus of four months and upwards; the certificate being given to the friends for delivery to the sexton. This was stated to be customary on the part of surgeons and midwives.

6. Registration of immature live-born fœtuses. This was stated to be unusual. The law of England requires registrars to enter as live-births every case in which breathing or movement occurs, however slightly, after the complete extrusion of the fœtus from the maternal passages. This is witnessed sometimes at the fifth month. The law is clear as regards the duty of the registrar, but does not compel the parents to effect the registration. This law has no reference to viability, that is, to the power of maintaining life.

7. Registration of live-born mature fœtuses; (*a*) of those that die within one hour; and (*b*) of those that die within twenty-four hours. It was stated that cases occurring in the first subdivision were commonly treated as still-births, although improperly. Cases in the second subdivision were often similarly treated by the friends, although the medical attendant usually gives a certificate for the registrar.

At the conclusion of the discussion, it was the general impression that the subject requires consideration, and regulation by legislative enactments.

Communications. The following cases and papers were read.

1. Median Lithotomy in a Man aged 65, for the Removal of a Piece of Metal Catheter: Recovery. By F. Fry, Esq.

2. Lateral Lithotomy in a Child 22 months old: Contemplated Operation for a Recurrence of Stone, two years subsequently, rendered unnecessary by the Escape of the Calculus *per Urethram*. By F. Fry, Esq.

3 and 4. Median or Allarton's Operation of Lithotomy in a Boy aged two years and seven months: Death by Peritonitis. Ditto in a Boy aged three years and seven months: Recovery. By F. J. Brown, M.D.

5. On Puerperal Mania. By S. Monckton, M.D. The author distinguished four species:—(*a*) Phrenitis; (*b*) Insanity; (*c*) Delirium tremens; (*d*) Nervous exhaustion.

6. Case of Abdominal Abscess that discharged itself by the Rectum, together with Escape of Flatus *per Urethram*. By S. Monckton, M.D.

After the usual thanks, the members and visitors adjourned to dinner, which was served at the Mitre Inn.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

NOVEMBER 5TH, 1863.

J. B. SANDERSON, M.D., Vice-President, in the Chair.

Premature Labour in Albuminuria. Dr. CLEVELAND made some remarks upon the period at which premature labour ought to be induced in cases of albuminuria.

Ascites and Ovarian Disease. Dr. DRYSDALE mentioned a case where the diagnosis of ascites and ovarian disease seemed to him to be doubtful.

SOME OF THE DISEASES CONSTITUTING THE CONDITION COMMONLY CALLED AMAUROSIS. BY ERNEST HART, ESQ.

Mr. HART said that amaurosis was not one, but many diseases; and that by the ophthalmoscope it was possible to distinguish in their early stage those deep-seated alterations in the tunics, nerves, humours, and vessels of the eye which, without it, could only be guessed at, but which constituted the variety of diseases leading to blindness, without change in the external appearance of the eye, called amaurosis. Upon their diagnosis and treatment in their early stage rested the possibility of saving the patient's sight. If they were so recognised, sight could now in the majority of cases be saved; if they were not, sooner or later it was lost. The subject was so wide, that he proposed only to describe one or two of the most common conditions, selecting those which most frequently occurred in general practice, and were most likely to be overlooked. Mr. Hart then showed the appearances presented under the ophthalmoscope by the first streaks of cataract; he said the chapters in ophthalmology which dwelt on the difficulties of distinction between cataract and amaurosis might now be cancelled; for, with the ophthalmoscope, the diagnosis might be made absolute. He then proceeded to the distinctions between "muscæ", or black spots before the sight, arising from organic destruction of the vitreous, and those which were indications of functional disorder. Both were very much under the influence of treatment (the former being often of syphilitic origin); but the

treatment appropriate to the one was highly inappropriate in the other. He then passed to a serious class of cases of defective vision, of which the early premonitory symptom was fast increasing shortness of sight, especially during early life. To this was often added uneasiness of the eye, perhaps slight lacrymation and fatigue of the vision after slight exertion. These were the first outward signs of congestive inflammation of the choroid, productive of posterior sclero-choroiditis, with staphyloma or pouching of the tunics of the eye around the optic nerve-entrance. The use of ordinary myopic glasses, while it alleviated the inconvenience, aggravated the progress of the disease. It was one of incredible frequency. If arrested, its worst consequence was considerable short-sightedness; but it frequently progressed, and, leading to atrophy of the yellow spot, detachment of the retina, ocular apoplexy, vitreous opacity, and fluidification, and sometimes to (complicated) cataract and glaucoma, it was a fertile source of the inveterate amauroses of advanced life. In every case of advancing short-sight, the fundus of the eye should be inspected as a matter of course, and in simple justice to the patient and practitioner. For there were two kinds of short-sightedness: in the one, glasses were beneficial; in the other, they were injurious. Only the ophthalmoscope could decide; and, if a guess were made, it was two to one that it would be wrong. Mr. Hart detailed the means which he found most useful in arresting this form of disease, and gave notes of cases. He then referred to an insidious form of amaurosis, of which the characteristic ophthalmoscopic sign was pigmentation of the retina, the retina looking like a leopard-skin. Of this he demonstrated, ophthalmoscopically, a beautifully marked case, where the disease had been progressing unsuspected for eighteen years, and sight was nearly extinguished. The earliest outward sign was dimness of vision at night (*hemeralopia*). The appearance of the eye remained unaltered, and the progress of the disease was painless. Mr. Hart then demonstrated examples of the various forms of disease of which he had been speaking, by the aid of a fixed ophthalmoscope which he used in hospital teaching; by its means those present were able to see and appreciate the changes which were taking place at the back of eyes otherwise apparently healthy-looking.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, Nov. 6th, 1863.

PRESCOTT G. HEWETT, Esq., Vice-President, in the Chair.

Extroversion of the Bladder. Mr. TIMOTHY HOLMES exhibited a boy, aged 8 years, with congenital extroversion of the bladder, for covering which he had performed two plastic operations. The first operation consisted of placing over the exposed vesical membrane a cover composed of two layers of integument, one taken from the groin, the other from the right scrotum, each flap in itself large enough to cover the cleft. The former flap had been folded down like a leaf of a book, with its thin surface towards the mucous membrane; the latter had been turned horizontally, with the skin-surface outwards over the inner flap. The edges were united by silver sutures. The upper edge of the united flaps had been implanted into the skin of the abdomen, so that only the lower edge of the cleft remained open. Notwithstanding the contact of the urine, the flaps united naturally; but the upper border failed to do so, so that urine escaped that way. The second operation was to remedy this; and the flaps were united by the harelip suture to the skin of the abdomen. This almost entirely succeeded, and a very little opening now exists. This Mr. Holmes proposes to close, and also to narrow the lower gap, so that an India-rubber bottle can be easily adjusted to catch the urine.

Drawings were exhibited of the case before and after operation; also of a case operated on by Professor Pancoast of Philadelphia.

Mr. Holmes referred to three other cases on which he had himself operated. One was an infant; the first operation succeeded, but the child died of fever in the country. One was a boy, 7 years of age; and one was a lad, 19 years of age, still under treatment. The flaps in these two cases were interfered with by phagedæna. The object of the operation is as much as possible to cover the mucous membrane, and arrange for catching the urine. The operation is most easy in infants, from the nature of the tissue, the smaller flaps at that age required, and the less likelihood of difficulty from the coexistence of hernia.

Clot in the Pulmonary Artery. Dr. CAHILL related two cases. The symptoms in both cases were much the same. One patient, a young lady, having some spinal disease, and subject to rheumatic affection of the joints, was seized with violent dyspnœa and some struggling before death. The clot was found filling up one division of the pulmonary artery. The other patient was a lady with many large and hard varicose veins of the lower extremities. She was seized with dyspnœa just like the preceding patient, and recovered; but has since then shown other symptoms of affected circulation.

The PRESIDENT mentioned a patient who had great temporary œdema from venous obstruction in all four limbs, one after the other.

Poisonous Symptoms from Cannabis Indica. The patient, a medical man, with some epigastric pain, for which he generally took morphia, had swallowed four grains of cannabis Indica. Mr. KEEN found him sitting up in horror at the idea of being touched or moved, suffering much anxiety, and with muscular power greatly in abeyance. The pulse was 92, steady, full, and soft; pupils natural. With stimuli and sinapisms, he soon recovered.

CENTENARIANS. In 1851 215 persons were returned as being above 100 years old, but only 201 persons in 1861—one in every 100,000. Of the last number, 146 were women, and but 55 men—nearly three women to one man. Only 26 had never been married. About a third were found living in large towns—21 in London, 11 in Liverpool, five in Manchester, one in Birmingham, four in Bristol, one in Leeds. As in 1851, so in 1861, these very aged persons were not found so often in the midland districts of the kingdom as in the north and the east, and most of all in the west. At the last census, Norfolk had among its 435,000 people 11 above 100 years old; Gloucestershire, with 485,000 people, had eight centenarians; and Somerset, with its 445,000, had nine. Wales, with its 1,112,000, had no less than 24, the same number as Lancashire with its 2,400,000 people, and more than London with its 2,800,000 inhabitants. So far as the occupations of these long-lived persons are given, the returns show a majority engaged in pursuits that caused them to be much in the open air. Three had been farmers, thirteen out-door farm servants, five labourers, three hawkers, three seamen, three soldiers; there was a fisherman, a quarrier, a waterworks man, a miller. But there was also a scrivener, four shoemakers, a baker, a grocer, a carpenter, a marine-store dealer, three persons occupied in cotton manufacture, two in woollen, one in silk, one in lace. Of the women the returns commonly state only whether the person is wife or widow, but we are told that there were six who had been domestic servants, two nurses, three charwomen, two washerwomen, and a gipsy. One centenarian was a member of the Household. Fourteen are described as land or house proprietors, or independent; nineteen were passing their last years in the workhouse. Six were blind.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—Anxious to do all I can to obtain for the practice of iridectomy in glaucoma an early and an universal acceptance, I beg to notice, as succinctly as I am able, some of the points contained in your leading article of last week.

1. You say that "some surgeons of the highest authority deem it an operation not only useless, but worse than useless." I reply; the only surgeon, not an oculist, whom I am aware of as having made himself publicly responsible for such an opinion, is Mr. Syme, whose letter I have already dealt with in your last two numbers. If you can refer to any other published opinions to a similar effect, I will endeavour to meet them fairly, and examine how much weight they may be entitled to. If you refer to opinions not published, I may assume them, until their authors give them more distinct expression, to rest on no stronger grounds than those put forward by the eminent Professor of Edinburgh.

2. You say, "we find others" ("oculists of the highest celebrity") "who, after having practised it and given it a trial, conclude it to be an inadmissible operation, and have determined never to resort to it again." I answer; no oculist that I know of has published any account of such adverse experience—at least, with the voucher of his name; and until this be done, I am at liberty to suppose, and from my own acquaintance with the subject I do believe, that any such trials, leading any one to the conclusion above recited, have been altogether inadequate, and undertaken without accurate discrimination of the conditions of disease present.

When the eminence of men is thus advanced as an argument to add weight to opinions opposed, as I believe, to scientific truth, and pernicious in proportion as they prevail in practice, I am surely justified in asking that the names of these gentlemen should be stated, and that they should be requested to report the cases on which they have based their conclusions, so that these opinions should be open to examination and criticism.

So far as my reading has extended, I have not met with a single such case containing the details necessary to establish the accuracy of the diagnosis. Our knowledge of glaucoma has been greatly elucidated and defined by those who have practised iridectomy, especially by its illustrious proposer, Von Graefe; and it is not unlikely that those who have disparaged the operation from the first, or who have lightly discarded it on a superficial trial, may have failed to study the most recent additions to our knowledge of the disease itself, and so prove no trustworthy guides on this subject, however great their reputation as oculists may be.

3. You say, "We also find specialists—eye-surgeons—of no mean understanding, who have never resorted to iridectomy, and who utterly condemn the operation—not blindly and out of mere stupid opposition; but on three grounds: 1. From what they can judge of the operation on general principles of surgery; 2. From what they have witnessed of the effects of the operation done by the hands of other oculists; and 3. Because they have a firm belief that many of the cases of defective vision which have been subjected to iridectomy would have recovered better had they been left to nature's own method of cure."

Answer. 1. The "general principles of surgery" is too vague a phrase to have any strict meaning when applied to an operation so peculiar as this one. Those who advocate iridectomy are probably as well versed in these principles as those who oppose it, and may be even better able to estimate their bearing upon it, than oculists who have not practised the operation which they decry. 2. If any of these gentlemen will allow me to show him the effects of the operation, I promise to do so in a conclusive manner. 3. "Nature's own method" in glaucomatous disease is to destroy the sight. If, therefore, it be meant that glaucomatous disease submitted to iridectomy would have recovered better under "nature's own method", I join issue in the most pointed manner on the question of fact; if it be intended that other forms of disease have been mistaken for glaucoma, and been, therefore, treated by iridectomy, that would only imply ignorance or carelessness on the part of the operator, and would constitute no argument at all against the use of iridectomy. On the whole, I must say, that any oculist is pursuing a course perilous to his own reputation, however great, who, after six years of open proofs of the efficacy of iridectomy, continues to treat glaucoma by those purely "medical" means, which universal experience declares to be but temporising and inefficacious expedients. What can a surgeon who knows how these expedients have beguiled the practitioner into the loss of splendid opportunities say, when afterwards asked by the disconsolate patient, "Could my sight have been saved at an earlier period?" With the kindest wish to screen a professional brother, he can but evade the question by some such words as these, "I have no doubt all was done by those you consulted that seemed to them at the time to be best for you," or maintain a painful silence; *à priori* arguments are but poor opponents to facts.

4. You then say, "Iridectomy seems to occupy this remarkable position in the history of modern scientific surgery; viz., that the principles upon which it is founded are not capable of clear and simple definition, as they are in the case of other recognised surgical operations. Ask the surgeon why he cuts off a leg, ties an artery, or extracts a cataract; and he will give you a plain and ready answer, comprehensible to every mind. But it is not so with iridectomy. The morbid conditions which are said to demand the performance of the operation; the mode of action of the operation itself—that is to say, the theory of its beneficial mode of action—are still overshadowed with difficulties; at least, not one surgeon in fifty can give you any plain and satisfactory explanation of the thing." And I am informed that this supposed want of a *rationale* of its action has been a stumbling-block to many persons, who have doubted whether iridectomy could reduce tension, because they failed to see in what manner, or on what principle, it could do so. The fallacy of this reasoning is obvious. The fact is that glaucoma is a disease characterised by augmented tension of the eyeball, under which the retina suffers damage. Iridectomy has been observed to be a proceeding capable of lessening this tension, and thus of relieving the retina from pressure. It is, therefore, employed for that most rational object, until some other method of accomplishing it is discovered, equally efficacious, and otherwise in some way preferable. Far, indeed, be it from me to say that no such other and preferable method may not some day be hit upon. On the contrary, I should always hope for it and strive for it. But, meanwhile, it is indeed a folly to reject what will effect our purpose, because we cannot forsooth explain its *modus operandi*. No one can be said to have explained why it is that the tension augments in glaucoma. We should be very short-sighted if we imagined that there will remain no mysteries for investigation, in this as in a thousand other diseases, long after all who now pore into them are buried and forgotten. The essential processes of disease and the *modus operandi* of remedies are probably among the last problems which will test the zeal of future men of science; and it will be sufficient to argue against the value of iridectomy on the ground of the mystery of its mode of action, when ob-

servers shall have fully elucidated the intimate nature of the glaucomatous process.

5. "You understand me to say that it is the early stages of glaucoma to which alone iridectomy is especially applicable." A reference to my paper, published in this JOURNAL, October 11th, 1862, will correct this misapprehension. I may also add, that I have not alluded to its applicability in certain forms of recurrent iritis and irido-choroiditis, and in extraction of cataract, only because it was unadvisable to introduce complications into the present discussion.

6. I regard the operation of iridectomy as one which any surgeon able to operate for cataract can perform with safety, and it is, of course, now better understood than it was a few years ago. I have described it fully, as well as the general indications for it, in the paper referred to.

7. I thank you for having called attention to the subject of this letter, and am persuaded that much good will result from the step you have taken. I shall consider it a duty to endeavour to state ere long, in concise terms, what are the indications which should draw the attention of practitioners to the presence of glaucomatous disease. They will be found much simpler than is imagined.

I am, etc.,

W. BOWMAN.

5, Clifford Street, November 10th, 1863.

LETTER FROM J. C. WORDSWORTH, ESQ.

SIR,—May I again trespass on your space for a few more remarks on iridectomy, which I am induced to offer by the importunity of your correspondent, "A General Practitioner," who is not satisfied with my referring those who wish for further information on this subject to the writings of its great advocate and expositor, Von Graefe.

I have no wish to inflict on your indulgence a long dissertation on iridectomy, but simply to state—

1. In what iridectomy for the cure of glaucoma consists;

2. On what principle it acts in glaucoma;

3. Under what condition or conditions its employment is indicated.

1. The operation, as practised in *glaucoma*, differs from that for *artificial pupil* in the following essential particulars.

In the first place, the incision is made in the *sclerotica*, as far from the edge of the cornea as is practicable for the knife to pass in front of the iris. Then, in the second, a segment of the *entire* iris is removed—*i.e.*, from the pupil to its attached border. The first step is necessary for the second. In performing iridectomy for other purposes, the *cornea* is incised, and only a partial division of the iris is made, except when a marginal pupil is required; for, independently of this being a safer operation, it is also more suitable to the purpose.

2. Iridectomy relieves glaucoma by permanently reducing the *tension* of the eyeball.

One of the most evident changes in the eye produced by glaucoma, if not one of the first, is the condition of undue *hardness*; the containing structures are over-distended. Vision is soon affected, in the same way as when the eyeball is pressed from without; and if the distension be reduced by evacuating some portion of the fluid contents, sight is at once improved. Now, iridectomy not only lessens the tension of the eyeball, and so effects the necessary proximate change, but it also has the advantage of producing a permanent result. How this is effected, may be a matter of investigation for years; the ultimate fact suffices for our purpose as practitioners. In the meantime, physiologists may well employ their minds in the endeavour to ascertain the *ultima ratio*. Medicine abounds much more in facts than in reasons, or, at any rate, satisfactory reasons.

3. Iridectomy is indicated in those conditions of the eye affecting sight, which are proximately dependent on over-distention.

There is no essential dependence between these and the condition of inflammation; but they may coexist. It is, therefore, of infinite importance that they should enter into all inquiries, when investigating the disturbances of vision; for in their earliest stages, they may very easily be overlooked; and the opportunity for employing iridectomy with the best effect is then lost; the visual field becomes very contracted from long-sustained pressure; the lens and other media diffusely opaque; and the last stage of glaucoma supervenes.

I believe that most of the misunderstanding in reference to this subject has arisen about a *name*. If iridectomy had been introduced as a means of relieving *tension* of the eyeball, instead of being styled *the* remedy for *glaucoma*, it would more readily have won its way into the good opinion of the profession at large. Glaucoma had long been so much associated with incurable blindness in the minds of most men, that when a remedy was propounded for its cure, it necessarily was received with incredulity on all sides; and this was further increased when it became known that excising a portion of the iris was the remedy of such pretensions.

It was argued that the proposed remedy could have no influence on a disease that, from time immemorial, had been recognised as a disorganisation of the eye, and, of course, justly. Thus prejudice and incredulity now withstand its progress, and iridectomy is condemned untried, because its supposed pretensions are absurd.

It is quite true, that neither iridectomy nor any other remedy can cure the disease commonly associated with the name of glaucoma; but had it been proposed as a means of treating undue tension of the eyeball, dissociated from the name glaucoma, the importance of the condition would then not have been commonly recognised, and, as now, the disease would have been allowed to run its wonted course unopposed, till iridectomy had ceased to be the cure.

Much as I regret the tone of this controversy, I believe that much good will come of it. I think the profession will rate at its proper value the evidence of those who condemn iridectomy untried, when it is remembered that many of the first ophthalmologists in this country and abroad speak with such unequivocal approval of its use; and that no one who can speak from *experience* has entered the lists against it in our JOURNAL.

At most, we have the vague innuendos of anonymous eye-surgeons, and the *inexperience* of an eminent, justly eminent, general surgeon against us; while, on the other hand, materials are daily accumulating that must ultimately convince all but the medical tories.

And after all has been said *pro* and *con*, I have no doubt that iridectomy will take its true place among the resources of our art, and continue the recognised means of dealing with a diseased condition for which not even its opponents can recommend a trusted remedy to supplant it.

I now hope to take my leave of this controversy; and shall not regret the part that I have taken in it, if the attention of the medical public is thereby directed to an impartial consideration of the value of iridectomy as a remedy for the early conditions of glaucoma.

I am, etc., J. C. WORDSWORTH.

50, Queen Anne Street, Nov. 2, 1863.

LETTER FROM J. Z. LAURENCE, ESQ.

SIR,—On February 19th last, Mrs. P., aged 59, came up from Hereford, to consult me regarding an "inflammation" of the left eye, which had been in progress for three weeks. It had commenced with intense pain in the globe, gradual diminution of vision, general *malaise*, and depression of spirits and vomiting.

I found the globe quite hard, the pupil fixed and dilated, the cornea nearly devoid of sensibility, general sclerotitis, and conjunctivitis. *Her vision (with the affected eye) was limited to the merest perception of light.* The fundus oculi, owing to turbidity of the vitreous humour, gave only a red reflex with the ophthalmoscope. My diagnosis was "acute glaucoma." She visited me about 4 P.M.; and, notwithstanding the disadvantages attending the performance of so delicate an operation at night, I felt so impressed with the serious character and urgency of the case, that I determined to perform iridectomy forthwith. This I did, with the assistance of Dr. Duke and Dr. Eastlake, the same evening at 8 P.M. During the night, the right eye was attacked with a similar "inflammation" as the left had previously been.

When I visited her the next morning (the 20th), I found the globe hard, the pupil dilated, a very limited amount of vision, and intense pain in the right eyeball. She was in an extremely prostrate condition, and had vomited some thin, bilious fluid.

By the following day, her vision had, as previously in the left eye, *become reduced to simple perception of light.* I recommended instant iridectomy; but my patient refused to submit to this without first writing to her husband at Hereford.

On the 25th (five days after the attack), I performed iridectomy on the right eye.

March 6th. She read No. 10 of Giraud-Teulon's test-types. Owing to the eyes not having yet recovered themselves, I did not prolong my examination of her visual powers.

May 23rd. At seventeen feet, with No. 12 convex-glass, she read with the right eye No. 22 test-type (Jäger); with the left eye No. 23. With No. 8 convexes, she read, at ten inches, with the right eye, No. 5; with the left eye, No. 13.

So striking a case as the above is self-eloquent; it needs no comment on my part.

On the general question of iridectomy in glaucoma, I cannot express my opinion better than by transcribing a few detached lines from my pamphlet on *The Progress of Ophthalmic Surgery* (pp. 11-12).

"We may discuss the effects of this operation, firstly, as pure matters of fact. From this aspect, my own opinion and experience is, that its influence on the restoration of vision is inversely proportional to the duration of the disease. In chronic glaucoma I have never seen it remarkably successful. Contrary to this observation, however, it is only right to add that Dr. Haffmann states (*op. cit.*, p. 173), in Donders's practice, an arrest, or even a diminution, of impending blindness has been noticed, not only in many cases of chronic glaucoma, but even in those of 'amaurosis with excavation' ('glaucoma simplex'), in which tension of the tunics was a prominent sign. Von Graefe himself says (*Arch. f. Ophthalm.*, viii, 2, p. 303) he can adduce numerous cases, which had been progressing from six months to three years, in which he has obtained the same results with a permanence, which he had the opportunity of testing for periods varying from one to three years. We may next discuss the *rationale* of the operation. In this point of view, iridectomy is singularly weak.... Whilst (nearly) every other operation, not only in ophthalmic, but in general surgery, has some tangible reason to exhibit for its performance, iridectomy stands (almost) alone in the utter insufficiency of the various far-fetched explanations that have from time to time been assigned for its assumed efficiency. I cannot help thinking the greater part of the benefit of the operation results from the largeness of the corneal incision, necessarily preliminary to the actual excision of the iris, and the consequent completeness of the relief to the intraocular tension thus implied; that a limited paracentesis corneæ is as inferior to 'iridectomy' precisely in the same ratio as the temporary relief afforded by the mere puncture of an abscess is to the permanent relief given by a free incision."

Trusting you will consider the extreme importance of the question at issue a sufficient apology for this intrusion on your columns. I am, etc.,

J. Zachariah Laurence.

30, Devonshire Street, Portland Place, Nov. 8, 1863.

TREATMENT OF ASPHYXIA FROM DROWNING.

Letter from J. C. S. Jennings, Esq.

Sir,—In your leading article of October 3rd, in reference to the letter received by you from the National Life Boat Institution, on the subject of the treatment of the drowned, you call upon your readers, "who have had experience in cases of asphyxia, to render every help in their power to the Institution in coming at a correct conclusion on so important a matter."

First, then, let me remind you of the old adage, that one ounce of practice is worth a pound of theory; and clearly convinced as I am, that I have succeeded in fully establishing respiration and circulation by means of galvanism, I, for one, am astonished that the Committee of the Royal Medical and Chirurgical Society have not recognised this agent in their rules for the treatment of the drowned; as it is undeniable that galvanism, alternated with other stimulants, *i. e.* the cold dash, warmth, and frictions, will excite reflex action. Its value was demonstrated many years since by Mr. Erichsen. Its use is advocated by Mr. John Hepworth, in the British Medical Journal, July 20, 1861. I must also enter my protest against the last clause of Rule 3, which states that the patient should not be left in the hot bath longer than five or six minutes. In the case reported by me in the Association Medical Journal, April 22, 1853, it proved fatal in half of that period; therefore why use it at all, particularly when no directions are added as to the degree of temperature? Rather substitute a blanket wrung out of hot water, as suggested by Mr. John Hepworth, in the letter above referred to, at the very time when I brought the subject before the Annual Meeting of the Association at Canterbury, together with the results of experiments on animals. The hot blanket would not be attended with danger in the hands of the people, or prevent the skin from exercising its necessary functions.

Dr. J. Toogood quite coincides with my views, in the British Medical Journal of September 28, 1861.

I am, etc., J. C. S. Jennings.

Abbey House, Malmesbury, Oct. 26, 1863.

FOREIGN BODY IN THE RECTUM.

Letter from William Soper, Esq.

Sir,—I venture to bring before your notice a case that may be interesting to some of your readers.

On Monday evening, October 26th, I was called to a gentleman, who stated that he was suffering from the most exquisite pain at the lower part of the bowel; and that, on attempting to pass a motion, it became intensified in a high degree. He stated that on the previous day he had taken an unusually long walk; and he thought that might be the cause of his pain. He said that his digestion was habitually imperfect; and that at times he suffered from constipation. There was no history of hæmorrhoids, fistula, nor fissured anus; in fact, he never in his life complained of any pain in the anal region previously to this. I proposed an examination; and, on introducing my finger into the anus, I detected, about two inches and a half above the orifice, a foreign body firmly fixed transversely to the rectum. I passed up on my finger a pair of dressing forceps, and succeeded in seizing the body, which was nearly an inch and a half

in length, in the centre; and, by a little manipulation, extracted what proved to be a fish-bone, being a portion of the cod fish which had been partaken of on the previous Saturday. Some little hæmorrhage followed. There was an almost immediate relief to his symptoms; and he is now doing well. I am, etc.,

WM. SOPER.

1, St. George's Villas, Stockwell Road, Oct. 30, 1863.

Medical News.

UNIVERSITY OF OXFORD. Degree of Doctor of Medicine conferred, November 5th.

Andrew, James, Wadham College

APOTHECARIES' HALL. On November 5th, the following Licentiates were admitted:—

Beddard, James, Edgbaston, Birmingham
Fox, Cornelius Benjamin, Truro
Gill, William, Truro
Joynson, George Thomas, Northwich, Cheshire
Kemp, George, Eyre Street, Sheffield
Norton, William Augustus, Kensington Park Gardens
Peatfield, Thomas John, Edwinstowe, Notts

At the same Court, the following passed the first examination:—

Fyson, Ernest Last, Guy's Hospital
Hawkins, Edmund Woods, London Hospital
Heygate, William Nicholas, St. Thomas's Hospital
Rendle, George, Guy's Hospital
Siddall, Joseph Bower, St. Thomas's Hospital

APPOINTMENTS.

*BALCHIN, R., Esq., elected Mayor of Godalming for the ensuing year.
BRIDSON, John, M.D., elected Surgeon to the Isle of Man General Hospital and Dispensary, in the room of the late H. N. Scarff, Esq.
DUCKWORTH, Dyce, M.D., has been appointed Resident Physician to the Clinical Wards of Royal Infirmary, Edinburgh.
FEARNLEY, George, M.D., elected Mayor of Dewsbury.
HOLDSWORTH, S., M.D., elected Mayor of Wakefield.
MILLER, W. W., M.D., elected Mayor of Eye.
*PARKER, Edward, Esq., appointed North Divisional Surgeon to the Police Force, Liverpool, in the room of the late *H. Swift, Esq.
*RODEN, William, M.D., elected Mayor of Kidderminster.
TRURAN, T., Esq., elected Mayor of Truro.

UNIVERSITY OF OXFORD.

BRODIE, Sir B. C., Bart., F.R.S.
MONRO, H., M.D.
OGLE, John W., M.D.
ROLLESTON, G., M.D.
SMITH, H. J. S., Esq.
} appointed Examiners for the degree of Bachelor of Medicine.

POOR-LAW MEDICAL SERVICE.

BOURNES, W. H., M.D., to the Ballycastle Dispensary District of the Killala Union, co. Mayo.
GRIBBIN, Hugh, M.D., to the Bangor Dispensary District of the Belmullet Union, co. Mayo.
KING, Robert, Esq., to the District of West Drayton and part of Hillingdon of the Uxbridge Union.
MACINTOSH, Matthew, Esq., to the Rotherfield District of the Uckfield Union, Sussex.
PERCIVAL, William, Esq., to the All Saints' and the St. Andrew's Districts of the Northampton Union.
RUST, James, M.D., to the Borrowby District of the Northallerton Union.
WILSON, John, L.R.C.P.Edin., to the Danby District of the Guisborough Union, Yorkshire.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

CHRISTIE, J., M.D., to be Surgeon 1st Monmouthshire A.V.

To be Honorary Assistant-Surgeons:—

BRUNTON, W. R., Esq., 1st Surrey R.V.
HASTINGS, H., Esq., 15th Norfolk R.V.

BIRTH.

LATHAM. On November 7th, at Cambridge, the wife of *P. W. Latham, M.A., M.B., Physician to Addenbrooke's Hospital, of a son.

DEATHS.

BROWNE. On September 20th, on board H.M.S. *Himalaya*, aged 3 months, Emilie Ethel, daughter of R. Browne, Esq., Surgeon 2nd Battalion 25th Regiment.
BULLOCK. On November 9th, at Isleworth, aged 10 months, Albert E. A., youngest child of Henry Bullock, Esq.
*CAMPLIN, John M., M.D., of Islington, aged 73, on November 3.
COLLEDGE. On October 7th, at Bilaspoor, North Western Provinces, India, aged 29, George Welstead, eldest son of *Thomas R. Colledge, M.D., of Cheltenham.
ELLIS. On November 10th, at Crowle, Lincolnshire, aged 4 years and 8 month, Robert Henry Phineas, eldest son of *Henry W. J. Ellis, L.R.C.P.Ed.
*SCANNELL, Daniel, Esq., at 22, Chapel Street, Belgrave Square, on November 1.
THOMPSON. On November 7th, at Biggleswade, aged 52, Ann, wife of John Thompson, Esq., Surgeon.
WALLEN. On November 2nd, at Rotherhithe, Hannah Maria, wife of W. S. Wallen, Esq., Surgeon.

THE GRESHAM LECTURES. Dr. H. H. Southey this year delivers the Gresham Lectures on Physic.

NEW HOSPITAL AT POONA. Sir Bartle Frere laid the foundation-stone of the Sassoon General Hospital at Poona on September 8th.

DR. FINIZIO, who has been lately tried in Italy on the charge of producing criminal abortion, has been pronounced innocent of the charge.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY. Mr. Thomas Appleby Stephenson has been elected President of this Society.

UNIVERSITY OF LONDON. The practical medical examinations of candidates for degrees in medicine at the University of London are to be this year conducted at St. Mary's Hospital, by Dr. Sibson and Dr. Parkes.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH. Benjamin Bell, Esq., has been elected President; John Gairdner, M.D., Treasurer; Archibald Inglis, M.D., Librarian; and James Simson, M.D., Secretary, of this College.

A SENSIBLE ACT. The Vestry of St. George's Southwark have shown their sense by increasing the salary of their medical officer of health to £150 a year. It will be found a good investment.

THE BOMBARDMENT OF KAGOSIMA. The *London Gazette* of last Tuesday contains a notification of the promotion of Mr. C. R. Godfrey, Assistant-Surgeon R.N., to the rank of Surgeon, "in consideration of the successful operations against the batteries of Kagosima."

SUNDERLAND MEDICAL SOCIETY. Mr. George B. Morgan has been elected President of this Society for the ensuing year; Dr. Henry J. Yeld has been elected Secretary and Treasurer; and Mr. Edward Allan Maling has been re-elected Librarian.

MEDICINE IN PETTICOATS. A person, calling herself "Mrs. Major Gage, surgeon, U.S.V.," has been representing herself to surgeons in charge of hospitals in the North, as holding the President's commission as such, and demanding quarters, fuel, etc. It is needless to say that no such person is known or recognised by the Medical Department. (*American Med. Times.*)

UNIVERSITY COLLEGE, LONDON. The Council held their first Session of the academical year 1863-4 on Saturday. A cheque for £3000, a gift to the College by Messrs. Cama and Co., was presented by Sir Edward Ryan. A vote of thanks was unanimously given to Messrs. Cama for their generous donation, and a further vote of thanks was passed to the same gentlemen for their recent donation of £1,000 to the hospital. A vote of thanks was passed for the generous contribution sent on August 14th, of £500 for the hospital by an anonymous benefactress. The Filliter Exhibition of £30, for proficiency in Pathological Anatomy (Examiners, Dr. Sharpey and Dr. Wilson Fox, with Professor Hare, M.D.) was awarded to Mr. Alexander Bruce. The Longridge prize of £40, for general proficiency in medicine and surgery, was also conferred on Mr. Alexander Bruce.

Lady Doctors on Horseback. Miss Doctor Harriet N. Austin, of New York, has come out in favour of ladies riding on horseback astride. The present style of riding, she says, is unsafe, ungraceful, unhealthy, and unnatural. Dr. James C. Jackson, in his work on consumption, takes the same view. He says that the present style in which ladies ride, when long continued, is productive of numerous diseases; but thinks that, if women could have dresses fitted for the purpose, and would ride astride as men do, horseback riding might be used not only as a means of occasional relief from the monotony of life, but it might be elevated into a national characteristic. (*American Paper.*)

Action by a Medical Man for Alleged Illegal Arrest. The Court of Queen's Bench of Ireland has been engaged in hearing arguments on an application for criminal informations against Mr. Hunt, a magistrate for Antrim, at the suit of Dr. Thomas Courtney. The case arose out of the death, in last January, of Amelia Carey, under peculiar and melancholy circumstances, which were the subject of protracted magisterial investigation. Her death was supposed to have been caused by an irritant mineral poison, which Dr. Courtney, who attended her in her last illness, was suspected of having administered. Her body was exhumed soon after interment, and the contents of the stomach were analysed by eminent chemists, but no trace of poison was detected, and the coroner's jury returned an open verdict. Mr. Hunt, however, professing to act under instructions from the Castle, caused Dr. Courtney to be arrested and held to bail, and instituted an inquiry, which, after proceeding for several weeks, was at last quashed by order of Government. The allegations against Mr. Hunt were that Dr. Courtney was not, at the initiation of the proceedings, informed of the nature of the charge against him, that the investigation was unfairly conducted, and that at its close Mr. Hunt maliciously and corruptly caused the charge of being accessory before the fact to Miss Carey's death to be placed against Dr. Courtney on the books of the Ballymena Petty Sessions Court. The Judges have not yet pronounced their decision.

Social Science Association. At a local committee at Edinburgh, Professor Archer read a report, which refers to the gratifying way in which the people of Edinburgh had sustained their reputation for hospitality, etc. It stated that the working men's meeting was a feature of special interest, no fewer than 34,960 applications having been received for admission, of which only about 3,600 could be gratified; and the order of the meeting, and the deep interest taken in the proceedings, were such as to excite the admiration of all. Great success had attended the excursions. Mr. Curror, city treasurer, read the financial report, which stated that the revenue of the general fund from the sale of tickets was £1,747 14s., and the disbursements £208; leaving a balance of £1,539. The local subscription fund amounted to £905, and the disbursements to £802; leaving a balance of £103. It was proposed to transmit immediately the sum of £1,500 to the Association in London.

Hydrophobia. A young man was lately admitted at the Royal Infirmary, Liverpool, labouring under unusual symptoms. He could swallow no solid of any kind. The doctor in attendance directed a glass of water to be given to him. The man evinced no fear of it, but endeavoured to swallow it. He managed to get the water to his mouth, and also to swallow it, to a certain extent. Then violent spasms of the muscles of the neck set in, and he ejected the water and also some froth and saliva, violently shaking his head at the same time, and apparently choking. This occurred every time he attempted to take anything. The medical man, thinking it principally nervousness, as the man denied ever having been bitten by a dog, ordered him a mixture of chloric ether, etc. The patient, however, afterwards said that he had been bitten seven years ago, but it had escaped his memory when asked before. About two in the afternoon delirium set in; his head was shaved, and the temporal artery divided. He became so delirious that it was necessary to tie him down. Morphia was administered, but with little or no effect. Chloroform was also tried, but found to be of no service. His gestures and exclamations were horrible. He continued to eject froth and saliva, along with a dark fluid, which he threw some distance by the shaking of his head. He made attempts to bite those who came near him, and it was with great difficulty that he was restrained. He became insensible, and died in the afternoon.

Health of the British Army. Dr. Franklyn, surgeon of the 10th Foot, refers as follows to those diseases of a special type which are the bane of the British soldier:—"Professor Maclean, in his introductory lecture at the Royal Victoria Hospital, Netley, states that the ills which arise from the diseases in question, rendering the soldier prematurely old and inefficient, amount to 50 per cent. In judging of the health of troops, the following points must be considered: viz., length of service; length of tropical service; age of the man; whether married or single. Among British soldiers, as age increases, so the mortality, in comparison with the civil population, increases to an immense degree; and almost all the rheumatism, and, in fact, many other diseases are traceable to the soldier having been the victim of that class of diseases of which I speak. If not, how is it that this is not the case in continental armies, as the French, Prussian, and Austrian; and why is it that in the Danish and Hanoverian armies the case is reversed, and the soldier, as age advances, becomes absolutely more healthy than the civil population? In the English infantry, the average number of sick is about 50 per 1000 men; in the English cavalry, a little less; in the Royal Artillery, a little more; and the Military Train and depôt battalions, at most 7000 men, furnish about 1400 admissions *per annum*, on account of these two corps being chiefly composed of old and young soldiers. Striking an average, in the British army, the number of sick is nearly 55 per 1000 of strength; in the French army, 45; in the Prussian, 47; and in the Austrian, 48. Our average time in hospital is 17 to 20 or 21 days; in the French army, it is 16 days; in the Prussian army, it is 16 days; and in the Austrian army, it is 17 days. But the special diseases which constitute the chief admissions in our army keep men a long time under treatment; and this serves to explain why they are longer in hospital than is the case on the continent. These diseases in the English army run up the admissions to from 350 to 450 *per annum*, or nearly one-half, of which one-third are of lighter, and two-thirds of the severer kind. The French army is very fortunate in this respect. Taking the garrison of Paris and comparing it with some of ours, we find the admissions from these diseases were:—In 1858, Paris, 24 per 1000 men; Aldershott, 411 per 1000 men; and Woolwich, 512 per 1000 men. Sometimes in Paris it fell to 16 per 1000 men, while in England it was 20 times as great; and in the worst garrison—viz., Marseilles—it never reached above 113, or considerably less than one-third of our number even at Aldershott. And there is reason to believe, that if it were possible to carry out police regulations, establish special hospitals in our garrison towns, and occupy the men more with their respective trades, that an immense saving in men and money would be the result, and that in the event of a war we should have a fine, healthy, serviceable body of men, instead of the wretched, ill-formed boys who fill up our regiments after a little drain has taken place; boys who, if they enter at eighteen, have really many years to wait before they become completely formed and able-bodied men.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion. The President, "Cases of Large Tumours of the Scalp removed by Operation"; "A Case of Fibrous Tumour of the Uterus"; Dr. Routh, "On a Case of Hydrocephalus of several years' standing"; Dr. Gibb, 1. "Removal of a Pin from the Larynx"; 2. "Removal of the Bristle of a Tooth-Brush from the Tonsil"; 3. "United Fracture of the Pomum Adami in a Phthisical Boy"; Mr. Hart, "Ophthalmic Disease"; Dr. B. W. Richardson, "On Iodine as a Disinfectant".—Asiatic.

TUESDAY. Statistical.—Pathological.—Ethnological.

WEDNESDAY. Meteorological.—Society of Arts.—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Dr. Drysdale, "On Evidence against the Internal Use of Mercury in Syphilis and other Diseases."—Zoological.—Royal.—Antiquarian.—Linnæan.—Chemical.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M.

SATURDAY. Royal Botanical.—Association Med. Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—NOVEMBER 7, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1011 / Girls.. 952	1963	1270
Average of corresponding weeks 1853-62		1879	1270

Barometer:
Highest (Fri.) 30.323; lowest (Mon.) 28.900; mean, 29.731.

Thermometer:
Highest in sun—extremes (Fri.) 80.4 degs.; (Sat.) 53.1 degs.
In shade—highest (Wed.) 60.8 degs.; lowest (Fri.) 34.3 degs.
Mean—47.3 degrees; difference from mean of 43 yrs.+1.5 deg.
Range—during week, 26.4 degrees; mean daily, 10.9 degrees.

Mean humidity of air (*saturation*=100), 87.

Mean direction of wind, S.W.—Rain in inches, 0.86.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

IF A MEMBER will refer to the JOURNAL of August 29th, 1863, page 245, he will there find remarks made relative to the action of "Beck *v.* Sterne". Members and Licentiates of the College of Physicians can make legal charges for medical attendances. Fellows of the College cannot do so. They have debarred themselves of the privileges once offered to them of doing so under the Medical Act.

G. D. M.—A correspondent writes for explanation of a short notice at page 461 of the JOURNAL, headed "The New Register". He says he "cannot understand it, as it seems to be a self-evident truism."

[Our correspondent's error—for the error is all his—arises from his *supposing* that the Register is published on January 1st, which it is not. The paragraph simply says: That no names will be inserted in the published Register, which may be inserted in the Registrar's Register after January 1st. EDITOR.]

MEDICAL CHARGES.—SIR: I was very glad to see in the report of the late meeting of the South Midland Branch, that the subject of medical charges was brought prominently before the notice of the members. I am sure the great body of general practitioners would rejoice to see a change for the better; for as matters are at present, it is a difficult thing with some to make both ends meet; and many of the ignorant public are not satisfied unless they have a certain amount of medicine. It is only just and right "that the remuneration of the medical profession should depend solely upon the time and skill devoted to their patients, without reference to the quantity of medicine supplied." I think it would be advisable if a similar resolution were adopted by each Branch of the Association. I am, etc., JOHN CANDY, M.D.

Alstonfield, near Ashbourn, Nov. 3rd, 1863.

COMMUNICATIONS have been received from:—Dr. FREDERICK J. BROWN; Mr. H. COLLEY MARCH; Dr. T. J. WALKER; Mr. J. VOSE SOLOMON; Mr. F. FRY; Mr. C. HUNTER; Mr. W. PARKER; THE HON. SECS. OF THE EPIDEMIOLOGICAL SOCIETY; Dr. SANKEY; Mr. R. J. ROGERS; Mr. J. ROBERTSON; THE HON. SECRETARIES OF THE HARVEIAN SOCIETY; Mr. J. HALL; Dr. G. F. GILES; Dr. S. MONCKTON; Mr. LOWNDES; Dr. D. DUCKWORTH; Mr. WILLIAM BOWMAN; Dr. GIBB; Mr. HULKE; Mr. J. Z. LAURENCE; THE SECRETARY OF THE COLLEGE OF SURGEONS OF EDINBURGH; Mr. S. W. FEARN; Mr. APPLEYARD; Mr. G. E. FORMAN; Mr. THOMAS LONGMORE; Dr. J. GARDNER; Dr. P. W. LATHAM; Dr. H. SANDWITH; Dr. H. W. J. ELLIS; Mr. R. W. MARTYN; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. F. PITMAN; Dr. B. W. RICHARDSON; and Dr. G. M. HUMPHRY.

BOOKS RECEIVED.

1. Reports of Dr. W. T. Gairdner, the Medical Officer of Health for the City of Glasgow. 1863.
2. Principles and Methods of Medical Observation and Research. Second edition. By Thomas Laycock, M.D. Edinburgh: 1863.
3. Asthma, etc., treated by the Water Cure and Air Bath. By W. Macleod, M.D. 1863.
4. Report on Gun-Shot Wounds of Invalids sent to Fort Pitt, etc. By T. Longmore. London: 1863.
5. Life: its Nature, Varieties, and Phenomena. By Leo H. Grindon. Third edition. London: 1863.

ADVERTISEMENTS.

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Abstract of Two Lectures

ON

LARYNGEAL DISEASE, AS EXHIBITED BY THE LARYNGOSCOPE.

Delivered to the Students of the Birmingham General Hospital.

BY

JAMES RUSSELL, M.D.,

PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—The view of the larynx which is afforded by the laryngoscope is, in some respects, a peculiar one; and a few words are necessary to explain to you the somewhat unusual relation which the several parts presented in the mirror bear to one another, as well as to point out the portions of the larynx to which you must pay special attention in conducting your examination.

Let me, then, remind you that the throat-mirror is held at a considerable height above the upper opening of the larynx, and that, consequently, the view you obtain of the larynx is a bird's-eye view; the parts are thus foreshortened, and portions of the organ are entirely concealed by others which project in front of them. You have also to remember, that the relative position of parts is inverted in the mirror, so far, at least, as front and back are concerned; though such inversion does not involve the objects situated on either side. This inversion must be carefully remembered whilst you are educating your hand to introduce instruments into the larynx: the mind must then come to the assistance of the eye, and correct the impressions derived from the latter.

The anterior boundary of the upper opening in the larynx (as seen in the laryngoscope) is formed (Fig. 1) by the extremity of the epiglottis, which describes a curve from side to side; sometimes the extremity of the epiglottis is also curved upwards upon itself, and then we can also see a portion of the under surface of the cartilage. From the perspective nature of the view, to which I have already adverted, but little of the descending sides of the epiglottis is visible; and thus each limb of the curve described by the apex appears almost to rest upon the posterior edge of the larynx.

The posterior edge exhibits on each side the apex of the arytenoid cartilage; and between these apices it is formed by the fold of mucous membrane covering the arytenoid muscle. Like the epiglottis, it is curved from side to side, but in the opposite direction, the concavity of the curve looking forwards (backwards as it appears in the mirror).

This posterior edge is of much importance in laryngoscopy, as it affords us the means of ascertaining the degree of motility possessed by the arytenoid cartilages. This information is of great value in estimating the effect of disease; for the power of the arytenoid cartilages to perform their appropriate functions, depends entirely upon the freedom of movement which they enjoy. The condition of this posterior edge varies with each change in the glottis. During tranquil breathing, the vocal cords are widely separated; the arytenoid cartilages are recumbent; and their apices, widely apart from each other, are indicated by a little tubercle on each side, lying just beneath each limb of the epiglottic curve (Fig. 1). During vocalisation, on the other hand, the lips

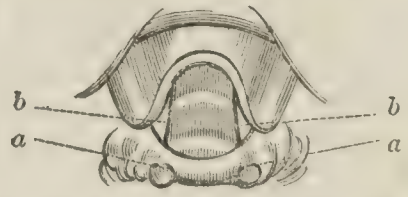


Fig. 1.—Upper Opening of the Larynx as seen with the Laryngoscope. *a a.* Apices of Arytenoid Cartilages. *b b.* Vocal Cords.

of the glottis are brought into apposition; in effecting this movement the arytenoid cartilages rotate on their articulation, and their apices are closely approximated, rising from their previously recumbent position, and elevating the posterior wall of the larynx to an extent which differs in different subjects. We had the means of witnessing all these phenomena the other day, in the unfortunate patient who had laid open his larynx by severing the thyroid cartilage above the vocal cords.

Thus, by fixing your attention upon the posterior margin of the larynx, you are enabled to form an opinion respecting the condition of that organ, as regards its capability both to perform its appropriate functions as an organ of speech, and to afford free admission of air into the lungs.

The opening into the larynx lies between the two curves I have now indicated. It varies in dimensions in different subjects, according to the attitude of the epiglottis, whether prone or erect, peculiar to the individual; and with the size of the opening must also vary the extent to which the interior cavity is exposed to view. In certain persons the epiglottis is naturally so erect as to leave the top of the larynx uncovered, and even to expose the anterior extremities of the vocal cords; whilst in others it is very recumbent, and covers a considerable part of the opening, so that only the posterior segment of the cords is visible.

I may here mention that, under the last mentioned circumstances, advantage may be taken of the well known fact, that the entire larynx undergoes considerable elevation in the neck whilst sounding notes of a high pitch; by this means it may be brought more within the scope of the throat-mirror, and the view of the interior be extended in proportion. By desiring the patient to sound a high pitched E, the larynx instantly rises to a considerable distance, and so approaches the throat-mirror.

The true vocal cords constitute very prominent objects at the lowest part of the laryngeal cavity, conspicuous by their thickness and by their white colour. When apart, as they are in tranquil breathing, the rings of the trachea are distinctly visible between them; and, under very favourable conditions, a very patent glottis, and a directly vertical attitude of the trachea, even the opening of the primary bronchi may be distinguished. This fortunate concurrence of circumstances has once happened to myself.

Having made these preliminary remarks, I now proceed to illustrate a few points in laryngeal disease, which have lately presented themselves to my observation in this hospital and elsewhere; and I shall arrange what I have to say under the head of

three acts, in each of which the larynx is immediately concerned; viz., the act of speaking, that of breathing, and that of coughing.

1. *Voice.* Vocalisation and respiration are directly opposed to each other, as regards the condition of the glottis which each involves. For easy breathing, the lips of the glottis must be widely separated; for vocalising, they must be brought into apposition. Further, the pitch of the voice is regulated by the tension of the vocal cords, which, like the preceding acts, depends upon muscular action. The essential condition for vocalisation lies, therefore, in the free action of the arytenoid cartilages, with the object of bringing the vocal cords into exact parallelism and apposition. The requisites for obtaining this condition are exactly those which are involved in the unimpeded movement of any of the limbs; healthy action of the muscles of the larynx, a normal condition of the articulation connecting the arytenoid with the cricoid cartilage, and a soft and yielding state of the soft parts covering the arytenoid cartilages. These requisites may be violated by disease in various ways.

In the first place, some substance may be interposed between the vocal cords, so as to prevent the closure of the glottis; a familiar illustration is the huskiness of voice produced by the collecting of phlegm in the larynx, at once removed by "clearing the throat". But a better example was afforded by a patient, now about to leave the hospital, whose case will be detailed presently, in whom a pendulous growth, springing from the angle of the thyroid cartilage, lay within the glottis, and was embraced by the cords at each attempt at vocalisation. Not only did this growth prevent the approximation of the vocal cords necessary for clear speech, but it would interfere with the production of sufficient tension of the cords, and would act as a damper upon their vibrations. Even at the present time, when nothing of the growth remains but its base, this small portion, being situated just at the attachment of the cords, is sufficient to interfere with the clearness of the man's voice, by preventing perfect parallelism from being established between the two cords. Hence, in the case of a morbid growth within the larynx, the state of the voice may be accepted as an indication of its situation.

Secondly, the vocal apparatus may be structurally healthy, but the muscles may fail in their action. I am not able to speak of paralysis of the laryngeal muscles from organic disease of the brain; but in hysteria we often meet with instances in which the action of a particular group of muscles is suspended, with a degree of precision in their selection defying the utmost effort of art. Such cases are examples of suspension of voluntary impulse, rather than of paralysis; the influence of the will is withheld for a time from the particular muscle or muscles, not, as in organic disease, by injury to the communicating fibres between the muscles and the seat of voluntary power, but by suspension of voluntary effort itself, in consequence of a morbid state of the nervous system closely connected with the mental functions. By the application of some unwonted stimulant, a voluntary effort is aroused in these patients, and, for the time at least, the quasi-paralysis disappears; too often, however, to return again, or to transfer itself to some other part of the muscular apparatus. You will generally find that the quasi-paralytic affection dates from some sensation which has drawn morbid attention to the parts moved by the muscles in question, or in some emotion which has relations with the functions to which such muscles administer; in accordance with the law enunciated by Van der Kolk, that, in compound nerves, the sentient filaments are distributed to those parts which are moved by the muscles to which the motor filaments of the same nerve are supplied. A case in point is now in the hospital, in which a nervous girl, affected with excessive sensitiveness of the sole of one foot, has drawn it under the thigh, and, to all appearance, has lost the power of extending her knee.

Loss of voice, from this cause, is a frequent symptom in nervous or hysterical subjects, frequently dating from a slight cold, which has occasioned passing hoarseness and soreness of the throat. In some cases which I have examined, the laryngoscope has completely confirmed the evidence derived from other considerations. In a young lady with very hysterical antecedents, in whom for a time voice was absolutely extinguished, I could not perceive the slightest movement in the arytenoid cartilages when the patient was desired to vocalise, and the glottis retained the widely opened condition proper to tranquil breathing. In a lady of nervous temperament, whose voice long remained very feeble after the subsidence of a common cold, the glottis was only half closed during speaking. In this disorder, which is termed hysterical aphonia, the voice, though feeble and whispering, has none of the roughness observed in chronic laryngitis; and the patients are sometimes sensible that they have to draw breath more frequently than usual whilst speaking, because the chest empties itself with preternatural rapidity, in consequence of imperfect closure of the glottis. Cases of the kind I am describing do not always produce immediate conviction of their real nature, and the laryngoscope thus becomes a valuable assistant in diagnosis; and this aid is the more important, that it is essential to discriminate the affection from others depending on organic change. Nothing could be more mischievous to a case of hysterical aphonia than to keep the patient's attention fixed on the complaint by local treatment; whilst, on the other hand, it would be equally mischievous, in a case of inflammatory disease, to omit proper local and general indications.

Thirdly, the mucous membrance and submucous cellular tissue of the larynx may be so altered by inflammation, as to lose that soft and yielding character which is essential to the free movement of the arytenoid cartilages, on the importance of which I have so often insisted. The submucous cellular tissue may be infiltrated by fluid in acute inflammation, or be hardened by lymph in the chronic form of that disease; the movements of the arytenoid cartilages are thereby as completely impeded as is the action of the elbow-joint by a contracted cicatrix remaining after a burn. Moreover, the swollen mucous membrane advances into the interior of the larynx and partially occupies its cavity, as is strikingly shewn in the illustrative cases; and, in consequence of the irritated and tender condition of that membrane, the movements of the arytenoid cartilages during vocalisation are affected with pain and unwillingness. The true vocal cords do not participate in the thickening with equal readiness; their mucous covering being too delicate and too closely attached to admit of fluid

collecting beneath it; but the false vocal cords, composed of much looser tissue, are very liable to suffer, and, by their swollen condition, take their share in preventing the apposition of the true cords, and in damping their vibrations. I make no more special reference to acute laryngitis, as I have no examples of this disease to bring before you.

In examining the larynx in chronic inflammation, we see the arytenoid cartilages more or less erect, and the glottis on this account more or less closed, and incapable of opening; the posterior edge of the larynx much thickened and irregular; the apices of the arytenoid cartilages prominent; and the lining membrane tumefied; in one of the following cases it was also remarkably granular. The mucous membrane may be preternaturally vascular and bathed with secretion, or it may retain its normal colour and dryness, according as the surface of the membrane is or is not affected by the inflammation. If the epiglottis be involved, it is thickened, contracted, and recumbent, or considerably everted, or even ulcerated.

I may mention ulceration of the vocal cords as another important cause of loss of voice. The mode in which it operates to produce this effect does not require further explanation. Mr. Ryland states (*Diseases and Injuries of the Larynx and Trachea*, p. 103) "if this occur on one side only, the voice is rendered very hoarse and rough, but some degree of vocal resonance remains; but, if both ligaments be destroyed or much injured, the voice is absolutely extinguished."

[*To be continued.*]

Clinical Records.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO ST. GEORGE'S HOSPITAL.

XII.—Radical Cure of Umbilical Hernia.

Wm. Nichols, aged 50, was admitted into St. George's Hospital, under the care of Dr. Bence Jones, in 1861. He left the hospital supposed to be cured at the expiration of six weeks. Soon after this, he found a protrusion at the navel, which gradually increased, until he was admitted a second time into the hospital, on December 16th, 1862.

Upon examination, an umbilical hernia was found, causing a swelling rather larger than a hen's egg. The swelling could with some little difficulty be reduced, but it always returned upon his assuming the erect position. For some time past, the swelling had occasionally become very tense, and remained in that condition three or four days together, causing him much pain, and preventing him from following his occupation.

Dec. 17th. The patient was brought into the operating theatre. The hernia was found full and tense, but was completely reduced after some little difficulty. The tumour was then grasped between the thumb and finger, and three needles were passed through its neck, from side to side, close to the abdominal ring. The collapsed sac was allowed to hang down, and twisted sutures were placed, with moderate firmness, over the extremities of the needles. The patient was then sent to bed.

Dec. 20th. He felt rather low; there was no other symptom. Three ounces of gin were ordered.

Dec. 23rd. The sac felt as if completely consolidated. The needles were removed.

Dec. 24th. He felt quite well, entirely free from pain

Dec. 27th. No impulse was communicated on coughing to the remains of the sac, which was shrivelling up.

Dec. 29th. He left the hospital apparently cured.

This patient called at the hospital on February 3rd, and on subsequent occasions. There was no return of the hernia; and the skin which had covered the sac, gradually became converted into a dry, dark, warty looking substance, not larger than half an ordinary nut.

Several other cases of umbilical hernia of smaller size, in children, have been recently successfully treated in St. George's Hospital in the manner above described.

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

CASES OF COMPRESSION OF THE BRAIN, IN WHICH THE OPERATION OF TREPHINING HAS BEEN PERFORMED: WITH REMARKS.*

By Thomas P. Pick, Esq., late Surgical Registrar.

The injuries of the head, in their relation to operative surgery, is a subject of such vast importance to all practical surgeons, that I have thought a narration of some of the cases which have occurred in this hospital during the last few years might be of interest, and might tend to confirm us in our views of the recognised and orthodox treatment, or suggest some other.

Compression of the brain from injury, requiring the use of the trephine, may arise from three causes: 1. Extravasation of blood; 2. Depression of bone; 3. Effusion of the products of inflammation. It will be convenient, for the sake of order, to classify our few cases under these three heads.

I. *Extravasation of Blood.* Of the first class of cases —viz., *trephining for extravasation of blood*—no instance has occurred during the last few years in the wards of this hospital. They are, however, of the highest importance, not only on account of the great difficulty of diagnosis as to the seat of the effusion, but also on the success which attends the treatment, if resorted to early. One of the chief points to be attended to, in coming to a correct diagnosis with regard to these cases, is that they are usually complicated with fracture of the skull. Of thirty cases, collected at random from the *post mortem* records of this hospital, of extravasation of blood between the bone and dura mater, there was extensive fissure in every case.

II. *Compression of the Brain from Depressed Bone.* The fracture may be simple or compound; may be accompanied by symptoms, or not. Of cases of simple depressed fracture without symptoms, Sir Astley Cooper says: "Intracranial suppuration does not often occur as long as the depressed fracture is covered by integument"; and undoubtedly this is often the case, though Guthrie appears to differ from this view; and cases sometimes occur in which this takes place, as, for instance, the following case.

Case I. Michael M., aged 25, labourer, was admitted August 9th, under Mr. Henry Lee. Half an hour before admission, he fell down an area, striking his head. He was drunk at the time. When admitted, he was so intoxicated that it was impossible to diagnose what

* From a paper read before the St. George's Medical Society, 1862-63.

head-symptoms there were. The following morning, he was quite quiet, and answered questions rationally. A depression of the occipital bone was felt to the extent of half an inch, to the left of the external occipital protuberance. The pupils were natural, and sensible to light. Pulse quiet; tongue clean. The bowels had acted. He was ordered to have ten grains of calomel immediately, and a senna draught in two hours.

August 11th. He complained of great pain in the head, and was very restless. There was slight facial paralysis of the right side. The pulse was 66, throbbing; the tongue furred; the pupils dilated and sluggish; the bowels acted freely. Symptoms of inflammation now developed themselves; convulsions and symptomatic fever, followed by coma and death on August 24th, thirteen days after the accident.

At the *post mortem* examination, pus was found in the cavity of the arachnoid, and an abscess in the substance of the brain.

In cases of compound depressed fracture without symptoms, the trephine must be applied to prevent impending mischief. The fracture is not here covered by integument, and therefore intracranial suppuration will more probably occur.

Case II. George Keally, aged 50, was admitted October 20th, 1859, under Mr. Johnson. A short time before admission, whilst working at a mill, he was struck on the left side of the head by the shaft, knocking the opposite side against a wall. On admission (5.30 P.M.), he was quite sensible, and gave an account of the accident. Pulse 60. The pupils acted, and were regular. There was a lacerated wound on the left side of the forehead, leading down to a fracture of the skull, the bone being comminuted and depressed. There was a long ragged scalp-wound over the right parietal bone, at the bottom of which the bone was exposed. There was no fracture detected on this side. The depressed portions were removed by means of Hey's saw and the elevator. The dura mater was uninjured.

October 21st. He had passed a quiet night, and was in little or no pain. There had been no bleeding. He was quite sensible, and the pupils acted. Pulse 72, full. He was ordered to have three grains of calomel immediately, and a senna draught in four hours.

October 22nd. The bowels acted copiously after the draught. He had been quite quiet, and slept a little. The wound was discharging laudable pus. Pulse 86, full; tongue white at the edges.

October 23rd. He had been very restless all night, with constant twitching of the muscles of the face. He complained of great pain in the head; was constantly moving in bed, and throwing his arms about. He was quite sensible. There was paralysis of the left side of the *face*. The left pupil was somewhat larger than the right; both acted. The face was flushed; the skin hot; pulse 86, full; the tongue was furred. He was ordered to have three grains of calomel every four hours, and to have a blister applied to the nape of the neck.

October 24th. He was quite delirious, and could not be made to answer questions. He was constantly muttering to himself and talking incoherently. The face was more paralysed; the pupils were dilated and insensible; pulse 96, weaker; the skin was hot. He had passed his urine and motions involuntarily.

Evening. He was quite insensible; his breathing was stertorous. He died at 11 P.M.

Post Mortem Examination, fifteen hours after death. The body was in good condition. There was a large scalp-wound, exposing the bone behind the ear, with much lymph in the subaponeurotic tissue. There was another wound on the left side, at the bottom of which a portion of bone had been removed, so that the dura mater was exposed. A portion of the squamous bone was depressed. The dura mater under the depressed bone was healthy, while the exposed portion was smeared with lymph. A considerable quantity of pus was found in the cavity of the arachnoid on the left side. Some blood was effused in the meshes of the pia mater, over the left hemisphere of the cerebellum, the pons, and down the cord. There was no laceration of any part of the brain; and, except for the compression it had received, it was perfectly healthy. The fracture was traced across the middle fossa into the sphenoidal fissure. There was no blood in the orbit.

Case III. Mark Stevens, aged 41, bricklayer, was admitted March 9th, 1860, under Mr. Johnson. A short time before admission, he fell off a scaffold, striking his head. He was insensible when picked up. On admission, he had not yet rallied from the concussion, but could be roused sufficiently to be made to answer questions. Pulse 80, weak; pupils contracted, sensible. There were two scalp-wounds on the right side of the head, one of which communicated with bone. A most careful examination failed to detect any fracture.

March 10th. He was quite conscious. Pulse 76, weak; pupils natural; tongue clean.

He went on well till the 15th, when he complained of pain in the head; and was ordered to have three grains of calomel immediately, and a senna draught in four hours.

March 17th. He had become somewhat delirious; but, when roused, answered questions rationally. Pulse 120, full; face flushed; tongue furred; skin hot. The wound was dry, and the tissues infiltrated. He was ordered to have three grains of calomel every four hours.

March 18th. He seemed rather better; there was less delirium, less pain in the head. The bowels acted. The tongue was still furred. Pulse 118.

March 19th. He was still wandering; seemed much weaker and lower. Pulse 100, very weak. He was very restless. There was no discharge from the scalp.

March 21st. A slough having separated this morning, a depression of the bone was discovered under the scalp. An incision was therefore made, and an extensive depression discovered. A very large portion of bone was removed. The bone was very vascular, and had a thick coating of lymph up it.

March 22nd. He had been very restless and delirious all night. His respiration was quick; pulse 108, small and weak. He answered questions rationally, and protruded his tongue when told to do so. The pupils were natural, and acted.

March 23rd. He was still sensible. The breathing was more oppressed. Pulse 112, weak; tongue dry. The wound was quiet; a little healthy pus discharging.

March 24th. Insensibility gradually came on during the night. He was now in a state of coma; pupils dilated and insensible. His breathing was stertorous. He had paralysis of the left side. The pulse was slow and laboured. He died at 4 P.M.

Post Mortem Examination. There was a large sloughy wound over the right ear, communicating with a hole in the skull. The dura mater was exposed, and covered with blood and lymph, but not injured. In front of the hole there was a piece of bone, quite loose, but on a level with the rest of the skull. There was a little blood between the bone and dura mater. There was a large quantity of purulent lymph in the arachnoid cavity, in the right posterior fossa, and below the fracture; and a still larger quantity of turbid serum in the subarachnoid tissue down to the base of the brain. It did not appear that the brain was in any way injured. At one point, the cortical structure, below a considerable mass of purulent lymph, appeared a little softened. In all other particulars, the brain was healthy. The other parts of the body were not examined.

Though the rule is to trephine in compound fracture with depression, there are some cases in which this treatment is not necessary, especially in children; for it is an established fact, that children bear greater injuries

to the head with impunity than adults; and that the same amount of injury is less often followed by evil consequences in children.

Case iv. John C., aged 10, was admitted April 20th, under Mr. Hewett. Just before admission, he was run over by a water-cart. It was stated that the wheel passed over his head. He was stunned to a certain extent by the accident. On admission (11 a.m.), he was not insensible, but was somewhat stupid, as if rallying from concussion. There was a large semicircular wound extending from the external angular process of the frontal bone to the occiput, forming an oval flap. There was a fracture of the skull corresponding to the external wound, with depression of the bone; the lower portion being driven under the upper. There was bleeding from the right ear; no bruising about the face.

1 p.m. Since admission, the boy had vomited a quantity of black blood. There had been bleeding from the nose; and there was considerable ecchymosis around the left eye. The pupils acted. He was quite sensible, and answered questions rationally, but did not give a very clear account of the accident. Tongue dry; pulse 90, quiet. He was ordered to have three grains of calomel immediately.

He went on well without any symptoms till May 3rd, five days after the accident, when the scalp around the wound was noticed to be puffy. An incision was made; and a quantity of bloody pus, mixed with brain-like matter, escaped.

On May 8th, slight facial paralysis of the left side was noticed; which, however, had quite disappeared on the 14th. He had not a single other untoward symptom, but recovered, and went out perfectly well.

Two other cases of very formidable compound depressed fracture of the skull in children have occurred lately at this hospital, in which no operative measures were adopted, both patients recovering.

On referring to my case-book, I find notes of eight cases of well-marked compound depressed fracture of the skull, which presented no symptoms of compression on admission. In two of these cases, trephining was at once performed; the other six being left entirely alone. Of the two that were trephined, one recovered. Of the six other cases, three were those of the three children referred to above, which recovered; two others had intracranial suppuration, and died; and one recovered; but it is probable that in this case there was only depression of the outer table.

We come now, in the third place, to consider a class of cases about which there can be no doubt as to the plan of treatment; though, unfortunately, it is one rarely followed by success. I allude to depressed fracture of the skull, accompanied by symptoms of compression of the brain. In these cases, with very few exceptions, it is necessary to trephine. We cannot place our patient in a worse position than that in which he already is, and we must resort to operative measures as a last resource. The symptoms, however, even in this class of cases, vary very much; and we must be guided by these, in a great extent, as to our prognosis. Contrast the two following cases.

Case v. Redman Callaghan, aged 16, was admitted January 23rd, 1862, under Mr. H. C. Johnson. A short time before admission, he fell backwards off a ladder, a distance of twenty feet, striking his head. On admission, there was perfect insensibility, stertorous breathing, and paralysis of the right side. There was also ptosis of the right eyelid; the pupils were dilated and insensible; and there was slight eversion of the right eye. The teeth were clenched. The pulse was 62, laboured, and intermittent. He had slight occasional spasm of the face. There were mucous *râles* over both lungs. There was a distinct depression, with crepitus, over the occiput. An incision was made down to the bone, and a considerable quantity of brain-matter exuded. No further attempt was made. He died fourteen hours after the accident.

Case vi. William Harde, aged 44, police-inspector, was admitted May 31st, under Mr. G. D. Pollock. He was supposed to have been thrown off his horse. He was picked up insensible. On admission, he was unconscious, but sensible to pain. There was no paralysis; the pupils were natural; pulse 60, soft. A small scalp-wound, with depressed bone, was found over the left temple. He was trephined, and the bone elevated. The following day, he was sensible, and remained so for five days, when symptoms of meningitis supervened; and he ultimately sank, and died on the twelfth day after the accident.

How different were the indications of brain-mischief in these two cases! And it is to this that we must more especially look, as we do not so much dread the pressure produced on the brain by the depressed bone, as the concomitant injury which the brain may have, nay, generally has received. Mr. Hewett, in his lecture, says: "It has never fallen to my lot to meet with a single case of cerebral disturbance, of a formidable or urgent character, in which such symptoms were wholly dependent upon depressed bone. In every case which I have seen with these symptoms strongly marked, there was also some extensive extravasation of blood, or some serious lesion of the brain-substance itself." And certainly the records of this hospital coincide with this view. Of thirteen cases of depressed fracture of the skull which died in this hospital, and were examined after death, in nine the brain was lacerated, and much blood effused; in three there was extravasation of blood within the arachnoid, and bruising of the brain; and in the other one there was simply extravasation between the bone and dura mater, and no apparent injury to the brain-substance beyond compression.

Case vii. James Holden, aged 23, bricklayer, was admitted August 20th, 1861, under Mr. Hewett. A piece of wood had fallen from a scaffold, a distance of sixty feet, on to his head. On admission, he was insensible, and would not answer when spoken to. He, however, resisted any attempt to move him. He was very restless. There was a great amount of ecchymosis around the left eye, and extravasation of blood over the left side of the head. There was a small scalp-wound, leading down to bone, at the anterior superior angle of the parietal bone. There was no paralysis; but the left pupil was dilated, the right contracted. There was bleeding from the nose.

In an hour and a half, the breathing became stertorous, and respiration difficult, and all the limbs paralysed. An incision was made, and a depressed fracture discovered at the anterior inferior angle of the parietal bone. This was elevated with the trephine, and a quantity of blood escaped; but without relief to the symptoms, as he sank and died the same evening.

Post Mortem Examination. There was the hole in the skull made by the trephine, at the anterior inferior angle of the parietal bone. From this point proceeded two fractures; one running forwards and outwards through the coronary suture to the left temporal fossa; the other directly backwards to the extent of an inch. There was also a fracture running through the sella tursica to the crista galli. There was much clotted blood on the surface of the dura mater of the left hemisphere. There was a large quantity of serum in the dura mater. The brain was not lacerated.

Case viii. George Ballard, aged 30, was admitted July 11th, 1860, under Mr. Hewett. A large piece of timber had fallen on his head, afterwards striking his thigh. On admission, he was perfectly insensible. There was a large extravasation of blood on the left side of the head, with two small scalp-wounds. The breathing was stertorous, and there was bleeding from the nose. The right thigh was fractured. Six hours after the accident,

he was partially sensible. Pulse 56, laboured. He could not move any of the limbs. A crucial incision was made over the vertex; and an extensive fracture, with depression, was found. A large triangular piece of the frontal bone on the left side, limited posteriorly by the coronal and laterally by a fracture in the course of the obliterated frontal suture, was depressed and driven under the adjacent bone. This bone was elevated, after a piece had been removed by the trephine and Hey's saw. After the operation, he was sensible and able to speak; but the breathing again became stertorous, and he died thirteen hours after the accident.

Post Mortem Examination. There was a fracture on the vertex of the head, which had traversed the groove for the middle meningeal artery, which was torn across. There was an immense extravasation of blood between the bone and dura mater.

III. *Compression by Effusion of the Products of Inflammation.* Here the treatment is surrounded with difficulties, as we have to take into consideration two points—first the presence, and secondly the situation, of the pus. The first is always a difficult thing to determine; but the second is all but impossible; such cases as those described by Pott being very rare in the practice of the present day. The treatment is, therefore, necessarily very unsatisfactory, as may be seen from a narrative of the following cases.

Case IX. John K., aged 28, was admitted Oct. 22nd, 1858, under Mr. Johnson. Two days before admission, in a quarrel with a fellow-servant, he was struck on the head with a bar of iron, which inflicted a wound about an inch and a half in length on the forehead. He did not apply for any assistance till his admission, as he suffered so little inconvenience; though his wife stated he was delirious the night of the accident. On admission, he was a strong, healthy-looking man. His skin was hot, but moist; the tongue was slightly furred; his pulse was quick; and there was a restless manner about him. He had a wound on the forehead, extending from the median line to the left side, an inch and a half in length, the lower part of which was in a sloughy condition. The bone was exposed and rather rough, as if fissured. He was ordered to have two grains of calomel every six hours.

October 23rd. Symptoms of delirium tremens appeared to be coming on. He was ordered gin and opium.

October 24th. He slept well; answered questions rationally. He was very restless. Pulse weak, 90; tongue dry and white.

12 P.M. He was delirious, and had had a convulsive fit. He was ordered to continue the calomel; to have a drachm of mercurial ointment rubbed in every three hours; and a blister applied to the nape of the neck.

In the evening, he was more rational, but passed his urine and motions involuntarily.

October 25th. He was much convulsed; the left hand was most contracted. At 10 A.M. he became unconscious. There was reflex action on irritating the feet. Pulse 96. The pupils were dilated; there was spasm of the right lid, and ptosis of the left. At 1 P.M. symptoms of compression were strongly marked. The trephine was applied in the region of the wound, but he died during the operation.

Post Mortem Examination, twenty-three hours after death. There was a wound over the left frontal eminence; here a piece of bone had been removed. A small fissure led downwards from this part, which at first involved the external table of the skull only; this led down to a comminuted fracture of the left orbital plate of the frontal bone, near its junction with the ethmoid. There was no wound of the dura mater in any part, and no effusion between it and the cranium. A large quantity of pus was found diffused over the hemispheres of the brain, both in the arachnoid and subarachnoid spaces. This was in greater quantity at the right side in the parietal region, and had exercised a good deal of pressure on the brain. The left anterior lobe of the brain, near the olfactory bulb, was slightly lacerated, corresponding to the fracture above mentioned. No other organs were examined.

Case X. James S., aged 9, was admitted July 30th, 1861, under Mr. Tatum. Half an hour before admission, he had been kicked on the forehead by a horse, and rendered insensible. On admission, he was quite conscious. There was a large wound over the left orbit, the bone being exposed. The tongue was clean; the pulse was quiet; the skin cool and moist; the pupils natural.

July 31st. He had passed a quiet night. There were no symptoms of brain-mischief. The bowels had acted. The pulse was quiet; the pupils natural.

August 1st. He had been very noisy and delirious all night. Pulse 120; tongue dry and furred; skin hot. He had twitching of the muscles of expression.

3 P.M. Symptoms of compression had come on. He was perfectly insensible. The pulse was laboured; the pupils dilated. There was no paralysis. A piece of bone was elevated with the trephine, but without avail. Profound coma came on; and he died at 4 A.M., August 2nd.

Post Mortem Examination. There was a sloughy wound over the left eyebrow, leading down to a hole in the skull. The dura mater at this point was uninjured. There was a considerable amount of pus in the cavity of the arachnoid. The anterior lobe on the left side was completely broken up, and converted into a large abscess. The roof of the orbit on the left side was driven up into the brain. No other organs were examined.

Transactions of Branches.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By H. Colley March, M.B.

[*Read July 1st, 1863.*]

When I accepted the proposal which the Pathological Society did me the honour to make me, to read the present address, I thought, Mr. President, that my grand difficulty would have been to digest and arrange in compass sufficiently narrow the transactions of the past year; but, alas! one far more formidable presented itself. To have searched through a thousand reports, and to have made an abstract of the most interesting and instructive, would have been a patient and laborious occupation, but one that I should gladly have undertaken. My difficulty, however, was of an opposite kind, and consisted in this, that the whole number of reports read before the Society during the twelve months ending to-night was only ten.

Thrown, then, so greatly upon my own resources, I have had the arduous task of appending to the abstract of the reported cases a more or less lengthy commentary. This course has been rendered obligatory by the necessity of occupying your attention during the customary time; and, if anything I may say shall seem to you unfitting in a retrospective address, I will cast myself upon your kindness and generosity to excuse me, or at least to lay some part of the blame upon the inexorable requirements of my unfortunate position.

A few cases were brought before the Society illustrating the interesting subject of

Uræmic Intoxication.

Albuminuria: Epileptiform Convulsions: Coma: Death.

Dr. Wells related the case of J. N., a man aged 36,

who was brought to the Royal Berkshire Hospital suffering from albuminuria, with great congestion of the left lung. Six days afterwards, at one o'clock in the morning, he was attacked with epileptiform convulsions; foaming at the mouth, and biting his tongue severely. He was at once placed in a hot-air bath. At 11 o'clock, he lay in a semi-comatose state; and, having passed no urine since the onset of the convulsive attack, he voided just then a fair quantity, largely albuminous, and of specific gravity 1017. A blister was placed to the nape of his neck; an enema of castor oil and turpentine was injected; the hot-air bath repeated; and a quarter of a grain of elaterium administered every four hours. In the evening, being no better, he was bled to sixteen ounces. The crassamentum was small, cupped and buffed. This abstraction of blood proved the means of temporarily relieving the patient, as he became more conscious, and able to answer questions; but he subsequently relapsed into a semi-comatose state.

In this condition he was found on the following day, when urine passed in natural quantity, of specific gravity 1017, but still albuminous. His pulse was 80. The bowels had not acted, and he was ordered half a grain of podophyllin. The hot-air bath was repeated, and beef-tea injections employed.

On the succeeding day—the third from the convulsive seizure—the coma had become more profound, and he died in the afternoon.

On making a *post mortem* examination, the brain was found healthy, and there was no effusion into the ventricles. The heart was large and flabby. One of the aortic valves contained a calcareous growth. The lining membrane of the aorta was also studded with calcareous deposits. There was intense congestion of both lungs. The right kidney was contracted, hard, pale, and homogeneous in appearance; its surface, when the investing tunic was detached, was found to be granular. The other kidney was also found to have a granular surface; but the remaining changes were much less marked than in its fellow.

It seems to be pretty generally agreed that the cause of uræmic intoxication is the excessive presence in the blood of urea, which there acts as a poison. It seems, too, to be pretty clearly proved that urea, and urea alone, is capable of producing uræmic symptoms. It is true that, if there be in the blood an excess of water, or of ammonia, certain ill effects are produced; and, though these effects in some few points resemble, they are infinitely far from being identical with, those of uræmic poisoning. But, besides this, water and ammonia are of all things on earth the most easily got rid of from the system, enjoying many modes of exit. Hence, indeed, Nature seems to avail herself of this facility; for, in the intestines, the skin, and the lungs, she converts urea into ammonia; or, to speak more correctly, she decomposes the cyanate, which, *undecomposed*, can find only one path of departure from the system, and that path is the kidney.

There seems reason to believe that, in the healthy body, urea is the natural stimulus of the renal function; and so it acts like all functional stimuli; exciting due and proper action when present in moderation; but, when existing in excess, hurrying, embarrassing, impeding, and ultimately arresting, all action whatever.

It is in this way that, when a small quantity of urea is artificially introduced into the circulation, no coma nor convulsion is produced; the only effect being to stimulate the renal function to greater activity. But when a larger quantity is introduced, the kidneys are suddenly called upon to perform a task beyond their power; and they break down in the desperate attempt. If the organs be examined, they are found intensely congested, and their section drips with blood; while the little urine which they, in their agony, may have secreted, is highly albuminous.

Thus it is apparent that uræmia may have either of two starting-points.

In the first place, the *kidney* may be *primarily affected*. It may be spoilt by the poison of scarlet fever, or damaged by a dose of cantharides, or bombarded by the breech of a child, or blockaded by a calculus in the ureter. In these cases, though no more than the ordinary amount of urea be formed, it becomes excessive by accumulation through the closure of its natural way of exit.

But, in the second place, the *excess* may be *primarily produced*. The kidney may be excellent in its way, and do its duty satisfactorily. But it has no power in reserve; all its capabilities are required for its ordinary performances. But a time comes when, for some reason or other, perhaps a gluttonous feast of animal food, perhaps unusual muscular exertion, perhaps a check to the action of the skin or of the lungs—but, for some reason or other, the system produces an extra quantity of urea; and it is precisely this extra quantity that the kidney is unable to excrete, and, being overstimulated, becomes generally incapable.

Of these two points of origin of uræmia, it is often difficult to say, in a given case, which is the real one. For instance, the cause in puerperal convulsions may be the pressure of the gravid uterus on the kidneys—coming under the first head; or it may be the excessive amount of urea formed by the double vitality of the pregnant woman—coming under the second head.

In all probability, under the second head, come those rare cases of Bright's disease subsequent on surgical operations. Here, the sympathetic fever causes a general heating of the system—raising its temperature some 5° Fahrenheit; and this increases the activity of the so-called vital processes, and augments the amount of textural waste, and consequently of urea, which stimulates into congestion a healthy but weak kidney.

The exact starting point of uræmia, though a subject of some interest, is, however, one of very little importance—compared with the consequences, and the means of obviating them.

The blood, in the uræmic condition, is found to be in a highly morbid state, consisting, for the most part, of changes in the fibrine and in the corpuscles; and this does so resemble that state brought about by an artificial alkalinisation, that there seems to be little room for doubt that it is due to the decomposition of urea—to the liberation of ammonia from its cyanate. The power of cyanate to produce a comatose state is well known. It has occurred to me that, perhaps, uræmic coma may be occasioned by the circulation through the brain of a salt of this nature.

The congestion in a spoilt kidney is followed by a necessary train of congestions of other organs—of the spleen and liver; of the nervous envelopes; of the lungs and bowels. Of the congestion of these last, nature takes advantage; ammonia being largely present in the breath, and a salutary vomiting and purging being often produced. Nature, however, makes one grand omission. Strange to say, she neglects the skin, and allows it to remain almost inactive; but, perhaps, this is to give, in a mood more generous than common, something for the practitioner to do. What he may do, and ought to do, it was the object of Dr. Wells's report to set forth.

There are two prime indications of treatment:

1. To remove the poisonous excess of urea:

2. To relieve congestions.

Diuretics are altogether out of the question. For a diuretic, in the shape of urea, is already in the system; and its action upon the kidney produces only what every effort must be made to remove, a disastrous congestion. Those organs that are capable of eliminating urea, in some form or other, from the blood—those organs, that is to say, that are vicarious of the kidney—are to be roused into unwonted activity. The hot air bath, as or-

dinarily used, produces a copious diaphoresis; but the Turkish bath, while acting equally on the skin, stimulates more thoroughly the respiratory function.

Purgation is of great value; but it is of vast importance to avoid those aperients that have an irritating effect on the kidneys. Calomel, under these circumstances, is notoriously injurious. But I have known a large dose of scammony produce albuminuria; and have seen bloody urine passed as the result of an administration of santonine. The terebinthinate evacuants are also diuretic. Indeed, vegetable cathartics, as a rule, are liable to irritate the kidneys. Among those medicines that may be safely used to act upon the bowels, may be mentioned pre-eminently, the sulphate of magnesia, where large doses can be given; or the extract of elaterium, where a small dose is requisite—the extract, too, having the advantage of speedy operation. To adopt these measures is, as it were, to place weapons in the grasp of nature, by which she may struggle with her relentless foe. But the practitioner may advance to the rescue sword in hand.

Among the evil vauntings of the homœopathist, it has been his chief boast that he has brought discredit, if not absolute disuse, upon the lancet. He may parade this achievement before the eyes of a silly multitude with the exultation of a regicide who proclaims that he has slain his king. But his folly and wickedness will ultimately recoil on his own head.

There is hardly a fact more firmly established in medicine than the benefit of bleeding in cases of uræmic coma. In every ounce of blood, a tangible amount of urea is removed, while the deadly congestion of internal organs is relieved. The convulsions cease; the brain is unburdened; the mind wakes from its torpor; and the kidneys have a little respite in which perchance to recover.

Another case illustrative of the present subject was related by Mr. WALFORD; and is as follows.

Ante partum Convulsions: Albuminuria: Artificial Delivery: Death. On October 16th, J. L., aged 20, a single woman, in the sixth month of pregnancy, applied for and obtained some aperient medicine.

On the 17th, at two o'clock in the morning, she was reported to be in convulsions; and a dose of croton oil and colocynth was administered. Later in the morning, Mr. Walford saw her, and found her convulsed and comatose, and incapable of being roused. Her skin was cool and her pulse weak. A small quantity of highly albuminous urine was drawn off by the catheter. The womb was examined; but there was no indication of uterine action. A bolus containing a minim of croton oil was given her. At 1 P.M., the bowels had been freely relieved; but there was no improvement in the symptoms. At 3 P.M., she was cupped over the kidneys, and seventeen ounces of blood removed; and at six o'clock, another minim of croton oil was administered. The convulsions continued at intervals, and the coma was uninterruptedly profound.

On the morning of the 18th, the bowels had acted, and some urine had passed; but as no change for the better had supervened, it was determined to bleed from the arm, and at once to induce labour. By means of Dr. Barnes's admirable uterine dilators, the womb was emptied of its contents in an hour and a half, and the patient was then enveloped in hot water packing. At 7 P.M., she had had only one fit; was rouseable; was beginning to pass urine freely; and had taken some nourishment. The hot air bath was then used, and induced a profuse sweat.

On the 19th, it was found that she had passed the night with only one fit; that she had passed urine freely; and that consciousness was returning. The hot air bath was repeated, and nourishment more abundantly administered, with the result of a general improvement.

On the 20th, some hypogastric pain was complained of; and the neighbourhood of the uterus was tender on pressure. Turpentine stupes and a linseed poultice were applied; and the vagina was occasionally syringed.

On the 21st, hope was bright, and recovery seemed at hand; but in the evening, the pain and tenderness returned, and spread over the entire abdomen. The local applications were repeated, and stimulants and henbane prescribed.

On the 22nd, the case was hopeless. She became comatose, and died in the evening; having been ill five days and sixteen hours since the uræmic convulsions appeared. No autopsy was made.

There are few medical practitioners who have not had the fortune to witness the beneficial results of venesection in cases of this kind; and strongly was it advocated by those who heard Mr. Walford's relation. But while uræmia in a pregnant woman is subject to the general principles of treatment of uræmic poisoning, it presents two special features.

The efficient cause of the attack is generally, in one way or the other, the intrauterine fœtus; and this cause has to be removed. This, which used to be a most tedious and severe operation, has, by the introduction of Barnes's uterine dilators, become one of comparative ease, speed, and safety. These instruments are a great boon, not only to the patient, but also to the obstetrician, to whom, frequently, nothing was more wearisome than attempts at the induction of premature labour. Puncture of the membranes; the introduction of substances between these and the uterine wall; galvanism; the use of ergot of rye; the uterine douche; irritation of the mammæ; all these were less certain to induce labour in the patient than madness in the practitioner—who may now, there seems reason to hope, fix his dinner-hour and take his stall at the opera.

The other peculiar feature is, that while aperients are unspeakably valuable in ordinary uræmia, they may give rise to dangerous complications in puerperal cases. Indeed, a recent writer states that "the symptoms of puerperal fever frequently set in after, and seem specially to follow, the free action of purgatives."

One other point may be referred to. A living Frenchman has observed that, when any important discovery is made in science, people first cry out that it is not true; then they object that it is contrary to religion; and, finally, they declare that it is an old discovery, and that everybody knew it before. So, to a great extent, it was when the benign uses of chloroform were brought to light. At first, it was invested with all kinds of horrors and dangers. Persons frequently died under its administration; or become fatuous afterwards; or suffered from the development of unusual complications in the course of the subsequent treatment. Then it was objected that the use of chloroform to exclude pain was irreligious; that the world was under a curse of suffering; that woman was expressly condemned to conceive in sorrow and to bring forth with travail; and that to attempt to escape a doom directly pronounced was to resist Providence. But a better reason soon prevailed; and it was remembered, amongst other things, that when God took one of Adam's ribs, and closed up the flesh instead thereof, He caused a deep sleep to fall upon him. And, at last, chloroform has become so fashionable that the difficulty is to get patients to do without it. Among the multitude of purposes to which it is applied, it is now recommended by some obstetricians to administer inhalations in cases of puerperal convulsions.

It must certainly be highly expedient, if such a remedy be employed, to ascertain that the urine is free from albumen; for it can hardly be maintained that chloroform can do anything but harm if the convulsions be uræmic. Indeed, it is a question whether anæsthetics be not, as a rule, injurious to the parturient woman; whether they do not interfere with the activity of the

expulsive efforts of the uterus, as they certainly prevent the assistance of the abdominal muscles; whether they do not tend to induce the occurrence of hæmorrhage, while it is certain that in instrumental delivery, by suspending sensibility, they destroy a very great safeguard. Thus, a strong, and apparently a well-grounded, opinion is growing up against their employment in obstetric cases.

Œdema during Pregnancy: Albuminuria; Removal of Œdema after Delivery: Mania. Mr. WALFORD also related, in connection with the uræmic state, the case of Mrs. G., aged 38, who was delivered of her fourth child, which had been dead some hours. She had been under treatment a month previous on account of an œdematous condition of her face and limbs, coupled with scanty and albuminous urine. Within three weeks of her delivery, the urine reverted to its natural state; but not before puerperal mania had supervened. The discussion of this case elicited from the Society the unanimous opinion that women suffering from puerperal mania should on no account be sent into a lunatic asylum. The husband of the patient in question was desirous of placing her in Bethlehem Hospital. This course was not adopted; but she was removed from home into lodgings; and in a month was nearly restored to health.

Puerperal Convulsions: Recovery: Subsequent Death from Apoplexy in Sixth Month of Labour. A case that raised the question of uræmia, was related by Dr. COWAN. There was a woman in the sixth month of pregnancy; from girlhood till her marriage, she had suffered from chorea. In her first labour she had convulsions, and remained comatose for two days; but contrary to expectation, recovered. On the occasion referred to by Dr. Cowan, she was first of all seized with severe vomiting; then, having been heavy and drowsy for two or three days, fell into a partial insensibility. There was no paralysis, and no stertor. There were no uterine symptoms. The pulse was full. Blisters, leeches, and venesection were employed; but she died on the second day. On examination, a sanguineous clot was found in the right lobe of the cerebellum, and serous effusion over the brain.

During the discussion of this case, it was suggested that uræmia would afford a *causa vera*; for, in this disease the heart makes powerful efforts to overcome the general tendency to vascular congestion; and would be likely to rupture any weak cerebral vessel. But no renal disease was discovered; and the urine left in the bladder after death, was not albuminous. The case received no real elucidation.

[*To be continued.*]

GRATUITY TO A POOR-LAW MEDICAL OFFICER. The Board of Guardians of the Camelford Union (Cornwall) at a recent meeting, voted a gratuity of £5 to Mr. James Somers, the medical officer of the Boscastle district, together with the following letter:—"Camelford Union, October 17th, 1863. Dear Sir,—The Board of Guardians having considered the long-continued case of Mary Clements, and your constant care during her painful sickness, on the 2nd instant passed the following resolution:—'Resolved,—That Mr. Somer, the medical officer of the Boscastle district, be granted the sum of £5 on his application for a gratuity in the matter of Mary Clements; and that the thanks of this Board be conveyed to him for the zealous discharge of his duty in the case.' The Poor-Law Board having approved of the grant, I have much pleasure in sending you the enclosed cheque for £5, signed by the Guardians yesterday, as well as the copy of the resolution containing their generous acknowledgment of your services. I am, dear Sir, yours truly, C. HAWKER, *Clerk*."

Progress of Medical Science.

PREPARATION OF ACONITINE. MM. Liégeois and Hottot describe the following process for preparing aconitine. It is believed to be of English origin, and will, with a slight difference, be incorporated in the forthcoming *British Pharmacopœia*. The bruised root of *Aconitum napellus* is digested for eight days in alcohol slightly acidulated with sulphuric acid. The alcoholic solution is then pressed out, and the alcohol distilled off. A small quantity of green oil and an aqueous extract are thus obtained. The green oil is separated, and the extract further evaporated to the consistence of a syrup. It is now dissolved in water, and neutralised with magnesia, and then shaken up with ether. The ethereal solution on evaporation yields the rough aconitine. This is again dissolved in water acidulated with sulphuric acid, and decolorised by means of animal charcoal. Ammonia is then added to precipitate the aconitine, and the mixture boiled, after which the alkaloid is collected on a filter and dried. This part of the process is repeated once, or twice if necessary, in order to obtain the alkaloid with as little colour as possible. It is eventually precipitated with a very slight excess of ammonia, and dried at a low temperature. Aconitine so obtained is completely soluble in ether, and possesses remarkable activity. The alkaloid received from the Continent, and commonly sold in England, is of very inferior quality. A correspondent administered three grains to a dog without producing the smallest discomfort to the animal. Two *milligrammes*, or little more than three hundredths of a grain, prepared by MM. Liégeois and Hottot by the above process, killed a frog in four minutes, while it required a grain and a half of the most active that could be found in commerce to produce the same effect. The *British Pharmacopœia* is said to make considerable use of alkaloids; and as, in consequence of their greater cheapness, most of these will be imported from abroad, it will be incumbent on pharmaceutists to test their activity by experiments on living animals, or to procure the alkaloids from reliable English sources. (*Chemical News.*)

PHYSIOLOGAL EFFECTS OF SULPHURET OF CARBON. Dr. Delpech has recently published some observations on the evil effects of the sulphuret of carbon and other noxious substances employed in certain trades. Sulphuret of carbon is a transparent, exceedingly fluid, and highly volatile liquid, possessing a characteristic and disagreeable smell; it is one of the most dangerous substances known in chemistry, but unfortunately also one of the most useful. Its chief property is that of dissolving India-rubber with the greatest ease, whence it follows that it is extensively used in the factories where that substance is blown into bladders for various purposes. The vulcanisation of India-rubber is chiefly effected by sulphuret of carbon, aided by chloride of sulphur, although it might be equally obtained in certian cases by sulphur alone. But the men engaged in this work are exposed to the effluvia of the sulphuret, which in a short time causes headache, vertigo, and an over-excitement of the nervous system. The patient talks with great volubility, sings incoherently, or laughs immoderately, or else hides himself and weeps. This state may even lead to lunacy, and at all events will cause obtuseness and imbecility. To obviate these serious effects, Dr. Delpech recommends a glass screen to be placed between the workman and his table, leaving two holes for the hands and arms; these also are to be protected by ample sleeves of waterproof stuff. Another hole is to be left for the nozzle of the bellows which they use to blow

the India-rubber into balls. These precautions, Dr. Delpech thinks, ought to be enforced by the authorities. (*Galignani.*)

Physiological Properties of Nitrobenzole and Aniline. Dr. Letheby observes that, until recently, there has been a common belief among the unlearned that a skilful poisoner could so apportion the dose and combinations of certain subtle agents that he could destroy the life of his victim with certainty, and at the same time measure his allotted moments with the nicest precision, and defy the utmost skill of the physician and the chemist.

Modern toxicologists have long since discarded these notions, and have set them down to the vague fears and exaggerated fancies of the ancients. But an account of the physiological properties of nitrobenzole shows that there is one substance, at least, which realises to a great extent the extraordinary opinions of the ancients. This compound may be given to-day, and yet, if the dose be not too large, it shall not manifest its action until to-morrow or the day after, and shall then destroy life by a lingering illness, which shall not only defy the skill of the physician, but shall also baffle the researches of the medical jurist.

In every manufactory where nitrobenzole and aniline are prepared on a large scale, the peculiar narcotic effects of these poisons are often observed. The vapours escaping into the atmosphere are breathed by the workmen, and cause distressing headache and a heavy sleepy sensation. For the most part these effects are not serious, but are quickly relieved by fresh air and a mild stimulant, as a glass of brandy-and-water. Now and then, however, the workmen, from carelessness in their habits, expose themselves to the action of comparatively large quantities of these poisons, and then the effects are most dangerous. Two fatal cases of poisoning by nitrobenzole have been referred to Dr. Letheby by the coroner for investigation during the last two years, and in both instances they were the results of careless manipulation. The effects were nearly the same in both cases, notwithstanding that in one the poison was inhaled, and in the other it was swallowed. For some time there was no feeling of discomfort beyond that of drowsiness; gradually, however, the face became flushed, the expression stupid, and the gait unsteady—the sufferers had the appearance of persons who had been drinking. Little by little this stupor increased, until it passed into profound coma, and in this condition they died. The progress of each case was much the same as that of slow intoxication, excepting that the mind was perfectly clear until the coming on of the fatal coma. This was sudden, like a fit of apoplexy; and from that moment there was no return of consciousness or of bodily power; the sufferer lay as if in a deep sleep, and died without a struggle. The duration of each case was nearly the same time; about four hours elapsed from the time of taking or inhaling the poison to the setting in of the coma, and the coma lasted for about five hours.

After death there were no appearances of convulsions, but rather of narcotism and apoplexy. The face was flushed; the lips were livid; the superficial vessels of the body, especially about the throat and arms, were gorged with blood; the dependent parts were turgid; the blood was everywhere black and fluid; the lungs were somewhat congested; the cavities of the heart were full; the liver was of a purple colour, and the gall-bladder distended with bile; the brain and its membranes were turgid, and in the case of the man there was much bloody serosity in the ventricles. Analysis discovered the existence of nitrobenzole in the brain and stomach, and also of aniline.

These effects were so remarkable, that Dr. Letheby determined to examine them still further by experiments on domestic animals. Two classes of effects were clearly observed; there was either the rapid coma which characterised the operation of the poison on the human subject, or there was a slow setting in of paralysis and coma, after a long period of inaction

The general conclusions which appear to Dr. Letheby to be warranted by his investigations are:—

1. Nitrobenzole and aniline in its free state are powerful narcotic poisons. 2. They exert but little action, as local irritants, on the stomach and bowels. 3. Although the effects may be quick, and the fatal termination of them rapid, yet nitrobenzole may remain in the system for a long time without manifesting its action. 4. The salts of aniline are not nearly so poisonous as the free alkali. 5. In rapid cases of fatal poisoning both the poisons are readily discovered in the dead body. 6. In slow cases the poisons may be entirely changed or eliminated, and therefore not recognisable. 7. Both of the poisons appear to be changed in the body by processes of oxidation and reduction, nitrobenzole being changed into aniline, and aniline and its salts into mauve or magenta. (*Phar. Jour.*)

The Agency of the Periosteum after Excisions. M. Forget passes in review a prolonged discussion which took place in the Paris Surgical Society, consequent upon a report which he presented to it upon Professor Rizzoli's memoir on *Subperiosteal Resections.* During the discussion the whole question of the osteogenic power of the periosteum was handled, and the following are the ultimate conclusions which M. Forget believes to be fairly deducible. 1. The osteogenic property of the periosteum, brought into light by recent researches in experimental physiology, has been much more utilised of late years than formerly. 2. The part which surgery can derive from this property in the treatment of diseases of bone is limited, especially by the condition of the periosteum, the characters of these diseases, and the nature of the local and general causes which have produced them. 3. Subperiosteal resections, applied to organic and traumatic lesions of bones, have not, thus far, furnished results resembling those derived from experiments upon animals. 4. Preserved in the midst of a resection, or of a fracture with loss of substance of bone, the periosteum may there become the generative element of a new ossification, which the surrounding tissues would themselves be incapable of producing in a like degree. 5. The bony tissue of this new formation is not a faithful copy of the physiological bone. It is only an incomplete production of its solidity, form, functional aptitude, and anatomical structure. 6. In those pathological cases in which clinical experience determines amputation to be necessary, no fact, to the present time, has demonstrated the possibility of avoiding this by means of subperiosteal resection. 7. Nor has any clinical observation as yet shown the superiority and advantages of subcapsular periosteal resection in the treatment of surgical affections of the joints, whether spontaneous or traumatic. 8. In the operations for facial autoplasty, the periosteum may be usefully comprised among the flaps serving as a basis for the production of osseous or osteiform tissue, capable of repairing loss of substance and solutions of continuity, undergone by the bones of the face. (*L'Union Méd.*, and *Brit. and For. Med Chir. Review.*)

Canine Madness. The generally received opinion that this disorder is constantly fatal seems about to be seriously questioned. The *Abeille Médicale* publishes a letter from Mr. E. Decroix, a veterinary surgeon, in which he arrives at the following conclusions. 1. A subject labouring under canine madness may die without any fit of frenzy; 2. In a subject in whom the disorder is characterised by such fits, their frequency is in the direct ratio of exterior provocation; 3. A dog may in a

violent fit of anger communicate the disease by a bite, and yet continue to enjoy perfect health; and, 4. There are examples which show that communicated rabies is capable of cure, either spontaneously or by means of a proper treatment. In support of the fourth point, the following cases are given. In the first, a dog inoculated with the saliva of a man attacked with the disease a fortnight afterwards displayed all the symptoms of quiet madness, which, however, gradually diminished in intensity, and at length disappeared entirely in the course of thirteen days, without any remedy being applied. The second case was much the same. In the third case, a man and his wife were bitten by an unknown dog. A month later the man died of confirmed rabies at the hospital. Two days after his death his wife was taken ill and received into the hospital, where the physician pronounced her disorder to be rabies; nevertheless she got better, and eventually recovered. The fourth case is one reported in 1777 by the surgeon Beudon. A sow and a little dog were both bitten by a mad dog, which afterwards ran away, but returned two days afterwards in a pitiable state. Beudon had it put into a cage, and for several days it displayed all the symptoms of rabies. Beudon then caused vinegar to boil in the cage, so as to expose the animal to the fumes. By degrees the patient got better, and at length recovered. Six days after the infliction of the bite the sow became raving mad, a state which lasted seven hours. Beudon took advantage of a momentary respite to cause boiling vinegar to be let down into the sty. When the vinegar got cool the sow drank some, and got better; vinegar was then mixed with its food, and in the course of a few days the animal was radically cured. The little dog had no symptoms at all. It may now be asked whether the cures were spontaneous or owing to the vinegar. M. Decroix thinks that among all the nostrums proposed as specifics for this terrible affection there may happen to be one of real value, but rejected on account of the preconceived opinion of the incurability of the disease.

The Cause of Death from Superficial Burns. M. Baraduc's observations are confined to extensive burns, accompanied by large phlyctænæ. Dupuytren ascribed death resulting from these to the shock consequent on the excessive pain; but the author believes it due to modifications in the condition of the blood. The serum of this fluid is abstracted in excessive quantity, and the accidents which result are proportioned in gravity to the amount of this abstraction. Besides reasoning from analogy, M. Baraduc adduces the results of autopsies in support of his theory. He has found that the viscera of persons dying from the effects of extensive superficial burns exhibit a surprising dryness of tissue, while there is an absence of fluid in all the serous cavities. The right cavities of the heart, too, are empty, while the left are gorged with dark, coagulated, non-fibrinous blood. The pulmonary veins and the aorta are filled with similar blood, while the venæ cavæ are nearly empty. The femoral, popliteal, and brachial arteries are gorged with blood of a gelatinous consistency, the corresponding veins being almost empty. Death in these cases is then to be attributed to the difficulty or impossibility which the blood, inspissated by the loss of its serum, finds in passing from the arteries into the veins. The indications for treatment are to increase and render fluid the mass of the blood, and arrest the exosmosis, which constitutes the vesication. For the fulfilment of the first of these, the patient should be kept in a bath (at a temperature of 80° to 82°) for ten to fourteen hours, and abundant drinks of a slightly diuretic or emollient nature should be given him. Enemata and tepid injections into the bladder should also be had recourse to, and the vapour of some emollient fluid should be inhaled. If the patient be very weak, chicken broth, or even a fuller diet, must be given. The fluidifying of the blood may be promoted by substituting alkaline baths, drinks, and injections. To prevent a continuance of the exosmosis, the parts, after the patient has left the bath, must be dressed with cerates, thickly covered with wadding, and submitted to gentle compression by means of a bandage. The bath should be repeated daily, its duration being gradually abridged. In two cases, the author has been successful in fulfilling these indications. (*L'Union Méd.*, and *Brit. and For. Med.-Chir. Review.*)

On the Importance of Tapping the Joints and Bursæ Mucosæ. Professor Inzani of Parma asserts the perfect harmlessness of puncturing a distended joint, even during the progress of acute inflammation. The fear of bad consequences following from the wound of the tendinous structures is a mere imagination of the ancients; nor does the air ever appear to make its entrance. The puncture may be made with a trocar or a lancet; the latter is preferable for superficial joints. The author has operated very frequently on the knee, several times on the elbow, occasionally on the carpus and ankle, and once only on the hip; no bad consequences ever followed. Pressure by means of a starched bandage should be made, and when the synovial sac refills it should be again punctured before the distension has advanced too far. In this way a radical cure may be obtained. Examples are given in which large joints, principally the knee, were opened for effusions of blood, of serum in acute inflammation, of serum in chronic inflammation, and of pus—usually with a successful result. But paracentesis should be avoided where the skin is much thinned and ulceration seems impending. In the synovial bursæ, paracentesis has given equally good results. The examples which are given are those of effusion in the sheaths of tendons after accident (as the peronæi in sprains of the foot, the extensors of the thumb in falls on the hand), in which a puncture will give exit to synovial fluid mixed with blood, with much relief to the pain and abbreviation of the course of the disease. The author believes that by these punctures chronic synovitis may often be arrested in cases which, treated by ordinary methods, would end in "white swelling," and that in dropsy of the joint the treatment by repeated puncture and pressure is as effectual and more safe than by injections. (*Omodei' Annali* and *Brit. and For. Med.-Chir. Review.*)

Broncho-Muco-Alterants. Dr. Easton, in a paper On the Use of so-called Expectorants in Diseases of the Mucous Membrane of the Lungs, etc., gives the following general conclusions. 1. As in the early stage of acute bronchitis, the pulmonary mucous membrane is inflamed and dry and the bronchi consequently contain nothing to be expectorated, the remedies which are employed in the treatment of that form of the disease cannot with any propriety be called expectorants. 2. As the principal indication of cure in acute bronchitis is to alter the condition of the mucous membrane, to make it natural and moist from being inflamed and dry, the agents which effect this change might be called relaxing broncho-muco-alterants. They are, principally, inhalation of vapours, tartar emetic in one-twelfth or one-sixth of a grain doses, ipecacuan in one-quarter or one-half grain doses, henbane, hemlock, aconite, green hellebore, hydrocyanic acid, demulcents, alkalies, etc. 3. As in chronic bronchitis the system generally is often in an atonic state, and the mucous membrane of the lungs is always so, the indication of cure is to invigorate the general system by tonics, stimulants, and general hygienic measures, and particularly to alter the aërian membrane from a state of debility to a state of health by the administration of those medicines which are known to stimulate that surface, and such agents might be called stimulating broncho-muco-alterants. They are, principally, squill, leek, onion, garlic, benzoin, styrax, prepara-

tions of tolu and peru, turpentine, copaiva, the fœtid gums, myrrh, senega, lobelia, sesquicarbonate of ammonia, etc. 4. As coughing is necessary for the removal of excessive muco-purulent secretion and the consequent relief of dyspnœa, and is a muscular act performed by respiratory muscles, it is often necessary to excite these to healthy contractions, and the means for that purpose, when employed in that special relation, might be called pneumo-musculo-excitants; these means are, chiefly, stimulants, especially the sesquicarbonate and aromatic spirit of ammonia, alcohol, as also tonics as a class, and more particularly, nux vomica, iron, cinchona, along with general hygienic measures, the use of embrocations, sponging and friction, and the inhalation of stimulating vapours, so as to excite the afferent branches of the pneumogastric nerve that are spread out upon the mucous membrane of the larynx. (*Glasgow Medical Journal*, October 1863.)

Antidotes for Strychnia. Professor R. Bellini, after conducting a long series of experiments on poisoning by strychnia and its salts, arrives at the opinion, that the best antidotes are tannic acid and tannin, chlorine, and the tinctures of iodine and bromine. Chlorine, he maintains, attacks the strychnia even when it is diffused through the system, for he found that in rabbits poisoned with the sulphate of the alkaloid, on being made to inhale chlorine gas in quantity, such as was not sufficient in itself to kill, the convulsions were retarded, and were milder when they occurred; death also was less rapid. The author further observed, that when strychnia was exhibited with pyrogallic acid, the convulsion was retarded for the space of half an hour, by comparison with other experiments in which the alkaloid was given by itself. Professor Bellini believes that this arrest in symptoms is not dependent on the acid acting chemically on the strychnia, but only through the astringent effects produced by the acid on the mucous membrane of the stomach, whereby the absorption of the poison is rendered difficult. The same author, dwelling on the frog-test for strychnia, asserts that this test is not to be trusted, inasmuch as other poisons produce the tetanic symptoms, although in a lesser degree. He adds, in speaking of the effects of the antidotes to which reference has been made, that he trusts his results will have a bearing not only on the treatment of strychnine tetanus, but on traumatic and idiopathic tetanic disease. (*Annali di Chimica*, and *Brit. and For. Medico-Chirurgical Review.*)

Action of Iodine in Urine. Dr. Percy of New York writes respecting Trousseau and his new iodine test (?) as follows. It is claimed that M. Trousseau has made the discovery that iodine is deprived of its colour by human urine. By referring to the *American Medical Times* of March 1, 1862, in my lecture upon iodine, after giving the various methods for detecting iodine in the urine, the following language is used: "but, as the urine itself has the property of decolorising iodine," etc. Again, in my lecture of March 8, 1862, the following language is used: "The saliva, the nasal and pulmonary mucus, the blood, and the urine, when added to small quantities of iodide of starch, completely deprive it of colour; the same decolorisation also takes place if applied over an ulcer, and the sweat produces the same result." Dalton makes the same observation with regard to the gastric juice, and, if my memory does not betray me, he makes the same remark regarding the urine as the results of his experiments, as I, in the instances here mentioned, state as the result of my experiments. I do not deny the industry of our French medical brethren; I merely mean to assert, as I have so frequently done, that we are not behind them either in industry or invention. I must confess, that I have been not a little astonished to see how eagerly many of our medical journals seize upon discoveries or novelties that they receive from abroad, and neglect even to notice important discoveries made at home. We do not receive any too great praise abroad; it therefore behoves us to be watchful of what rightfully belongs to us. There is no novelty whatever in the facts stated by M. Trousseau; chemists have been for some time aware of them, and, as will be seen by reference to my lectures in your Journal, we have taught it to our students of materia medica. (*Amer. Med. Times.*)

Pregnancy in Advanced Age. Dr. Carpenter, of Durham, tells us that he has attended in their confinements several women whose ages were 50. "I well recollect a case occurring in my father's practice in 1839, where a woman became a widow at 49 years of age. Shortly afterwards she married her second husband, and within twelve months of this time gave birth to her *first* child. These cases belong to the working classes. But I know of two others, where gentlewomen became mothers at 50; one with her first child, the other with her eighth. I can say nothing of how they menstruated; but I know of a virgin in whom the catamenia appeared *regularly* and undiminished up to and at the age of 60." Dr. Powell says, that he last year attended a woman in her fifty-second year; and Mr. Heckford, that he attended a woman who stated her age to be at least 50; Mr. Clarke of Mold states, that he has attended several women whose ages were upwards of 44, and that he lately delivered a woman of her first child at 48. Mr. Bloxam of Portsmouth delivered at 52, in her first confinement, a woman who had been married 35 years.

Action of Phenic Acid. *On the Human Skin.* Immediately after the application of a thin coating of the pure acid, a sharp smarting is felt, which lasts about an hour. The epidermis becomes wrinkled, and in a short time the formation of a white body may be remarked wherever the acid has touched. This white coloration results from the action of the acid on albumen; it disappears by degrees, and is replaced by some congestion, which lasts about twenty days. This congestion presents all the characters of an intense inflammation, being attended with redness, heat, and swelling. If a small piece of the epidermis (which appears raised as in a blister) be stripped off no serum escapes. The epidermis becomes detached by degrees, and when the exfoliation is complete a brown spot remains, which testifies for a long time to the energetic action of the acid. After a number of experiments on his own arms, and the arms of his friends, M. Lemaire states that the smarting never lasts longer than an hour. The redness of the skin endures about twenty days, but the inflammation never extends beyond the part to which the acid has been applied. *Action on the Mucous Membrane.* The action of the pure acid on the mucous membrane is, of course, analogous to its action on the skin; acute smarting, shrivelling up of the epithelium, and a milky coloration being observed. The smarting does not last so long as on the skin, especially on such membranes as produce an abundant secretion; and the epithelium quickly returns to its normal condition. *Action on the Respiratory Organs.* From experiments on mice and horses, the author concludes that the higher animals may breathe the diluted vapour of the acid for a long time without discomfort or danger. (*Chemical News.*)

Expectoration of Cretaceous Tubercle. At a meeting of the New York Pathological Society, Dr. Flint stated that he had frequently met with cases of expectoration of cretaceous tubercle, but the most striking instance was one which had come to his notice many years ago, where a patient had coughed up from time to time a sufficiently large number of calculi to supply all the medical men for miles around with specimens. That pa-

tient had well marked physical signs of tubercular disease. He was advised to change his habits of life, which were sedentary, and go out west, which he did. He became a farmer, and at the end of fifteen years he was in perfect health. Dr. Flint stated that the calculi formed as a consequence of the absorption of all the animal matter of the tubercle, leaving the deposit of earthy salts. Dr. Finnell thought that the existence of concretions was presumptive proof against extensive and progressive tubercular deposit. He had often met with cicatrices at the apices of lungs, but in the majority of cases he attributed the cause to the contraction of fibrinous deposit outside the lung-tissue, and not as the direct result of the contraction and disappearance of a pulmonary cavity. Dr. Conant corroborated such a statement, and remarked that in cicatrices of pulmonary cavities, in addition to the bands usually met with, there were trabeculæ extending in different directions. (*American Medical Times.*)

Reviews and Notices.

SKIN-DISEASES OF PARASITIC ORIGIN; THEIR NATURE AND TREATMENT: including the Description and Relations of the Fungi found on Man. By W. TILBURY FOX, M.D.Lond.; University Medical Scholar; Physician-Accoucheur to the Farringdon General Dispensary and Lying-in Charity. Pp. 210. London: 1863.

ALTHOUGH this is a work on a special subject, the author begins by making us distinctly understand that he is no favourer of specialties. To the formation of skin-diseases into a specialty he ascribes the present unsatisfactory state of their treatment and classification; and says:

"To separate skin-diseases from out the domain, and to study them as other than part and parcel of general medicine, is utterly wrong, and antagonistic to successful treatment; yet such is the marked error of the present day. Diseases of the skin are but outward evidences, in the vast majority of cases, of certain alterations of the blood; and he who would be a thorough dermatologist must comprehend intimately, and have under constant observation, the details of medicine generally. Acne, one of the commonest and most annoying diseases of the surface, to which I have paid much attention, is an apt illustration; I believe, in the great bulk of instances, it is related as cause and effect with definite and remediable derangements of the stomach and uterine functions, mostly, indeed almost invariably, disregarded." (*Preface.*)

But to denounce the specialisation of skin-diseases is not the object of Dr. Fox's book. It is to supply an account of the nature and treatment of tinea, and a description of epiphytes and entophytes, or the vegetable parasites of the human body.

The first chapter in the work contains the author's ideas on the Nomenclature and Description of Parasitic Diseases. Here he aims at simplification; and, throwing aside all such names as scall-head, ringworm, and porrigo, adopts the generic term *tinea* to denote the diseases of the surface connected necessarily with the growth of fungi. The species of tinea which he recognises are, with their synonyms in the writings of other dermatologists:

"1. Tinea favosa (Favus—Porrigo Lupinosa of Willan—Favus Dispersus of Wilson—Porrigo Scutulata of Biett and Rayer—Scall-head, etc.)

"2. Tinea Tonsurans (Porrigo Scutulata of Willan and Bateman—Herpes Tondens of Cazenave—Trichosis Furfuracea of Wilson—Rhizo-phyto-alopecia of Gruby).

"3. Tinea Circinata (Herpes Circinatus).

"4. Tinea Sycosis (Mentagra—Chin-welk—Mentagrophyte—Sycosis menti).

"5. Tinea Decalvans (Porrigo Decalvans of Willan—Alopecia—Area—Ophiasis—Tinea Tondens—Phyto-alopecia of Gruby).

"6. Tinea Versicolor (Chloasma—Pityriasis Versicolor—Pityriasis Lutea).

"7. Tinea Polonica (Plica Polonica—Trichoma—Plicatio).

"8. Tinea Tarsi (Ophthalmia Tarsi—Psorophthalmia)."

Thus Dr. Fox brings together, under one name, skin-diseases where the presence of a parasitic growth is held to be the *essential* element. In other forms of cutaneous disease, indeed, vegetable parasites may be sometimes present; but in such cases he would apply the term "parasitic" to the disease—*e.g.*, parasitic herpes, parasitic lichen, etc.

Each of the species of tinea is attended with its special fungus; as will be shown in a table to be presently given.

The chapter is concluded with a brief notice of the curious Indian disease, the "Madura foot," in which, among human maladies, vegetable parasitic growth seems to attain its most luxuriant development.

In the second chapter, the author enters on debatable ground, and treats of the Nature of Parasitic Disease. Since the discovery of the presence of fungi in skin-diseases, there has been, as is well known, much diversity of opinion among dermatologists as to the relation of these growths to the diseases. A fair exposition of these differences will be found in the present chapter; but we can only deal with Dr. Fox's own opinions. He recognises three conditions for the existence of tinea or parasitic skin-disease; viz., 1. A suitable soil; 2. A pathological lesion (disease of hairs and epithelium); 3. The cause of such lesion (the fungus). As to the soil, he agrees with the majority at least of observers in recognising the fact, that parasites will not grow on a healthy surface. If we understand him correctly, he associates the development of tinea with the presence of morbid states of the blood characterised by a tendency to non-specific eruptions.

"It is usually taught that tuberculous, scrofulous, and dirty people furnish the best nidus, and it is just these very subjects whose general nutrition is disposed to express itself in non-specific eruptions; and it would appear, from all considerations, that the non-specific eruptive crasis is that which supplies the necessary and only fit soil for fungous growth; the crasis, or *tendency to eruption*, because by no means need there be any actual manifestation present in the form of eruption, which is the culmination of the peculiar blood-state." (P. 19.)

After giving a number of reasons in favour of this view, he says:

"The point is one which admits of very much hypothesis, and much research is needed before we can arrive at a scientific result; but for clinical purposes there is no lack of guides to treatment, and it may safely be concluded that such as are mostly predisposed to exhibit the tuberculous and non-specific eruptive crasis are the most likely to nourish parasites, and the same general treatment is applicable to the two cases." (P. 27.)

The next point considered is the pathological le-

sion—the disease of the hairs and epithelium—by which tinea in its various forms is attended. Is the parasite an accident of the disease? or a necessary element? On this question, Dr. Fox presents for consideration the following arguments:

"1. Nothing but the growth of a fungus can produce the ravages upon the hairs and epithelial tissue, seen in the tineæ.

"2. Whenever the parasite is absent, the damaged hairs, etc., are never found.

"3. The disease will certainly not be cured unless the parasite be destroyed or die.

"4. The fungus in a state of growth need be the only abnormal state present in addition to the disease of the hairs and epithelium.

"5. The disease of the hair and epithelium is pathognomonic of a fungous growth." (P. 29.)

Several good observers have sometimes found fungi in psoriasis, lepra, eczema, etc.; and sometimes have failed; hence they have inferred that the presence of parasites is accidental. To this Dr. Fox replies to the effect, that *eruptive* disease and *parasitic* disease are two distinct things. Fungi, when present in a true eruptive skin-disease, do not produce their pathognomonic lesions in a sufficiently marked form to make any appreciable difference in the character of the disease; while the true parasitic diseases cannot exist as such—as tineæ—without the presence of a fungus. In them there may be, and often is, eruption, prior to the implantation of the parasite; but "assuredly, in the majority of instances, no physical change has taken place prior to the planting of the fungus." The author, indeed, is inclined to attribute the presence of eruptive phenomena in parasitic disease to the irritation produced by the parasite, rather than to regard them as preceding its development; and he explains the fact that good observers have apparently seen nutritive changes in the skin precede the fungous growth, by the supposition that they have probably overlooked the early or granular state of the fungus—a condition which he describes as "a minute granular infiltration, or nuclear form, identical with the stroma of fungi, and which may germinate into the more perfect state of sporule or spore."

In the third chapter, the author gives a General Outline of Diseases other than the True Tineæ, complicated by the Growth of Fungi. How are we to infer the existence of a fungus in cases of ordinary eruptive skin-diseases? Dr. Fox, after pointing out *seriatim* the points on which a diagnosis may be founded, thus sums up:

"Speaking of the ordinary forms of eruption, we may suspect the existence of a parasite if the disease be unsymmetrical, circular, increasing centrifugally, obstinate, attended with pruritus, of a brownish tint; if there be any evidence of contagion, and if it occur in the inmate of a school, or in those exposed to great heat; if it be seated where hairs are growing; and the diagnosis is rendered certain if we find the fungus-elements and damaged hairs." (P. 44.)

The fourth chapter contains a notice of the Special Conditions which determine the Form and Seat of Disease. These are discussed under the heads of constitution; age; sex; seat of the disease; and hygienic and social condition. Dr. Fox here discusses at some length the circumstances which in the child and the adult respectively predispose to or allow the development of tineæ. He questions the correctness of the statement, made by Mr. Hutchinson and others, that the adult human scalp is rarely if ever attacked by ringworm; and adduces instances of tinea tonsurans and circinata which have come under his notice in persons above forty years of age. The reason why adults are less frequently attacked by ringworm is found in nutritive changes. In the child,

"The circulation of the scalp is particularly active, the tissues are more delicate, the hairs are rapidly growing, and hence disease is *determined* to this locality."

In the adult, on the other hand,

"The necessary nidus gradually lessens in intensity; its evidences are less distinctly marked. Hence the scaly replace vesicular and pustular eruptions; hence, also, parasitic diseases are neither so well marked nor so frequent; the tissues are denser and more resistent, and *in some degree* may counteract the onset and spread of parasitic growth. Further, the local circumstances favourable to the latter—viz., secretion, moisture, etc.—are *nil*, or in little amount in the scaly affections of the adult. And, lastly, in those cases of adults affected by tineæ, we often find symptoms of stomach derangement in the form of dyspepsia, or signs of the non-specific eruptive crasis, present." (P. 47.)

The fifth chapter contains an account of the Fungi themselves, and their Microscopic Characters. We have not space for an abstract of the descriptions which the author gives of the fungi; we will only say, that the understanding of them is facilitated by four plates containing figures representing the several epiphytes described, which have been admirably drawn *ad naturam* and engraved by Mr. H. O. Smith.

The following are the fungi met with in man, from a table given by Dr. Fox at p. 50:

Genera.	Species.	Disease in which found.
Trichophyton	Tonsurans.	Tinea Tonsurans.
	Sporuloides.	Tinea Polonica.
	Ulcerum.	Ulcer of Leg.
Microsporon	Mentagrophytes.	Tinea Sycosis.
	Audouini.	Tinea Decalvans.
	Furfurans.	Tinea Versicolor.
Achorion	Schönleinii.	Tinea Favosa.
Oïdium	Albicans.	Aphtha.
Puccinia	D'Arnsten.	Tinea Favosa.
		Tinea Tarsi.
		Acne.

The genera trichophyton and microsporon belong to the group *Torulacés* of the division *Arthrosporés* of Robin and Laveillé; the achorion and oïdium to the group *Oïdiés* of the same division; and puccinia to the division *Clinosporés* of the above-named authors.

In the sixth chapter, the author gives a Summary of the Microscopical Appearances presented by the Lesions arising from the growth of fungi. The changes which take place in consequence of the parasitic growth are described as they occur in the hairs, in the epidermis and epithelium of the surface and of the hair-follicles; in the follicles themselves; and in the glands.

The seventh chapter is on Diagnosis. This is comparatively easy in regard to the more ordinary forms of tinea; and becomes difficult only when the tinea partakes of the scaly character, or when non-parasitic eruptions are complicated by fungous growths. Dr. Fox gives in detail the means of distinguishing

tineæ from erythematous, papulous, vesicular, and pustular eruptions.

In the eighth chapter, the author gives the Prognosis of parasitic skin-diseases. A spontaneous cure, he says, is rare; and no case is so bad as to be utterly incurable. But the duration of the disease is modified by general as well as by local circumstances; a marked scrofulous diathesis, especially, mostly indicates that the cure will be tedious. As regards local guides, the length of time during which the disease has existed is an important point to ascertain; but even long duration on the part of the disease indicates, not incurability, but the necessity that "the patient follow out implicitly the directions of the medical man, and the latter pursue a regular, careful, and decided course of therapeutics; in such instances, the fungus must be destroyed, the soil altered, and the lesions remedied; all which require time." Prognostic indications, which are clearly described by the author, are also afforded by the state of the scalp and of the hairs.

The ninth chapter contains General Remarks on the Relationship of Fungi. The author commences this chapter by pointing to the difference of opinion which exists on this point. In England, it is generally taught that the parasites in the several varieties of tineæ are distinct one from another. Continental authorities, on the other hand—as Bazin, Hebra, Berg, etc.—are disposed to lessen the number of epiphytes, by fusing together some of the genera supposed to be distinct. Sometimes, also, we find different observers of undoubted competency, such as Virchow and Küchenmeister and Robin, ascribing the fungus found in the same disease to different genera; and hence Dr. Fox considers that

"These examples suggest an absence of criteria sufficiently important in themselves to differentiate species, and the probability, to say the least, that some of these fungi, usually regarded as distinct, are, in reality, identical in nature. Still, however, the greatest reluctance is felt in discussing this view of the case, due, no doubt, in part to the difficult nature of the inquiry, and in part, also, to the circumstance that the investigation of the subject seeks at the hand of observers more time and patience than the great majority can afford. Of late, Dr. J. Lowe has led the way towards the solution of the various points at issue in his pamphlet, *On the Identity of Achorion Schönleinii with Aspergillus Glaucus and other Parasites;* and would appear to have established as actual fact the production of the latter from the former. It is unquestionably due to Dr. Lowe to state that he was the first to show by experiment this identity. (*Edin. Bot. Soc. Trans.*, vol. v, 1857.) Mr. Hogg subsequently, in 1859, confirmed Dr. Lowe's observations; and in the same year I recorded in the *Lancet* certain arguments which led me to believe that all parasites found on man possess a common origin." (Pp. 99-100.)

Dr. Fox then goes on to refer to some instances derived from the observation of fungous growths other than parasites on the animal body, which tend to shew that the same fungus varies in its form according to the influence of the agency under which it is developed; and notices, also, in support of this view, the facts observed with regard to the development of the entozoa. What is wanted is, according to Dr. Fox, a careful study of the parasitic fungi and the circumstances producing their modifications of form, in a *botanical* as well as in a medical point of view.

Dr. Fox has some remarks on spontaneous generation—a hypothesis which meets no favour with him; and in regard to it he quotes, and endorses as a clear and forcible exposition, some passages from a paper published by Dr. W. Budd in this JOURNAL for December 7, 1861. The chapter ends with a reference to the presence of fungi on the exterior parts of the lower animals, as demonstrated by Kölliker, Wedl, Quekett, etc.

The tenth chapter contains an elaborate examination of the Insufficiency of the Differential Criteria of the Tineæ. These are commented on in order under the heads of secretion, the amount of parasite, the rapidity of its growth, differences in the seat of the disease, and differences in the microscopic characters of the fungi. The author's reasoning is in the direction of the theory that the several varieties of parasite in tinea may arise from one original form.

"*Secretion* means suitable pabulum; this favours the increase in the *amount of parasite*, and conduces to *rapidity of growth*; differences in the seat and microscopic characters of the fungi are to be explained in perfect harmony with fluctuations in the degree and kind of the above conditions in the way we should be led to anticipate."

The eleventh chapter contains Clinical and Experimental Evidence in favour of the theory of the identity of the parasitic fungi. Of the instances given, as having been met with by the author and other observers, a summary is furnished at pp. 147 and 148; and here, among other examples, we find noted, the similarity in some cases between favus and sycosis, of favus and tinea tonsurans; the production of tinea circinata from favus, of aspergillus by the germination of achorion, of favus (probably) from implantation of torula, of tinea circinata from tinea tonsurans, and *vice versâ*, of tinea sycosis from tinea tonsurans and tinea circinata, of sycosis from torula, etc.; also, the coexistence, in the same subjects, of tinea tonsurans and tinea circinata, and of tinea circinata, tinea decalvans, and sycosis; and, in different members of the same family, of tinea tonsurans, tinea circinata, and sycosis.

In the twelfth chapter, a similar line of argument to that followed in the previous two chapters is adopted in regard to Entophytes, or the vegetable parasites found on the mucous surfaces. Dr. Fox discusses the relations of torula, sarcina, oïdium albicans, mucor, aspergillus, penicillium, and leptomitus and leptothrix. As in the case of external parasites, he finds these possessing a relation to each other, as well as to the epiphytes, which appears to him to indicate identity.

Dr. Fox, having thus argued in favour of the identity of the epiphytic and entophytic parasites, protests against a too hasty application of his views to the nomenclature of skin-diseases.

"It may be said, if the fungi be identical, why not do away with the various distinctive names of those diseases in which fungi occur, and also those of the fungi themselves? This would be, to say the least, injudicious; differences in the fungi and physical aspect of the tineæ result from differences in the character of concomitants, such as soil, etc.; and the peculiar 'appellations' are best retained as guides to treatment." (P. 178.)

The last chapter is on Treatment. This must, Dr. Fox observes, be simple and definite, and must be persevered in. The aim should be: 1, to alter the soil; 2, to kill the fungus and prevent further mis-

chief; 3, to promote the re-growth of the hair; and the treatment, therefore, is both constitutional and local. Among parasiticides, Dr. Fox prefers the bichloride of mercury; and he has also tried carbolic acid, "which appears to act uncommonly well; it seems to penetrate very decidedly into the structures." The author gives an outline of the treatment of tinea in general, and of its various forms; and observes that,

"Perseverance, cleanliness, simplicity of treatment, effectual but uncomplicated, a thorough knowledge of and a constant careful search for microscopic evidence, are essential requisites towards constituting a successful practitioner, and no case is entirely hopeless. The word incurable has no place in the history of tinea." (P. 200.)

To this chapter is appended a series of formulæ for baths, vesicating parasiticides, milder parasiticides, depilatories, soothing applications, special stimulants of the scalp, and general remedies.

The very able manner, both scientific and practical, in which Dr. Fox has treated his subject, will already have been inferred from the epitome of his views which has been given above. Much more research—and no one knows this better than Dr. Fox himself, or can acknowledge it more frankly—is required, before the true relations of the parasitic fungi to each other, and to varying conditions of the body, can be determined; still, the views advanced by the author in the present volume are so clearly the result of elaborate research and of a careful weighing of evidence, as to deserve an attentive consideration from dermatologists. Whatever may become of the scientific hypothesis as to the relationship of fungi to each other, the fact that epiphytic growths constitute an important—if not the essential—element in a large class of cutaneous diseases is a practical point of much moment: for it must tend to guide us to, and confirm us in, a rational treatment of these diseases. If it happens, as is the case, that in some instances the old remedies are just those which one would select from their power in destroying vegetable parasites and preventing their growth, the coincidence affords an interesting instance of agreement between the empirical practice of the past and the rational treatment of modern times.

We heartily commend Dr. Fox's book to our readers. All may derive from it useful instructions as to treatment; and his observations on, and drawings of, the parasitic fungi will be interesting to microscopists.

On Austalasian Climates, and their Influence in the Prevention and Arrest of Pulmonary Consumption. By S. Dougan Bird, M.D., L.R.C.P.L.; Physician to the Benevolent Asylum, Melbourne. With Illustrations in Chromolithography and on Wood. Pp. 168. London: 1863.

Dr. Bird has presented us with an illustrated, pleasing, and well-written volume, containing facts of no small importance in connexion with consumption and climate; and, although we are acquainted with numerous places recommended for phthisis in its threatened, progressive, or matured form, we welcome a book which points out to us the merits of a new country said to possess, above all others, the true requisites and essentials for the consumptive patient. The author forcibly tells us that the following elements are needed in a change of climate.

"It should have an alterative action so complete and powerful that it will open not only a new leaf, but a new volume, in the patient's constitutional history, and so change and modify the course of his vital functions, and more particularly the operation of his glandular and secreting system, that the probability of his blood again assuming the conditions under which tubercle was first formed will be very remote."

Dr. Bird gives us a correct idea of what true change ought to be in consumption; and, judging from his statistics, we are inclined to agree with him that in the temperate regions of the Australasian continent and islands we find peculiarities of climate, not only most remarkable in their contrast to those of any other countries, but also highly suitable for diseases of the respiratory organs. It is shewn, for example, that of all the stations of the British army, the Australasian colonies have the lowest mortality; that, while in the British Islands we have 40 per cent. dying annually from lung-disease, only 15 per cent. die from the same cause in Victoria; and that in Melbourne only 7 per cent. die of consumption, while it is fatal to 20 out of every 100 in England.

The author, who himself resides in Melbourne, finds that its mean temperature is about the same as that of Montpellier, Marseilles, Nice, Genoa, Pau, or Florence; but that it has a decided advantage over these places, in having a warmer average temperature than they have in winter, and a cooler one in summer. He states the air to be generally dry, stimulating, and ozoniferous; and to be so tempered by the prevalence of ocean-winds, that it is prevented from becoming irritating, like that of Nice or Provence. This favourable combination of atmosphere contributes largely, in his opinion, to the prevention and arrest of pulmonary consumption.

We have a cheering and graphic account of boardship life, given to us in the third chapter; and it is clear that, with our modern improvements, coupled with the Englishman's taste for comfort, the invalid has nothing to fear in the sea-voyage.

Melbourne is described as a most flourishing city. It possesses a Royal Society; a Museum of Natural History, Geology, Agriculture, and Mining; a Medical and Pharmaceutical Society; besides societies of fine arts, photographic, phonetic, etc. In 1862, it supported two Italian opera-seasons; and there are no fewer than fifty-six different newspapers and periodicals published in it yearly.

The proper time of year when an invalid should start for Victoria is in October or November; and he should make the voyage round the Cape of Good Hope, as sea-air for some weeks will probably have a beneficial effect as an introductory to a residence in Australia.

We cannot here enter fully into the sanitary condition of the colony, as regards climate, soil, and other important matters; so we refer our reader to the pages before us, assuring him that all these points have been carefully looked into by Dr. Bird. There is a great deal of information, useful to the medical as well as to the general reader, in this book, which may be regarded as a boon to the public, and as such we are confident it will command the success which it deserves.

British Medical Journal.

SATURDAY, NOVEMBER 21ST, 1863.

THE COTTON FAMINE AND MORTALITY.

Our learned associate, Dr. Noble of Manchester, has placed before us, in a paper lately read before the Statistical Society of Manchester, a very able and solid review of the effects of the cotton famine on the mortality of the Lancashire operatives. The results at which Dr. Noble has arrived are not merely interesting to the profession and cheering to the country, but are an evidence of the increasing importance which medical men attach to the correct solution of great public questions, and of the facility with which the physician, engaged though he may be with the onerous duties of daily practice, can retire into the study and at once grasp a series of general facts, and extract from them their true and absolute value, placing them in lights which no other man can, and giving to them a simplicity and clearness which the most skilled of general writers, even Buckle himself, could not effect. In the labour to which Dr. Noble has devoted himself, he had to contend at the outset with numerous doubts and difficulties, and with those unreasoning speculations and fears that are cast always in the path of the exact scholar. He had, as he tells us, to contend against a disposition which has been very generally manifested, to attribute every accidental elevation or depression in the death-rate, occurring in any part of the districts of the cotton manufacture, to the distress which the diminished supplies of the raw material have caused to fall upon many of the working population. This disposition has found expression in various societies, and in the public press; and the most diverse theories have been invented to explain supposed relations between an ascertained elevation or depression of the mortality in particular localities, and the reduced employment present in them. If there has been a high death-rate anywhere, in some particular quarter of the year, it has been suggested, or almost taken as granted, that the cause must be sought for in the distress. If, on the other hand, the mortality has in any place been under an average, speculation has been set to work to account for the fact by the present exceptional condition of the cotton-trade. It is sometimes said: "Mothers, not being so extensively employed in the mills, have attended better to their children; and in this way many lives have been probably saved." And again: "The working classes have drunk less, from the necessity of the case, and so have had amongst them less disease and less death." Again, the idea has been thrown out, that the death-rate in the cotton districts has been reduced by a diminution of the cotton-flue in the air—a circumstance which, according to the author of the hypothesis, might have lessened the amount of bronchitis, and so have reduced the mortality from one cause of death.

We are ourselves all familiar with hypotheses such as these, excepting the last. That is so ingenious, that we know not what to do with it. Since the time when the laying down of wood pavement in the metropolis was considered and suggested as a reason for the so-called change of type in disease, a speculation so rigidly inventive has never been put before us. Deal with it we cannot: we must let it go its way, if it can, rejoicingly. It must have been a pun.

Against the various hypotheses thus advanced, Dr. Noble was compelled to raise his voice, not in mere denunciation, but in common sense argument, and in reference to a broad field of facts. In order to make his position sound and safe, he had recourse to the returns of the Manchester Registration District. This district includes the township of the City of Manchester, having a population of 185,050, and the out-townships of Blackley, Harpurhey, Failsworth, Moston, Cheetham, Crumpsall, Newton, Bradford, Beswick, Prestwich, and Great and Little Heaton; the aggregate population of these amounted, in 1861, to 58,575. The whole area included a population of 243,625 in the year 1861.

From the returns of mortality in the districts thus named, Dr. Noble estimated the annual mortalty from the year 1841, and also the ratio of deaths in four quinquennial periods. From these calculations he demonstrated that the death-rate has systematically fluctuated from year to year much more than the rate of birth. In no successive two or three years did the births vary in number more than a few hundreds; whilst, as regards the deaths, there was within the same periods a range as wide as 3,500.

Now as to the causes of these fluctuations. The question is put: Whether we have any positive knowledge, any consistent idea, respecting these causes? The answer given is, that we have a great deal of information at hand for the elucidation of the point. The causes actually at work are divided into the ordinary and the extraordinary; the former depending upon temperature, season, and the like; and the latter on what is known as the epidemic influence.

We must not linger over the numerous tables supplied by Dr. Noble in illustration of the death-rates of various years; but, proceeding to the years 1862-3, we must take them and the facts they bring. They prove that, in the Ancoats district, no evidence can be found in favour of the view that the local distress

exerted any influence on the death-rate. The number of deaths, indeed, in that same year, was less than in the previous year. Nay, as the effects of the famine went on increasing as the year advanced, the mortality went on diminishing until the last quarter, when truly there was a rise; but this was a fluctuation that had been observed to take a similar course in preceding years; and, in the year immediately preceding, the rise was more marked and more decisive. The increase was fairly due to season and to epidemics.

Tables of the death-rate of the year 1863 in the Ancoats district prove that the mortality has been high; but, on examination as to the causes, it is shown that the increase has been due to the inordinate prevalence of small-pox, hooping-cough, measles, and scarlet fever. The same diseases have been proportionally prevalent in the metropolitan and other districts, and stand apart altogether from the hypothesis of physical destitution as the cause.

Whilst the increase of mortality for the past four quarters of the year is thus accounted for by Dr. Noble, he sustains in a most conclusive way that there have been present in the Manchester districts no evidences of those diseases which essentially indicate destitution. In the year 1847, when there was in truth a famine in the districts, he held an official position which enabled him to determine what were the real effects of famine. He saw these in the form of epidemic typhus and purpura hæmorrhagica, the diseases of famine. But this time there have, virtually, been none of these. Of typhus there were a few straggling cases in Manchester, and a threatened irruption at Preston, which stopped in its early course; while of the last named disease there is no evidence of any example at any point, nor, in truth, of any sign leading to the conviction that the physical health of the community has undergone the slightest deterioration. On the other hand, there is as little proof that the mortality has been, on the whole, reduced by the late calamity. The cotton famine has told on the wealthy, rendering them anxious; on the middle classes, dissipating their savings, diminishing their business, and producing gloomy forebodings; on the working classes, setting up in them an enforced idleness and diminished resources, but no actual disease, the food-requirements and other necessaries having been met by the various organisations for the administration of relief.

The views that have been thus put forward by our associate are so clear, so common sense, and so obviously true, that they come to us not as of value for the present only, but of interest for the future. His paper, short though it is, will stand forth as one of the best chronicles of the physical condition of an immense population during a terrible crisis, and as a durable monument of the success of that glorious picture of charity which last year England set forth as a lesson for all her children who are to come.

With new supplies of cotton entering freely into our ports, with four-and-a-half days' work per week in prospect, with abundant corn in the land, and more wine than ever before was cellared, we may consider the crisis as past, and for the moment the hard work of the physician-statist ended. Let us not, however, thank him the less heartily.

THE WEEK.

The Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity has determined to apply to the Crown for a Charter of Incorporation. At an extraordinary general meeting of the members of the Society, on Wednesday last, a draft of the proposed charter was read; and the president was authorised to take the usual steps for obtaining a grant of it from her Majesty. Hitherto, the affairs of the Society have been managed under the provisions of the Friendly Societies' Act; but the effect of the granting of the charter will be to remove the necessity for such supervision, and to place the management of the institution entirely in the hands of its members.

Dr. W. T. Gairdner, who was some time ago appointed Medical Officer of Health for Glasgow, seems very energetic in his endeavours to improve the sanitary condition of that city. Three reports have been addressed by him to the Board of Police; viz., in April, July, and October, of the present year. It appears from them, that typhus has been very prevalent; and at the date of the last report, the epidemic, so far from decreasing, continued to such an extent as to "cause uneasiness as respects the ensuing winter and spring." Cases of small-pox and scarlet fever have also of late increased in number. Dr. Gairdner enlarges much on the overcrowding which exists in Glasgow. He recommends the application of the Glasgow Police Act to the removal of this evil; but admits that in some cases the carrying out of the provisions of the Act will require more than ordinary care, "on account of the extreme wretchedness of many of the poor inhabitants, and the inadequacy of the means of parochial relief." One of the greatest difficulties with which Dr. Gairdner has to contend, appears to be the influence exercised on the public health of Glasgow by certain crowded suburbs and neighbouring places, such as Govan and Greenock, within which he has no jurisdiction. The Medical Officer of Health for Glasgow has evidently a most arduous task to perform. But he has girded up his loins to the work; and we wish him all success.

Our obituary of this week contains the names of two well-known and worthy members of the Association—men who have taken an active part in promoting its prosperity, and whose loss, as men, all who have known them must hear of with regret. We refer to Mr. Henry Ancell of Norfolk Terrace, and Mr. Peter Martin of Reigate. Of the latter gentleman, a memoir appears at a subsequent page. Mr. Ancell died on Thursday last, at the age of 61, after a long illness—a chronic affection of the air-passages, we believe. He was well known as an honest and zealous medical politician, and was also the author of several works bearing on animal chemistry and pathology. At the time of his death, he had nearly completed a work on the *Poisons of the Blood*. Mr. Ancell enjoyed a prosperous practice, from which he was compelled to retire, by his failing health, at the end of last year.

The Lancashire and Cheshire Branch of the Association have announced the delivery of three lectures by Dr. A. T. H. Waters, at the Medical Institution in Liverpool, on the Mutual Relations of Physiology, Pathology, and the Practice of Medicine. It is much to be hoped that the excellent example set by this Branch will be copied by other Branches.

Every week brings us news of the rise, or attempted rise, of another "village hospital." If these hospitals are to be worked gratuitously, all we can say is, what we have so often repeated, that the baneful results of gratuitous medical services, which have already so degraded the social position of our profession, will be still further promoted and extended. We would ask those who thus offer their services gratuitously to answer these three questions: Do they do the work out of a pure love of charity, or is it to promote their own private ends? Do they gain the respect or obtain the thanks of society for their gratuitous labours? If the work of attending the sick poor be the work of society (just as is the work of feeding the poor), why should the medical man be called upon to do the work of society gratuitously?

It is not yet, after all, a settled fact that St. Thomas's Hospital will rise on the Stangate site as proposed, any time within the next ten or twelve years. Great, and powerful, opposition has been got up against the proposition; and as there is some considerable show of reason in the opposition, it is not at all impossible that the governors of St. Thomas's, who have so long ill-managed the affairs of that wealthy institution, may find themselves in a minority when their Stangate proposition is brought for final settlement under the notice of the Lord Chancellor. The most formidable competitor for the honour of bearing St. Thomas's will, doubtless, be the Bethlehem site; and we apprehend that the general philanthropist, who can embrace in one view the interests of the Bethlehem lunatic as well as of the St. Thomas's patient, will cordially vote in favour of the Bethlehem site. And we have no doubt, that if a judge indifferently friendly to either charity has to settle the question, that he will naturally allow this killing-of-two-birds-with-one-stone fact to weigh in his decision. St. Thomas's interests, of course, are, to the governors of St. Thomas, simply and solely limited to St. Thomas's; but those of us who live outside the local atmosphere cannot help feeling that not to place St. Thomas's on Bethlehem's present site, and thereby to send off Bethlehem's lunatics into country retirement would be a great occasion irretrievably lost. It is, at all events, a great satisfaction to know that a question of so much importance will come for final decision under the calm atmosphere of Westminster Hall, and be removed out of the close and magic circle which has hitherto presided over the fortunes of St. Thomas's. We are very glad to add, that, as we hear, the government intends to inquire into the state of the royal hospitals. The inquiry has evidently arisen out of this long-agitated St. Thomas's Hospital question. Nothing more is wanting to show the necessity for such an investigation, than the fact already stated in this Journal, that St. George's Hospital, with its £16,000 *per annum*, provided for as many in-patients in one year as St. Thomas's with its £30,000 and upwards.

The profession will be glad to learn that complete justice has now been executed upon Mr. Jordan, of the "masculine vigour" school of medicine. The name of this individual was sometime since erased from the list of the Royal College of Surgeons; and now we learn that, at a meeting of the Edinburgh College (of which Mr. Jordan was a Licentiate), the following resolution was passed on the 3rd inst.:

"It having been proved to the satisfaction of the College, that Robert Jacob Jordan, a Licentiate of this College, has been guilty of conduct unbecoming the character of a physician, in publishing, or causing to be published, an indecent work, entitled 'The Illustrated and Descriptive Catalogue of the Subjects contained in the London Anatomical Museum: to which is annexed the Guide to Masculine Vigour. By a Physician'; that the said Robert Jacob Jordan be deprived of his Licence from the College."

The result of this resolution will be that the aforesaid Jordan's name will be erased from the *Medical Register*, as he now possesses no title which qualifies him for the honour of a place on the *Register*.

The Poor-law Board, in a letter touching the neglect of a relieving-officer in not attending to the order of the medical officer for a supply of extras to a pauper, write as follows:

"Although the certificates of the medical officers as

to the necessaries required by any pauper under their care can only be considered as recommendations on their part, and not as orders which the relieving-officers are bound to obey, the refusal to comply with them involves a serious responsibility, and would only be justified under special circumstances showing the relief to be improper in the case."

This mode of conducting the Poor Laws is, unless we are much mistaken, a specimen of the causes of the cruelties and injuries which are too often, under its administration, inflicted on the poor. What earthly reason is there why the order of the medical officer should not be instantly obeyed; and how can the relieving officer be a better judge of the wants of the pauper than the medical officer? Not to give instant relief in many urgent cases, is to seal the fate of the pauper. After all, the responsibility of giving the extras must fall on some one, and why not on the medical officer, who is the only real judge of their need? To us, this systematised delay in administering what is needed for life, seems to be nothing less than an attempt on the part of the Board to prevent the pauper getting the extras required. To lecture an official, with such a regulation as this on their books, is simply a farce, and the official knows it to be so.

The Physicians of the Brompton Hospital have just presented to the governors a Second Report of the hospital, commencing with the year 1849, and coming down to the present time, embracing, therefore, thirteen years of operations. We regret to find in it nothing about the treatment of consumption. Thirteen years of additional experience has not, it would appear, enabled the authors of it even to corroborate their former statements under this head. "The subject of treatment," we read, "has been omitted intentionally. It has been thought better to leave it in the hands of individual members of the staff, as by them detailed in their published works, or in communications to medical journals." We suppose we must conclude from this, that there is (as usual now-a-days) no agreement in opinion amongst the medical officers on the subject. We will only say, however, that to us the omission of all allusion to the treatment in such a report reads like a very great defect. It would have been something to have been told that there was no agreement in opinion on the subject. Negative information would have been more instructive than none. The Report—and a most able one it is in a statistical point of view—has been drawn up entirely by Dr. Stone; and he it is who comments on all the tables, and is responsible for the commentaries, and must have the credit of all the work. Under such circumstances, it seems to us a complete misnomer to call this a report presented by the medical officers, inasmuch as the medical officers had clearly nothing whatever to do with it, but simply signing it and laying it on the table. The report tells of the number of patients admitted during the past thirteen years; of their age; their social condition; trades, etc.; hereditary predisposition; duration of illness before admission; and so on. We think the medical officers should at least have given us a summary of the conclusions which they consider may be deduced from these tables, so carefully compiled by Dr. Stone, and have told us, whether they confirm what is already known on the subject, or indicate something new.

The papers of last week contain the following reports of the proceedings of non-combatant (?) officers, as the Horse Guards calls army and navy medical men.

"Sunkiang is garrisoned by a force under Dr. Macartney, late of Her Majesty's 99th Regiment. We reported last mail that he had taken a city called Fung-ching; he has since, with his force, driven the rebels out of Seedong, a large town said to have been well defended by stockades. The affair was very creditable to Dr. Macartney's force. Two hundred thousand dollars worth of loot was taken at the same time."

"The superintendent of Wellington, New Zealand, Dr. Featherstone, deserves great praise for the brave and bold manner in which he has acted. He has visited the disaffected tribes, told them plainly what steps he intended to take, and endeavoured to persuade them to be peaceable. There is no doubt that Dr. Featherstone has more than once, by his fearless frankness, prevented an outbreak. Only the other day he addressed a large meeting of Kingite natives, who were armed with guns, and in an excited state. A single incautious word or action would have been his death; but he managed to smooth their angry passions for the time, and was allowed to depart unmolested."

"The exploration of the west coast of the middle island of New Zealand is a subject of as much interest to the New Zealand colonists as were the attempts of Burke and Wills and other explorers in Australia. Dr. Hector, the provincial geologist, of Otago, is now out exploring the coast from the sea; the attempts overland having been attended with great difficulty and danger. Dr. Hector has been absent about four months, and news has just been received of him. He is reported to be at Milford Sound, one of the fine inlets which indent the west coast, suffering from a broken arm, sustained by a fall down a precipice."

M. Baudela tells us, through the *Siglo Medico*, that he ordered, for a child five or six months old, affected with a croupal cough, and fits of suffocation, fever, and enlarged submaxillary glands, a julep, and a solution of fifteen grains of nitrate of silver in thirty *grammes* of water. On the following day, the doctor found his patient breathing freely and calmly, and finding the lips and mouth black, discovered on inquiry, that instead of the julep, the child was given the silver-solution. The child vomited after each dose of the solution; and was, in fact, cured apparently through the mistake of the *pharmacien*.

The Academy of Sciences is still warmly debating, whether or not madness disposes an individual to pellagra.

THE LATE PETER MARTIN, ESQ.

"On the 14th inst., at Reigate, Peter Martin, Esq., surgeon, in the fifty-second year of his age."

Too early, while still in the prime of life, and at the full tide of his honourable and successful career of usefulness, Peter Martin has been taken away; and few men have left behind them so many sorrowing friends. A "simple ulcer" of the duodenum, involving nearly two-thirds of the circumference of the intestine, and producing, by its surrounding thickening, almost entire occlusion of the tube immediately below the pylorus, has done its work.

Notwithstanding the exhaustion produced by constantly recurring sickness and frequent hæmorrhage—hæmorrhage sometimes through the stomach and sometimes through the intestines—the patient made constant efforts towards rallying; until at last symptoms of peritonitis, and of a more copious hæmorrhage, set in, and the end soon came.

Peter, the son of Thomas and Elizabeth Martin, was born at Reigate on the 12th of April, 1812. The early part of his general education was conducted at home, under the careful supervision of his father, with the assistance of private tutors, and was continued later at Hazlewood, near Birmingham, and at Bruce Castle, Tottenham. At Bruce Castle, he enjoyed the advantages of the special educational system there inaugurated by the present Sir Rowland Hill, and quickly gaining the first position in the school, he maintained it to the conclusion of his stay.

Being thus well grounded in general preliminary education, he was apprenticed to his father, a general practitioner, for initiation in pharmaceutical operations and early professional reading; with opportunities, which were well used, for seeing practice. To this apprenticeship, entered upon after such preparation, and conducted so thoroughly and so conscientiously, he ever considered that he owed much of his subsequent professional success; and he was constant through life in his steady advocacy of a well ordered and honestly carried out apprenticeship system.

Proceeding to University College, London, he was one of the earliest students in its new medical classes and at the hospital attached to the College, where he enjoyed the friendship of Sir Charles Bell and Mr. Liston. His thoroughgoing habits of industry were here continued; and as a meritorious student he was rewarded with a gold and a silver medal, and with certificates of honour in all the classes he attended.

Subsequently, at Guy's Hospital, to which he turned for a wider field of observation than was then afforded at the infant University, he was a favoured and favourite student under Mr. Key.

Having completed his London career, he next proceeded to the medical school of the University of Edinburgh; and there, together with his friend Mr. Archibald Dalrymple of Norwich, was seized with continued fever, caught in the wards of the Infirmary. Under the able care of Dr. Alison, and of Mr. Dalrymple, sen., who left Norwich to attend upon his son, the two friends passed safely through the trial, and resumed their studies; but it may be fairly questioned whether this attack of fever (he had been the subject of a former attack when a child) may not have laid the foundation in Peter Martin for the malady which eventually proved fatal to him; such a supposition, indeed, was hinted at by him during his last illness.

From Edinburgh, Peter Martin proceeded to Paris, and there enjoyed the privilege of attending the lectures and witnessing the practice of the eminent professors who then flourished at that school; among them being Dupuytren, and Louis, whose tract on the "numerical method" Martin translated and published on his return.

Having reaped the fruits of his diligent, assiduous application in these great professional schools, he returned to be associated with his father in practice at Reigate.

Quickly attracting the notice of the then Lord Monson (predecessor of the late Lord, and a passionate lover of the fine arts), he was induced to accompany his lordship to the continent as his friend and physician; and for three successtve summers, devoting four months to each excursion, the two travellers visited most of the principal towns in Italy, Belgium, and Germany, studying in their progress all the most celebrated works of ancient and modern art then to be found in Europe.

With a mind thus adorned, and enlarged by the contemplation of some of the grandest scenes of nature and by all the other expanding influences of foreign travel, Martin returned from time to time to his professional employment at Reigate; but for some years later, indeed up to the time of Lord Monson's death, in 1842, he was occasionally absent with him.

Finally, however, upon his father's retirement, he settled down as his successor, and shortly after married the elder daughter of Henry Holman, Esq., of Hurstpierpoint. Following the bright example set before him in the daily life of one who survives in a green old age, at 84, to mourn and feel but too acutely the loss of his son, Peter Martin was not content to be useful to himself alone—his was a nobler nature. In the midst of the anxious and harassing duties of a large practice, he found time to study how best he might improve the condition of his fellow-workers in the medical profession (the proceedings of the Poor-law Medical Reform Committee testify to his labours in one direction), and, not less anxiously, how contribute to the intellectual and social well-being of his fellow-townsmen. Following his father (the founder of both Associations), he became Secretary to the Surrey Medical Benevolent Society, and Secretary and Treasurer of the South-Eastern Branch of the Provincial Medical and Surgical (now "British") Association; and to the ability, tact, and judgment with which he introduced and conducted the business of these bodies is doubtless owing, in great measure, their present flourishing and influential position. But Peter Martin's unselfishness and love of work were best known, because he was most intimately known, to the older inhabitants of Reigate, for whom, and among whom, he laboured so zealously. These can remember how he delighted them in days gone by with his lectures; how, in the discussion of the various

social questions which arose in the Reigate of that time, he charmed them with the universality and accuracy of his knowledge, and with the fluency and precision of the language in which that knowledge was imparted. Increasing and imperative calls upon his time, and, alas! too frequently recurring attacks of illness, had of late compelled his partial retirement from the active share he once took in all the business of the day, and allowed him only now and then to reappear upon the scene, with all the freshness, with all the quickness of apprehension, with all the accuracy of perception, and with all the modest decision, of his former years.

And it might have been well for him (who shall now dare say it would have been better for him?) had he earlier withdrawn from all but the necessary duties of his position. But his sense of duty prompted him to continued exertion; and his unselfish nature allowed too little consideration for his own safety to interpose.

After suffering at intervals spread over a long time from symptoms of gastric disorder, symptoms which disappeared entirely for many months together, leaving him apparently in the enjoyment of perfect health (two years ago he was, for him, stout and ruddy), he was harassed by a rapid succession of anxious cases, and his strength soon began to decline. His condition, however, was no more than usually alarming; until, suddenly, during the month of last June, vomiting for the first time set in; and, altered blood appearing almost immediately in the matters vomited, the evidence of the existence of serious organic disease became but too clear. Improvement quickly following upon his consenting to make himself the invalid, he availed himself of the kind offer of a valued friend, who placed his house in the Isle of Wight at his disposal, to absent himself for awhile from home. Very soon after his arrival in the island, however, his health again broke down; and he returned with all his symptoms aggravated. Another improvement resulting from perfect repose, he paid a visit to Hurstpierpoint, where he continued to gain ground; and so much better, indeed, did he become, as to be very anxious to return to his professional duties. This not being considered desirable, his old fondness for travel was invoked, to reconcile him to a temporary absence from harder work; and he left, in company with his son and brother-in-law, for the continent. He had got no farther than Brussels, however, when symptoms of obstruction again set in; and, after a severe attack of sickness of three days duration, he returned to Folkestone. From Folkestone, where he was again attacked, he was removed as soon as was practicable to Reigate, and from that time never left his bed. Nursed through the whole period of his long illness with untiring endurance and marvellous ability, his inherent and hereditary vitality was so well husbanded as to enable him to make repeated attempts to rally. But meanwhile his disease was making progress towards a fatal termination; until at last, in the enjoyment of a clear unclouded mind, this enlightened and accomplished man closed a life of usefulness and honour at the early age of fifty-one, leaving behind him a widow and seven surviving children.

Few men, it was said at the beginning of this notice, have left behind them so many sorrowing friends. And this is no mere figure of speech. Gifted by nature with an attractive person; with all good qualities, intellectual and social, looking out through his clear blue eyes, and beaming in his expressive face and winning smile, there was that about him which to the merest stranger was irresistibly attractive. But this was not all. By those who had the privilege of knowing him intimately will be long cherished the remembrance of those more solid attributes of that inner life to which the access was not so easy; and when to these are added his uncompromising honesty, his fearless candour, and his gentle charity, all nurtured and harmonised and hallowed by faith, a more complete and noble character could scarcely be imagined or portrayed.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Ordinary.]	Victoria Rooms, Clifton.	Friday, Nov. 27, 7 P.M.

EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Fountain Hotel, Canterbury, on Thursday, November 26th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

THOMAS BOYCOTT, M.D., *Hon. Secretary.*

Canterbury, November 2nd, 1863.

LANCASHIRE AND CHESHIRE BRANCH.

THE first Course of Lectures instituted by this Society will be delivered at the Medical Institution, Mount Pleasant, Liverpool, by A. T. H. Waters, M.D., M.R.C.P., on Monday, November 23rd, Monday, November 30th, and Monday, December 7th, at eight o'clock p.m. Subject: "On the Mutual Relations of Physiology, Pathology, and the Practice of Medicine."

Lecture 1.—Physiology in its Relations to Pathology and the Practice of Medicine—On the early Recognition of Disturbed Function in Relation to Disease—The Reflex Function of the Nervous System, in Relation to Pathology, Diagnosis, and Therapeutics; its Bearings on certain Organic and other Diseases, etc.

Lecture 2.—Pathology in its Relations to the Practice of Medicine—On certain Pathological States, as the Result of Impaired Nutrition, consequent on the Abeyance or Imperfect Performance of Physiological Action—Diseases of Degeneration attacking the Heart, Lungs, etc.—Sudden Death, in Relation to Diseases of the Heart, etc.

Lecture 3.—On the Pathology and Treatment of certain Forms of Delirium—Therapeutics—The Physiological and Therapeutic Action of Alcohol—The present state of Therapeutics, and the Direction which Therapeutical Inquiries should take, etc.

JAMES VOSE, M.D., *President.*

November 12th, 1863.

SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

"*Felicitas infelicibus adjuvante scientiâ.*"

THE annual meeting of this Branch was held on October 27th, at the George Hotel, Shrewsbury, under the presidency of WILLIAM EDDOWES, Esq. On taking the

chair, Mr. Eddowes made a few remarks, and several letters were read from members regretting their inability to attend the meeting.

The minutes of the last meeting were read by the Secretary, and signed by the Chairman.

President's Address. An able and practical address on the progress of medicine and surgery, especially relating to cancer, was then read by the President, after which an animated discussion followed, and he was requested to send it for publication.

Papers. The following papers were read :—

1. Calculus passed through a Fistulous Opening near the Rectum. By W. Newman, M.D.

2. Two Cases of Secondary Hæmorrhage, occurring in the Salop Infirmary: with Remarks. By W. Eddowes, jun., Esq.

Evening Meetings. It was proposed that the evening meetings of this Branch take place quarterly; and that the next be held on some convenient day in January 1864.

Officers. The officers for the ensuing year were chosen, and three new members added, making six in the present year.

Dinner. The members and friends then adjourned to dinner, at which seventeen were present. The President presented the champagne.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A GENERAL meeting of the above Branch was held on Thursday, November 12, in the medical department of Birmingham Library. In the absence of the President, T. BOISRAGON, M.D., took the chair. There were present fourteen members.

Paper. Some observations on Trusses: with a Description of a new one recently invented by Mr. T. P. Salt. By Oliver Pemberton, Esq.

After the conclusion of the paper and the discussion, Mr. Salt explained the principles of his invention, and replied to the various suggestions and inquiries of the members.

Reports of Societies.

CAMBRIDGE PHILOSOPHICAL SOCIETY.

MONDAY, NOVEMBER 9TH, 1863.

Professor THOMPSON, in the Chair.

RESULT OF EXPERIMENTS ON THE GROWTH OF THE JAW. BY G. M. HUMPHREY, M.D., F.R.S.

It had been shown by the author in a former paper read before the Society, as well as by other physiologists, that the enlargement of bones does not take place by interstitial growth, like that of other structures, but solely by addition at their surfaces, edges and ends; the addition of osseous matter, at some parts, being usually attended with more or less removal at others, so as to maintain the proper shape and proportions of the bone. The object of the communication was to show in what manner this principle is carried out in the jaws so as to make room for the permanent teeth which are both larger and more numerous than those of the first dentition.

It was shown with regard to the lower jaw, that the five middle, or front permanent teeth (the two incisors, the canine, and the two bicuspids) occupy precisely the same space as their predecessors of the first series (the two incisors, the canine, and the two primary molars); the third primary molar, which is a permanent tooth (the first permanent molar), occupying the same position throughout life; and all the additional teeth of the permanent series (the second and third molars) are added to the hinder part of the jaw. Hence the *fore* part of the arch of the jaw, the part containing the primary teeth, undergoes very little change of size throughout life, being nearly as large in the new-born infant as in the adult; and the teeth which occupy it in the adult require only the same space as their predecessors in the infant. The jaw is deepened at this part and strengthened by addition, beneath, in front, and behind; but no alteration in the shape or size of its arch takes place.

How is the space gained in the *back* part of the jaw for the additional teeth, viz., the three molars? To ascertain this with certainty the author made experiments upon young pigs, passing wires round the condyloid and coronoid margins of the ascending portion of the jaw, and killing the animals at variable periods afterwards. The result of these experiments, which were detailed at the meeting, was to prove that the body or dental part of the jaw is lengthened by gradual addition to the hinder or condyloid edge, and by absorption of the anterior or coronoid edge of the bone. The molar teeth, when first formed, are placed, successively, quite beneath the coronoid process; and by the absorption of the anterior edge of that process they are subsequently exposed, and a clear surface is left for them.

The lengthening of the bone by addition to its hinder edge is accompanied by a gradual shifting of the periosteum and other soft parts, along the surface of the bone, towards that edge. Thus the proper relations of the soft parts to the bone are maintained (as explained, with reference to the long bones, in a paper by the author, published in the *Transactions of the Medico-Chirurgical Society*, vol. xliv); and the mental hole is carried a little backwards and acquires a slant from within outwards and *backwards* in consequence of the traction of the nerve upon it during the shifting of the soft parts upon the bone.

The additional molars grow up in the same line with the primary teeth; so that, although the horns of the alveolar arch are lengthened, and the arch is rendered more elliptical; it is not widened. The widening of the jaw, in correspondence with the increasing width of the base of the skull, takes place behind the alveolar arch, in the ascending portion, and is effected by progression of absorption on the inner, and addition to the outer surface of this part.

In the upper jaw the course much the same. The fore part of the dental arch is but little altered. The permanent molars, developed behind and above one another in the "tubercle," descend, and the space for them is formed by the backward growth of the tubercle, and by changes in the pterygoid processes in the sphenoid corresponding with those in the coronoid processes of the lower jaw.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, NOVEMBER 2ND, 1863.

B. G. BABINGTON, M.D., F.R.S., in the Chair.

ON THE PRESENT POSITION AND PROSPECTS OF EPIDEMIOLOGICAL SCIENCE. BY B. W. RICHARDSON, M.D.

[This paper will be published in the JOURNAL.]

NOTICES OF THE EPIDEMICS OF 1719-20 AND 1759 IN PERU. BY ARCHIBALD SMITH, M.D.

Dr. SMITH communicated to the Society several curious historical notes on Peruvian epidemics in the past century. A highly interesting narrative was given of the prevalence of the epidemic of 1719-20 in Cuzco, derived from the manuscript of an old Cuzco chronicler, and originally published in the *Lima Medical Gazette*.

In the brief discussion which followed the reading of

this paper, Sir Ranald Martin and Dr. Milroy took part. Dr. Milroy directed attention to the similarity existing between several of the symptoms of the epidemic of 1719-20 as described by the old Cuzco chronicler, and the symptoms of the Pali plague.

Correspondence.

IRIDECTOMY.

LETTER FROM J. W. HULKE, ESQ.

SIR,—The questions that have arisen in the discussion you have invited on iridectomy: 1. What is the principle on which iridectomy is performed in glaucoma? 2. In what cases is iridectomy indicated?—admit of easy reply.

1. The principle on which iridectomy is performed in glaucoma is *the relief of excessive ocular tension.* 2. Iridectomy is indicated (with limitations to be presently stated) wherever such excessive tension exists.

Now, excessive tension of the globe is the prominent feature in the glaucomatous process; it is the efficient cause of the blindness and of the disorganisation of the ocular tissues. The proof of this lies in the arrest of the process, and restoration of sight when the over-tension is permanently relieved. Experience has long ago abundantly demonstrated, that iridectomy can effect this relief; but, as your correspondents require it, I shall supply cases in confirmation. Before doing this, the prevalent misconceptions respecting glaucoma oblige me, in order to avoid being misunderstood, to sketch its outlines as known to the modern school of ophthalmic surgery.

To commence with the morbid anatomy: in 1858, H. Müller demonstrated by dissection an excavation of the intraocular end of the optic nerve, for shortness called optic disc. (*Archiv. für Ophthalm.*, Bd. iv.) This was confirmed by other anatomists; amongst them, by myself. (*Ophthalmic Hospital Reports*, No. xiii, Oct. 1860; where vertical sections of different kinds of excavation of the optic disc are figured.) The hollow has steep abrupt sides, and reaches the circumference of the disc. Its bottom soon comes to lie behind the plane of the choroid, and the *lamina cribrosa* presents a concave, instead of slightly convex, surface towards the interior of the globe. In the advanced stage of the disease, the excavation extends laterally, and undermines the border of the sclero-choroidal aperture. These characters at once distinguish the excavation of glaucoma from the small natural hollow at the centre of the disc left by the bending aside of the optic nerve-fibres as they pass to the retina (the physiological depression, as it has been termed), and from the gently sloping hollow produced by the simple wasting of the nerve-fibres. The indications of intraocular pressure are so unmistakable in the glaucomatous hollow, that they can proceed from no other agency; no traction from behind in consequence of shrinking of the trunk of the optic nerve, as some suppose, could produce the peculiar features of the hollow.

The other morbid appearances in the optic disc and retina are conveniently classed as those which concern the blood-vessels and those presented by the nervous and connective tissues. The veins at the optic disc appear to have a smaller calibre than in the retina; and, as they follow the surface of the hollow, their direction is suddenly changed at the point where they pass from the retina round the sharp brink of the hollow. In the retina, the veins are swollen, and their course is tortuous. The capillaries are dilated; saccules are formed on them; and these, with the capillaries on which they sit, are often found crammed with blood-corpuscles. Small extravasations of blood, traceable to ruptures of these saccules, are not infrequent; they are confined to the inner layers of the retina, or burst into the vitreous humour. Such apoplexies are more common in the inflammatory forms of glaucoma. (The saccules are figured in a paper on Glaucoma written by me in 1857. *Medico-Chir. Trans.*, vol. xvi.) The obstructed capillaries and saccules sometimes wither; they become granular and opaque, contain minute oil-beads and small masses of hæmatoidine, and the parts of the retina supplied by them acquire an opaque stone-grey appearance. In some eyes (mostly in chronic glaucoma), I have found the coats of the arteries hypertrophied. All this indicates an unusual resistence at the optic disc to the efflux of blood through the vena centralis, and consequent increase of the blood-pressure on the inner surface of the vessels which lie in the order of the circulation behind this spot.

The other changes in the retinal tissues may be summed under atrophy. The nerve-fibres and ganglion-cells forming the inner layers waste first; the rods and cones are more enduring, and are often found comparatively intact when the inner layers are withered.

The vessels of the choroid, particularly the veins and capillaries, are greatly dilated. Dissections have, however, shown that capillary hæmorrhage is less common than has been supposed. One reason of this may consist in the closeness of the capillary net, owing to which the interspaces become nearly obliterated when the vessels are swollen, and this allows the walls of adjacent vessels to mutually support each other, whilst the elastic lamina affords an uniform support in front. (In the *Ophthalmic Hospital Reports*, No. xiii, I have figured some of these dilated choroidal capillaries.) Extravasations of blood from the veins into the stroma are occasionally found.

Congestion and œdema, in which the ciliary body and iris participate, are then the chief morbid appearances in the choroid. In all my dissections of glaucomatous eyeballs, I have never seen the serous effusion between the choroid and retina which a recent authority describes; and I doubt its occurrence.

Where acute inflammation has existed, the interstices of the sclerotic are filled with serum; but, in other cases, they are occupied with fat-globules, and granules whose solubility in acids show them to be bone-earth.

The vitreous humour is clear and colourless, afterwards clouded; or has a yellow tinge in transmitted light when there are capillary apoplexies in the retina. This tinge becomes orange when blood has burst into the vitreous. The small clots are often traceable to the spot where the limiting membrane and the hyaloid capsule have been torn. But the most striking circumstance connected with the vitreous humour is its solidity; it offers a remarkable resistance to the knife, and does not quickly run off when the eyeball is cut across.

When the vitreous humour is stained, the lens shares the tinge; and the greenest lenses I have ever seen in the living eye have been those which on dissection I found most deeply stained with blood-pigment.

Summed briefly, the principal finer anatomical changes in glaucoma consist in a peculiar excavation of the optic disc, and congestion of the choroid, ciliary body, iris, and retina, with increase of the vitreous humour. The first is clearly due to the agency of pressure on the surface of the disc. It has been objected that if this were so, it ought to disappear when the pressure is removed. The objection fails, because the hollow diminishes if the pressure have been removed before it has produced atrophy of the nervous tissue. The congestion of the vascular coats is at once the cause and the effect of the increased ocular tension. The increased quantity of blood in the eye increases its tension, and the increased pressure on the inner surface of the globe diminishes the sclerotic canals (their oblique direction favours this) by which the vasa vorticosa emerge; this obstructs the

venous circulation, and augments the distension of all the vessels lying behind the obstruction. The retinal congestion is similarly produced by the abrupt change in the direction of the veins at the margin of the excavated optic disc and by their compression against the margin; and it contributes, though in a much smaller degree than the choroidal congestion, to heighten the ocular tension.

To these finer alterations (which concern the earlier stages, those belonging to the stage of glaucomatous degeneration being atrophic) must be added the rougher anatomical alterations in the front of the eye: advance of the lens and iris and flattening of the cornea, also effects of over-tension.

What are the signs of glaucoma in the living eye? The limits of a letter do not allow the description of the several forms in which glaucoma come before us in practice, as a primary affection, or complicating an already existing disease. They may be roughly arranged in two classes, comprising: 1. Cases (apparently) unattended with inflammation (glaucoma simplex vel sine ophthalmiâ, of Donders; amaurosis with glaucomatous excavation of the optic disc, of Von Graefe); and 2. Cases attended with easily recognisable signs of inflammation (glaucoma cum ophthalmiâ, of Donders; glaucoma with intermittent inflammation; chronic inflammatory glaucoma; acute inflammatory glaucoma; glaucoma fulminans (peracute inflammatory), of Von Graefe.) All possess certain common features which show the essential identity of the process, and in all four stages or periods are generally recognisable: 1. A precursory period; 2. A period in which the glaucoma is fully developed (glaucoma evolutum, confirmatum, of Von Graefe); 3. A period when quantitative perception of light has been some time quite lost (glaucoma absolutum, Von Graefe); 4. The period of glaucomatous degeneration, (Von Graefe).

1. The *precursory period* is rarely absent; but its duration is very variable, and its symptoms are sometimes so little prominent that they escape the attention they deserve. It is marked by increasing presbyopia (owing to the larger corneal curve); the appearance as of a rainbow or halo round a candle-flame; *intermittent* dimness of sight; slight hardness of the eyeball; a lighter pressure with the finger on the eyeball produces pulsation in the arteria centralis at the optic disc, than would be requisite for its production in a healthy eye; fulness of the anterior ciliary and muscular veins; a sluggish pupil; vague *intermittent* pains in the forehead and temples; and commencing contraction of the field of vision. In cases unattended with inflammation, the precursory gradually slides into the period of full development; in acutely inflammatory cases, the transition is sudden.

2. The *period of developed glaucoma* is marked by notable hardness of the eyeball; pulsation of the arteria centralis, spontaneous or producible by the slightest pressure (pulsation of the arteria centralis, first noticed by Jaeger in diseased eyes, was adduced by Von Graefe as pathognomonic of glaucoma); excavation of the optic disc, shown by the abrupt bending of the veins at the edge of the hollow—where the hollow is deep, their continuity seems to be broken, and a lateral displacement of the disconnected portions to have occurred; continuous and increasing obscuration; progressive contraction of the field of vision (generally this begins at the inner part of the field and proceeds obliquely, the upper and outer part disappearing last, and the temporal side of the retina suffering first); cloudiness of the vitreous and aqueous humours; dulness and anæsthesia of the cornea; a dilated and motionless pupil; increased pain in the temples and forehead, and tensive pain in the eyeball (this varies much, and is most severe in glaucoma with acute inflammation.)

4. In the period of *glaucomatous degeneration*, the iris is a mere narrow ring; the lens is cataractous; all the ocular tissues are more or less disorganised. The eye presents the familiar features of the glaucoma of the old school. (The pulsation in the artery and the obscuration, the flattening of the cornea and the ciliary pains, are each and all results of excessive ocular tension; the first are producible in the healthy eye by pressure with the tip of the finger.)

In confirmation of the proved efficacy of iridectomy to relieve the over-tension which paralyses the retina and brings about the disorganisation of the eyeball in glaucoma, I submit the annexed cases to the impartial judgment of the profession. They are purposely chosen from hospital practice, because the publicity which attends this is an additional voucher for their genuineness.

None of its advocates claim for iridectomy the universal applicability and infallibility which some have laid to their charge. None suppose it can restore sight which has been long extinguished, or renew an eyeball in the stage of glaucomatous degeneration. In the fourth stage it does not always certainly relieve pain. The extent of irreparable structural change existing at the time of operation is the measure of its usefulness in any given case. This is the explanation of the more perfect restoration of sight in acute inflammatory cases (in which in a few hours the tension rises so high as to paralyse the retina), where a timely iridectomy anticipates structural change, and of the less complete recovery in subacute and chronic cases where pressure and atrophy proceed with nearly equal step; but, even here, though no improvement of sight follow, the glaucomatous process is generally arrested, and the amount of existing sight preserved.

I do not profess to offer any explanation of the way in which iridectomy permanently relieves over-tension. Granted that this is not yet sufficiently explained, whilst the fact remains that iridectomy controls a confessedly otherwise incurable disease, their culpability is great who refuse their patients its benefit.

The practice of iridectomy in recurrent iritis is not new, as might be inferred from your second article. It was in recurrent iritis that Von Graefe first practised it (his inducement being the observation, that the tendency to subsequent attacks is proportioned to the extent to which the pupillary edge remains adherent to the lens and the communication between the chambers interrupted); and it was precisely the correlation of some forms in which the choroid participates, irido-choroiditis and glaucoma, which induced him to adopt it in the latter.

In the course of the discussion iridectomy has been spoken of as *nothing more than the old operation for artificial pupil by excision*, which consists in making a puncture in the *cornea*, and excising a piece of iris proportioned to the size of the desired pupil, with respect to the corneal speck, etc., necessitating its performance. But the kind of *iridectomy practised in glaucoma is something different;* the portion removed comprehends *a wedge-like segment of iris in its entire breadth* from the pupil to the attached great circumference (its size is regulated by the degree of tension to be relieved); for this the anterior chamber is opened at its extreme circumference, and *the incision is begun in the sclerotic.*

Case I. *Acute Inflammatory Glaucoma: Second Period: Iridectomy.* A needlewoman, aged 30, whose mother had lost both eyes from glaucoma, was admitted into the Royal London Ophthalmic Hospital, January 20th, 1860, with acute inflammatory glaucoma of her right and only eye. (The left eye had been accidentally injured in a squint operation fourteen years before, and was shrunken.) The eyeball was very hard, much congested, and painful; the pupil was dilated, and almost motionless. A haziness of the humours prevented an accurate exploration of the fundus oculi; but the retinal veins were

turgid, and there was slight excavation of the optic disc. The field of vision was much contracted, particularly below; and her vision was so blunted, that she could not make out No. 20 test-type (eight-line Roman), the short letters of which are seven-eighths of an inch tall. For two years, she had been liable to occasional obscurations and a rainbow round the candle-flame. I performed iridectomy, removing the upper and outer seventh part of the iris. January 24th. The congestion was less; the tension of the globe natural. She read the smallest type on her bed-ticket (about No. 10 test-type). Jan. 31st. The redness of the eye-ball was gone. Her sight was improving. She was made an out-patient. Feb. 10th. The tension continued natural. She read No. 2. Feb. 17th. She read No. 1 (brilliant). July. She read No. 1, and was supporting herself by needlework. The optic disc was no longer excavated.

Case II. *Subacute Inflammatory Glaucoma of the Left Eye: Fourth Period: Acute Inflammatory Glaucoma of the Right Eye: Second Period: Iridectomy.* A needlewoman, aged 64, sought relief at the Royal London Ophthalmic Hospital, July 1859, for intolerable pain in her left eye, which had been quite blind several months. She was a pale, nervous woman; had had a large family; and often stitched from 9 A.M. till 10 o'clock at night. Early in the year, she had been in St. Thomas's Hospital with erysipelas; and while there had fever. At this time, the left eye became exceedingly painful; its sight failed, and in four months was quite lost. When she came under my care in July, the cornea of this eye was dull and vesicated; the pupil was widely dilated and fixed. The ciliary region was congested; the anterior ciliary and muscular veins were particularly swollen and varicose. The globe was very hard, and excessively painful. The right eye was occasionally painful and dim, and sometimes the candle-flame seemed to her to have a rainbow round it. Iridectomy was performed in the left eye, in the hope of relieving the pain. On July 26th, the redness had disappeared. She had none of the former severe pain, but only an occasional ache, and expressed herself much relieved. She was now anxious about her right eye, which was painful, and soon became tired. Its pupil was sluggish; its anterior chamber was small. The anterior ciliary veins were swollen. At the distance of one foot, the field of vision was scarcely as large as the palm of my hand, and she could with difficulty pick out letters in No. 16 test-types (two-line great primer). The globe was a little hard; there was commencing excavation of the optic disc; a very slight pressure caused pulsation of the vena and arteria centralis. Foreseeing the near approach of an acute attack, I strongly urged her to come into the hospital on Friday (for she had been made an out-patient), and let me anticipate it by an iridectomy. When the time came, she was frightened, and stayed away. On Saturday night, she was seized with violent pain in the eye-ball, attended with severe headache, rapid and complete blindness, retching, and great prostration. On Sunday, there was a slight remission, she could just distinguish light from shade. On Tuesday, when she was brought to the hospital, the great hardness of the globe indicated excessive ocular tension. The cornea was dull; the pupil dilated and motionless; the ciliary region red, and encircled by arches formed by the swollen anterior ciliary and muscular veins. She had not the slightest power of perceiving objects (qualitative perception), and had only a minimum quantitative perception of light (just distinguished light from shade). A large segment of iris, in its whole breadth, was removed by iridectomy. August 5th. She was greatly relieved. She had a little pain the previous night, but had none now. She could see, but could not yet count my fingers. From this time she made steady progress. On the 23rd, she could count my fingers at the distance of three feet, and could tell the back of the hand from the palm. Sept. 23rd. She found her way alone to the hospital; she was continuing to improve. Nov. 1st. With a sixteen-inch lens (such as a person at her age might require) she read No. 10 (pica) correctly, and was again at needlework.

Case III. *Acute Inflammatory Glaucoma: Second Stage: Iridectomy.* A spare, wiry, old sailor, aged 66, who "had never known a day's illness", was attacked with severe pain in the right eyeball, which became very red. In a few hours he could hardly see his hand. On the third day there was a remission. Four weeks and four days after the attack, he came to the Royal London Ophthalmic Hospital. At that time, the eyeball was very hard and very red; the pupil dilated and motionless; the cornea so dull that the ophthalmoscope could not be used; the field of vision much contracted; at its centre, he could just make out letters in No 20 test-type (eight-line Roman). There was constant severe pain, not so violent as at first, but paroxysmally aggravated. I performed iridectomy. On the third (three days afterwards), the hardness had much diminished, but not quite disappeared. He had soreness, but the former severe pain was gone. 11th. The cornea was brighter; the redness was fading. He had no pain. His sight was improving. The ocular tension was normal. 14th. He read No. 16 quickly. 22nd. The tension continued normal. With convex spectacle, of twenty inches focal length (to correct his presbyopia), he read No. 6. 26th. He continued as at the last date. He was now obliged to leave with his ship, or I would have iridectomised his left eye, which began to exhibit precursory symptoms of glaucoma.

Case IV. *Subacute Inflammatory Glaucoma of the Right Eye: Second Stage: Iridectomy.* An artisan was seized with pain in the right eye, which lasted continuously with great severity for a couple of days, and then became remittent. The sight became very dim. Three weeks after this, he came under my care at the Royal London Ophthalmic Hospital. The eyeball was hard; the pupil large and motionless; the cornea dull, its surface uneven, its sensitiveness much blunted. The anterior ciliary veins were swollen. He made out letters in No. 20 test-type, and counted fingers at four feet. The inner half of the field of vision was much contracted. March 1st. Iridectomy was performed. 5th. He had no pain; the redness was subsiding. He read No. 10. June 28th. He read No. 10 with spectacles. There was no pain, nor redness.

Case V. *Glaucoma with occasional Inflammation: Chronic Inflammatory Glaucoma: Second Stage: Iridectomy.* A short, stout woman, aged 50, came under my care at the Royal London Ophthalmic Hospital, May 3rd, 1862, for chronic glaucoma. The eyeball was hard; the pupil large and sluggish; the anterior chamber small; the cornea slightly dull; the vitreous humour cloudy; but the fundus oculi could just be seen with the ophthalmoscope. The optic disc was excavated in a marked degree. The field was contracted. She could just pick out letters in No. 19 type (four-line condensed). She had had an occasional fret in this eye for three or four years, and had several times increased the strength of her spectacles. During the preceding twelve months, her sight had failed greatly. A large iridectomy was performed, upwards. May 6th. The media were brighter, and the ocular tension less. 17th. She was made an out-patient. Tension was still slightly in excess. June 10th. The eye felt stronger. She read No 20. In July 1863, she read No. 16. The tension was normal. The optic disc was less deeply excavated.

Case VI. *Glaucoma without Inflammation: Second Stage: Iridectomy.* A night watchman at the river-side, a robust, healthy-looking man, was occasionally troubled with pain in the right eyeball, generally whilst on his watch; and its sight grew dim, and objects lying to his right were better seen than those directly in front. In

December 1862, three months after the commencement of these symptoms, he came under my care. There were no outward appearances of inflammation. The ocular tension was slightly increased. The pupil was large and inactive. In the upper and outer part of the field, he could count fingers; but could not decipher the largest type, the letters appearing merely as black lines on the white page. Iridectomy was recommended, but the patient's employers dissuaded him from having it performed. The tension then rather rapidly increased, till the globe became very hard; and the obscuration progressed. The excavation of the optic disc grew deeper. Jan. 16th. He desired iridectomy, which was performed; and he was made an out-patient on the 21st. The wound had healed; the tension of the globe was natural; the sight was slightly improved. Oct. 24th, 1863. He read No. 20. Tension was natural. The excavation of the optic disc was less deep.

The only remark I shall add is, that these are average cases in the respective forms of glaucoma, and fair illustrations of the effects of iridectomy.

I am, etc., J. W. Hulke.

10, Old Burlington Street, November 9th, 1863.

Sir,—Will you allow me, through your pages, to ask of Mr. Bowman an explanation of a difficulty which occurs to me in reference to the operation of iridectomy? The condition of the eye requiring the performance of iridectomy appears very common. Mr. Bowman tells us that he every week sees cases in which he has to lament the ignorance of the profession generally on this subject; and besides this, if I understand the matter rightly, iridectomy is now an operation of daily performance in the hands of some of our leading oculists. The operation, moreover, appears to be absolutely necessary to save the eye. Now, if such is the case, the patients in whom the operation of iridectomy is said to be required must be very numerous; and I suppose such patients must at all times have been very numerous; and, if so, how comes it that, before the days of iridectomy, complete glaucoma was comparatively a rare disease? We ought, as it seems to me, to have met with incurable glaucoma at every corner of the street, if iridectomy, as is now asserted, is the only means for arresting the progress of the disease which leads to incurable glaucoma. I am, etc.,

A Surgeon.

THE LARYNGEAL ECRASEUR.

Letter from George D. Gibb, M.D.

Sir,—In Dr. Walker's communication upon the Laryngoscope in your last number, he refers in a foot-note to my laryngeal *écraseur*, and supposes that I must have forgotten or overlooked his—to me most interesting—communication in the *Lancet*, of November 1861. I can assure him I have done neither; and I willingly concede to him all the credit he so justly deserves for what he has done. It must be observed, however, that the *principle* of the instrument was in my mind long before his paper was published—of using a loop of wire if ever I were required to remove a growth from the larynx, as preferable to the great bulky continental instruments. When an opportunity presented itself, I saw that Dr. Walker's instrument would not at all answer my purpose, and had one constructed to take up the *smallest possible room in the larynx*, and without the necessity of having two tubes as in Dr. Walker's; this will be readily apparent on comparison. In fact, his instrument was, as he himself states, a Gooch's double silver cannula bent at a suitable angle, and the difficulty of its application he has extremely well shown; whereas my own, consisting of a single steel limb grooved on the back, from its slender form, little bulk, and easy manipulation with a single steel wire, was applied without any difficulty, as the many gentlemen can testify who were present at my operations.

The difference between Dr. Walker's instrument and mine, is as great as between a man's nose and his ears; for in the nose there are two channels, as in Dr. Walker's instrument, and in the ears but one, as in mine. His instrument would have been utterly impossible to use in such cases as have been submitted to me for treatment; but it answered in his case because the growth was really in the larynx *above* the right vocal cord, and attached to the surface of the epiglottis, a spot comparatively easy of access. Whereas in some of mine the growths were below, between, or on the edge of the cords, and rather small, and therefore much more difficult to remove. Dr. Walker was the first in this country to remove a growth from *above* one vocal cord, and myself the first to remove one from *below*; or to place it in another and perhaps more agreeable light to him, he was the first to remove a growth from the larynx with the aid of the laryngoscope, and I was the second.

I regret there should be any unpleasant feeling or misapprehension about these instruments, and can assure Dr. Walker that I shall do him every justice in the new edition of my work on the *Throat and Larynx*, in the course of preparation.

I am, etc., G. D. Gibb.

Portman Street, London, November 16th, 1863.

A QUERY FOR THE HELMINTHOLOGIST.

Sir,—It has often occurred to me that the utility of the Journal might be considerably increased, if the members of the Association would employ it to a greater extent than they now do, as the medium through which they might lay before their professional brethren those doubts and difficulties which must occasionally beset most of them.

I am living in a retired village, with few scientific friends or books to consult. May I venture to ask some of my more favoured medical brethren to relieve my mind on the following points?

1. A few months ago, a London physician of some eminence suggested in the Journal, that tapeworm was probably (or possibly) propagated in the following way. Children were assumed to pick up the mature joints of the worm ejected by their suffering parents, and to eat these joints, just as they would devour shrimps, with their bread and butter. Is there any evidence that the ova thus devoured by these unhappy children could become developed in their intestines into tapeworm? If developed at all, would they not of necessity make their way out of the intestines into the tissues, where they would appear as *cysticerci?* If, then, tapeworm is to be propagated in this way, is it not necessary that the children infested with the *cysticerci* should be *eaten raw?*

2. A somewhat similar difficulty suggests itself to my mind in reading the discussion, reported last week by your Liverpool correspondent, on Dr. Skinner's case of tapeworm. In the course of that discussion, a gentleman remarked that he had frequently seen tapeworms in the bodies of calves and lambs. Unless *cysticerci* occasionally exist in the milk (and I am not aware that they have ever been found in that fluid), how did these sucking animals obtain their tapeworm?

I am, etc., Vers Solitaire.

Nov. 3rd, 1863.

Proportion of the Medical Profession to the Population. The last census shows that there are in England and Wales, for about every 1712 persons one surgeon or general practitioner; for every 5552 one physician; and for every 3505 one dentist.

Medical News.

UNIVERSITY OF LONDON. 1863. Candidates who have passed the Second M.B. Examination.

First Division.

Axford, William Henry, King's College
Bastian, Henry Charlton (M.A.), University College
Beddard, James, Guy's Hospital
Clarke, Julius St. Thomas, Guy's Hospital
Edis, Arthur Wellesley, Westminster Hospital
Gwyther, James (B.A.), Manchester Royal Infirmary
Harries, Gwynne Henry, King's College
Hicks, John Wale, St. Thomas's Hospital
Jones, John Talfourd, University College
Lanchester, Henry Thomas, St. Bartholomew's Hospital
Money, Frederick John, St. Thomas's Hospital
PyeSmith, Philip Henry (B.A.), Guy's Hospital
Rivington, Walter (B.A.), London Hospital
Roberts, Frederick Thomas (B.Sc.), University College
Smith, William John, University College
Southam, George Thomas Mitchell, St. Bartholomew's Hospital
Stevenson, Thomas, Guy's Hospital
Wood, John Henry, King's College

Second Division.

Cooke, John, University College
De Negri, Athenodore, University College
Gale, Henry Stanley, King's College
Jackson, James, London Hospital
Mercer, John Thomas, Guy's Hospital
Taaffe, Rickard Patrick Burke, St. Bartholomew's Hospital

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. The following gentlemen passed their *first professional* examinations during the recent sittings of the Examiners.

M'Carthy, John, Cork
M'Culloch, Latham B., Drogheda
Kingston, Joseph L., Cork

And the following gentlemen passed their final examinations, and were admitted L.R.C.P.Edinburgh, and L.R.C.S.Edinburgh.

Boyd, Hugh, Ayrshire
Gassin, Jean Baptiste Jèrèmie, Mauritius
Glover, Henry, co. Down
Hardesty, James Jeffrey, Edinburgh
M'Gibbon, John, Crieff
Mackenzie, Joseph, Belfast
Mathews, James Snodgrass, Edinburgh
Munro, David, Dunfermline
Sheriff, Thomas, Northumberland
Tindal, William Davidson, Montrose

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentlemen passed their *first professional* examinations during the recent sittings of the Examiners.

Livingston, John, Perthshire
M'Gregor, John, Caithness
Provan, James, Dunbar
Walker, William, Kilbirnie

And the following gentlemen passed their final examinations, and received the diploma of the College.

Deas, Peter Maury, Edinburgh
Hartland, John Francis, co. Cork
O'Kelly, Joseph, co. Tipperary
Robertson, James, Aberdeenshire
Wright, George Edward, Yorkshire

APOTHECARIES' HALL. On November 12th, the following Licentiates were admitted:—

Bale, William, Teviot Dale, Stockport, Cheshire
Bryan, Edward, Frisby-on-the-Wreak, Leicestershire
Holyoake, Thomas, Kinver, Staffordshire
Killingworth, Thomas Bradford, University College, London
Richards, George, Chirk, North Wales
Starling, George, Union Road, Charlton
Wintle, Henry James, St. Paul's, Bristol

At the same Court, the following passed the first examination:—

Burnham, Ralph, Westminster Hospital
Evans, Alfred Paget, Sydenham College, Birmingham

APPOINTMENTS.

AGNIS, John C., M.B., appointed Junior Surgeon to the West London Hospital.

FERRIS, John S., Esq., elected Resident Physician-Accoucheur to King's College Hospital.

GABB, John, Esq., elected Mayor of Bewdley.

KEMPTHORNE, Henry L., Esq., elected House-Physician to King's College Hospital.

POLLOCK, E., Esq., elected House-Surg. to King's College Hospital.

*TEEVAN, William F., Esq., appointed Surgeon to the West London Hospital, in the room of C. Heath, Esq.

TYNER, George St. G., Esq., appointed Resident Surgeon to Dr. Steevens's Hospital, Dublin.

WEARNE, Vivian, Esq., elected House-Surgeon to the Devonport, Stonehouse, and Cornwall Hospital and Eye Infirmary.

POOR-LAW MEDICAL SERVICE.

BEAUMONT, Joseph W., M.D., to District No. 2 of the Eccleshall-Bierlow Union.

BOOKER, G., Esq., to District No. 5 of the Eccleshall-Bierlow Union.

GREGORY, James, Esq., to District No. 3 of the Eccleshall-Bierlow Union.

KERR, Alexander S., Esq., to the Renvyle Dispensary District of the Clifden Union, co. Galway.

WILLINGTON, Frederick A., Esq., to District No. 1 of the Eccleshall-Bierlow Union.

WILSON, Knowlton, M.D., to District No. 4 of the Eccleshall-Bierlow Union.

INDIAN ARMY. The undermentioned medical officers, retired upon full-pay from Her Majesty's Indian Military Forces, are to have a step of honorary rank, as follows:—

BALFOUR, Deputy Inspector-General J., to be Inspector-General of Hospitals.

BRADLEY, Surgeon-Major W. H., to be Deputy Inspector-General of Hospitals.

SANDERSON, Surgeon-Major J., to be Deputy Inspector-General of Hospitals.

ROYAL NAVY.

ALLAN, James A., Esq., Assistant-Surgeon, to the *Wasp*.
DICK, James N., Esq., Surgeon, to the *Hydra*.
DUNCAN, Daniel, M.D., Surgeon, to the *Greyhound*.
GIVETT, Philip W., Esq., Surgeon, to the *Wasp*.
IRELAND, Arthur J., M.D., Assistant-Surgeon, to the *Duke of Wellington*.
JEWELL, Thomas W., Esq., Staff-Surgeon, to the *Aurora*.
KELLY, Arthur H., Esq., Assistant-Surgeon (addit.), to the *Victory*.
KYNSEY, J. F., Esq., Assistant-Surgeon, to the *Aurora*.
M'CARTHY, Denis, Esq., Assistant-Surgeon (additional), to the *Royal Adelaide*.
MACDONALD, J. A., Esq., Acting Assistant-Surgeon, to the *Aurora*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

CAYZER, T., Esq., to be Assistant-Surgeon 15th Lancashire A.V.
FENTON, H., Esq., to be Assistant-Surgeon 1st Administrative Battalion Shropshire R.V.

To be Honorary Assistant-Surgeon:—

MEADE, E., M.D., 24th Norfolk R.V.

DEATHS.

*ANCELL, Henry, Esq., at 8, Norfolk Crescent, aged 61, on Nov. 19.
BARRETT, Ferberd S., Esq., Surgeon, at Kingston Bagpuize, Berks, aged 35, on November 13.
COGAN. On November 14th, at Greenwich, Emma, wife of Cecil C. Cogan, M.D.
ELLIS. On November 16th, at Crowle, Lincolnshire, aged 1 year and 8 days, Archibald William, youngest son of *Henry Wm. T. Ellis, L.R.C.P.Ed.
LAMMIMAN. On November 4th, at 106, Cannon Street Road, aged 36, Sarah, wife of Robert W. Lammiman, Esq., Surgeon.
LOVEGROVE, Washington, Esq., Surgeon, at Hastings, aged 26, on November 12.
*MARTIN, Peter, Esq., at Reigate, aged 51, on November 14.

OVARIOTOMY. Dr. Thompson, of the County Antrim Infirmary, claims the credit of performing the first successful case of ovariotomy in Ireland; viz., in 1848.

THE PRUSSIAN PARLIAMENT. Nine physicians and two *pharmaciens* have been elected representatives in the Legislative Chamber in Prussia.

SARRACENIA PURPUREA, as an infallible remedy for small-pox, will, of course, have its praises sung, so long as the article finds a good sale in the market.

MR. J. H. GREEN. The health of this esteemed member of the profession is so much improved under the kind and unremitting attention of his colleague, Dr. Brinton, that he was enabled to be removed from his temporary lodgings to his own residence on the 18th inst.

Bequests. The Rev. H. J. Hutchinson has left £200 to the Kent Ophthalmic Hospital, £100 to the Canterbury Hospital, and £50 to the Canterbury Dispensary.

Scarlatina in the Navy. Scarlatina has again appeared at Dartmouth among the cadets on board the *Britannia*. The young lads have, therefore, been all sent home for a season.

West Kent Medico-Chirurgical Society. Mr. William Carr has been elected President for the ensuing year; Dr. Robert Venables, Dr. David King, Vice-Presidents; and Dr. James Palfrey, Secretary.

University of Oxford. Examinations for the degree of Bachelor of Medicine, both in the scientific and in the professional part, will commence in the Museum on Monday, November 30th, at 10 A.M.

A New Metal. Spectrum analysis has recently introduced us to another new metal through the investigations of Reich and Ritter; the name of *Indium* has been given to it.

University College Dinner. On the 5th instant, the University College medical dinner was held at St. James's Hall; Dr. Parkes in the chair. The most notable presence there was Dr. Elliotson.

The British Association. The receipts of the executive committee, from subscriptions, exhibitions, etc., at the recent meeting were £4170 : 14, which, after defraying all liabilities, left a balance of £395 : 16 : 2. The general committee have determined that £200 should be presented to the Natural History Society of Newcastle-on-Tyne, and the balance divided between the Fine Art Society and the Mechanics' Institute.

Vacancies. The following appointments are vacant:—Two Resident House-Surgeons to the General Lying-in Hospital, Lambeth; House-Surgeon to the Lock Hospital; House-Surgeon to the London Surgical Home; Resident Superintendent and Resident Surgeon to the Birmingham Lying-in Hospital and Dispensary for the Diseases of Women and Children; and Medical Officer for the Heworth district of the Gateshead Union.

Proportion of Births to Population. The proportion of births to population in various European countries is given in a blue-book of *Statistical Tables relating to Foreign Countries*. In England and Wales the annual births are 1 in 28 persons; 1 in 30 in Belgium, Holland, and Norway; 1 in 32 in Sweden; 1 in 33 in Hanover, the Hans Towns, and Denmark; 1 in 34 in Greece; 1 in 38 in France; 1 in 26 in Würtemburg; 1 in 25 in Russia; 1 in 24 in Austria, Saxony, and Prussia; and in Poland 1 in 23.

A Lunatic's Sensations. At the Pathological Society, on the 3rd November, Dr. Wilks related the case of a lunatic who had been battered about the head by another lunatic. After the first effects of the concussion had gone off, the lunatic seemed as well as ever, ate his dinner, and remained in his usual health for some weeks, when he died, apparently of disease not connected with the injury. After death it was found that his skull had been fractured in several places.

Proposed Testimonial to Dr. Cookworthy. The Committee of the Plymouth Public Dispensary have determined on taking steps to mark their estimation of the valuable services rendered by Dr. Cookworthy as physician to that Institution during the last fifty years. They have resolved that a marble tablet shall be erected in the Board Room to record his invaluable services, and that a testimonial shall also be presented to him, to be raised by public subscription. This subscription will, we hope, be most extensively responded to by the inhabitants of the town; for the testimonial ought to be such a one as the inhabitants should feel pleasure in seeing presented to a gentleman who has served his day and generation so well, and which the worthy Doctor may feel proud to receive. (*Western Daily Mercury.*)

New Bakehouse Act. The new Act for the regulation of bakehouses has come into force, and Dr. Letheby, the medical officer of the City, has just made a report to the Commissioners of Sewers of the results of an inspection which he has made of the bakehouses in the City. He finds that within the City limits there are 140 bakehouses, in which 364 boys and men, and one woman, are employed. Of the bakehouses, 101 are underground, the others being on a level with the street; 57 were in a filthy condition, these being mainly in the eastern and northern districts. In only one case was the bakehouse used as a sleeping place. The young people under the age of eighteen employed were not in any case allowed to work between the hours of nine at night and five in the morning. Steps were ordered to be taken to enforce compliance with the regulations of the Act of Parliament where those regulations are infringed.

Importation into Zealand of Small-Pox. Very great alarm has been occasioned throughout the colony by the arrival of several vessels from England with small-pox on board. The first ship which brought the disease was the *Victory*, from Glasgow, which arrived on the 12th of July. The passengers were put in quarantine. Four deaths occurred among the passengers by the *Victory*, and thirteen cases. The next infected ship was the *New Great Britain*, from the Clyde. This vessel had five deaths during the passage from small-pox, and fifteen cases. The *Mataura*, from the Clyde. Thirteen cases of small-pox occurred during the passage, and one patient died. Scarlet fever also prevailed. This ship has been placed in quarantine. The most recent case is that of the ship *Tyburnia*, which arrived at Auckland on September 4th. Small-pox broke out ten days from England, and during the passage nine serious and twenty-six mild cases of the epidemic occurred. There was only one death from small-pox. As yet I have heard of no case of the disease in the colony. At present no Compulsory Vaccination Act exists in New Zealand, and the vaccination of children is sadly neglected. The Otago authorities have been the first to take steps in the matter, and a Vaccination Bill is now in course of discussion by the Provincial Council, and very probably the example will be followed by the other provinces.

Suicide by the Introduction of Needles. M. Caen has published the case of a woman, aged twenty-six, who, being in prison and dreading to be brought to trial, resolved to destroy herself. This she accomplished by thrusting about thirty pins and needles into her chest in the region of the heart. She introduced them with great gentleness, and used to press them inwards with the aid of her prayer-book. She died on the day preceding the intended trial. On a *post mortem* examination numerous needles were found in the parietes of the chest, all of which were more or less travelling inwards; some had reached the lungs, and some were found in the mediastinum; one had reached the back part of the right auricle and perforated the descending cava. The anterior portion of the left ventricle was transfixed by a needle, and a small clot had formed around it within the cavity of the ventricle. The œsophagus also was perforated by a needle, and several were found in the liver.

The Indian Medical Staff Corps. The despatches from Her Majesty's Secretary of State for India have been received by the Governor-General. The proposed alterations are on a most extensive scale. The chief points fixed are the retention of staff appointments of every description to be limited to *five years*, including pay-inspector-generals, inspector-generals, and deputy-inspector-generals; the retirement of these officers at the expiration of five years' tenure of office is to be compulsory, as is the case with brigadiers; but some compensation in the shape of increased pension is to be given to the officers thus shelved, unless already entitled to the highest pension—viz. £700 per annum. The

minor staff appointments are subject to renewal at the expiration of five years. Many of the details, such as the enforcement of the "Hindustani Staff test," are left to the decision of the Governor-General. But it is supposed that the present incumbents will not be subjected to this ordeal, unless on confirmation, reappointment, or promotion to the higher grades. The pay of relative army rank has been conceded to the medical officers, but the amount of staff allowance is left open, to be determined by the Governor-General. The receipt of such allowances (except in the case of the charge of European troops) is, in all instances, to be contingent on passing the Hindustani Staff test. Officers not joining the Royal Staff Corps are to be allowed to remain, as at present, on the local list, without the privilege of pay of relative army rank, and the option of pensions, according to the warrant of 1858 or the rules now in force. The funds, both medical and military, are likely to form the subject of a future despatch. (*Times of India*, Oct. 1.)

YANKEE ARMY SURGEONS. The following medical officers have been tried by Court-Martial recently:—Assistant-Surgeons Wm. Robinson, tried for acting in a disgraceful and disorderly manner while in a state of intoxication, found guilty, and sentenced to be dismissed the service. Surgeon Alfred Wynkoop, tried for conduct to the prejudice of good order and military discipline, and sentenced to be dismissed the service of the United States. Sentence remitted by the President on recommendation of the General commanding the Army of the Potomac, to severe reprimand, and to be published in General Orders, it appearing that the act was one of indiscretion, and not of intentional criminality, and that no evil resulted from it. Assistant-Surgeon Edmund G. Pugsley, tried for conduct to the prejudice of good order and military discipline, and conduct unbecoming an officer and a gentleman, found guilty and sentenced to be cashiered. Assistant-Surgeon George Dougherty, tried for drunkenness, found guilty, and sentenced to be dismissed the service of the United States. Assistant-Surgeon James M. Morrison, tried for conduct unbecoming an officer and a gentleman, enticing a non-commissioned officer to leave camp with him without a proper pass, found guilty, and sentenced to be dismissed the service of the United States. (*American Med. Times.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. C. H. F. Routh, Lettsomian Lecture "On Midwifery and Diseases of Women."—Royal Geographical.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. William Ogle (of Derby), "Supposed Abdominal Tumour: a Stick, ten inches long, introduced into the Bowel *per anum*"; Mr. T. P. Salt (of Birmingham), "Description of a New Truss"; Mr. H. Thompson, "Difficult Case in Lithotomy, from Distortion of the Pelvis by Rickets."—Zoological.

WEDNESDAY. Society of Arts.

THURSDAY. Royal.—Antiquarian.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—NOVEMBER 14, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1006 / Girls..995	2061	1457
Average of corresponding weeks 1853-62		1851	1379

Barometer:
Highest (Fri.) 30.117; lowest (Wed.) 29.246; mean, 29.791.

Thermometer:
Highest in sun—extremes (Mon.) 79.7 degs.; (Wed.) 47.2 degs.
In shade—highest (Sun.) 53.3 degs.; lowest (Tu.) 28.1 degs.
Mean—41.6 degrees; difference from mean of 43 yrs.—2.5 deg.
Range—during week, 25.2 degrees; mean daily, 12.9 degrees.

Mean humidity of air (*saturation*=100), 91.

Mean direction of wind, S.W.—Rain in inches, 0.33.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PHYSICIANS' FEES.—Our readers will remember the highly honourable part played by Dr. Vose, of Liverpool, in reference to a disputed fee. The profession will be glad to learn that his conduct has been duly appreciated, and that the fee originally demanded by him has been paid.

DR. PHILBRICK'S CASE.—Our readers will remember the persecution to which Dr. Philbrick, of Leamington, was some months subjected to, in consequence of the extraordinary evidence which was given at Leamington by some of his medical brethren, on the occasion of a coroner's inquest. A most groundless action was brought against Dr. Philbrick, in consequence of which he was put to great expense, and still greater anxiety of mind; and, unwilling to run the risk of losing the suit, he compounded with the plaintiff. We now recur to the fact, to note that the attorney for the plaintiff in the action against Dr. Philbrick, was, a few weeks ago, struck off the rolls!

A CHEAP ASSURANCE OFFICE.—Dr. W. Ogle of Derby has written the following reply to an assurance office, which wishes to have the benefit of some of the abundant gratuitous medical advice now in the market.

"Derby, November 5th, 1863.

"Dear Sir,—After very full consideration of your second application to me to accept half-a-guinea for proposals under £500, I beg to decline. I do not even in private practice accept less than a guinea; and though almost always a second visit is expected, which would seldom be necessary in your case, the correspondence and extra care which (if the work is done properly) is often necessary in life assurance, makes me feel that the return is barely adequate, even when the full amount is paid.

"The last case, for which I received two guineas, occupied me several hours. I might have dismissed it in five minutes; but in that case, my report to the Company would have been very different. Unless I am greatly mistaken, the Company will have no reason to regret their liberality.

"Had you been instructed to offer a proportionately increased fee for larger sums, I would have accepted your proposal, because the work is, professionally, very interesting to me; and, in addition, I take great interest in the principles of assurance, believing that they are capable of much wider application than has been made of them at present. "I am, etc., WILLIAM OGLE."

COMMUNICATIONS have been received from:—Dr. JAMES RUSSELL; Mr. PICK; Dr. C. TAYLOR; Dr. G. D. GIBB; Mr. ASHBY G. OSBORN; Mr. J. W. HULKE; Mr. H. HAILEY; Dr. HUMPHRY SANDWITH; Dr. KIDD; Mr. S. WOOD; Dr. T. B. BOTT; Mr. W. EDDOWES; Dr. JOHNSON; Dr. ELLIS; Dr. MACKENZIE; THE HON. SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. W. R. ROBERTS; Dr. J. G. HILDIGE; Dr. HUGHES BENNETT; Mr. W. ALLISON; Mr. T. M. STONE; Dr. DYCE DUCKWORTH; Dr. WATERS; and Dr. PARKES.

BOOKS RECEIVED.

1. Transactions of the Pathological Society of London. Vol. xiv. London: 1863.
2. Essays on Digestion, etc. By the late J. Carson, M.D. London: 1863.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

LECTURE III.

ON CURVATURES OF THE SPINE.
(*Continued.*)

Cyphosis.

CYPHOSIS, or posterior curvature of the spine, is a much more frequent affection than the last mentioned form of distortion. Indeed, occurring, as it does, in infancy, in youth, and in old age, it is one of the most common forms of distortion of the spinal column. As well as being applied to posterior curvature, the term cyphosis is also sometimes used to express angular curvature of the spine. But, inasmuch as posterior curvature and caries, or angular curvature, are totally distinct affections, I shall not include them under a common heading ; nor shall I further allude to the last-mentioned form of disease at the present time ; but shall reserve what I have to say with regard to it for a future occasion.

The *causes of posterior curvature of the spine* are debility—debility in infancy, in youth, and in old age ; rachitis, muscular rheumatism, and partial paralysis. Some occupations are prone to induce a stoop in those who are engaged in them ; thus it is, for instance, with watchmakers, engravers, embroiderers, writers, shoemakers, and others, whose occupations require a stooping position. This position, which is at first most irksome, becomes at length easy, and more or less permanent. Those, also, who are subject to asthma, acquire a stoop which becomes diagnostic of the disease.

Debility and rachitis are, in infancy especially, the causes of cyphosis. For the most part, the curve occupies the entire length of the spine, from the occiput to the sacrum ; and in infants this is the least severe form of posterior curvature. The normal curves of the spine have not been formed, the muscles of the back not having power to support the trunk ; and the head falls forward through muscular debility. This bowed condition of the spine increases, and the dorsal vertebræ become more prominent ; for, notwithstanding its weakness, the child is seldom kept lying down. Nutrition is imperfect, and symptoms of rickets begin to show themselves ; frequent diarrhœa, perspiration about the head and neck, general wasting, and a blanched condition of the skin. The child is uneasy and fretful. Swelling of the ends of the long bones may now be observed, especially of the carpal extremity of the radius and the tarsal end of the tibia ; and the vertebræ will probably now assume a somewhat more conical appearance.

Such children are seldom brought up at the mother's breast, or they are not alone nursed, but at the same time they are fed with farinaceous food. Some are born rickety ; others become so at the breast, when, at the same time, they are fed with farinaceous food ; but a child which is healthy at birth, will seldom show symptoms of rickets while it has a sufficiency of milk for nutrition (and without admixture of farinaceous food), and while it is kept warm.

Some of the worst forms of this affection are produced in Russia. The intense cold which prevails during the winter months is the reason, though an insufficient one, for the very imperfect ventilation which is observed in the dwelling-rooms throughout Russia. So badly ventilated and hot are the rooms in St. Petersburg, for the most part, that respiration is not carried on easily. But, in winter, the children are seldom allowed to breathe the outer air. This is a prominent cause of the prevalence of this affection in Russia.

When the child has commenced to walk, a different kind of curve is, for the most part, induced. Here the normal antero-posterior curves have been at least in part developed, that the erect position may be maintained ; and consequently, as in the last mentioned form of distortion, the curve which is induced is an exaggeration merely of the normal curve of the region : it occupies especially the middle or the middle and upper portions of the dorsal region. (Fig. 5.)

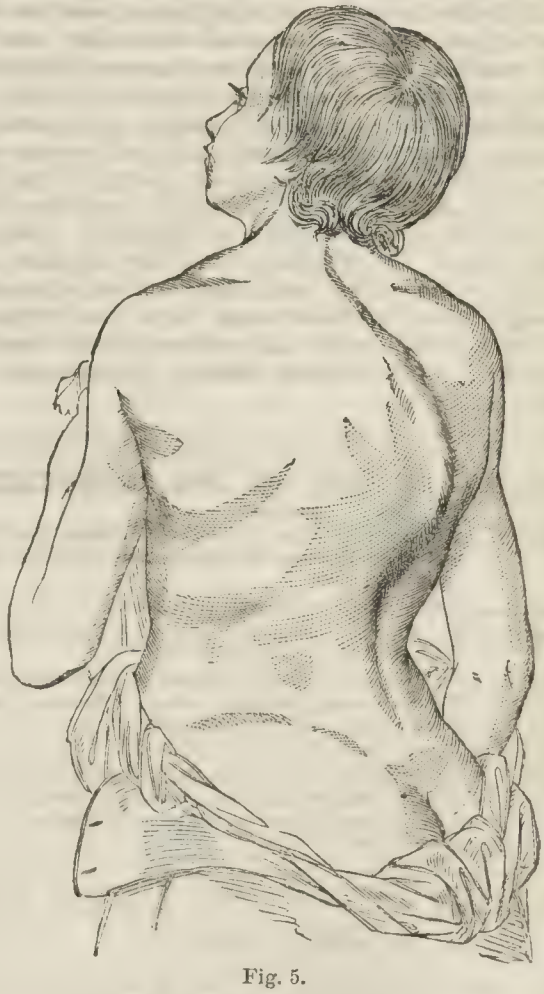


Fig. 5.

In *youth*, posterior curvature often occurs during rapid growth, as a consequence of debility. At this period, the lower cervical and the upper dorsal vertebræ are mostly affected. A stoop is not unfrequently acquired during convalescence, and remains permanent in manhood. Those also who are short-sighted, and who do not habitually wear

glasses, are apt to accommodate their figures to their imperfect vision, and thus acquire a stooping position. Posterior curvature is not attended with pain; so that firm pressure may be made along the course of the spine without flinching. And should tenderness be found on examining the spine, destructive disease, or caries, must be suspected. Caries is often so insidious in its advances, that great and irremediable distortion may be already induced before the affection is recognised.

In *old age*, an abnormal increase of the dorsal curve is common, as a result of muscular debility. And when cyphosis has been induced by any occupation, or through disease, as rheumatism, etc., it is frequently much increased in old age; then equilibrium can no longer be sustained, and a stick becomes necessary for support.

The *pathological appearances* differ according to the age at which cyphosis is observed. In infancy, the muscular system is chiefly affected; while, in the adult, the intervertebral substances become compressed anteriorly; and, in old age, fusion of the bodies of the vertebræ or more partial ossification may be found. Together with these changes, the whole trunk is more or less affected; the chin rests on the sternum; the ribs are approximated, and respiration is laboured, in consequence of their diminished motion.

The *treatment* of this affection in childhood is simply to maintain the horizontal position until debility is so far removed that the child has power to sit or stand erect. Nature is an excellent guide with regard to this change.

When debility is inconsiderable, a splint of leather or gutta percha applied to the back will give sufficient support to enable such children to assume a sitting posture occasionally; but when the head droops, the horizontal posture ought to be maintained; for it cannot be otherwise supported in an infant without the apparatus be so weighty that it is liable to do more harm than good. Such children, then, should be treated for debility in the horizontal position. But it is not necessary here to dwell on the appropriate treatment for debility; this involves rules of diet and hygiene generally. It is a subject which deserves to be treated of at length; for it is one that is greatly neglected, and yet of the utmost importance to children of every class; since it relates to the diet, the air that is breathed, the clothing by day and night, exercise, bathing, etc. I say it is of the utmost importance to children that these questions should be carefully considered with regard to them especially, since they are more sensitive to external agencies than adults; and yet no adult can neglect any of these considerations with impunity. The neglect of this subject involves great loss to the state; the lives of the people being shortened, and their physical power not being wholly developed through inattention to the laws of our well-being.

This is a subject which, as yet, has scarcely been treated of in our language; indeed, it cannot properly be said to have been treated of at all. Nor is it possible here to enter on the treatment of rachitis: this is a subject scarcely less extensive than that last mentioned. Suffice it to say, that the horizontal position, together with a well-regulated animal diet, attention to warmth, ventilation, exercise, bathing, etc., will speedily alter the appearance and increase the strength of any child suffering from cyphosis.

As the muscular system becomes more developed, gymnastic exercises are useful to increase the power of the extensors of the trunk. According to circumstances, they may be used in the horizontal or the upright position. These exercises will generally remove the tendency to cyphosis, if debility have occurred in youth, and they are employed carefully, and before the curve is permanent. In advocating the employment of gymnastic exercises, however, I consider it an absolute duty, having watched very closely their effects, to warn against their indiscriminate use. I know nothing more pregnant with danger where a spinal curve exists, than the use of muscular exercises: they should never be undertaken without the constant superintendence of a competent person. Frequently, a slight curve is increased by their use, and a temporary curve is rendered permanent.

Hereditary cyphosis will seldom be removed by any means; and it will generally recur if removed. It is, for the most part, conjoined with thoracic disease.

Portable instruments, which remove the weight of the head and shoulders from the spine, may be used with great advantage in most of these distortions; indeed, after childhood, they should, for the most part, be worn when exercise is taken; but modified pressure whilst in the horizontal position and on the spinal couch—pressure which can be regulated at will and perfectly adjusted by means of springs—is the only certain form of instrument which can be employed where the curve is more than of the slightest kind. With a portable instrument, the pressure that can be used is of the most trivial description; but with the couch, treatment commences in earnest. It is a mistake, however, in these cases, to use much pressure. The curve is much more readily removed by moderate, firm pressure on the horizontal couch, than by severe pressure. Pressure which is painful is hurtful; it induces much rather a compensating curve than the removal of the primary curve.

In *old age*, support to the trunk may be so well adjusted that the instrument shall give great comfort to the wearer, and not be apparent, unless the head also be supported. These supports may be worn with the greatest ease, even on horseback. One of the most celebrated men who ever lived was to be seen on horseback, with his chin very close upon the pommel of his saddle, until he wore such a support as is now mentioned, when he was again as upright as in his youth. He continued to use this support so long as he rode; namely, within a very short period of his last illness.

Presentation of Adresses to Dr. Edmundson. A few months since, Dr. Edmundson of Carrick on Suir was appointed by the Lord Lieutenant to the position of Resident Superintendent of the Auxilliary Lunatic Asylum at Clonmel. His departure from Carrick seems to have called forth universal regrets. An address was prepared on behalf of the town, and signed by the magistracy, gentry, and townspeople generally. Accompanying this complimentary expression of opinion, was a costly evening service of plate, and a valuable skeleton clock. The constabulary body of Carrick, also presented Dr. Edmundson, their kind and attentive medical officer, with a third address, accompanied by a handsome photographic album. (*Clonmel Chronicle.*)

Abstract of Two Lectures

ON

LARYNGEAL DISEASE, AS EXHIBITED BY THE LARYNGOSCOPE.

Delivered to the Students of the Birmingham General Hospital.

BY

JAMES RUSSELL, M.D.,

PHYSICIAN TO THE HOSPITAL.

[*Continued from page* 543.]

II. *Respiration.* It is hardly needful to repeat that, for a full and sufficient inspiration, as occurs during tranquil breathing, the glottis must be well opened. Czermak says that he could pass his fingers through the glottis when in this condition, and I have no doubt that he is correct; indeed, the appearance of the glottis in the unfortunate suicide, to whom I have already referred, certainly justified his assertion.

Now, in more than one of the diseases I have lately described, this necessary opening of the glottis is prevented, and the lips are maintained permanently more or less in abnormal approximation. When a morbid growth exists within the larynx, the degree of obstruction which it offers must vary with circumstances; with its situation and mobility. In the case to be hereafter described, obstructed breathing occurred only in certain positions of the head and neck. Such a statement on the part of the patient may serve to arouse our suspicions in similar cases. Equal diagnostic value does not attach to another complaint by the patient, of sudden dyspnœa at the moment of first falling asleep. This symptom is shared, as we shall see by and by, by other organic affections of the larynx. In the case to which I now specially allude, the growth was pendulous and freely moveable: hence, though hanging between the vocal cords, it left sufficient space for the free passage of air, being drawn within the trachea during inspiration, and driven into the larynx by the expiratory effort. Hence the obstacle it opposed to free breathing was less serious than might have been expected, although dyspnœa of an alarming character was occasioned more than once. In a similar case, presented to the Pathological Society of London (*Medical Times and Gazette*, April 4th), a similar growth attached along the vocal cord, being less moveable, proved fatal by inducing sudden asphyxia. Such, too, would probably have been the ultimate fate of our patient, had not the tumour been discovered in time, before it had attained still larger dimensions.

Answering to the bastard paralysis, to which I have adverted as a cause of aphonia, I may here mention spasm of the glottis as a well known cause of impeded or even of arrested breathing. In using the laryngoscope, nothing is more striking than the frequent approximation of the apices of the arytenoid cartilages, and consequent closure of the glottis, which is effected as a consequence of the slightest sensation in the throat; the orifice of the larynx is, indeed, seldom quiescent for any length of time, so jealous is the larynx of the least intrusion within its sacred precincts.

It is this movement which is exaggerated in cases of spasm. In the suicide more than once referred to, we saw the vocal cords repeatedly brought into apposition, from the irritation of the outer air, or from any reflex action excited by contact with the mucous membrane of the upper part of the larynx during the necessary manipulation. So urgent was the need for relieving this spasm, that an orifice into the larynx was required beneath the vocal cords.

In inflammation within the larynx, spasm of the glottis still has frequently a share in impeding respiration, but in such cases a more permanent cause of obstructed breathing exists in the effects of the inflammation itself; and the laryngoscope exhibits that cause in operation. The fixed condition of the arytenoid cartilages, produced by the rigid condition of their mucous covering, permanently approximates the vocal cords, and narrows the inlet for the air; whilst the swelling of the false vocal cords, when present, further diminishes the capacity of this inlet. In acute inflammation, the obstacle often exists also at the upper orifice of the larynx, in consequence of œdema of the aryteno-epiglottic folds. Regarding chronic inflammation only, at present, I have to observe that the orifice of the glottis is generally sufficiently patulous to enable the patient to conduct *tranquil* breathing without stridor, though frequently with conscious effort on his part; but when the patient is hurried or makes exertion, or even if he draw a deep breath, inspiration becomes instantly noisy. One of my patients, who respired easily when quiet, spoke of himself as being "like a broken-winded horse" when he walked fast; and he stated that when he slept, when the muscular apparatus of the larynx is relaxed, he made so much noise during respiration, as seriously to disturb those who slept in his room. The noise, under these circumstances, occurs chiefly during inspiration, unless closure of the glottis is very considerable, from the valve-like action of the upper vocal cords; the true cords, not being equally thickened, do not oppose the same obstacle to the egress of the air.

I must notice, in passing, a more remote consequence of impediment to free breathing in chronic laryngitis—the loss of flesh which is often present; due, no doubt, to defective aëration of the blood. This symptom was present even in the case of tumour within the larynx, although the patient was in other respects in good health.

III. *Cough.* The object of the act of coughing is to clear the respiratory passages of foreign matters, whether expectoration or foreign substances. As the larynx is the appointed janitor of these passages, its sensitiveness to impressions is remarkably keen: hence the violence and explosive character of the laryngeal cough. Therefore, under normal circumstances, cough will be regulated by the amount of matter to be expelled, and by the degree of irritability possessed by the mucous membrane.

Now, even in so small a compass as the interior of the larynx, there is a surprising variety in the situation of the inflammation, or rather of its visible effects. The inflammation may affect the mucous membrane itself, together with the submucous cellular tissue, or may expend its force mainly upon the latter. In the former case, with an injected state of the membrane, there will also be copious secretion, and cough of extreme violence; in the second case, the membrane will be pale and void of secretion, and

cough will be a subordinate symptom. This difference is also illustrated by the following cases.

It is singular that the patient with the tumour in his glottis was so free from cough; we must ascribe his immunity to the slow growth of the tumour, whereby the mucous membrane was gradually accustomed to the presence of the intruder.

Before concluding, I must just glance at one act in which, during health, the larynx is hardly concerned; I mean the act of deglutition. In inflammatory and other affections of the larynx, as is well known, this act is often painful, though it is far from being so invariably. The presence or absence of dysphagia depends on the epiglottis being involved in the disease.

The condition of the epiglottis is easily ascertained by the laryngoscope. In the chronic forms of inflammation, to which I have here confined my attention, it is seen sometimes erect and everted, exposing to view almost the whole of its under surface, and not infrequently a large part of the laryngeal cavity, even the anterior insertion of the vocal cords; sometimes, on the contrary, it is greatly thickened, or œdematous and contracted, reminding one forcibly of the semicylindrical tiles placed on the crest of a roof; at the same time, it is unusually prone, perfectly shutting out the interior of the larynx from view.

It will thus be seen, that when the epiglottis is affected, it by no means necessarily follows that choking should attend the performance of deglutition, how painful so ever that act may be; although it must still be remembered, that even when the epiglottis is preternaturally prone and covers in the cavity of the larynx, its swollen and rigid condition may disqualify it for preventing the intrusion of matters, especially those of a fluid character, and the evil will, of course, be much increased if ulceration be superadded.

[*To be continued.*]

Hunter's Portrait. The painting was the *chef d'œuvre* of Sir Joshua Reynolds, and like all his productions has been rapidly fading; it was accordingly consigned to Mr. Farrer, on the recommendation of Sir Charles Eastlake, and so well has this gentleman performed the cleaning process that it now exhibits a freshness which has not been seen for the last half century. The history of the painting is this. Hunter's friends had long been desirous to engage him to sit to Sir Joshua Reynolds, but he always declined, not choosing that it should be done at the expense of others, and thinking the price too high for himself to pay. He was, however, at length induced to comply, chiefly to oblige Sharpe, the eminent engraver, who was very anxious to make an engraving from Sir Joshua's picture. Reynolds found Hunter a bad sitter, and had not been able to satisfy himself with the likeness, when one day, after the picture was far advanced, Hunter fell into a train of thought, in the attitude in which he is represented in the portrait in question; Reynolds without saying a word turned the canvass upside down, made a fresh sketch, with the head between the legs of the former figure, and so proceeded to lay on over the former painting, the colours of that which now graces the walls of the Council Chamber of the Royal College of Surgeons. From this portrait Sharpe executed his engraving, which is admitted by the best judges to be one of the finest, if not the very finest, specimen of the art ever executed. (*Dublin Med. Press.*)

Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

ILLUSTRATIONS OF THE CAUSES OF HOARSENESS AND LOSS OF VOICE.

By George D. Gibb, M.D., M.R.C.P.Lond., Physician to the West London Hospital, and Assistant-Physician to Westminster Hospital.

Hoarseness has long been recognised as a prominent and common symptom of disease, whether located in the larynx or in the trachea. According to the amount of roughness it possessed, or to its smooth, yet low tone, was the inference drawn of the amount of congestion or inflammation of the part giving rise to it. Its period of duration, if protracted for months or years, was still believed to depend upon a very chronic state of inflammation, requiring the persevering use of counterirritation and the adoption of alterative constitutional treatment. A commencing hoarseness, changing in its tone and character according to its period of continuance, would not unfrequently end in more or less complete aphonia, perhaps a raucous, or may be a soft and smooth whisper; a *susurration*, the result of the cessation of action in the inferior vocal ligaments or glottis, the articulation of sound being produced by the lips and tongue, as the air passed in or out of the vocal tube.

A hoarseness may persist for ten or even twenty years, without being necessarily associated with permanent loss of voice; yet experience is daily proving that freedom from occasional attacks of the latter is rare in long continued hoarseness.

In the laryngeal mirror, we see the reflection of the various causes giving rise to modifications of the voice in speaking or singing, and assuredly they are numerous enough. Congestion of the larynx *per se* will not produce hoarseness, unless it involve the mucous membrane in immediate connection with or covering the vocal cords, and thus interfering with their action. Temporary congestion of the membrane covering the thyro-arytenoid muscles, and of the aryteno-epiglottidean folds, is produced when particles of dust, food, whether solid or fluid, or other substances, come into contact with them in deglutition. This is commonly known as "something going the wrong way." The roughness felt in the larynx and the hoarseness, are here the result of the impaired action of the laryngeal muscles through the want of harmony and simultaneous action, which arise in common with the irritation and congestion produced by the presence of the foreign substance. The membrane of the false cords is at the same time not unfrequently tumefied as well as congested, as the laryngeal mirror has shown me.

Acute inflammation of the larynx or trachea is known to cause hoarseness and dysphonia, and this has now been seen many times in the laryngeal mirror. The ulceration of a single mucous follicle will produce as obstinate an amount of hoarseness as a large extent of inflammatory disease, and if the ulcers be extensive and numerous, especially on the vocal cords, the voice is extinguished.

The supra and infraglottic submucous areolar tissue is in some persons so lax, that there is a tendency, on the subsidence of congested or inflamed states, to the formation of little folds or plications of the mucous membrane, which grow into little polypoid tumours, or form true warts, according to their seat and the amount of resistance which they offer to the explosive succus-

sions of the air during the formation of sound, or in coughing. These are the causes of the most obstinate and long continued hoarseness. An artificial voice after the partial loss of substance in one or both true vocal cords, gives rise to what may be called a loud and rough hoarseness.

In cases where the destruction of the cords has been so great as to produce complete aphonia, my efforts are directed to the production, if possible, of a loud and audible hoarseness, through the intervention of the subglottic mucous membrane; and I am happy to say they have been sometimes successful, so that a person heretofore aphonic, and able to make himself understood only by an almost inaudible whisper, has been heard across a room in a loud hoarseness. This is a desirable result, when the generation of perfect vocalism is rendered impossible from the lesions existing in the yellow elastic tissue of the true vocal cords.

There is yet another cause of hoarseness, which is here announced for the first time; and it is atheromatous conversion of the true structure of the cords, seen either as the result of advanced life, or of premature changes in the middle-aged or even younger. With some amount of hoarseness, is there an alteration in the character of the voice, which becomes crankey, shaky, brassy, cracked, or tremulous. Hoarseness not unfrequently arises from the pressure of intrathoracic or cervical tumours upon the bronchi and trachea, with a decided alteration in the voice as well. If circumstances be favourable, the trachea can be seen throughout its length to the bifurcation, and collateral signs must be weighed in estimating a diagnosis. Aneurisms are the most common of all tumours pressing on the trachea, and not necessarily involving the pneumogastric or recurrent laryngeal nerves, although they frequently do.

Tumours growing within the trachea, generally from its posterior wall, give rise to hoarseness which simulates that from the pressure of an aneurism. Indeed, the latter was diagnosed by one of our first authorities, in an instance where the former was found after death, and no aneurism was discovered.

A lax condition of the mucous membrane of the false cords and epiglottidean folds, with sometimes tumefaction or swelling, or submucous infiltration giving rise to supraglottic œdema, are causes of hoarseness as verified by the laryngoscope. Impeded circulation through the laryngeal vessels, whatever may be the cause, sometimes proceeding to a varicose condition of the veins, and generally, so far as my experience leads me to believe, associated with a moderate amount of œdema, particularly involving the aryteno-epiglottic folds, produces a dysphonic hoarseness.

A painful kind of hoarseness, the hoarseness of obstruction, is produced by infraglottic œdema, *i.e.*, an œdematous condition of the mucous membrane of the larynx *below* the vocal cords, seldom extending further than the commencement of the first ring of the trachea, yet generally requiring the trachea to be laid open, if relief be not quickly obtained by active constitutional measures. This condition is wholly distinct in nature and character from the supraglottic œdema, with which we are familiar under the ordinary name of œdema of the glottis. I have carefully investigated the clinical history of both forms in different stages, with the aid of the laryngoscope; but I announce in this place for the first time, the existence of two distinct forms of œdema of the glottis, to which I give the names of *supraglottic œdema of the larynx*, and *infraglottic œdema of the larynx*, the treatment of both varying, and the form which might be supposed the most dangerous, namely the supraglottic, being in reality the most amenable when early scarifications are practised with the assistance of the laryngeal mirror, associated perhaps, as I have already successfully practised a few times, with laryngeal catheterism. The nature of the effusion in the first form is serum, and in the second, lymph or fibrine. The anatomical disposition of the submucous areolar structures, above and below the glottis, is so widely different, that at first sight, my division of œdema would be considered unjustifiable. It remains for those who, like myself, are constantly working with the laryngoscope, to bring information to bear on this highly important subject.

As it would be taxing the patience of the members present, to go further into the details of this interesting subject, I shall content myself by pointing out these various causes of hoarseness as well as I can, in groups, in the diagrams suspended on the wall, all of which represent actual conditions seen by the aid of the laryngeal mirror, in cases which came under my personal observation.

I must, however, observe that, in some cases the amount of hoarseness present, was not at all proportionate to the extent of the disease and resistance offered to the passage of air through the glottis. Nevertheless that there must be some amount of hoarseness and aphonia present, and a cause to explain them can be readily conceived, before a diagnosis is attempted to be made. In the different groups we have:—

1. Various degrees of congestion and inflammation in primary hoarseness and aphonia, which are liable to degenerate into—
2. Thickening of the mucous membrane and deposition of lymph or serum in the tissues beneath;
3. These give rise to puckering, folds, growths, and swellings.
4. Over-exertion of the laryngeal structures, whether muscular or ligamentous, give rise to disturbance in the uniformity of the tensile fibres of the true vocal cords, ending in disease, proceeding to ulceration, or hypertrophy, or impaired nervous power, causing hoarseness, aphonia, and dysphonia.
5. Partial or complete destruction and lesions of the true and false vocal cords, and other contiguous structures, of which examples are numerous.

I might add some others, but sufficient is stated to show that mere congestion or chronic inflammation is not the invariable cause of hoarseness, especially in chronic cases, and that the extent and amount of counter-irritation sometimes practised to get rid of it is generally uncalled for, and decidedly debilitating, if not positively injurious, in its results. Indeed (as I shall now point out in a very few words), hoarseness and loss of voice depend upon so many and so widely different causes, that for any one to attempt to cure them without ascertaining their true origin, would prove not only injurious to the patient, but mortifying and embarrassing to the practitioner.

As my main object in this short paper, is to show what gives rise to hoarseness and aphonia, I shall at present refrain from entering into the subject of their treatment.

The examples which were brought forward to illustrate this communication, in the form of large diagrams, and briefly described, were:—

Five cases of total loss of the free portion of the epiglottis, and ulceration of the aryteno-epiglottidean folds, true and false vocal cords, and arytenoid cartilages.

Three cases of growths between the origin of the vocal cords anteriorly.

Four cases of growths originating between the vocal cords posteriorly.

A case of growth springing from the right ventricle of ths larynx, and hanging down in the trachea.

In all the above, excepting one instance, the growths were removed by the laryngeal *écraseur*, and the hoarseness and loss of voice were cured.

A case of double plication of the mucous membrane in the anterior infraglottic region, of which occasional hoarseness was the sole symptom.

Two cases of growths from the free borders of the true cords, one very much elongated and detached spontaneously.

Four cases of growths from the superior surfaces of the true cords, but in one involving the false as well.

Three cases of irregular destructive ulceration of the true vocal cords.

A case of variolous destruction of the right vocal cord.

Three cases of tuberculous ulceration of the whole larynx, with destruction of tissue.

A case of supraglottic œdema, with perforating ulcer of velum palati.

A case of elephantiasis of the throat and larynx.

A case of phlebectasis laryngea, and paralysis of the true cords from old inflammation.

Seven cases of pendency of the epiglottis, with a tumour posteriorly in one.

Eight cases of malformation and deformity of the epiglottis.

Two cases of malformation of the larynx in the deaf and dumb.

A case of paralysis of the larynx after diphtheria.

A case of supposed aortic aneurism pressing upon the trachea.

A case of bronchocele pressing on the trachea. In these three cases the bifurcation of the trachea was represented as seen in the laryngeal mirror.

A case of necrosis of the cricoid cartilage, with expulsion of portions of it.

A case of chronic inflammation of the larynx and trachea in epilepsy.

A case of patchy copper discoloration of the larynx from syphilis.

A case of expectoration from the infraglottic region of *rings of lymph*, from an excoriated surface.

A case of wound of the left vocal cord with a penknife, and its cicatrix of union.

A case of nutshell seen in the rima glottidis.

A case of wound of the back of the tongue in front of the right half of the epiglottis.

Two cases of ulceration of the nostrils posteriorly, associated with disease of the larynx.

All these were represented by upwards of sixty diagrams; and I may remark, in conclusion, that a large number of cases of loss of voice have been under my observation and treatment, wherein the causes were of a functional character, chiefly depending upon loss of nervous power over the laryngeal muscles. In these, nothing was seen (to depict) structurally wrong; the true vocal cords were either completely paralysed in their action, or the latter was so limited as to prevent perfect approximation of the free borders of the glottis, and therefore, inability to produce sound was the result.

The Bitter Principle of Gentian. Chemists have long failed to isolate the body to which gentian owes its purely bitter taste, though there has been eliminated an acid principle, gentianic acid. Ludwig and Kromeyer have at last obtained it from an alcoholic extract of the fresh root of gentian (*lutea*), the watery solution of which transferred its bitterness to animal charcoal by two successive treatments. The charcoal was extracted with alcohol, the tincture evaporated, the residue freed from precipitable matter by means of oxide of lead, and after removal of the latter by sulphuretted hydrogen, evaporated to the consistence of a syrup; the latter precipitated the principle by agitation with ether. This *gentopicrin* is crystallisable, is readily soluble in water and alcohol, but not in ether, neutral, and not precipitated either by tannin or subacetate of lead. It is a glucoside; for contact with mineral acids, as well as oxalic and acetic acids, splits it into fermentable sugar and a brownish, yellow, amorphous body, *gentiogenin*. (*Pharmaceutical Journal.*)

Original Communications.

ON PORRIGO.

By R. William Dunn, Esq., Senior Surgeon to the Farringdon Dispensary.

In Willan's *Synopsis* by Dr. Bateman, we have six specific forms of this disease; viz., Porrigo Larvalis; Porrigo Lupinosa; Porrigo Scutulata; Porrigo Decalvans; Porrigo Furfurans; Porrigo Favosa. I reduce these to one; viz., Porrigo Scutulata; for P. Furfurans is Pityriasis Capitis, or chronic Eczema; P. Larvalis is Impetigo; P. Decalvans is Alopecia Circumscripta of the present day; and P. Favosa is true Favus, which is quite a distinct disease from Porrigo. I propose to discard the name of Porrigo Scutulata, and call the disease Porrigo Contagiosa, and place it among the parasitic diseases of the skin. I shall proceed at once to describe this eruption; and to point out how it may be distinguished from other diseases of the skin resembling it.

Porrigo Contagiosa is characterised by an eruption of large, dirty, straw-coloured spots, of a flattened, irregular shape, seeming as if they were stuck on or glued on the part. There is no inflammation at the base, nor redness. It appears most commonly on the scalp; but is found on all parts of the body. It is accompanied by a little itching. When the face and extremities are attacked, the spots assume a more regular shape. There is generally more or less discharge from them. The lymphatic system is affected, suppuration even sometimes taking place. The disease commences generally by a red papule, which soon becomes pustular, and very soon forms the peculiar kind of incrustation which Willan and Bateman term a *psydracium*. Whitlows, containing thin, watery pus, appear on the fingers; and ulcerations are found upon different parts of the body.

Diagnosis. *From Impetigo.* The great distinctive differences between these two are the following. In porrigo, we have the total absence of the inflamed base which we find in impetigo. 2. In porrigo we have a pustular scab, in impetigo a seropurulent one.* 3. In porrigo we have glandular enlargements, ulcerations, and whitlows; which we do not find in impetigo. 4. In porrigo the scab appears as if stuck on to the part; whilst in impetigo the scab is always surrounded by a more or less inflamed base. 5. Porrigo is contagious; impetigo is not.

From Favus. 1. Both are contagious; but favus more so than porrigo. 2. Favus is generally a chronic complaint; porrigo acute. 3. In favus we have a peculiar mouse-like smell, which is not present in porrigo. 4. In favus the hair is affected with the malady; and under the microscope, we see the parasite which is the cause of the disease. In porrigo the hair is not affected; and if we find a parasite, it is quite different from that in favus. 5. The scab in favus is cup-shaped, and the development is rapid and regular. In porrigo the scab is flat, stuck on to the parts, and the development irregular.

Bazin gives the following chemical diagnosis of favus Distilled water at the common temperature or boiling, rectified spirit, ether, chloroform, do not dissolve the pure mass of favus. It is left unaltered, whilst fatty matters are easily dissolved. The epithelial masses become thin by this treatment. Ammonia renders the favus mass a little paler, but does not dissolve it; whilst it dissolves pus and impetiginous crusts, forming a milky gelatinous mass. An alcoholic solution of potassa, especially on being heated, dissolves impetigo crusts, pus, skin, hair, and fatty matters; but not favi.

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* Dr. Gull of Guy's Hospital is my authority.

From Eczema. 1. The history of the case is a means of diagnosis. 2. In porrigo the scab is a psydracium; but in eczema the scab resembles that of chronic psoriasis. 3.*In porrigo we have a pustular, in eczema we have a serous scab. 4. In eczema we have great heat of parts, and small superficial ulcerations, more or less constant oozing of a serous discharge, which we have not in porrlgo; but in both we have glandular enlargement. 5. Eczema is non-contagious, whilst porrigo is contagious. 6. Eczema affects all ages, and the eruption is chiefly general, extending over large surfaces; whilst in porrigo it affects children and is more local.

Cause. The disease arises from direct infection, by using combs, brushes, caps, towels, etc. It often occurs in children during the period of dentition, and most frequently during the damp season of the year, and in sudden changes of the atmosphere. It most commonly attacks children between the ages of 3 months and 12 years. Improper feeding and bad ventilation produce it; and it is sometimes (though rarely) caused by vaccination. The general health is as usual, except in severe cases.

What is the cause of the infection? In my mind, this depends upon a vegetable parasite, which, I believe, has not hitherto been described by any author. I have examined fifty or sixty cases carefully, with only a vague result; for in some I have found the same parasite, and in others I have quite failed to discover it. The parasite which I have found is a cryptogam, and is very similar to that found in sycosis, but differing in size. It consists of a stem with branches and spores; about the hair itself I have failed to discover any disease. I am of opinion that this disease is very similar to sycosis; both being dependent upon the same parasite.

I tried the following experiment three years ago.

J. B., a warder at Cold Bath Fields, came under my care for sycosis menti, which had resisted treatment. He allowed me to inoculate his arm from his chin. In seven days, there was a distinct porriginous scab; viz., a psydracium surrounded by no inflammatory base. The same parasite was found in it as in the chin; and the disease yielded to the same treatment, except that the arm got well first.

Treatment. This is very simple and effective. I generally treat all the cases coming under my care as Mr. Startin does at the Skin Hospital; viz., by the internal administration of iodide of potassium, and the application of compound sulphur ointment of the Skin Hospital *Pharmacopœia.*+ But any other antiparasitic treatment would do; and, in a large number of cases, no medicine is at all necessary. I have very often used, with a good effect, alkalies; viz., magnesia, sesquicarbonate of soda combined with a little colchicum, and an ointment composed of three grains of nitric oxide of mercury and half an ounce of lard, with three drops of creasote.

But the most important point is to *remove the scab.* The head must be kept clean by washing it with the yolk of an egg and warm water, the use of soap being avoided. In some extreme cases, bread and water poultices over the scab are of great service. A regulated diet is important; it should not be overstimulating, and the meals should be taken at regular hours. Sweets of every kind, pastry, salted food, are not to be taken. Beer, wine, and spirits should be strictly prohibited. I now cite the following cases, in proof of the correctness of my diagnosis, and the treatment consequent thereon.

Case i. J. S., aged 4 months, applied at the Farringdon Dispensary, March 1860. About a week previously, the mother observed that the child had a sore head. She found a scab upon her breast, and a whitlow on her finger; and, upon inquiry, discovered that the girl who had tended the child during her absence from home was suffering from the same disease. Upon examination, I found that the child had porrigo contagiosa. The scalp alone was affected. The glands in the neck were very much enlarged. The mother had a true porriginous scab upon the breast. This was the first instance in which I found the parasite. In all three patients I found it. They were put under treatment, and soon got quite well. The whitlow on the mother's finger I opened; it discharged a thin watery pus.

Case ii. J. B., aged 2 years, came to the Dispensary in 1860. He had always had good health. The disease first showed itself four weeks before. He had been under treatment, but had derived no benefit. The whole of the scalp was more or less affected with the disease; also the nose and back. Another child, who slept in the same bed, was likewise affected. The glands in the neck were very much enlarged, and one had suppurated. There was no distinct cause, except that the child went to an infant school, where many of the children had eruptions; and the same parasite was found as in the former. The other child came to the Dispensary the following week. The legs, back, and head were affected. The same parasite was found. In both, the disease yielded rapidly to treatment.

Case iii. A. B., sister to the above, came to the Dispensary this year. The child was quite free from any disease till vaccinated. The mother stated that the child from whom her baby was vaccinated had an eruption on its face. On both arms, where the child had been vaccinated, were distinct porriginous crusts; and the child had porrigo on other parts of the body. Two more children in the same family caught the disease; and the mother had whitlows and porriginous scabs upon her chest. I found the parasite in *two* of these cases. They all soon got well under treatment.

* Dr. Gull.

+ *Compound sulphur ointment.*—R. Sulphuris sublimati ℥ss; hydrarg. ammonio-chlorid. ℈ss; hydrargyri sulphureti cum sulphure ℈ss; conterendo misceantur; et adde olei olivæ ℥ii; adipis recentis ℥vi; creasoti gttas iv.

SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, Etc.

By James Vose Solomon, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[*Read before the Midland Medical Society, February 3rd*, 1863.]

[*Continued from page 509 of last volume.*]

Division of the Ciliary Muscle. [It was shown in the first part of this article, that Mr. Hancock's theory of acute glaucoma being dependent upon an arthritic condition of the blood, and spasm or constriction of the ciliary muscle as evinced by a conical state of the cornea, were unsupported by the cases which he had appended as illustrative of his views. I now proceed to offer some other objections to his opinions, which, in part, arise out of a consideration of the physiological anatomy of the choroid and ciliary muscle.]

In the first of a series of articles on "Incision of the Ciliary Muscle," published in the *Medical Times and Gazette* (Jan. 19, 1861, p. 56), I remark: "The existence of ganglion-cells in the choroid (Müller and Schweiger), and the arrangement of its vessels (and nerves) indicate the importance of it in the nutrition of the eye. Is it probable that with such nervous and vascular endowments, the function (circulation?) of the choroid is made subservient to the greater or less tension of a muscle, which, among civilised nations, almost equals in activity that of the eyelid; which, in many occupations—watchmakers, engravers, etc.—is maintained for eight or ten hours of the day in constant contraction, without ren-

dering such employments specially liable to glaucoma or choroiditis? Is it credible that this little delicate muscle, which is only one-eighth of an inch broad, and which is arched to the curve of the case of the eye, and so rich in nerves as to have been mistaken by the older anatomists for a ganglion, possesses such power as to be able to invert by spasm or constriction of its fibres, the arch of the tough fibrous sclerotica, at a point corresponding to its position, and to cone the cornea? According to my observations, before the arch of the sclerotica will suffer inversion or flattening, so as to form a kind of neck to the cornea, its structure must be weakened, either by inflammation of the choroid when it becomes thin, or by a fracture from a blow—as, for example, where the lens has been subconjunctivally dislocated, in which case the cornea has a tendency to become conical. If it be replied that it is the circular, and not the radial fibres, which are in a spasmodic or constricted state, then we should expect the patient would obtain more distinct vision from concave glasses; whereas, in glaucoma, we find he corrects the presbyopia which precedes the impaired vision by wearing convex glasses. Moreover, it has never been explained (by Mr. Hancock) how an incision in the direction of the radial fibres relieves the assumed spasm or constriction of the muscle in question. Assuredly, if an organ like the thoracic diaphragm were in a state of spasm (and its division had been decided upon as practicable and proper), the surgeon would not incise it in the direction of its fibres, but contrariwise. Nor can I admit what is observed in spasm of the sphincter ani, and the relief of it by myotomy, bears any sort of analogy, as stated by Mr. Hancock, to the treatment of glaucoma by cutting asunder the ciliary muscular circle. Before such illustration can be considered of argumentative value, it must be shown that the relation of the vessels to the direction of the fibres in the two muscles is the same. Mr. Hancock is too good an anatomist to be unaware that the hæmorrhoidal vessels which suffer compression and congestion in spasm of the sphincter ani run longitudinally in the gut, and at right angles with the muscular fibres; whereas, the radial fibres of the ciliary muscle and their vessels run parallel,* or nearly so, and, consequently, the latter are not constricted by the former."

To these arguments, Mr. Hancock has never attempted the slightest answer.

But it may be suggested, if there is not spasm, may there not be such constriction of the ciliary region that the eye will expand rather in its antero-posterior axis than laterally, and thereby a conical cornea and a groove over the ciliary muscle be produced?

Modern clinical observations conducted by Von Gräfe, Bowman, and Donders, are entirely opposed to such a view. These authorities agree that, in consequence of the intra-ocular pressure, the cornea, in glaucoma, has a tendency to become flat.† Indeed, it is obvious, on mechanical principles, that the arch of the cornea cannot be lessened without a proportionate expansion of the sclerotic ring (ciliary region) with which its base is continuous. But, while insisting on this view, I by no means pretend that any form of eye is prophylactic of glaucoma; we know that conoidal and buphthalmic eyes sometimes become the seat of the glaucomatous process. Such occurrence, however, is accidental, and in no way in the relation of cause and effect.

One more observation, and I will dismiss the pathological views propounded by Mr. Hancock. If it be true that an arthritic condition of the blood-vessels and ciliary spasm be the main elements in the production of the glaucomatous state, then a resort to operative measures certainly cannot be needful. The patient will only require to be armed in one hand with a solution of atropine to relax his ciliary muscle, and in the other with a supply of antiarthritic medicine to depurate his blood of its *materies morbi*, and in due time he should be cured. Judged by his papers in the *Lancet*, Mr. Hancock has not yet essayed anything in a direction so consistent and logical with the principles for which he contends.

I witnessed for the first time the performance of division of the ciliary muscle on a casual visit to the Westminster Ophthalmic Hospital on Friday, June 1st, 1860, exactly a week after a notice of my treatment of near-sightedness by intraocular myotomy had appeared in the British Medical Journal, and on the same day that the London edition of the *Medical Times and Gazette* drew attention to the subject, and to certain particulars wherein intraocular myotomy differs from division of the ciliary structures, as practised by Mr. Hancock.* The procedure which I witnessed was as follows. The patient being seated in a chair, the eyelids were held widely apart by an assistant, who stood behind him. Mr. Hancock, having placed his left hand on the patient's face, plunged with his right a large sized Wenzel's cataract-knife into the eyeball near to the rim of the cornea, and cleft the ciliary structures by an incision which radiated from the cornea in the space between the external and inferior pectus muscles. This sudden stab, as a matter of course, excited spasm in the external muscles of the globe, and consequently an emission of the aqueous and vitreous humours. In the case of a much enlarged eye, the vitreous body was so exceedingly firm, that none escaped, although the opening was extended to nearly half an inch in length; the diameter of the globe being enlarged, and *the vitreous acting as a tent in the wound.*

It is remarkable that the advocates of the operation, having in view the reduction of ciliary spasm, do not avail themselves of the use of chloroform, and limit the operation to a slow, methodical division of the sclerotica and ciliary muscle, taking care to avoid disturbance of the vitreous humour.

Mr. Hulke, after having witnessed this proceeding, publicly expressed the opinion that it differed in no respect from paracentesis of the sclerotica, as practised by Desmarres and others, with a view to lessen the contents of the globe. In reply, Mr. Hancock vindicated his treatment of acute *glaucoma* by publishing a case of *recurrent iritis*, or irido-cyclitis, which he had benefited, although *no fluid* was noticed to follow the incision.

This attempt to prove the value of an operation in a certain and peculiar disease (glaucoma), by showing its utility in one of an entirely different nature, must be admitted to be more plausible than conclusive. The following summary of the case to which reference has been made (*Lancet*, 1860, Case 15) is here given, as it exhibits in a striking manner the sort of clinical reports upon which Mr. Hancock founds his practice and commends it to the judgment of the profession.

A lady, aged 26, was treated during three years by mercury, tonics, and an issue in the arm, for an iritis of the *left* eye, which, notwithstanding, terminated in "*a progressive opacity of the lens* and capsule, *a contracted and irregular pupil*," and the "*utter extinction of vision.*" Subsequently iritis attacked the *right* eye. It recovered, and remained well for two years, when it became the seat of asthenic irido-cyclitis (inflammation

* The vessels of the ciliary muscle resemble those of unstriped muscle in abundance and arrangement, and indicate in the most decided manner the backward direction of the fibres, from their origin at the junction of the cornea and sclerotica, towards the anterior region of the choroid. (Bowman's *Lectures*. London: 1849, page 53.)

† It has been experimentally shown that excessive tension of the eyeball lessens the curvature of the cornea.

* "In this operation, the incision does not radiate from the lens and ciliary attachment of the iris, as it does in Mr. Hancock's operation for acute glaucoma; hence the diameter of the globe behind the diaphragm (iris) is not increased." (*Medical Times and Gazette*, June 2nd, 1860, page 548.)

of the iris and ciliary body of the choroid). Mr. Hancock, on being consulted, divided the ciliary muscle. No fluid was discharged, and vision was restored.

In the *Lancet* for September 13th, 1862, p. 279, and under the heading of Case 22, some additional particulars of this lady's case are given, which deserve attention as bearing upon the credibility of the papers under review. "Soon after September 5th, 1860, the *left* eye became less satisfactory; the vision rapidly failed; the pupil became insensible to light, and occupied with fragments of pigment."

Inasmuch as the *same* organ had been already reported (*Lancet*, 1860, Case 15) as having been affected with "progressive opacity of the lens and its capsule" (capsulo-lenticular cataract), and "utter extinction of vision", the reader is puzzled to understand in what way it could possibly "become less satisfactory", unless from a general disorganisation of its tissues; and the process whereby "the utter extinction of vision" was converted into a "rapid failure of vision" is equally mysterious.

In October, iridectomy was proposed to the patient, and rejected by her. All medical treatment was now dispensed with; and, by Christmas, the eye in which there was cataract and "utter extinction of vision" had so far recovered itself that small print could be read with it! So brilliant and marvellous a result having been got without the aid of the doctors, we are startled on reading that medical advice was again sought, and a constricting band placed upon an hæmorrhoid which had bled much (indeed, apparently during the several years the eye was under treatment). Misfortune, however, still remorselessly pursued this unfortunate woman; for the cataractous eye, which read small print on Christmas Day, 1861, again failed. Division of the ciliary muscle was performed at the beginning of 1862. "Notwithstanding," says the report, "the attack was very obstinate; but she was ultimately restored to sight." The degree of impairment of vision is not stated.

It is upon such clinical evidence as the preceding that Mr. Hancock asks his brethren to adopt division of the ciliary muscle as a cure for acute glaucoma, in preference to iridectomy.

I have given the method a very extended trial in public and private practice, and I regret to say that it has uniformly disappointed me as a means of *permanent* relief in glaucoma. My experience fully corroborates that of Desmarres and Bader, that it is merely a palliative. In many cases it has not even this merit, but proves positively detrimental to the interests of the patient, by preventing the adoption of a really useful plan of treatment at the outset of the disease.

The accidents which I have witnessed to follow its employment are ophthalmitis and atrophy of the globe. The latter event occurred to a patient who, from being blind, was enabled to count fingers immediately after the turbid humours were discharged from the eye.*

If a close investigation be made of Mr. Hancock's method, the claims he has made to originality must be seen to have been anticipated by other ophthalmic surgeons.

He cuts the ciliary muscle; so did Whyte and Desmarres.

His incision is made in the space between the inferior and external rectus muscles; so was that of Desmarres.

He plunges with force a large lance-shaped knife into the globe, and extracts vitreous: Desmarres did likewise, and published his results years before Mr. Hancock discovered (?) "division of the ciliary muscle".

He repeats the paracentesis on the same eye for the same disease; so did Desmarres, and moreover publicly avowed the necessity of the practice, which his imitator has not done.

Mr. Hancock asserts that the operation *cures* glaucoma. Desmarres candidly admits it produces no more than beneficial arrest in the disorder ("detente salutaire").*

Desmarres sometimes pierced the sclerotica behind the insertion of the ciliary muscle, without apparently obtaining any appreciable difference in his results. Whyte, as has been already remarked, always cut the muscle for the relief of tension.

These facts having been laid before the Society, its members will find no difficulty in deciding whether Mr. Hancock is in a position to claim originality for the slight modification, if any, which he has made in the mode of performing sclerotic paracentesis in cases of acute glaucoma—a measure of relief which was first suggested by Mackenzie, extensively practised by Desmarres, and which, in the hands of every surgeon who has given it an extended trial, has failed to cure idiopathic glaucoma.

* As a remedy for myopia, it is deceptive and dangerous. In the course of a few months, the patient finds his myopia to have returned, his adjustment destroyed, and that spectacles are no longer of any service to him.

Progress of Medical Science.

Causes of Death after Operations for Hernia. Dr. Rupprecht of Munich, in a paper on the favourable and unfavourable results of hernia operations, describes recovery as taking place in the following ways. 1. Perfect recovery: *a.* the external wound being healed by the first intention; *b.* the wound being healed by suppuration and granulation, often with simultaneous radical cure of the hernia by adhesive inflammation; *c.* recovery preceded by peritonitis, which may or may not leave strong adhesions. 2. Imperfect recovery; *a.* with stricture of the intestine, as the result of gangrene; *b.* with formation of an artificial anus, also produced by gangrene.

He then speaks of the causes of death after the operation, arranging them under the heads of peritonitis, morbid changes in the intestine, shock, internal hæmorrhage, and pyæmia.

1. Peritonitis may set in very rapidly after the operation. It most frequently occurs when a large quantity of intestine has been protruded, and has been exposed for some time to the air during its replacement. It is also very liable to occur, when there has been very tight constriction and consequent considerable hyperæmia of the intestine; and especially when the operation has been preceded by repeated and rough attempts to reduce the hernia by the taxis. Very frequently, also, peritonitis occurs when a portion of the hernial sac has been cut away, or even when the omentum, after a portion has been removed, has been tied and reduced, as the ligatures not unfrequently exert no small amount of irritation on the peritoneal surface. The peritonitis sets in with rigors and nausea, soon followed by vomiting, generally of a green colour; the abdomen is somewhat distended, very tender on pressure; exceptions being afforded in the cases of those who have taken large doses of opium, or who are still under the prolonged influence of chloroform, and in whom therefore there is less tenderness. Even though all appears to be going on well after an operation for hernia, the surgeon must not lose sight of the possibility of the occurrence of peritonitis. It often happen that, when the intestine has been reduced and all obstruction has been removed, no evacua-

* "On pourra faire tomber la douleur et disparaître l'accès, par des ponctions pratiquées de temps en temps au travers de la sclérotique; il en résultera de cette façon une detente salataire." (*Traité des Maladies des Yeux*, p. 767. Paris: 1817.)

tion follows; and it would be a great error to treat such a case by violent remedies. In the meantime, a larger or smaller portion of the intestine may become gangrenous and burst, pour out its contents into the abdomen, and thus produce fatal peritonitis on the sixth or tenth day after the operation. It more rarely happens that a slow peritonitis sets in at a late period.

2. With regard to the intestine, it is evident that, if any portion of this do not perform its function, and the peristaltic movement in it cease, death will soon take place.

Paralysis of the intestine is a further cause of death after herniotomy. This paralysis is usually induced by a very considerable and prolonged constriction of the intestine at the ring; the gut may not recover itself after the operation, and hence neither are the ordinary evacuations produced, nor does the peristaltic action take place which is necessary to the further performance of the intestinal functions. Three years ago, Dr. Rupprecht performed herniotomy on a man aged 73, in whom, nine hours before his admission into the hospital, incarceration took place in a large but hitherto easily reducible hernia. The symptoms being urgent, and the taxis having failed, an operation was performed. The sac contained about four feet of intestine, with some omentum; it was much distended, although there was not a remarkable amount of effusion present. The operation appeared successful; and the passage of a large amount of flatus led to the belief that the intestine had soon become pervious. The patient passed a good night; but, after a few days, the abdomen suddenly became distended; no further evacuations took place; the pulse became small and quick; and death took place on the seventh day. On *post mortem* examination, the vessels of the portion of intestine which had been constricted were full of blood, so that the intestine here had a dark blue red colour. The rest of the abdomen was free from disease; the wound made in the abdominal ring had healed; there was no trace of peritonitis, but death had evidently been produced by paralysis and incipient gangrene.

In some cases, after herniotomy has been performed, and the intestine has been replaced, stercoraceous vomiting, and violent dragging pain in the abdomen, indicating obstruction of the intestinal tube, set in at an earlier or at a later period. These may be produced by a renewal of the hernia through coughing or any similar effort, or from internal incarceration. In such cases, the surgeon should remove the dressings, reopen the wound, and cause the hernia to be reproduced by coughing or by pressure, so that he may relieve the constriction. This proceeding, however, is very liable to be followed by fatal peritonitis. In a case that occurred in the practice of one of Dr. Rupprecht's colleagues, an operation for hernia was performed on a woman, and all appeared to be going on well, when symptoms of obstruction suddenly set in. On examination, it was found that, notwithstanding that the patient had been kept quiet in bed, a hernia had become strangulated on the other side. This was reduced by the taxis, and the patient recovered.

In some cases, especially in large and old herniæ and in aged people, an operation may become necessary in consequence of the impaction of the intestine with fæces or indigestible substances. Death from peritonitis is very liable to occur, especially in old persons.

The intestine may be wounded in the operation, especially when the sac is opened too quickly and without sufficient care, or when the intestine has become adherent to the peritoneum. The prognosis in such cases is rather unfavourable; nevertheless, recovery has been known to take place. If the strangulation be tight and of long duration, the hyperæmia is often so great, that a vessel is ruptured, and the serous contents of the sac are tinged with blood. This is a very unfavourable symptom; and gangrene finally takes place in most of the cases in which it occurs. Morowek has collected 1854 observations of the changes which the intestine undergoes after strangulation. Among them he has found ulceration of the mucous membrane, ending in stricture; also adhesions, the result of inflammation between the omentum and the internal ring, giving rise to a liability to the production of internal strangulation. Phlegmonous inflammation of the omentum, not unfrequently passing into abscess, may also, as has been described by Goyrand, take place after herniotomy.

3. In some cases, where death follows herniotomy, no cause for it can be discovered in the parts operated on nor in the abdomen. The fatal event must here be attributed to the shock of the general system produced by the operation. An analogous instance occurs sometimes in the production of collapse and death by the introduction of a catheter, or even by the extraction of teeth. This disposition to fatal collapse occurs chiefly in old and very fat people, probably because the former have atheromatous degeneration of the blood-vessels, and the latter fatty degeneration of internal organs, especially the heart.

4. Internal hæmorrhage may be a cause of death. The surgeon may cut away a portion of protruding omentum, and, finding no bleeding of any importance, may return the rest of the omentum without applying a ligature. Now, the absence of hæmorrhage has arisen in part from the pressure which has been exerted on the omentum by its strangulation, and in part from the weakening of the heart's impulse by chloroform. If these points be overlooked, and the omentum returned, the removal of the pressure on it and the re-establishment of the heart's action are very liable to produce hæmorrhage into the abdominal cavity, and the patient dies, partly from the loss of blood, partly from the peritonitis which is readily induced by the hæmorrhage. Hæmorrhage may also take place into the cavity from the wounding of vessels in the abdominal walls.

5. Death from pyæmia after herniotomy occurs very rarely in private practice, but is more common among hospital patients. It generally arises from over-crowding; and Dr. Rupprecht suggests that if patients after operations were more isolated, and kept in single rooms, the difference between the results of hospital and of private practice, as regards the occurrence of pyæmia, would be greatly diminished. (*Wiener Med. Woch.*, Aug. 29, Sept. 5 and 12, 1863.)

Poisoning by Arseniuretted Hydrogen. Arseniuretted hydrogen is said to be one of the most poisonous compounds of the metal; but the recorded instances of poisoning by it are very rare. A case has lately occurred in M. Piorry's wards at La Charité.

B., aged 22, employed in a chemical manufactory, was engaged in some researches on the production of colouring matters from aniline. In one of his experiments, he set free a large quantity of arseniuretted hydrogen, which became spread through the atmosphere of his laboratory (this was at 7 A.M.). About an hour afterwards, he felt a rather violent pain in the head, which made him open the window for some minutes. He then resumed his work for two hours. At half-past ten, he took a meal, without perceiving anything particular. An hour afterwards, the headache increased; pain in the epigastric region set in; and vomiting of the food took place. The patient was carried to the Charité Hospital; and, while being taken thither, he vomited three times.

On admission, his face and lips were pale; he walked with difficulty; had an intense frontal headache, and very violent pain towards the lumbar region; there was a feeling of constriction at the base of the lung and the breathing was quickened; there was no cough, no auscultatory *râles;* and the sounds of the lungs were normal

He had much thirst. There was no pain nor tenderness of the abdomen. The extremities were cold. There was no disturbance of the senses. He was treated by the application of sinapisms, frictions, and bottles of hot water; and by the administration of diuretics, acetate of ammonia, and an enema of senna. In about half an hour, the patient became warm, his body slightly moist, and his breathing more easy; but he still complained of general uneasiness, and especially of pain in the loins. The motor power seemed to be unaltered. The pulse was 110, sufficiently full and regular. The region of the liver was tender. At 5 P.M. he passed two abundant fœtid stools; and some time afterwards passed, without pain, almost 220 *grammes* (7 ounces) of red urine, in which not a single blood-globule could be discovered. Vomiting of greenish matters was produced by even the smallest quantity of drink. At half-past 10 P.M. the headache was more intense, and the face animated; the conjunctivæ were injected; the pulse was strong and frequent. He spoke with difficulty, and answered questions slowly. He was bled to 500 *grammes* (above a pound avoirdupois), and was almost immediately relieved. The headache and pain in the loins diminished. The respirations were 20; the pulse 95. The vomiting, however, continued; and drink could not be borne. At 1 A.M. M. Piorry was called to the patient, and found him with a flushed face, hot skin, pulse at 100, regular, of tolerable size. His intellect was entire, and he answered questions distinctly. The vomiting had ceased. Large quantities of drink, and repeated simple enemata, were prescribed. A purgative injection was given at three o'clock, after which he was placed in a bath. After this the patient felt somewhat better, though still much weakened.

The following day, the face had an earthy yellow colour; the skin was dry; the pulse 104; the tongue was dry; and he had great thirst, and an air of hebetude. There was pulmonary congestion posteriorly. The patient had not passed urine.

On the third day, the patient was in a drowsy apathetic state. The conjunctivæ were again injected. There was a marked diminution in the quantity of the urine, which retained its red colour.

On the fifth day, after an apparent but transient improvement, the patient's condition became notably worse. The urine was again suppressed; the tongue and lips were covered with dark sordes; the skin had a bronze colour; the pulse became imperceptible, and the respiration quick and laboured; the intellect was destroyed. He died in the evening.

At the *post mortem* examination, there were found to be congestion of the liver without change in the hepatic cells, softening of the spleen, and increase in the size of the kidneys, with considerable injection, especially in the tubular portions. There was also a granular state of the cells both of the cortical and of the medullary portions. (*Gazette des Hôpitaux*, 13 Octobre 1863.)

REPAIR OF TENDONS AFTER TENOTOMY. MM. Demarquay and Leconte, in a memoir on this subject, state that numerous facts show that the daily admission of air to tendons divided by subcutaneous section not only does not prevent their union, but does not sensibly retard it. The accidents which complicate certain cases of tenotomy cannot then be attributed to the fortuitous introduction of a little air into the wound at the moment of operation. Air, in contact with living animal tissues, rapidly loses almost all its oxygen, which is replaced by carbonic acid; so that the wound is in contact with a mixture of nitrogen, carbonic acid, and a very small amount of oxygen, which exerts little or no action. Daily injections of pure oxygen retard slightly the repair of tendons, and cause the wounds to assume a bad aspect; and hence, if *primâ facie* conclusions be drawn, there may be attributed to oxygen an intensely mischievous action on the reproduction of tendons—which it does not really possess. Oxygen, even in a pure state, and injected every twenty-four hours, has been found by MM. Demarquay and Leconte not to possess the hurtful properties which have been attributed to it. This, they consider, was doubtless to be attributed to the smallness of the quantity of oxygen which they were able to inject, and to its rapid replacement by carbonic acid; for large quantities of oxygen brought into contact with open wounds produce much stimulation, which may become pathological, if the action of the gas be prolonged several days without being watched. The authors of the memoir observe that it is not rational to draw conclusions from the action of oxygen as to that of the air, and *vice versâ*. In the air, the oxygen is dilated with nitrogen, and may be considered in a state analogous to that of an active local remedy diluted with a large quantity of water. (*Archives Génér. de Méd.*; and *Gazette Méd. de Paris*, 3 Octobre 1863.)

Reviews and Notices.

URINE, URINARY DEPOSITS, AND CALCULI; AND ON THE TREATMENT OF URINARY DISEASES. With Numerous Illustrations, and Tables for the Clinical Examination of Urine. By LIONEL S. BEALE, M.B., F.R.S.; Fellow of the Royal College of Physicians; etc. Second Edition. Pp. 439. London: 1863.

A GUIDE TO THE QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE URINE, designed especially for the Use of Medical Men. By Dr. C. NEUBAUER and Dr. C. VOGEL. Fourth Edition, considerably altered and enlarged, with Four Plates and Twenty-eight Woodcuts. Translated by WILLIAM O. MARKHAM, F.R.C.P.L., Physician to St. Mary's Hospital. Pp. 439. The New Sydenham Society. London: 1863.

THERE is no room for apprehension on the part of the British medical practitioner, that he will not be kept *au courant* with the latest and most elaborate of the researches made both by his own countrymen and by continental observers on the physiological and practical chemistry of the urine. The great advances which have been made in our knowledge of this matter during the last few years have been laid before the profession in the works of Thudichum, Parkes, Beale, Hassall, etc.; and since the last summer there have appeared the two works whose titles stand at the head of this article; viz., a second edition of the able Lectures of Dr. BEALE; and a translation, issued under the direction of the New Sydenham Society, of the elaborate Guide of the well-known German urologists, Drs. NEUBAUER and VOGEL.

When the first edition of Dr. Beale's work appeared, it mostly consisted, as will be remembered, of the lectures which had been published by him in the BRITISH MEDICAL JOURNAL. In the present edition, the author has abandoned the lecture form, and has made his work a manual, dividing it into chapters. As regards its contents, the general arrangement has been preserved; but some important additions have been made—to the amount, the author says in his preface, of nearly 100 pages; besides which, a considerable part of the work has been rewritten. The contents of the volume are arranged under the following general heads: Chemical and

Microscopical Apparatus for the Clinical Examination of Urine; the Volumetric Process of Analysis; Examination and Preservation of Urinary Deposits; the Anatomy of the Kidney, and its Action in Health and Disease; Urine in Health; Urine in Disease; Urinary Calculi; Summary of the most Important Constituents of Urine in Health and Disease; and Tables for the Systematic Qualitative Analysis of Urine. There are also twenty-four plates, containing 133 figures.

A translation of the third edition of the *Guide* of Drs. Neubauer and Vogel was announced by the New Sydenham Society more than two years ago. It was completed in manuscript; and some sheets had been printed, when the announcement of a fourth edition of the German work induced the Society and the translator to delay its issue for a time. The authors of the original work have very courteously furnished the translator with proof-sheets of the new edition while it was passing through the press in Germany; so that the English version has appeared very soon after its original on the continent.

In the construction of this book, the first division is by Dr. Neubauer, while the second has fallen to the share of Dr. Vogel. The first division consists of the three parts, in the first of which are described the normal and abnormal constituents of the urine, inorganic and organic sediments, and accidental constituents; the second describes the quantitative analysis of the urine; and the third, the method to be followed in the qualitative and quantitative analysis. In the second division, Dr. Vogel treats of the general semeiology of the urine, or the application of its qualitative and quantitative examination to diagnosis. Under the head of qualitative changes, he notices the changes in the colour, appearance, and odour; chemical reaction; the presence of unusual and abnormal constituents; and sediments. The second part comprises a notice of quantitative changes, those being first described which are appreciable without the use of chemical analysis, and then those which require the aid of chemistry for their demonstration.

These two books differ in the manner in which certain subjects are elaborated in them. Thus, for instance, Dr. Neubauer devotes more than eighty pages to the subject of volumetrical analysis; while Dr. Beale is much more concise. On the other hand, Dr. Beale enlarges on the anatomy of the kidney, and on the formation of casts of the urinary tubules; and has, in the present edition, made some useful practical additions in the nature of remarks on treatment. On the whole, it may be said that the German authors are more elaborate than Dr. Beale in the details of the subjects which they notice; while the latter describes at some length several important points which are not referred to, or but slightly so, in the work of Drs. Neubauer and Vogel.

As an illustration of the manner in which the authors of the two works treat their subjects, we may take their remarks on the presence of bile in the urine. Dr. Neubauer (pp. 84-91) describes the presence of the bile-pigments and bile-acids of the urine, the chemical characters of these substances, and the means of detecting them. At pp. 314-316, Dr. Vogel describes the diagnostic indications derivable from the presence of these matters, and, without discussing any of the theories propounded by other observers, expresses his opinion that the presence of bile in the urine is to be attributed to its reabsorption from the liver, in circumstances which prevent its escape into the intestines. As to the biliary acids—the taurocholic and glycocholic, which he calls collectively cholic—he explains their absence from the urine in jaundice to the non-interference with the changes which he supposes them to undergo, in the normal condition, in the blood. But, on the whole, he regards our knowledge of the changes of the biliary acids as very incomplete, and observes that

"We shall not be able to determine fully the diagnostic and prognostic value of the presence of cholic acid in the urine until we have ascertained the nature of the conditions which prevent its disappearance in the blood."

Dr. Beale, in speaking of the presence of bile in the urine, takes the opportunity of making some remarks on the debated question of the mode of production of jaundice. He refers to the researches of Frerichs, Kühne, Harley, Thudichum, etc.; and, as to the changes of the bile-constituents in the kidney, he expresses himself in favour of the doctrines of Kühne rather than those of Frerichs.

"It seems to me that the view that in certain cases of jaundice there is suppression of the action of the liver, that the liver does not produce bile, and that no biliary acids are formed, is opposed to very many facts; and I have been led to incline toward the view that in all cases of jaundice the bile has been formed by the liver-cells, and has been reabsorbed after its formation, and perhaps much of it again excreted in an altered form by the intestines. It is easy to conceive that the relative proportion of the biliary acids and colouring matters produced may be very different in different cases; that the quantity of the acids formed may vary greatly; that their composition may be affected—taurocholic acid being produced instead of glycocholic acid (Kühne); and that other chemical derangements may be caused without the action of the liver-*cells* being suspended." (P. 215.)

He then goes on to describe the treatment of jaundice. In those cases which commonly occur during the summer months, and are not connected with organic disease, Dr. Beale speaks strongly in favour of mild counterirritation over the liver.

"Even the application of cold wet cloths for half an hour now and then will relieve the pain, sense of fulness, or uneasiness, about the hepatic region; but rags steeped in equal parts of strong hydrochloric acid and water, applied for half an hour daily, form the best application. This application, which I learned from Dr. Blakiston, is of great service, not only in actual jaundice, but in cases of temporary biliary derangement generally. The acid may, perhaps, act through the cutaneous nerves, by exciting the biliary ducts and gall-bladder to contract. It also causes action of the colon." (P. 216.)

We might go on to great length, comparing these two books; but we must conclude with a few words on each. As to Dr. Beale's work, we have, on a former occasion, spoken so fully on its merits, that little remains now to be said. Its author has continued to shew himself to be at once a scientific and practical physician. The additions which have been made to the work, and the care which the author has taken in improving it from his own experience and from the results obtained by his fellow-labourers, justify us in reiterating what we said in noticing the first edi-

tion; that, after a careful perusal of the work, we are satisfied that, whether for its thoroughly practical and experimental tendency, or for the completeness and erudition of its articles, it stands second to no treatise on the subject in the language.

Regarding the work of Drs. Neubauer and Vogel, the well-known chemical skill and clinical knowledge of its authors render any comment almost unnecessary. We have already pointed out its principal characteristics, and have alluded to the richness in chemical details which forms the chief feature of Dr. Neubauer's portion, while the application of urological knowledge to the diagnosis of disease is ably expounded by Dr. Vogel.

Of the merits of the two works, weighed one against the other, readers must judge for themselves. To our view, both are excellent; yet neither so perfect, that it might not be in various matters supplemented by the other.

A Practical Treatise on Training, Gymnastics, and Riding. By a Subaltern. Pp. 69. London and Liverpool: 1863.

This is a cheap and simply written little book, giving information as to the manner of performing various healthy bodily exercises. The instructions given by the author are generally judicious; they refer to sleep, bathing, clothing, diet, moral and other influences, training, walking and running, dumb-bell exercise, club exercise, facing, marching, etc., and riding.

There is scarcely anything, if anything, in this book, to which objection can be taken on medical grounds; and the author is so careful in fixing proper limits to the hygienic resources of which he treats, that he observes that "Turkish baths should not be taken except under proper medical advice". The book, taken as a whole, is a very useful production; and our associates can with advantage recommend its introduction into the families of their patients.

The German University Degree Trade. We are glad to report the trade of obtaining German degrees for Englishmen to be in a flourishing condition. We have already published the price of Giessen, Jena, and Erlangen degrees (Giessen: Ph.D., £14:10; LL.D., £22:10. Erlangen: Ph.D., £15; and Jena Ph.D., £15), and we are now enabled to give the latest price current for Rostock, in Mecklenburg Schwerin. An individual, professing to be the correspondent of the University of Rostock, now circulates, in "strict confidence," of course, a printed tariff among those who reply to his advertisements, designating the original vendors of the degrees "a distinguished and ancient Prussian German (*sic.*) University, established at the commencement of the fifteenth century." We subjoin the latest prices:—Ph.D. and M.A. together, £12:12 (entrance £2:2, and diploma £10:10): LL.D., £17:13 (entrance £3:3, and diploma £14:10); and M.D., £30:3 (entrance £3:3, and diploma £27). The D.D. is granted as an honorary distinction to clergymen who have previously been customers. Fees equal to double the entrance fees are payable to the agent by the candidates, by way of commission, on the diploma being obtained, and if you assure the agent "that your intention is to proceed" for the degree, he will (in return, and without knowing who you are, or what are your qualifications) "assure to you the certainty of obtaining the diploma." (*Chemical News.*)

British Medical Journal.

SATURDAY, NOVEMBER 28th, 1863.

MR. CHARLES DICKENS AND "VERY HARD CASH."

The just indignation excited in the profession by the libellous statements on lunacy doctors lately published week after week by Mr. Charles Dickens in *All the Year Round* has at last drawn some sort of apology from that gentleman. Mr. Reade, it is true, is the author of the sensation tale, "Very Hard Cash," in which the gross mis-statements alluded to appear; but Mr. Dickens permits their publication, and is, therefore, responsible for them. Somewhat ashamed of his writer's performance, Mr. Dickens now, in a note to a late number of "Very Hard Cash," tells his readers as follows:—"The conductor of this journal desires to take this opportunity of expressing his personal belief that no public servants do their duty with greater ability, humanity, and independence, than the Commissioners in Lunacy."

Now, of this apology for the insults which have been thrown, through his highly lucrative commercial undertaking, upon the medical profession, we have to say that it is, as far as it goes, all very well; but it does not go half far enough. Mr. Dickens's journal has done a good deal more than slander Lunacy Commissioners; it has cast diabolical charges upon the character of all medical men connected with the management of lunatics, and has, therefore, insulted the whole profession. The Lunacy Commissioners have Lord Shaftesbury at their head, and are men of some mark in their way, and are not all of them doctors. They are, therefore, in a position to exert some social screw influence on Mr. Charles Dickens; but those other gentlemen—the profession at large—who have been far more grievously abused than the Lunacy Commissioners, have just as good a right to an apology from Mr. Dickens. We ask for no apology from Mr. Reade, because he is manifestly a sensation-novel writer, whose business or trade is the getting-up of literary articles of this cast. All we can say of him is, that if he believes what he writes about mad-doctors, he shows that he is utterly ignorant of the subject he is dealing with as far as they are concerned; and therefore, without due inquiry, has not hesitated, for the sake of a trade-trick and in the way of business, to asperse most shamefully the conduct of highly honourable men. If, on the other hand, he does not believe what he writes—we pity him that he has fallen into so low an estate; we do more than pity him. With regard to Mr. Charles Dickens, however, we must say, that there is for him no excuse. He has the

credit of being wealthy—of being blessed, or otherwise, with a marvellous income, through his literary properties. It is incomprehensible, therefore, that he should condescend, in this weekly production, to reduce his literary food to the condition best fitted for the ignorance or morbid appetites of the multitude, who greedily swallow sensation *morceaux*.

We would recall to his mind what the poet—Goethe's ideal poet—replied to the stage-manager, who demanded from him some low buffoonery—we may suppose of the kind touching doctors furnished in "Very Hard Cash" to Mr. Dickens:

> "Geh'hin, und such Dir einen andern Knecht!
> Der Dichter sollte wohl das höchste Recht,
> Um deinetwillen freventlich verscherzen."

Mr. C. Dickens has for many years stood prominently forward as a philanthropist and doer of good works, and as a sort of literary high-priest towards his fellow creatures; but, certainly, if he allow matter of this kind to spread, through his agency, over the face of the earth, and instil itself as truth into the minds of the ignorant, whom he pretends to teach and elevate, his philanthropy dwindles to very moderate proportions. He becomes a mere trader—a dealer in literary wares. Indeed, in such case, he occupies the position of the wealthy gin-merchant, who does the benevolent at large pious tea-meetings, at the time when by his industry he is assisting in the poisoning the bodies of half-a-dozen parishes.

Mr. Dickens, to speak the truth, with all his wit, has ever shown a want of wisdom or ballast—signs of a defective education, perhaps. We could again and again point to his works, and show the evil which he must have done in giving bad instruction to the people. Surely a man in his position should feel the deep responsibility which rests upon him of rightly and truly directing the large masses of semi-educated mankind, who listen to and are guided and influenced by his writings and publications.

It is a misfortune that some kind genius has not often whispered to Mr. Dickens that he has ever been over-fond of dishing-up spicy sauces, which best suit the appetite of the fashionably vulgar and the generally ignorant. He once, for example, went out of his way in a novel to work up as a fact the groundless assertion of "spontaneous combustion" of the human body. No doubt the gaping *plebs* greedily swallowed the dish; but why instruct *plebs* to believe as a truth that which science proves to be a falsehood? On another occasion, he gives us that most astounding hash of a novel by Sir B. Lytton, in which animal magnetism is served up in a style which we fancy, must have astonished and disgusted even Purveyor Dickens himself? Was that business creditable to him? And then, again, he has not failed at the right time to have piquant ghost-stories neatly and faithfully introduced, as *entremets*, to give a fillip to the jaded stomachs of his readers; and now, at last, wearied, we may suppose, of misrepresenting physical phenomena, or finding these diggings worked out, he now lets his journal loose upon individuals, indulging in calumnious personalities. He allows Mr. Reade to hold up to the execration of mankind invented brutalities of mad-doctors and abominations committed in mad-houses. We, therefore, again repeat it, Mr. Dickens has yet to clear himself with the profession. His apology to the Lunacy Commissioners leaves the case of the insulted profession untouched. Indeed, his words may be made to infer that he even holds good the opinions stated by his literary scribe, respecting the doings of mad-doctors in general, and their attendants in mad-houses.

But what, after all, is the meaning of these attacks on a body of most highly honourable members of our profession?

Mr. Dickens must know as well as we do that they are, at the present day at all events, utterly without foundation. He must know that the slightest whisper, founded in truth, of any of the abominations recorded as facts by his journalist, would be indignantly echoed from one end of the kingdom to the other, and the gravest investigation demanded touching them. And, if he knows this, how can he, Mr. Charles Dickens, as a philanthropist, as a man of high literary standing, as a great instructor, and as purveyor of universal literary food to the "general", reconcile it to his conscience, so tender to the good of his species in the gross, to cast such cruel, such false and slanderous imputations upon the doctor in particular? One of two things. If Mr. Dickens or Mr. Reade know that the things which they have recorded are true, why do they not indignantly denounce the *facts* and the *persons* to the Lunacy Commissioners, and have the miscreants who committed them brought to the bar of public opinion? But if neither Mr. Dickens nor Mr. Reade know of any such facts, and if Mr. Reade has consequently drawn solely on his imagination for the facts stated by him, he has committed an act which deserves public reprobation. What can justify him in dishing up slander upon a profession out of his imagination, merely for the sake of tickling the appetite of the multitude—of instilling false statements into the mind of the public—in order to "get off" his novel and make a successful trade-hit?

It must not be forgotten that Mr. Charles Dickens has the character of occasionally telling truths through his fictions, and of reforming evils by publishing them in a form of romance. Mr. Dickens is supposed, in cases of this kind, to have facts upon which he founds his fiction. For example, all the world will remember that Do-the-boys Hall was no slander or imaginative suggestion, but was an *exposé* of a real and existing state of things. When, therefore, Mr. Dickens produces such a history as is

that contained in "Very Hard Cash", there are plenty of persons ready enough to believe that his statements are true and real expressions of actual facts known to him.

Why these gentlemen have selected for their calumnies a profession to which no persons are more deeply indebted than literary men, it is hard to say, except on the ground that *such* payment is a not uncommon return for favours bestowed. We have little doubt that Mr. Reade has, one time or other, received the benefit of gratuitous medical services. But there may be one other solution to the question; and it is this; that there is no profession which possesses in so marked a degree as ours that "badge of all our tribe" which Shylock tells of—no profession which bears insults with such meekness. There is, in truth, a want of unity in the profession, and, we must say it, a want of moral courage amongst its highest ornaments to speak boldly out on such occasions as this. We have said it before, and we repeat it again: our profession does not obtain from the public the esteem to which it is justly entitled. It has not the influence over public affairs which it ought to have; and it has not all this, because it does not sufficiently respect itself. Hence it is that Mr. Reade, *per* Mr. Charles Dickens, takes delight to fling about his sensation phrases at the doctors' expense. "All men take a delight to gird at me," says Falstaff.

THE "READY METHOD" AND DR. SILVESTER'S METHOD.

We have not published, side by side, as requested to do by Mr. Lewis, Secretary of the National Life-Boat Committee, the directions laid down by that Society, and the directions lately published by the Royal Humane Society, for the restoring the apparently dead; and for the following reason. The Royal Humane Society has embodied in its newly-issued directions the principles laid down by the Royal Medical and Chirurgical Society's Committee on Asphyxia, in their Report issued July 1st, 1862. (See British Medical Journal, July 5th, 1862.)

This Committee, after long and careful investigation and experiment, came to the conclusion that the method for resuscitation recommended by Dr. Silvester was preferable to the "ready method" so well known of Dr. Marshall Hall; and we suspect that every reasonable person would, until further cause be shown, naturally be led to adopt the practices recommended by such a committee, in preference to any practice previously employed or recommended.

It may be well that we should shortly call to the remembrance of our readers what the main conclusions of that Committee were on the subject of the restoration of persons suffering under suspended animation.

It must be remembered that all parties are agreed in this; viz., that the first and grand object to be attempted in these cases is the restoration of the respiratory act. Consequently, with this principle in view, numerous experiments were made by the Committee referred to, to ascertain the comparative merits of the plans recommended by Dr. M. Hall and by Dr. Silvester, and to determine the quantity of air drawn in and expelled by these methods. Under Dr. Marshall Hall's method,

"When the body, being on the side, was turned into the prone position, not more than from one to eight cubic inches of air were expelled; but a somewhat larger quantity was displaced when the arm was laid on the abdomen. The quantity of air inspired when the body was replaced was always somewhat less than that expelled. When the body was turned on the face, the quantity of air expelled was somewhat increased by pressure on the spine; but it never exceeded fifteen cubic inches."

"When the arms were carried to the head, as in Dr. Silvester's method, the amount of air taken into the chest varied from nine to forty-four cubic inches; and the results were very uniform on the same subject. On replacing the arms by the side, the quantity expired was generally rather less than, but sometimes as much as, that which had been inspired. The effect was increased by alternating the movements of the arms with pressure on the lower end of the sternum; the expelled air amounting even to fifty cubic inches."

Hereupon the Committee remark, that without committing themselves to any decided opinion as to the actual efficacy of Dr. Silvester's method, they consider that its results were more marked than those of Dr. Marshall Hall; and that it had also the advantage of beginning with an inspiration.

As regards the value of any special apparatus for producing artificial respiration, which, they considered, possessed certain disadvantages, such as that of not being always ready when required, the Committee expressed no opinion.

"The application of the actual cautery produced no good result in five experiments; nor did any good effect arise from opening the jugular vein. The rapid application of cold, suddenly alternated with heat, seemed to produce considerable effect; while the use of cold or heat alone gave rise to purely negative results. Of seven animals treated by galvanism, five died; nor were any more certain results obtained by puncture of the diaphragm. The Committee, therefore, could not speak of any of these means as being of unequivocal efficacy."

The practical deductions arrived at by the Committee were summed up in the following sentence:

"From these observations, the Committee were led to suggest that, in cases of apnœa, impediments to respiration should be removed by placing a cushion under the shoulders, drawing the tongue forward, and alternately raising and depressing the arms twelve or fourteen times in a minute. If no result be soon obtained, douches of warm and cold water should be used. The body at the same time must be kept warm, and friction should be employed. In drowning, the body should be placed higher than the head for a period of about thirty seconds, before the abovementioned means are tried."

These conclusions have, we consider, been very properly, in the main, adopted by the Royal Humane Society; and there is no doubt that we must consider them as the most authentic and trustworthy conclusions which science has yet enabled us to arrive at in this matter; the investigations of the Committee having shown that the method of Dr. Silvester is superior to the method of Dr. Marshall Hall as regards the amount of air inspired. Unless, as we have said, good cause be shown to the contrary, we consider that the profession is bound, in the meantime and in all reason, to accept as practically trustworthy the important results arrived at by the Committee of the Royal Medical and Chirurgical Society. To place, therefore, the two methods with all their details, in juxtaposition, seems to us to be only uselessly and dangerously confusing a subject which ought, above all others, to be most simple and comprehensible to every ordinary understanding.

THE WEEK.

It is generally understood that the prayer of the petition lately presented to the College of Surgeons by the British Medical Association has been rejected, not on account of its being wanting in merit, but because of the expense which would be entailed by carrying it into practice. In order that country Fellows of the College might record their votes by proxy, a supplemental charter would be needed; and such a charter would cost a certain sum of money, and such a sum of money the Council, it is supposed, would not like to pay. We can hardly, however, believe that the richest College in the country, with an income of £12,000 or £13,000 *per annum*, would condescend to the plea of poverty in such a case as this. We must still believe that the College will, sooner or later, listen to the just desires and demands of that large and important body of the Fellows who live outside the metropolitan district.

Our readers will observe that the answer from the Royal College of Surgeons to the petition of the British Medical Association, addressed to the Secretary of the Association, is dated from the College on November 24th. Nevertheless, the information contained in the answer appeared in the *Lancet* and *Medical Times and Gazette* of the 21st instant. We can, of course, only congratulate our cotemporaries on their "early information." But we must beg to call the attention of the Council of the College to the very serious fact, either that their proceedings must have been surreptitiously obtained by some underling of the College and by him communicated to the journals; or that one of their own body has not considered it beneath his dignity to divulge facts which he has, tacitly if not overtly, pledged himself to conceal. The matter is of no consequence to ourselves. We shall certainly neither attempt to bribe sub-officials, nor to earwig Councillors, for the purpose of getting "early news." The College, however, owes it to itself to act consistently in this matter. Either let it openly admit the publication of all its proceedings; or, if it refuse to do so, then let the body, for its own credit, consistently carry out its present system. It surely cannot be right or seemly that the reply of the Council of the College of Surgeons should have been thus communicated to the journals referred to, nearly a week before the official reply of the Council is forwarded to the Secretary of the Association.

Some of the friends of Mr. Peter Martin, in the South-Eastern Branch, have been suggesting the propriety of recording their respect for his memory in some permanent form. We approve heartily of the proposal that something should be done to perpetuate the remembrance of the late excellent secretary of the above-named Branch; and trust that, whatever be the form of memorial ultimately decided on, the members will respond unanimously to the call which may be made on them.

The Queen has nominated, as members of the Medical Council, E. A. Parkes, M.D., of Netley, Richard Quain, M.D., of London, and H. W. Rumsey, Esq., of Cheltenham, in the room of Sir C. Hastings, W. Lawrence, Esq., and T. P. Teale, Esq., of Leeds. The Queen has also nominated Dr. Christison and Dr. W. Stokes to the Council for Scotland and Ireland respectively. Dr. Embleton has been re-elected into the Medical Council by the University of Durham; Dr. C. H. Leet by the Apothecaries' Hall of Ireland; and Dr. Storrar by the University of London.

In the case of Mr. Sergeant, a surgeon of Plaistow, whose name had been removed from the *Register* by the Medical Council, he not having answered their letter of inquiry according to the provisions of the Act, the letter having miscarried through a change of address, the Court of Queen's Bench has granted a rule *nisi* calling upon the Council to shew cause why his name should not be restored to the *Register*.

Mr. La' Mert objects to having his name removed from the *Medical Register*. He has, therefore, applied to the Court of Queen's Bench for a *mandamus* to the Medical Council to compel them to restore his name. His name had been erased from the *Register* on the ground that he had been guilty of "infamous conduct in a professional respect": 1. In publishing an indecent and unprofessional treatise, entitled *Self-Preservation*, etc.; 2. In having stated

that his son, "a Licentiate of the Royal College of Physicians", had been jointly concerned in the authorship of the work. The Lord Chief Justice, however, refused the rule; and therefore Mr. La' Mert's name will not figure again in the *Medical Register*.

Both in America and in France, at the present moment, discussions are going on relative to the propriety of raising the tariff of their fees by medical men. Expenses have increased, and are increasing enormously, is the argument: why then should not the fee—the income—be made to keep pace with the expenditure? We in our wisdom in England, just as our expenses increase, in a like proportion extend the area of our gratuitous medical services!

The question of spontaneous generation is still kept well alive in the Academy of Sciences. The late observations of MM. Guiche, Joly, and Musset, M. Pasteur informs us, "afford only another example, to be added to so many others, in the list of scientific errors, where we see men who pretend to reproduce and criticise the experiments of an author, and yet are not even able to comprehend his method of investigation, and who, whilst they are thinking to refute, actually confirm his experiments."

The groans of the wounded after the battle of Solferino and of other battles of the last Italian campaign, were heard of with deep sorrow at Geneva as well as elsewhere. So deeply were the Genevese impressed with the miseries attending the wounded, that they resolved to form a society for the purpose of administering relief on future occasions of the kind, on a scale equal to the demand. This society has held a meeting at Geneva to which delegates were invited from all the leading governments of Europe. The invitations were warmly accepted; and England was represented by Inspector-General Rutherford who was officially sent there; Austria sent Dr. Unger; France, MM. de Pieval and Bondier; Prussia, Drs. Lœffler and Housselle; and so on. A series of resolutions were passed to the effect, that committees should be formed in all countries to provide for the health of the army; and that such committees should be in relation with their respective governments; that in time of peace the committees should organise a system under which they would be ready to act in case of war; that during war, the belligerent nations should furnish contingents of volunteer assistants; that the expenses of these assistants should be paid solely by their respective committees; and that they should wear a red cross on a white coat as the badge of their service, etc.

The meeting of the German Society of Naturalists and Physicians, which has been held at Stettin this year, is to come off next year at Giessen, at the instance of Virchow. Some tragic occurrences threw a shade over the otherwise most successful meeting. At one of the dinners, a surgeon became excited, and during the confusion rushed out of the room, returned to his lodgings, tore up some papers, and then drowned himself. Another member, in landing from a steamboat, after a pleasure excursion, fell off the plank and was drowned. Again, news came that Bärensprung of the Berlin Charité, who was expected at Stettin, had become lunatic while travelling, and had been consigned to an asylum. Whilst this meeting was going on at Stettin, Hungarian doctors and physicians were holding a similar assemblage at Pesth, and toasted each other by telegraph. At Pesth, however, the hospitality of the inhabitants was "as cold as may be," whilst at Stettin it was universal and glowing.

On the 16th instant, the Faculty of Medicine of Paris commenced operations for the season under the presidency of M. Rayer. The pupils present were few; but the professors were all at their posts. Contrary to expectation, the opening ceremony passed off in a "profound calm". M. Tardieu pronounced the address, taking for his text "Political Medicine," and introducing therein an *éloge* of Professor Adelon. After the address, were declared the names of the prizemen. The Monthyon prize was adjudged to M. Ollivier for his paper on Cerebral Rheumatism; the first Barbier prize of 1200 *francs* to M. Preterre for his palatine and maxillary apparatus; and the second to M. Dolbeau for a paper on Perineal Lithotrity. It was also announced that Baron de Vienny had bequeathed to the Faculty an annual sum of 1000 *francs* to be given to a student "distinguished and without fortune." This year the sum was divided between two equally meritorious students who occupied the required position as claimants.

Virchow's name again occupies a prominent place in the debates now going on in the Prussian Chamber of Deputies. "He spoke in his usual sarcastic and telling style, denounced the system of warnings and the stupid and ignorant annoyance to which the Prussian press has been subjected for nearly half a year at the hands of the local authorities."

M. Rotereau tells the Academy of Sciences that he has been travelling in Italy, and has discovered a mineral spring at Borrino which possesses the property of curing pellagra. The municipality of that town are ready to take under their charge all patients afflicted with that disease, and provide for and cure them at the rate of two *francs* per day.

Dr. Barbinet read a paper, which was listened to with marked attention by the academicians, on the subject of "An Epidemic Jaundice of Pregnant Women, and its Influence as a Cause of Abortion and Death."

THE LATE HENRY ANCELL, ESQ.

The subject of this memoir was born at Croydon, on January 23rd, 1802. He was the son of William Ancell, Esq., of the same place, who in early life carried on the business of a cotton-mill at Carshalton established by his father. The last named gentleman—the grandfather of Mr. Henry Ancell—and the grandfather of the present Sir Robert Peel, were at one time fellow-managers in the same mill at Manchester. Mr. Peel was promoted to a partnership; whereon Mr. Ancell, considering himself injured, left his employment, and established himself as Carshalton.

Henry Ancell received his education at a school in Croydon. At the age of 16, he was apprenticed to Dr. Wilson of Yoxford in Suffolk. He remained there four years, obtaining the instruction derivable from a very extensive country practice. After this, he passed a winter in attendance on medical classes in Edinburgh.

It was not until several years subsequently that Mr. Ancell obtained his qualifications and settled in England as a practitioner. In 1823, he left this country for the United States, where he remained two years. He travelled on foot over the greatest part of the Northern and Southern States, practising medicine at the different places at which he stopped. While in America, he was seized with a violent attack of intermittent fever, through which he nearly lost his life. He recovered, however; but always experienced a return of his malady when in malarious localities. He was much pressed to settle in practice at Cincinnati; and returned to England with the intention of arranging his affairs prior to his final departure. His friends, however, persuaded him to remain in his native country (1825); and he entered into partnership with his brother, William Ancell, as a chemist and druggist. During the period of his partnership, he attended lectures at St. George's and St. Thomas's Hospitals, and also spent some months in attendance on the hospital practice in Paris.

Having completed his curriculum of medical studies, he obtained the license of the Apothecaries' Company in 1828, and the diploma of the Royal College of Surgeons in 1831; and soon afterwards commenced practice as a general practitioner at 39, Albion Street, Hyde Park, in which neighbourhood he resided up to the time of his death. In 1836, he was appointed Surgeon to the Western General Dispensary; and about the same time became lecturer on Materia Medica and Therapeutics and on Medical Jurisprudence at the School of Medicine adjoining St. George's Hospital. These appointments he held until 1848, when he was compelled to give them up, in consequence of his health having become affected by the pressure of his increasing professional duties.

When St. Mary's Hospital was projected in 1849, Mr. Ancell was among the most zealous and disinterested promoters of the institution, for the prosperity of which he worked laboriously during a long period. When the medical school attached to the hospital was established, he held for some time the post of lecturer on Medical Jurisprudence.

Notwithstanding that Mr. Ancell's time was largely occupied with his duties as a general practitioner, he found opportunities of making several valuable contributions to medical literature; and these contributions contain in themselves evidence of being the results of considerable preparation by reading and reflection. In the sessions of 1839 and 1840, he delivered at the School of Medicine adjoining St. George's Hospital a course of lectures on the Physiology and Pathology of the Blood, which he afterwards published in the *Lancet*. In 1844, he was the author of a series of Commentaries on the Doctrines of Liebig, in which he elaborately examined and criticised the views of the celebrated German chemist, then attracting much notice in the scientific world. In 1852, he published a volume of 800 pages on *Tuberculosis, the Constitutional Origin of Consumption and Scrofula*. In it, the author treated of the following subjects: The Peculiarities of the Scrofulous Constitution; the Signs and Symptoms of Tuberculosis; the Chemical, Physical, and Microscopical Characters of Tubercle and Tubercular Deposits; the Special Pathological Anatomy of Tuberculosis, with an Account of the Deposit of Tubercle in the various Tissues and Organs; the Causes; the Theories which have prevailed in different Ages of the World on the Essential Nature of the Disease; the Theories of the Present Day; the Reciprocal Influence of Tuberculosis and other Blood-Diseases; the Forms and Varieties of its Local Development; the Diagnosis, Prognosis, Prevention, and Treatment: with Statistical Tables of the Prevalence of the Disease in this and other Countries, and of its Relative Frequency according to Sex, Age, Occupation, Locality, Season, and Climate. We have given at length the list of the subjects contained in the book, as one proof of the laborious industry of its author. Soon after its appearance, the book was spoken of in this Journal (and the medical press in general was unanimous in expressing similar opinions of its merits) as "a luminous encyclopædia of the subject"—as "exhibiting the marks of profound historical research; and as containing, in a well digested form, the opinions of nearly every accessible author who has written on consumption and scrofula, from Hippocrates downwards." These opinions, to which Mr. Ancell made additions from his own observations and researches, he skilfully arranged and fairly examined; and, out of the heterogeneous mass which he had collected, he formed a treatise having for its object the demonstration of the dependence of tubercle and scrofula, in all their manifestations, on a morbid condition of the blood. In 1853 and 1854, he also contributed to this Journal several papers on Facts and Opinions relating to Tuberculosis. Among the latest of his literary labours are several of the articles in the new edition of *Cooper's Surgical Dictionary*. In it, we learn from the preface that the articles on Blood and on Tuberculosis were assigned to him; and in the first volume, which is the only one that has as yet appeared, the following articles were written by him: Anæmia; Blood, Acidity of; Blood, Anhydrous; Blood, Coagulation of during Life; Blood, Crystallisation of; Blood, Pathology of; Blood, Pigment-granules in; Blood, Superalkaline; Chlorosis; Cholæmia; Glucohæmia; Hæmitis; Hæmorrhagic Diathesis; Heterochymeusis; Hydræmia; Hyperæmia; Hyperinosis; and Hypinosis. At the time of his death, he was engaged

in a work on Poisons of the Blood. This, we learn, is nearly completed; and it is to be hoped that its appearance will not be interfered with materially by his death.

The professional duties and literary and scientific labours of Mr. Ancell would have been, it might be thought, sufficient to occupy all the time which he could give to hard work. But it was not so. For many years, Mr. Ancell was one of the most zealous workers in the difficult field of medical politics. About 1844, he became honorary secretary to the "National Association of General Practitioners"; and this appointment he continued to hold until the "National Association" merged into the "National Institute." As a member of the committee of the latter society, he still took an active part in medical politics for several years.

Mr. Ancell joined the Provincial Medical and Surgical Association in 1853, and was one of the earliest members of the Metropolitan Counties Branch, which was founded in the commencement of that year. For some time he was one of the most regular attendants at the meetings of the Branch, and participated in its debates; and was naturally, in consequence of the attention he was known to have given to medical politics, made a member of the Committee appointed by the Branch to watch the progress of medical reform in Parliament. The reports of the observations made by him on various occasions show him to have always advocated the direct representation of the whole profession in the Medical Council.

Mr. Ancell had one son, who entered the army during the Crimean war, and became assistant-surgeon to the 11th Hussars. While enjoying every promise of a prosperous future in his profession, he died in 1855 at Kadikoi.

Mr. Ancell's last illness dates from January 1862. At this date he had a severe attack of influenza, followed by a cough which remained up to the following summer. In the autumn, he had severe asthmatic attacks, and was compelled in October to leave London and pass the winter at Brighton. He derived, however, no benefit from the change. The cough and attacks of asthma increased; and in March 1863 he went to Tours. The warmer climate almost cured his cough; but the malarious air and change of diet brought on an attack of fever, which obliged him to return at the end of May to his house in Norfolk Crescent, Hyde Park. He became gradually a little better, although suffering much from pain in the abdomen, feet, and legs. The months of August and September were spent by him in Leicestershire; during this time he had not much cough, and appeared decidedly better. At the end of September, the coldness of the weather determined him to go to Lyme Regis for the purpose of spending the winter there. While there, on October 11th, he was seized with violent pain in his abdomen, and was with great difficulty brought back to Norfolk Crescent. He gradually sank, being never free from pain, and died on the morning of Nov. 19. After death, it was found that a large abscess existed behind the colon. It was full of putrid matter, but had not opened into the intestine; indeed, it was not until after death that the cause was discovered.

Thus died Henry Ancell, not indeed having reached in number of years the ordinary threescore and ten of man, but yet probably having lived more than that time in his acts. What has been already said of him in the foregoing observations, will have shown his untiring industry—an industry which did not forsake him even in illness, for he may be said to have "died in harness." In his more public relations—as a medical reformer and a member of this Association—in which capacities he has been known to many of our readers, he was distinguished for his unvarying adherence to his principles, and for his singleness of mind. In all his actions, indeed, it is difficult to say whether unselfish honesty, or persevering industry, was the leading feature—so thoroughly were both manifested. Though scarcely another man would have done greater honour to the "higher ranks" of the profession, Mr. Ancell to the last remained the simple general practitioner—the "M.R.C.S. and L.S.A." And not only will the general practitioners of the kingdom, but all who knew Mr. Ancell whether personally or by his deeds, long regard with respect the memory of so worthy a member of the medical profession.

FUNERAL OF PETER MARTIN, ESQ.

The funeral of the late Mr. Peter Martin took place at Reigate on the 20th inst., when every outward sign of respect that could be paid to his memory on the occasion was observed. Several of the magistrates of the county were present; the members of the different professions and societies with which the deceased had long been connected were largely represented; for the inhabitants of the town, it is scarcely too much to say that every one attended the funeral. It must be unusual in the history of any town for an event to take place which could call forth so wide and deep an expression of feeling. Among the numerous company who attended the funeral, were thirty medical men, many being members of the Association, who came from London, Brighton, Guildford, Rochester, etc. Six of these were relatives of the deceased; viz., his father, Mr. Martin; his brother, Mr. William Martin; Dr. Robert Martin; Dr. Martin Holman; Mr. Henry Holman; Dr. C. Holman. There were also present Mr. Street; Mr. Hallowes; Dr. Gordon (Dorking); Dr. Ward (Epsom); Dr. John Brown (Rochester); Dr. Ray (Dulwich); Dr. Armstrong (Gravesend); Mr. Smith (St. Mary's Cray); Mr. Soper (Stockwell); Mr. C. L. Allwork (Maidstone); Mr. C. Chaldecott (Dorking); Mr. Thompson (Westerham); Mr. J. Propert; Mr. G. Stillwell; Mr. J. Bush (Clapham); Mr. Henry Harris; Mr. A. Napper (Crawley); Mr. John Steele; Mr. Andrew Sisson; Dr. Milsom; Mr. Hodgson (Brighton); etc. Demonstrations are not uncommon, but they arise most frequently from some accidental circumstances of which the one man professedly noticed is but a part. In the present case there was nothing of the kind. Mr. Martin was not in the usual sense of the word a *popular* man; even more than that, he would not have violated his sense of duty for any amount of mere popularity. But he was very widely esteemed, and that esteem had been won by a steady unobtrusive devotion to duty. To him life was not only a stern reality, but an active unceasing practical lesson, which he studied and carried out with a rare sincerity. For these reasons was he so deeply respected. Thus the manner in which the funeral was observed must be a source of deep gratification not only to the immediate friends of the deceased, but also to every man who feels an interest in the working out of great principles. In a certain sense men are influenced by what they admire. That a well spent life should have given rise to so general an expression of

feeling as that of Friday last goes far to prove that the terrible loss which has fallen upon us may have a practical and beneficial result. It is a privilege, although a painful one, to have been able to sustain such a loss; to appreciate it *properly* would be an indication that many would be anxious to imitate that life which has made so strong a charm on their attention. Is any practical and immediate result to follow so undoubted an expression of widely spread feeling? Mr. Martin was, to use a common expression, cut off in mid career. It is not for any one to say how much he might have done had he lived to the length of years prescribed by the psalmist, but there is just reason to believe he would have done much. When the County Hospital, now in progress at Guildford, was first projected, Mr. Martin pointed out that some name, not including the whole county, should be used. Guildford being near one of the extremities of the county, and that not the most populous one, must prevent that enlarged use of the hospital which would accrue if it had a more central position. The name it retained, but the facts will remain the same. The hospital will not be much used by those who live in this part of the county. Could not a hospital for his own native town which he loved so much, be built as a memorial to Mr. Martin. No imprudent scheme need be entered into, but such a memorial would be, as it were, carrying on the work to which a great part of Mr. Martin's useful life was devoted. (Abridged from *Surrey Standard.*)

Association Intelligence.

ROYAL COLLEGE OF SURGEONS: ELECTION OF MEMBERS OF COUNCIL.

The following reply has been received in answer to the Memorial lately presented by the President and Members of the British Medical Association, and published at 510 of the Journal for November 7.

Royal College of Surgeons of England, London, W.C.
24th day of Nov. 1863.

Sir,—I have laid before the Council of this College your letter of the 23rd ultimo, addressed to the President of the College; together with its enclosure, a Memorial from the President and Members of the British Medical Association, requesting the Council of this College to take into consideration the propriety of altering its Bye Laws, in regard to the election of Members of Council; or, if necessary, of obtaining the legal power of doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of Members of Council.

And I am desired, in reply to your communication, to transmit to you the enclosed copy of the Fifteenth Section of the Charter of the 7th of Victoria; from which it will be perceived that the voting at elections of Members of the Council by the Fellows in person is not regulated by Bye Laws, but is a provision of the Charter by which the Fellowship of this College was instituted.

I am also directed to inform you that, although every consideration has been given to the wishes of so large a number of the profession as the Members of the Provincial Medical Association, it is not thought expedient, by applying for a new or supplementary Charter, to endeavour to effect the object to which their Memorial relates.

I am, sir, your obedient servant,
Edm. Belfour, *Secretary.*

T. Watkin Williams, Esq.,
Gen. Sec. to the British Medical Association, etc.

[copy.]

Section 15, Charter 7th Victoria.

"That the Members of the Council of the College shall hereafter be elected by the Fellows of the said College, including the Members of the Council as such; and such Fellows, whether Members of the Council or not, shall be allowed to vote in person only, and not by proxy: and that any number of Fellows (not being less than fifteen present) at a meeting convened for the purpose of electing a Member or Members of Council, shall be competent to proceed to such election."

Edm. Belfour, *Sec.*

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
West Somerset. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20, 1864.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 10th, 1863.

R. Partridge, Esq., F.R.S., President, in the Chair.

THE TREATMENT OF FROSTBITE BY FRICTION WITH SNOW, FOLLOWED BY INCISIONS. BY A. ROWAND, M.D., QUEBEC.

The method adopted by the author was as follows. After reaction had been induced by careful friction with snow, incisions were made into the diseased structure. This treatment was adopted by the author in two cases, the details of which he gave. Incisions were useful, not only in preventing inflammation and mortification caused by too great reaction, but by setting the blood in motion also, when it has been stopped by the action of the cold, and should be employed consequently at an early period.

CANCEROUS INFILTRATION OF THE ENTIRE PENIS: SECONDARY DEPOSITS. BY HOLMES COOTE, ESQ.

A man was admitted into St. Bartholomew's Hospital, under the care of Mr. Coote, with cancerous infiltration of the entire penis. It was found that he could not inhale chloroform without showing alarming symptoms of collapse. In the course of a month he died. On examination afterwards it was found that the whole penis was occupied by soft cancerous deposit; that there was a cancerous ulcer of the bladder; and cancerous deposits in the lungs and bronchial glands, and several of the bones. The head was not examined. The heart was in a state of extreme fatty degeneration.

MUCOUS CYST ON THE LARYNGEAL ASPECT OF THE EPIGLOTTIS, SEEN BY THE LARYNGOSCOPE, AND SUCCESSFULLY TREATED BY INCISION. BY ARTHUR E. DURHAM, ESQ.

The patient, a very intelligent lad, aged 11, was admitted into Guy's Hospital, under the care of Dr. Wilks, on June 10th, 1863. He had for three years suffered from gradually increasing impairment of voice, and difficulty of breathing and swallowing. On admission, all his symptoms were very severe; he complained of pain, increased by pressure, about the larynx; he did not breathe freely; his voice was reduced to a low whisper; solids seemed to stick in his throat, and he could only swallow liquids with difficulty. During the night of the 14th he was seized, as he had previously been on several occasions, while asleep, with a very severe attack of dyspnœa. Tracheotomy was upon the point of being performed, but was delayed by the desire of Dr. Wilks, and on the following morning, Mr. Durham was requested to make a laryngoscopic examination. On doing so, the

epiglottis could not be distinguished in its normal form, but instead there appeared a large, round, tense tumour, projecting backwards and downwards, and completely covering in and concealing the glottis. On each side and rather behind this, portions of the aryteno-epiglottidean folds could be seen, swollen and apparently œdematous. The tumour could be just reached by the finger. Feeling certain that it contained fluid, Mr. Durham, with the concurrence of Dr. Wilks, at once proceeded to make an incision into it by means of a long, curved, sharp-pointed bistoury, partially surrounded with sticking plaster. The incision was followed by a sudden gush of thick glairy mucus, mixed with a little pus and blood, which, on subsequent examination, proved to be precisely similar to the contents of a ranula beginning to suppurate. All the patient's symptoms were at once relieved, and in the evening he was singing in his bed. In the course of a few days he was perfectly well. Examinations were made from time to time, and it was interesting to watch the gradual subsidence of the œdema, and the return of the parts to their normal condition. The patient was last examined nearly four months after the operation; he was in every respect well. There was no appearance of the cyst (for such was evidently the nature of the tumour), but the cicatrix of the incision could be just distinguished on the lower part of the laryngeal aspect of the epiglottis.

LIVERPOOL MEDICAL INSTITUTION.

October 29th, 1863.

A. Stookes, M.D., Vice-President, in the Chair.

Mr. Steele said that in the report of a former meeting in the British Medical Journal, his name was mentioned in connection with that of Mr. Martin the druggist, in such a way as to lead to the inference that he had given Mr. Martin a certificate. He wished to repeat what he stated at the meeting alluded to, that he distinctly refused to give a certificate of any kind whatever.

Preservation of Vaccine Matter in Capillary Tubes. Mr. Bailey shewed an old pamphlet issued by the National Vaccine Institution, containing a list of officers and vaccinators, and directions for vaccinating. Among the modes indicated for preserving the lymph was that by capillary tubes, which is generally supposed to be a recent contrivance.

Mr. Steele said that the method had been in use for many years; Dr. Husband of Edinburgh was not the inventor, but had made great improvements in the method.

Dislocation of the Hip into the Obturator Foramen. Mr. Hakes said he had just had a case of this accident at the Northern Hospital. The patient had also met with a fracture of the thigh of the other leg. As the house-surgeon was attempting to reduce the dislocation, soon after the patient's admission, the head of the femur slipped into the ischiatic notch; and, as the administration of chloroform gave rise to symptoms that created alarm, nothing further was then done. The same afternoon, chloroform was again given; and Mr. Hakes in manipulating moved the head of the bone, but it slipped once more into the foramen ovale; it was then easily drawn into the acetabulum. At the Infirmary lately, a similar case occurred where the dislocation into the foramen ovale was converted into one on the ischiatic notch. These cases do not seem to be very infrequent.

Disease of the Nails. Mr. Harrison mentioned a case under his care in which, about two years ago, the nail of the left forefinger desquamated, and since then the same thing has happened to all the finger-nails but one. They are replaced by a kind of abortive nail; there was no ulceration at the roots of the nails, but a little roughness of the skin about them. The patient has no psoriasis, but a spot of lupus on the face.

PATHOLOGICAL DEPARTMENT.

Cerebriform Cancer. Dr. Rawdon showed a large tumour of this character, removed by Mr. Bickersteth from the nates. It weighed two pounds ten ounces, was of thirteen years' standing, and commenced as a hard nodule under the skin. It consisted entirely of a greyish white matter very like brain-substance. Its removal was accompanied by a good deal of bleeding.

Osteo-Sarcoma. Dr. Rawdon shewed a specimen of this disease involving the tibia and fibula. Eleven months ago there was a hard lump under the skin from which there has been a discharge ever since, sometimes of blood. The disease appeared to have commenced in the medullary structure of the bones.

Recurrent Fibrous Tumour. Dr. Rawdon shewed a specimen which had occupied the sole of the foot, and had been removed by Chopart's operation. The patient, a woman aged 56, first had a small tumour near the ball of the great toe, which was removed, but returned in six months' time. The present tumour was not attached to the bones, but was connected with them by firm fibrous tissue.

Skin-Diseases. Dr. Balman shewed under the microscope two specimens of skin-disease, viz., one of pityriasis versicolor, and one of herpes tonsurans. With regard to the former of these diseases, Dr. Balman made some remarks on its parasitic nature, and also as to its being contagious. In this case the patient, a servant, slept with her fellow, and the latter was not attacked. He had treated the disease locally with an application of Mr. Startin's, consisting of bichloride of mercury, creasote, and nitric acid; and had given arsenic internally.

Dr. Shearer, in his own person, had found nothing so effectual as a solution of borax in alcohol and acetic acid. This sweeps away the disease, but unfortunately it soon returns again. The disease is not a source of any great discomfort.

Dr. Stookes was in the habit of using a solution of hyposulphite of soda in the proportion of half an ounce to ten ounces of water.

Hydrophobia. Dr. Turnbull related a case of this disease, recently under his care at the Royal Infirmary. A young man, aged 19, was admitted on the morning of October 19th. Dr. Turnbull saw him at 1 P.M., and there was then something very unusual in his appearance; he was sitting forward in bed, breathing with difficulty, and was in a very nervous state; the heart's action was excited, pulse 140. Three days before, he had noticed a difficulty in swallowing fluids. He was now asked to swallow a little water, and he swallowed part, but spat out the greater part, shook very much, and his dyspnœa became worse. He spat up a quantity of frothy mucus. In reply to a question, he said he had never been bitten by a dog. Dr. Turnbull ordered for him an antispasmodic mixture, and desired chloroform to be administered if necessary. Before leaving the hospital he saw him again, and found him easier and more composed. He learns that soon after the man became much excited, swore very much, attempted to bite, and spat up much saliva. Mr. Nash, the house-surgeon, applied ice to the head, and gave chloroform; great congestion of the head came on, and Mr. Nash took some blood from the temporal artery. At 4 o'clock P.M. he became quieter, and he died at 5 P.M. At the *post mortem* examination nothing remarkable was found. In a report that had appeared in the public prints, it was stated that the man had been bitten seven years ago. He could not suppose that the poison could remain latent for so long a period as that; and Mr. Nash had ascertained that within the last two months the man had been bitten by a dog in the mouth. It has been said that this disease does not show itself until about

forty days after the infliction of the bite, and the period may vary from that term to several months and years. After symptoms have appeared, death usually occurs in from two to five days. No treatment seems of any avail.

In reply to a question from Dr Waters,

Mr. Nash said the chloroform seemed to interfere with respiration, and to produce very great congestion of the head. It was given for about forty minutes, but the patient was never fully under its influence. There was a slight mark near the lip, where the man was said to have been bitten two months ago.

Dr. Nottingham said that facts have been adduced to shew that rabies may arise spontaneously in dogs; but it is extremely difficult to be sure that a dog has been kept isolated from others. He remembered giving a fox to a friend of his who kept it chained up, but on two occasions its leather collar was found to be bitten through, probably by some visitor of its own species. In one case of hydrophobia he had tried prussic acid very largely. Veterinary surgeons and students do not seem to care much about being bitten; if they are bitten, they generally rub the part well with nitrate of silver.

Dr. Waters said that he had once the opportunity of watching some cases of rabies, of which some dogs of his own were the subjects. In one, the symptoms occurred in fourteen days after the dog had been bitten. In hydrophobia no treatment seemed of any avail, but he would be inclined to put the patient under the influence of chloroform for forty-eight hours.

Dr. Desmond said he had seen two cases of hydrophobia. One was that of a young man, who was said to have been trying to separate two dogs that were simply angry, not mad; in another case, a child died after being bitten by a lap-dog. It was an interesting question whether this disease could arise otherwise than from the bite of an animal affected with rabies.

Mr. Hakes said we must remember that there need not be a bite; there is only required an abraded surface and the presence of the poison. He had met with an interesting example of the simulation of this disease brought on through alarm. A late surgeon of Prescot was on two occasions bitten by dogs; on each occasion he was attacked with convulsions and other symptoms of hydrophobia, and in each case he recovered as soon as he was satisfied by his medical adviser that the symptoms arose from his alarm, and that there was no real danger.

Dr. Nottingham remembered a case of a lady who was suddenly reminded, by witnessing a similar accident, of a bite she had received several years before, and was immediately seized with the disease.

Dr. Imlach mentioned a similar case.

Tumours of the Thigh and Knee. Dr. Nottingham related several cases, pointing more particularly to the difficulty of diagnosis between fungoid and other forms of disease in these regions. In cases of diseased knee, where the affection is malignant, it may occur within the joint; but much more frequently it arises from the lower part of the thigh-bone, or the upper part of the tibia to near the joint. When it starts from the lower part of the thigh-bone, it is met with at the back part or sides, but not often at the fore part. After removal, the periosteum, in which the disease probably commenced, and the corresponding part of the surface of the bone, are found to be destroyed. The disease arises without any apparently satisfactory cause; but patients often refer to some slight accident which they regard as the source of the malady. The enlargement in such cases is rather a swelling, with a gradual slope of surface, than a tumour with abrupt elevation. The popliteal artery may beat in a part of the morbid growth, which may receive an impulse from the pulsation of the vessel. Patients thus affected are in most cases, like those affected with popliteal aneurism, young or middle-aged; so that, malignant disease of the lower and back part of the thigh-bone in its early stages having some features tending to remind one of aneurism, its diagnosis requires great care. Dr. Nottingham mentioned several cases in which he had amputated above the knee, generally with good results, as far as the immediate recovery from the operation was concerned. In cases of malignant disease of the lower extremity, or of the external organs of generation, the immediate cause of death is frequently found in the belly or chest, in the mesentery, liver, spleen, and lungs; but this does not seem to occur so commonly where malignant disease first appears about the head, face, and neck. In connection with prognosis and with the probable duration of life, with or without a surgical operation, the question of relative duration and of the modes of termination of malignant disease in the upper and lower regions of the body may be regarded as worthy of particular attention. Cases of tumour in the upper or anterior, or in the lower and posterior part of the thigh, may respectively simulate femoral or popliteal aneurism. The following two cases were given as illustrations.

A healthy looking man, a shoemaker, aged 45, had a tumour in the right groin and upper part of the thigh, somewhat larger than the human kidney, but resembling it in shape, having the hilus looking towards the umbilicus. At an early period of the history of this tumour (of six years' standing), a truss had been applied to it or near to it; which, as might be supposed, did harm rather than good. The tumour received an impulse from the beat of the vessel behind it, which became much more remarkable when the arterial action was excited or increased by unusual efforts of hard work. The tumour was removed by an incision five inches in length, made in the direction of its long axis, near to, and nearly parallel with Poupart's ligament. After the division of the skin and fascia, the tumour was carefully dissected from its cellular bed, and on section, was found to be mainly composed of fat. The patient made a favourable and complete recovery.

In the other case, more remarkable and more formidable, the patient was a bricklayer, 38 years of age, and a very healthy-looking man. The right thigh had acquired a size nearly double that of the left, by the development of a tumour distending the anterior and inner part of the limb; the disease had already existed about eighteen months. The surface of the thigh was pale, free from ulceration, and smooth, but the mass underneath felt somewhat undulated when examined through the skin. The tumour had a strong pulsation communicated to it by the femoral artery, which was evidently not very near to its surface, but lying at some depth within its mass. The disease had been regarded as aneurism, and ligature of the external iliac had been thought of; amputation of the limb had also been proposed, but to this proposal the patient refused to listen. The first incision for the removal of the tumour commenced nearly over the saphenous opening of the fascia lata, passed down the thigh over and nearly parallel with the femoral artery, to terminate at the inner condyle, and in the lower third of its course a second, but much shorter incision was carried from it to the outer condyle, so as to give to the whole a figure not unlike that of the letter Y inverted thus ⅄. In this way two triangular flaps were obtained, which, when freely turned aside, exposed the course of the sartorius; this muscle was then cut across in the middle of the thigh, and its two ends reflected in their respective directions. The most firm connection of the tumour was with the lower border of the linea aspera, and with the oblique line leading from this to the inner condyle; so that the further steps of the operation consisted in tying, above and below the tumour, the artery which was about to be divided, and then separating the tumour from its connections, with the isolated vessels within it. As there was no loss of skin, the wound was easily closed; and all went on well for the first three days, but on the fourth day symptoms of peritonitis and

of pyæmia came on, and the patient sank at the week end. Great care was taken immediately after the operation, to preserve the warmth of the limb; and this was never lost, although the femoral artery, below the origin of the profunda, had been entirely removed. The section of the tumour had an aspect very much resembling that of udder, of a pale yellow colour, firm in consistence, homogeneous, and not charged at any point with blood or other fluid deposit.

In the case of a woman aged 47, a very large tumour at the back of the thigh and knees covered the course of the popliteal artery; but when first observed, its duration, already long, its aspect, size, weight (about fifteen pounds), and pendulous state from dragging, put aside any idea of its being an aneurism; and of the coexistence of aneurism there was no reason to think. A case was mentioned in which a fatty tumour, long and pendulous, hung from a comparatively small base at the upper and inner third of the thigh; this was removed with success. Such tumours may be said to contrast well with malignant growths in the femoral region, which have generally a relatively broad base of attachment. Solid tumours are found on the anterior, interior, and posterior aspects of the thigh, but less frequently on the exterior of this part, where (as it were by way of compensation) chronic abscess and sero-sanguinolent fluid in large collections, outside the fascia, occurring after injury, and sometimes remaining long, are frequently met with, and if thickly covered, are not always easily diagnosed.

The altered state of the osseous system occasionally met with in persons suffering from malignant disease; the bony tissue softened and enfeebled on the one hand, or partially strengthened by hypertrophy on the other, were shortly noticed, and three cases of recent date mentioned, in which fracture had occurred to patients in whom the cancerous diathesis seemed to have previously existed in what might be called a latent state, and where the more or less rapid development of malignant disease had followed local injury of the femur in one case, of the tibia in another, and of the humerus in a third. In the case in which the femur was affected, the patient, a married lady, aged 38, met with a slight accident, by which her right thigh was broken when she was almost four months advanced in pregnancy. The fracture was thought to have united before her confinement, but the thigh was broken again, as it was supposed, at the same place, about three weeks after the birth of the child, which occurred at the full time, and without any untoward event immediately connected with the parturition. The thigh at the middle measured thirty-six inches in circumference, was of a pale colour, with hard and brawny feel, the disease reaching from the groin to the knee, but without ulceration on the surface. Many large blue-looking veins could be seen beneath the pale surface of the affected part; and about fourteen months after the commencement of the disease, one of these veins, without any previous apparent alteration, suddenly burst, when in less than five minutes the patient died from the very profuse hæmorrhage that occurred. It is worthy of mention that in this case the friends of the patient got the notion that the unfortunate progress of the case was altogether due to want of right management of the fracture which occurred during the pregnancy, and even talked of an action to be brought against the practitioner who attended at the time. In the other two cases also, questions had arisen as to whether the fractures had been properly treated. The medico-legal questions arising out of cases of this nature may affect individuals who were present at the time when the injury was received, or they may affect the practitioner who has treated the case; so that the great suffering of the patient and the fatal tendency of the malady, although the main, are by no means the only sources of claim on the careful attention of the surgeon.

Correspondence.

IRIDECTOMY.

Letter from William Bowman, Esq., F.R.S.

Sir,—"A Surgeon" in your Journal of last week asks me "to explain a difficulty which occurs to him in reference to the operation of iridectomy. The condition of the eye requiring the performance of iridectomy appears very common. Mr. Bowman tells us that he every week sees cases in which he has to lament the ignorance of the profession generally on this subject."* He understands that "iridectomy is now an operation of daily performance in the hands of some of our leading oculists. It appears, moreover, to be absolutely necessary for saving the eye. If such is the case, the patients in whom the operation is said to be required must be very numerous, and, I suppose, must at all times have been very numerous. If so," he asks, "how comes it that, before the days of iridectomy, complete glaucoma was comparatively a rare disease? We ought, as it seems to me, to have met with incurable glaucoma at every corner of the street, if iridectomy, as is now asserted, is the only means for arresting the progress of the disease which leads to incurable glaucoma." I reply with pleasure to this inquiry, as the difficulty may have occurred to others also, equally desirous of arriving at the truth.

To escape from the apparent dilemma, it is not necessary to suppose that glaucomatous disease was less frequent before 1857 than it is now; or that, being as frequent as at present, it then yielded to other treatment than iridectomy. It is only requisite to explain that our better acquaintance with the subject causes us to include at present under the term *glaucoma*, or *glaucomatous*, several forms of disease which formerly were never recognised as such. *All that are attended with augmented tension of the eyeball should now be embraced within that term, and as a class should be treated by iridectomy;* although a large proportion of them may and do run their course, even to blindness, without disorganising the eye to such a degree as to cause it to assume the full appearances to which alone the term "glaucoma" was formerly applied. In the cases of confirmed glaucoma ("complete glaucoma," and "incurable glaucoma," to use the "Surgeon's" phrase), in which these glaring appearances are found (viz., the large varicose ciliary veins, the fixed dilated pupil, the yellow or greenish glaucomatous cataract), I believe a considerable degree of inflammation has usually preceded the last disorganising change; and this inflammation is far from occurring in all cases of glaucomatous disease. Probably, however, the "Surgeon" exaggerates in his own mind the actual number of sufferers. They are certainly far too numerous, but, happily, are hardly to be met with "at every corner of the street".

I am, etc., W. Bowman.

5, Clifford Street, W., November 24th, 1863.

Letter from J. G. Hildige, Esq.

Sir,—As I see that the operation of iridectomy for the cure of glaucoma continues to be a subject of controversy in the principal medical journals, might I crave space in your columns for the following case, which, I think, shows the result of the two forms of treatment (*i. e.*, medical and surgical) principally recommended for the cure of glaucoma, in a more marked manner

* My expression was (*ante*, p. 484), "not a week passes, but I have to deplore the absence of this knowledge on the part of practitioners whose attention does not yet happen to have been called to the point."

than any other which has hitherto been published, so far as I am aware.

J. H——g, Esq., of Sligo, aged about 45, consulted me in the autumn of 1861. The history of his case is as follows. Some time previously, he had been attacked with chorio-iritis of the left eye, for which the usual *medical* treatment was employed without effect; and, after a period of about two years, he became perfectly blind of the eye. His right eye remained healthy for some eighteen months afterwards, when it also became affected, and for this he underwent a repetition of the same treatment employed to check the disease in the other. He had had medical advice in both London and Dublin, but had not hitherto had the good fortune to meet with any gentleman who practised iridectomy. At the time I saw him he was, according to his own statement, becoming gradually blind of his right eye also. On examination, I found his eyes in the following state. Left eye of normal size, hard to the touch, and of hyper-presbyopic build; conjunctiva of a yellowish tinge; ciliary vessels prominent and tortuous; anterior chamber reduced to a minimum, so that the cornea and iris were almost in apposition; iris much discoloured, its pupillary margin adherent in its whole extent to the capsule of the lens. The lens and its capsule were but slightly opaque; sufficiently so, however, to prevent ophthalmoscopic examination. Vision was in this eye so completely destroyed that he could not see the flame of a candle held within a few inches of his face. The right eye presented almost the same phenomena as the left, but in a minor degree, as he could still read No. 19 of Jäger's test-type when held close to his face. An interesting point with regard to his vision was the extreme astigmatism for objects placed vertically before him, showing the loss of symmetry about the axis of the eye. I performed iridectomy on this eye, in the presence of Mr. Colles, President of the Royal College of Surgeons of Ireland. His eye, when I last saw him, about eighteen months after the operation, was in the following state. The disease was completely arrested; the eye had recovered its normal tension; the conjunctiva had a healthy and almost natural colour; anterior chamber of good depth. There is a large iridectomy at the internal or nasal side of the iris, which has its apex at the ciliary ligament, and its base at the natural pupil. The lens is slightly opaque. His sight is now so much improved that he can correspond with his friends, myself among the number; can superintend his farming operations; and, by looking through a pin-hole or any small aperture, he can distinguish exceedingly remote and distant objects. I should mention that the improvement of vision commenced almost immediately after the operation.

I am, etc., J. G. Hildige, F.R.C.S.I.,
Surgeon to the National Eye and Ear Hospital.

Dublin, November 1863.

Milk from the London Cow. At the last meeting of the Association of the Medical Officers of Health, the necessity for increased accommodation for typhus patients was insisted upon: The subject of the unwholesomeness of diseased meat was fully discussed, and the highly objectionable character of the milk yielded by cows in the London cowsheds insisted on. The milk of stall-fed cows is poor, watery, innutritious, and in many cases, was said to be decidedly unwholesome, many instances of disease and ulceration of the alimentary canal of infants being traced to the diseased milk on which they are fed. So strongly has this evil impressed itself on the Vestry of St. James's, Westminster, that they have now determined not to license any cowshed in the parish. This proceeding has met with the most strernous opposition on the part of the cowkeepers, and will probably be brought before the Court of Queen's Bench.

Medical News.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on Nov. 17th:—

Barker, William Lewington, Hungerford
Bellamy, Edward, Balham
Dickson, John Thompson, Clapham Park
Douglas, Mordey, Sunderland
Fox, Francis, Kilburn
Franklin, Charles, Maida Hill
Geoghegan, Richard Taylor, Birkenhead
Grace, Alfred, Donnend, near Bristol
Haxworth, Walter, Barnsley, Yorkshire
Jameson, William Hugh, M.D, Caistor, Lincolnshire
Lebrun, Pierre Joseph Désiré, M.D., Brussels
Lewis, Alfred, M.D., Haverstock Hill
Lord, Richard, M.D., Crewe, Cheshire
Muir, Henry Skey, M.D., Gloucester Place, Regent's Park
Murray, Thomas, Trinidad
Mussen, Arthur, M.D., Lisburn, co. Antrim
Ralfe, Charles Henry, Cambridge
Rossellety, John Crampern, Watford, Herts
Sandell, Henry William Adrian, Wood Green
Waugh, Alexander, Corsley, Wiltshire
Wilkin, Henry Cox, Dublin
Zinzan, Robert Vaux, Hindon, Wilts

Admitted on November 18th:—

Atkinson, James, Hyde, near Manchester
Beverley, Michael, M.D., Seething, Norfolk
Burnard, Charles Frederick, Plymouth
Byrne, Patrick, Manchester
Elkington, George, Birmingham
Evershed, Montague Frederic, Billinghurst, Sussex
Gilbert, Henry, Birmingham
Greene, James Sherwin, St. George's, Shropshire
Grosvenor, George Fox, M.D., Alsager, Cheshire
Haigh, Sam, Leeds
Haliday, Saunders Barton, Dublin
Hamlyn, William T. B., Plymouth
Marriott, Henry Thomas, Colston Bassett, Notts.
Mudd, Frederic Charles, Chichester
Philipps, Alfred, Bridgwater
Ray, Edward Reynolds, Dulwich
Shears, Arthur, Isleworth
Sherwin, John, Upwell, Norfolk
Shaw, Charles Edward Martin, Crewkerne, Somerset
Smith, Solomon Charles, Halifax
Stall, William John, Manchester
Stamford, William Ackrill, Beverley, Yorkshire
Wall, George, Stourbridge, Worcestershire

APPOINTMENTS.

Althaus, Paul Julius, M.D., elected Fourth Physician to the Royal Infirmary for Consumption and Diseases of the Chest, City Road.

Betts, George H., M.D., appointed Medical Officer to the Holloway and North Islington Dispensary.

Brabazon, William P., M.D., elected House-Surgeon to the Southern Dispensary, Liverpool, in the room of H. B. Watters, L.R.C.P.Ed.

Brewer, Thomas, Esq., elected House-Surgeon to the Huddersfield Infirmary, in the room of W. Oxley, Esq.

*Cookworthy, Joseph C., M.D., appointed Consulting-Physician to the Plymouth Public Dispensary.

Corrigan, Dominic J., M.D., elected President of the King and Queen's College of Physicians in Ireland.

Duncan, James F., M.D., elected Vice-President of the King and Queen's College of Physicians in Ireland.

Hall, Marriott, Esq., appointed House-Surgeon to the Sheffield General Infirmary, in the room of H. J. Knight, Esq.

Harman, John, Esq., elected Resident Medical Officer to the Brixton, Streatham, and Herne Hill Dispensary, in the room of J. T. Merser, M.B.

Helsham, Hector, M.D., elected Medical Officer to the Brixton, Streatham, and Herne Hill Dispensary.

Kettle, Henry, Esq., appointed Resident Medical Officer to the Birmingham and Midland Hospital for Sick Children, in the room of A. W. R. Roberts, Esq.

Mason, Samuel, Esq., appointed House-Surgeon to the Teignmouth Infirmary, in the room of F. D. Harris, Esq.

Morton, Thomas, M.B., appointed Medical Officer to the Kilburn Dispensary, in the room of W. H. Cook, M.D.

Robertson, D. Argyll, M.D., appointed Surgeon to the Southern Eye Dispensary, Edinburgh.

Scattergood, Thomas, Esq., elected Surgeon to the Leeds Hospital for Women and Children, in the room of *G. Morley, Esq.

Smith, Aquilla, M.D., elected Vice-President of the King and Queen's College of Physicians in Ireland.

Wilde, Richard H., M.D., elected Surgeon to the St. John's Wood and Portland Town Provident Dispensary.

POOR-LAW MEDICAL SERVICE.

FORREST, John P., M.D., to the Kildorrery Dispensary District of the Mitchelstown Union, co. Cork.

HOLTTUM, Charles, Esq., to the Third or Canterbury District of the Bleau Union, Kent.

SPEER, Joseph, L.R.C.P.Edin., to District No. 1 of the parish of Liverpool.

SUTTON, William, Esq., to the Smethwick District of the King's Norton Union, Worcestershire.

TWIGG, William, M.D., to the Maguiresbridge Dispensary District of the Lisnaskea Union, co. Fermanagh.

WATTERS, Henry B., L.R.C.P.Edin., to the parish of Liverpool.

ARMY.

ASHTON, Staff-Assistant-Surgeon G., M.B., to be Assistant-Surgeon 102nd Foot.

BECHER, Staff-Assistant-Surgeon E., M.D., to be Assistant-Surgeon 104th Foot.

CARTER, Staff-Assistant-Surgeon N., to be Assist.-Surg. 109th Foot.

CHURCHILL, Staff-Assistant-Surgeon A. F., M.D., to be Assistant-Surgeon 109th Foot.

DUNSTAN, Staff-Assistant-Surg. J., to be Assist.-Surg. 107th Foot.

FANNIN, Staff-Assistant-Surg. J. E., to be Assist.-Surg. 103rd Foot.

FITZGERALD, Surgeon F. L., 2nd Foot, to be Staff-Surgeon, *vice* W. Stewart, M.D.

FLOOD, Staff-Assistant-Surgeon S., M.B., to be Assistant-Surgeon 106th Foot.

FOLLIOTT, Staff-Assistant-Surg. W., to be Assist.-Surg. 106th Foot.

FRASER, Surgeon-Major J. A., M.D., 18th Foot, to be Deputy Inspector-General of Hospitals, *vice* T. R. Jameson, M.D.

HALL, Staff-Assistant-Surgeon R., M.D., to be Assistant-Surgeon 103rd Foot.

HANNAH, Staff-Assistant-Surgeon J. B., M.D., to be Assistant-Surgeon 101st Foot.

JAMESON, Deputy Inspector-General T. R., M.D., to be Inspector-General of Hospitals, *vice* Williams.

LANGDON, Staff-Assistant-Surg. J., to be Assist.-Surg. 105th Foot.

MENZIES, Staff-Assistant-Surgeon R., to be Surgeon Royal Military Train, *vice* O'Connor D'Arcy, M.D.

MILBURN, Staff-Assist.-Surg. T. D., to be Assist.-Surg. 108th Foot.

MORGAN, Staff-Assist.Surg. T. C., to be Assistant-Surg. 105th Foot.

MULLINS, Staff-Surgeon J., to be Staff-Surgeon-Major, having completed twenty years' full-pay service.

MURRAY, Staff-Assistant Surgeon J. R., M.D., to be Assistant-Surgeon 107th Foot.

NOOTT, Staff-Assistant-Surgeon E. G., to be Surgeon 2nd Foot, *vice* F. L. Fitzgerald.

O'FARRELL, Staff-Assistant-Surgeon I. McDonogh, to be Assistant-Surgeon 108th Foot.

PILE, Staff Assistant-Surgeon W., M.B., to be Assistant-Surgeon 101st Foot.

SMALL, Staff-Surgeon J., to be Surgeon 13th Foot, *vice* W. G. Trousdell, M.D.

SMITH, Staff-Assistant-Surgeon T. P., M.B., to be Assistant-Surgeon 101th Foot.

STEWART, Staff-Surgeon W., M.D., to be Surgeon 18th Foot, *vice* J. A. Fraser, M.D.

TROUSDELL, Surgeon-Major W. G., M.D., 13th Foot, to be Staff-Surgeon-Major, *vice* J. Small.

TYRRELL, Staff-Assist.-Surg. W. J., to be Assist.-Surg. 102nd Foot.

WATSON, Staff-Assistant-Surgeon R., to be Assistant-Surgeon Royal Military Train.

WEBB, Staff-Surgeon V., to be Staff-Surgeon-Major, having completed twenty years' full-pay service.

To be Staff-Assistant-Surgeons:—

BERKELEY, Assistant-Surgeon R. W., from half-pay, late 23rd Foot, *vice* E. G. Nott.

DOILE, Staff-Assistant-Surgeon D. O., M.D., from half-pay, *vice* W. H. Jenkins, M.D.

GILGOUR, Assistant-Surgeon P., 79th Foot.

LAMB, Assistant-Surgeon H., 50th Foot, *vice* W. Ligertwood, M.D.

LEY, Assistant-Surgeon E. G., M.D., 21st Foot.

LONGHEED, Assistant-Surgeon J. F., Royal Artillery.

MACARTNEY, Assistant-Surgeon J., from half-pay, late 76th Foot.

MUSCHAMP, Assistant-Surgeon W. H., 82nd Foot, *vice* R. Menzies.

ROYAL NAVY.

CLARK, William H., Esq., Assistant-Surgeon, to the *Aurora*.

EYLES, Gabriel M., Esq., Assistant-Surgeon, to the *Euryalus*.

HADDOW, Henry, Esq., Assistant-Surgeon, to the *Conqueror*.

HURLEY, F. B., M.D., Assistant-Surgeon, to the *Warrior*.

MCCARTHY, Denis, Esq., Assistant-Surgeon, to the *Rifleman*.

ORD, Christopher K., M.D., Surgeon (additional), to the *Euryalus*, for service with the Marines.

ROBERTSON, Angus, Esq., Assistant-Surgeon, to the *Euryalus*.

SAUNDERS, Daniel, Esq., Surgeon, to the *Conqueror*.

BIRTH.

BROWN. On November 20th, at Rochester, the wife of *Frederick J. Brown, M.D., of a daughter.

DEATHS.

LANSDOWN. On November 23rd, at Bristol, Elizabeth B., wife of J. G. Lansdown, Esq., Surgeon.

NORRIS, J. H., M.D., at Trimdon House, Durham, aged 56, on November 23.

RIX. On November 19th, at Clapham, aged 24, Marianne Elizabeth, second daughter of the late Samuel S. Rix, Esq., Surgeon, of Tunbridge Wells.

RUSSELL, Richard C., Esq., Surgeon R.N., at Eckington, Derbyshire, aged 41, on November 22.

*WILSON, George, M.D., at Alnwick, aged 49, on November 12.

THE KENSINGTON LYING-IN HOSPITAL. The closure of this hospital is announced, through deficiency in its funds.

UNIVERSITY COLLEGE HOSPITAL. John Hibbert, Esq., has given a further donation of £100 to this Hospital.

ST. THOMAS'S HOSPITAL. The Metropolitan Board of Works have accepted the agreement of St. Thomas's for the Stangate site.

QUEEN'S COLLEGE, GALWAY. The Chair of Anatomy in the Queen's College, Galway, is vacant. The situation is worth, between salary and fees, close upon £500 a year.

CHAIR OF CHEMISTRY AT BERLIN. Professor Bunsen, of Heidelberg, has been appointed to the Professorship at Berlin, rendered vacant by the death of Mitscherlich. Professor Rose, we are told, declined the appointment.

THE LONDON FEVER HOSPITAL have determined to add sixty temporary beds to its present number to meet the requirements of the present fever season. It was to assist in this that Her Majesty forwarded a donation £50.

TESTIMONIAL TO DR. HENTY. A testimonial (consisting of a silver tea and coffee service) has been presented to Dr. Henty of Newington Butts, by his friends "for his successful services in obtaining for it a railway station, and otherwise improving the parish."

THE CASE OF DR. COURTNEY. The judges after very lengthened arguments have given judgment in the case of Dr. Courtney, who applied for a criminal information against Mr. Hunt for malicious prosecution. The judges considered that Mr. Hunt had only done his duty, and they therefore refused the rule applied for by Dr. Courtney.

ARTIFCIAL RESPIRATION. At a late meeting of the Metropolitan Association of the Medical Officers of Health, a report on Dr. Silvester's method was received; and the general opinion was expressed that, in all cases where artificial respiration is desirable, it is superior to any other plan that has been proposed.

EXAMINATION OF RECRUITS. The Provost-Marshal states that since the present rebellion began 200,000 soldiers, after entering on service, have been discharged on medical certificates of disability. It is probable that at least one half of them were unfit for service when received. (*Amer. Med. Times.*)

LORD LYNDHURST'S ACCOUCHEUR. It is stated that Dr. Joseph Warren, the distinguished leader in the Revolution who fell mortally wounded at the battle of Bunker Hill, was the accoucheur at the birth of Lord Lyndhurst, just deceased in England, and the venerable Josiah Quincy, of Boston, both of whom were born on the same day at Boston. (*Amer. Med. Times.*)

METEOROLOGICAL SOCIETY. At this Society, on November 18th, the President, Dr. R. D. Thomson, F.R.S., read the annual address. Dr. Thomson dwelt forcibly on the connection existing between certain states of the atmosphere and the occurrence of endemic diseases. During the prevalence of cholera the air has been found to contain an unusual amount of sulphurous acid, and, when passed through water, fungi are developed in that fluid. In the wards of cholera hospitals the air passed through water gives rise to vibriones and other lowest forms of animal life. Similar organisms are also developed when the air of the sewers is passed through water. These experiments prove that the germs of these animals exist in the atmosphere of close places, and show the intimate connection between the spread of dis-

ease and neglect of ventilation. The effect of the increased temperature during the summer and autumn months was demonstrated to be the cause of the diarrhœa so generally attributed to errors in diet and to the use of fruit.

Alleged Unlawful Possession of Dead Bodies. Charles Law, surgeon, of 24, Virginia Row, Bethnal Green, was some days ago admitted to bail on a charge of unlawfully disposing of the dead body of a female child by throwing it into an unfinished building in the King's Head Yard, Kingsland Road, Shoreditch; and also with having in his possession the dead body of another female child, with the intent of unlawfully disposing of it. He was to have appeared for further examination on Saturday (to-day); but on Wednesday the police officer who had the case in hand came to the court (Worship Street) with a medical certificate announcing that Law had died early that morning in a state of "raving madness".

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Dr. C. H. F. Routh, Lettsomian Lecture "On Midwifery and Diseases of Women."

Tuesday. Pathological Society, 8 P.M.—Photographical.—Ethnological.—Royal (Anniversary).

Wednesday. Obstetrical Society of London, 8 P.M. Papers by Mr. Marley, Dr. Earle, Dr. Braxton Hicks, Dr. Gervis, Dr. Barnes, and Mr. I. Baker Brown.—Society of Arts.—Geological.—Pharmaceutical, 8 P.M. Professor Bentley. "On a New Kind of Matico"; Mr. H. Deane, "On the Acetic Acids of the Three Pharmacopœias"; Mr. Tichborne, "Administration of Bismuth in a Soluble Form"; Mr. D. S. Kemp, "On Goa Powder"; Mr. T. B. Groves, "Note on the Recovery of Essential Oils from their Watery Solution"; Mr. Howard, "Note on the Root-Bark of Calisaya"; Mr. Hanbury, "Note on *Cassia moschata*."

Thursday. Harveian Society of London, 8 P.M. Clinical Discussion, "On Diphtheria."—Antiquarian.—Linnæan.—Chemical.

Friday. Western Medical and Surgical Society of London, 8 P.M. Dr. Gibb, "A General Discourse on Affections of the Throat, with the Practical Use of the Laryngoscope."—Archæological Institute.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—November 21, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys .. 999 / Girls .. 971	1970	1475
Average of corresponding weeks 1853-62		1861	1503

Barometer:
Highest (Sun.) 30.089; lowest (Sat.) 29.582; mean, 29.967.

Thermometer:
Highest in sun—extremes (Fri.) 81 degs.; (Sun.) 57.2 degs.
In shade—highest (Sat.) 56.2 degs.; lowest (Tu.) 39.4 degs.
Mean—48.6 degrees; difference from mean of 43 yrs.+6.3 deg.
Range—during week, 16.8 degrees; mean daily, 9.7 degrees.
Mean humidity of air (*saturation*=100), 86.
Mean direction of wind, S.W.—Rain in inches, 0.13.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Fellows of the Chemical Society are admitted to the privilege of attending the sittings of the Royal Society.

F. P.—A correspondent asks us for the meaning of the terms "developmental disorder".

A. T.—The criticism alluded to is founded, from first to last, on a series of misrepresentations. Of course, criticism of this kind, when called in question, can only be defended by a still further indulgence in misrepresentation; and, of course, it is so defended by critics of the class alluded to. You never can convict this sort of people, for they have always in their hand another card of the "old sort" to play out. The only way is to expose their fallacies to the public, and leave them to themselves; for nothing in the way of instruction or advice can make their nature other than it is.

Skilled Administration of Chloroform.—Sir: I quite concur in the observations made in the Journal of November 14th, on the importance of appointing an experienced person to administer chloroform in hospitals, and of not entrusting this duty to a house-surgeon or advanced student, who may prove incompetent or careless. But I demur, in some degree, to the remark, "that the operation of giving chloroform is too lightly considered by our surgical authorities." At one of the metropolitan hospitals, in which a fatal case of poisoning from chloroform recently occurred, I know that the medical officers have more than once strongly represented to the authorities the importance of appointing a skilled administrator—of course, with a salary; but, on both occasions, the committee declined to make any appointment. The lay authorities must, therefore, bear the responsibility of deaths from chloroform occurring in that hospital. I am, etc.,

November 14th, 1863. Chirurgus.

[Surely the surgeons in such a case could bring the hospital governors to their senses, by refusing to operate unless their proper demand was complied with. Feeling, as they do, the danger attending the administration of chloroform by incompetent persons, we think they are bound to insist on the appointment of a competent and responsible administrator. Editor.]

COMMUNICATIONS have been received from:—Dr. Frederick J. Brown; Dr. E. L. Ormerod; Mr. Brodhurst; Mr. J. Vose Solomon; Dr. D. A. Robertson; Mr. R. W. Dunn; Dr. James Russell; Dr. Armstrong; Mr. W. Bowman; The Honorary Secretaries of the Western Medical and Surgical Society of London; Dr. Cockle; Mr. J. Z. Laurence; Mr. T. Martin; Dr. Duckworth; Dr. Kelly; Mr. G. F. Hodgson; Mr. S. G. Freeman; Dr. Graily Hewitt; and Mr. T. M. Stone.

ADVERTISEMENTS.

Bass's East India Pale Ale.—This Season's Brewings of this Celebrated ALE are now arriving in casks of Eighteen Gallons and upwards. Our stock of Ale in bottles is in good condition. BARCLAY'S PORTER and STOUTS, in bottle and cask, may also be had of

BERRY BROS., & CO., 3, St. James' Street, London, S.W.
Also, DEVONSHIRE CIDER.

For Varicose Veins and Weakness. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and *inexpensive*, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.



ABDOMINAL SUPPORTING BELTS for both Sexes, those for Ladies' use, before and after accouchement, are admirably adapted for giving adequate support with EXTREME LIGHTNESS—a point little attended to in the comparatively clumsy contrivances and fabrics hitherto employed.

Instructions for measurement and prices on application, and the articles sent by post from the Manufacturers

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The Profession, Trade, and Hospitals supplied.

Original Communications.

THE PRESENT POSITION AND PROSPECTS OF EPIDEMIOLOGICAL SCIENCE:

BEING THE OPENING ADDRESS OF THE THIRTEENTH SESSION OF THE EPIDEMIOLOGICAL SOCIETY.

By Benjamin W. Richardson, M.A., M.D.

[*Delivered Nov. 2nd*, 1863.]

Mr. President and Gentlemen,—My first duty is to thank you for the distinguished honour you have done me, in inviting me to deliver the introductory address of this the thirteenth session of the Epidemiological Society. My second duty is to congratulate the Society on the continued success with which its great labours are conducted, and on the increasing interest with which those labours are observed and studied by the intelligent members of the general public both here and abroad; by governments not less than by peoples.

I have before me yet a third duty, more difficult and more important; I have to select a subject for my address this evening, that shall in some degree be worthy of the occasion; and that shall, in however poor a light, approach those addresses which on similar occasions, in previous years, have been delivered from this place.

If I have, even for a moment, hesitated in the selection of a subject, surely that hesitation has not arisen from any paucity of materials. A speaker who, without moving from the strict letter of his license, has the opportunity of treating on those diseases from which one-fourth of the death-stricken members of the community meet their end; diseases which, read according to our present knowledge, or perhaps I had better said, our present ignorance, appear as they list, so that we can scarcely say whence they came and whither they go; diseases which, avoiding, as if by some special law, the bowed head and grey locks of old age, seize on the youngest members of the world's family, and tear from our hearts the dearest of our ties—those for whom we would willingly die!—a speaker, I say, who has such subjects for his theme has certainly no lack of opportunity, no want of scope; he may be scientific to the profoundest of depths, pathetic to tears, eloquent to fury, learned to madness, and, in the end, have so much of substance left before him for disquisition, that it shall stand as a pedestal of granite over which his bare fingers have but feebly been drawn. No! it is the very richness of the matters in hand that renders the choice of selection so arduous and refined.

There is, however, a saying of the great Lord Bacon to this purpose: "*The past deserves that men should stand for a time upon it, to view around which is the best way; but when the discovery is well made they should stand no longer, but proceed with cheerfulness.*" This observation supplies me with a text for the present discourse. Instead of tracing out in historical detail the epidemics of the past year, instead of plunging deeply into statistics, which, in my judgment, have been carried in respect to epidemics to the extremity of their present application, I shall prefer simply to make an attempt to stand, for a brief half-hour, on the past of our knowledge; to sketch forth, as far as I am able, the realities that lie at our feet; and then to try to point out the road that seems most direct to the great end for which our Society was founded—by that gentle-hearted, earnest man, who, though removed from us, is not forgotten—the prevention, wholesale, of the pestilences of the earth.

Definition of Epidemic Diseases.

Ascending to our vantage ground, and looking at the prospect before us, dividing the known from the unknown, we discover, as a primary fact, that at last we have arrived at a definition almost absolute of each of the diseases of the epidemic class. We know, that is to say, all the forms which occupy our sphere of thought, as clearly as the astronomer knows the number of planets in his solar system. Such knowledge may be considered as exact; and the possession of it, the work of ages, commonplace as it has become, is by no means a contemptible progress.

And yet, with us, precisely as with the astronomer, our chart has one or two gaps in it that require to be filled, and one or two doubtful points that require to be cleared up. For instance, between scarlatina and measles there lies a disease which has yet not been perfectly defined, nor positively named. By some of the older writers, this disease has been called *roseola*. Dr. Ross has depicted it as a *spurious urticaria*. I have myself designated it as *idiopathic rosalia*. Regarding this variety of disease, we have yet to wait to be confirmed in many points; we require to know whether it be a specific disease, or but a modification of those other diseases to which it seems to be allied; whether it be a contagious disorder, or whether it spring from some passing cause, an error in diet, or an exposure to peculiar atmospheric variations. We have also yet to determine the actual differences that exist between the various forms of "typhous" fevers, and on such decision we have to base a new nomenclature. For if it be true, and I for one believe it to be true, that typhus and typhoid fevers are as distinct as Drs. Perry, Stewart, Jenner, and Murchison, would make them, then the idea of a supposed alliance between the two disorders ought properly to be entirely discarded; while certainly any such classification as that which puts the two forms of disease under the one head of "typhous" should be set aside; for the diseases are either one or two; and if two, they are as removed from each other as they are each from small-pox or Asiatic cholera.

Propagation of Epidemics.

From the position I have chosen to take, we see next a very clear course opened, and still further opening, in respect to the mode by which diseases of the epidemic class are propagated. In this direction we have learned, as a firm and sure basis of further observation, the fact, that the true epidemic disorders are essentially specific, as a general rule, in particular classes of animals. We are cognisant of the law, that scarlatina is peculiar to man, or at most to man and the pig; that the small-pox of man is a disease itself specifically one; that the small-pox of sheep is peculiar to the sheep, and admits of transmission by no means whatever to any other known domestic animal, nor to man; that the pleuro-pneumonia of cattle, while easily propagated from one of the bovine tribe to another, is capable of no further transmission; and that measles, hooping-cough, and true Asiatic cholera, are peculiar to the human race. This knowledge of distinction of disease, according to animal, is not merely an interesting part of our researches; but an important practical lesson. It will assist, in a future day, to an immense extent, in clearing up questions of causation; in other words, it will enable the etiologist to explain the nature of certain poisons, by a process of reasoning based on the peculiar organisation of the animals in which the poisons are capable of producing special diseases.

Seasons and Epidemics.

Once more, the past reveals to us many approved facts in relation to the influence of season on certain formidable diseases. On this point, the statistician and the meteorologist have come most serviceably to our aid;

and their results in their combined form are as safe as any others that are based on arithmetical calculations. Thus, we know that in this country small-pox, hooping-cough, croup, and bronchitis, are most common in the months of January, February, and March, and least common in July, August, and September; that diarrhœa, dysentery, and jaundice, are most common in July, August, and September, and least common in April, May, and June; and that influenza, ague, remittent fever, typhus, scarlet fever, measles, erysipelas, and carbuncle, are most prevalent in the months of October, November, and December. Further, we have learnt, as a particular fact, that at least one disease, small-pox, which admits of transmission by direct inoculation, is checked in its course, even in this method of propagation, by the wet seasons of tropical climates.

These facts, although at the moment they are not explained, afford a solid ground-work of labour for the future inquirer. They represent so much work done; and so much added to the capital of our knowledge.

Geographical Distribution of Epidemics.

Again, we have determined, through the labours of Keith Johnston and M. Boudin, the geographical limits of almost all the great epidemical disorders; so that from any centre of the earth's surface the learned physician can turn to his map and tell the traveller, or the general, or the politician, with precision and readiness, what diseases will be met with in any other centre. We can say of diseases, they have their habitats and stations which we know. We can define cholera as living between its own lines, of 64° north latitude and 21° south. We know that yellow fever, though it has passed, has never spread, beyond the degrees of 48° north and 27° south latitude. We know that typhus stops nearly at the point southward, where yellow fever stops in its northward course; that in Western Europe it prevails between the parallels of 44° and 60° north, and in Northern America between the parallels of 32° and 48°; in districts, in fact, where the thermometer, as Mr. Johnston shows, has a range between 62° and 40°, and nowhere else.

Lastly, we have learned that, according to elevation from the surface of the earth, diseases undergo change; that yellow fever, for example, never ascends a mountain above the height of four thousand yards, even in the tropical world.

In these facts, we have firm bases of learning, the importance of which we cannot too dearly prize. Our knowledge here compares handsomely with that of the physical geographer, navigator, natural historian, and botanist; nor need we shrink from contest with these as to the point, who is most exact and sure in his information. Nay more, our acquirements in respect to these geographical matters, admit of immediate and useful application in the actual treatment of epidemics. For, if typhus will not exist above or below certain mean temperatures, there is a direct index, that in treating it the patient should not be allowed to lie in an atmosphere included in those temperatures; and there is, further, a direct index towards a series of inquiries regarding other epidemics, whether they too will not cease to exist above or below certain thermometrical degrees?

Specific Causes of Epidemics.

Lastly, I conceive that our ground is now tolerably safe in respect to the law that each disease, which we may venture to call specific and spreading, has for its cause one special poison. This supposed law of propagation, lately announced in Edinburgh by the most distinguished of its professors, Dr. Christison, has been almost universally recognised in this Society from its foundation. It is a theory which has been most energetically supported by Mr. Grove; it was always resolutely, and some even thought doggedly, sustained by Dr. Snow; it was one of the articles of faith of our ever to be lamented Dr. McWilliam; and, in truth, through all our debates, we have never once had it seriously called in question.* For my own part, I look upon it as the best, the soundest, and the most useful of facts in our science; as sufficient, when properly understood, to explain all the observed phenomena of epidemics; and, as a theory, as demonstrative and as satisfactory as that of the tides in physics, or of the atomic theory in chemistry. If I were asked for proof or demonstration, what better can be found in any science or philosophy? The one simple experiment of inoculation for small-pox, and of the direct transmission of the disorder from one person to another by this method, is instant proof that the germ-theory is acceptable. The engrafting of a disease by inoculation, is not, in the abstract, different, in any respect, from the engrafting of a rose on a stem, or the planting of a seedling in the earth. When, therefore, we take the phenomena which follow the process of inoculation, and compare them with those which succeed from exposure of the body to small-pox virus without inoculation; and when, pushing the point further, we compare the results of exposure of healthy persons to those who are suffering from allied disorders, we have no alternative but to accept that one universal principle of causation prevails in epidemics; that each disease has its specific, organic, physical cause, which may not, it is true, have been discovered by the eye, but which exists nevertheless, and obeys the same influences of motion and rest, as other bodies more substantial and more readily demonstrable.

Influence of Sanitary Reforms.

While, however, we stand firmly on this law, we require, for the benefit of the outer world, to give to it an interpretation which shall secure for it respect and acceptance. It is a law which, partially understood and so dogmatically asserted, is apt to lead the mind away from paying attention to important details, and to produce mischiefs by default, that are not easily or momentarily remedied. It is the general disposition of most minds to be indolent in new and unpractised offices; it is the favourite bent, I believe, of nearly every mind to defend itself behind the inevitable, "What can't be cured must be endured"; "What is to be must be"; "When Jove commands we must obey"; "Let us eat and drink, for to-morrow we die." These are the daily solaces and sops with which the wisest of us fill our cups of life and pass them round. What, then, if there be poisons in this universe which are borne by every wind that will waft them; that may enter the system by the air we breathe unconsciously; passing, like right royal Mab,

> "Athwart men's noses as they lie asleep?"

What if these poisons be invisible and inscrutable? Of what use, then, all care, all thought, all precaution, all so-called preventive measures?

In regard to this position of the question, we, who hold the view that these poisons are veritable and substantial agencies, are bound to meet the dangerous objections that are thus suggested, with firmness on the one hand, and argument on the other. The worst feature

* The comments that have been made in the various journals on Dr. Christison's address, are somewhat startling to epidemiologists, and even painful, as indicating the haste with which criticism immediately falls without any due thought, on men of eminence and position. Dr. Christison, for instance, has been held up as the originator of the idea that mere bad smells are insufficient as causes of specific epidemic disorders. Of course, Dr. Christison was himself far too well read to assume any such position. Twelve years ago, for advancing the same views in this Journal, Dr. Noble of Manchester was criticised almost as severely. In the year 1855, Dr. Snow was attacked for the same reason, in consequence of his evidence before the Select Committee on the Public Health Nuisances Removal Bill. But in none of these attacks has there been any correct appreciation of the real question at issue.

of the disputation on the side of the poison-theory is, to ride the fact too madly and to protest too much; and the worst feature of the disputation on the other side, lies in the same direction. To affirm that a bad smell is sufficient to account for any epidemic, is as unwise as it is to assert, that in no case is impurity of the air a necessary attendant on the cause which actually excites a disease of the communicable type.

Neither is it the right thing to say, that the truth lies in the midst of the two extremes; for the truth really lies in the special facts of each disease. On the right hand, we see the salutary influence of preventive measures on the largest scale; we see districts in which, while they were still uncleansed, every epidemic disease was rampant, and in which the mortality was twenty-three, twenty-four, and even twenty-six per thousand, become, under the hand of the sanitary reformer, largely freed from these disorders, and the mortality reduced to twenty, or even to seventeen per thousand. Again, we observe certain pests, such as jail-fever, wiped entirely away from their old habitats purely by cleanliness, fresh air, and proper food. These are sterling facts, and are not to be gainsaid. On the left hand, we are met by these truths: that some disorders spread unaccountably in the most healthy districts; that scarlet fever, for instance, as I have elsewhere shown, seems to be modified in its course by no ordinary external conditions, but may be as fatal in the palace as in the hovel; its contagious poison passing from one point of the earth to the other in temperate climates, irrespectively, as it would appear, of all conditions that lie outside. The same may be said of measles, of hooping-cough, of croup, of cholera, of typhoid fever, and perhaps of diphtheria.

We are unable, as candid men, who care nothing for pet views and fancies, and who do care for the steady, however feeble, ray of truth, to ignore either class of the facts propounded; but we must deal with them separately, and discuss each one on its own merits. I believe we are able to effect this object; I believe we stand on safe ground when we undertake and advance an analysis of all the evidence before us in its details; I conceive that no contradictory elements invade the argument; and I would, in a few sentences, endeavour to indicate how analysis unfolds the difficulty.

The admirable experiments of Dr. Barker on cesspool-air prove to us beyond the shadow of a doubt, that long inhalation of an atmosphere charged with the gases evolved from decomposing organic matter, is capable of producing a set series of symptoms which constitute a disease. These symptoms are, increased heat of skin, thirst, irregular and feeble muscular contractions, and diarrhœa. The symptoms continue so long as the cause remains in operation. But it is to be observed that, when the cause is removed, there is no continuance of symptom, no recurrence or remittency; but a tendency towards recovery. No communicable disorder is induced. The poisons act for the time as chloroform might act, but they lay no hold on the tissues; they are negative poisons; and so soon as they are removed, so soon the affected organism returns to its equilibrium.

By the side of these experiments, let us place the wonderful history that has been given to us by Dr. Wm. Budd, of the late small-pox epidemic among sheep in Wiltshire. There we see a district of country in which the air is of the purest; where for centuries the white flocks of the English agriculturist have roamed untouched by disease. There is here no cesspool-air, either to excite disorder or to exaggerate evil. But a little leaven of disease, through some infected animals from abroad, is let into that open spot; and straightway, in those plains, so healthy hitherto, there is a devastating sheep-pestilence. Now for the tests of science. There are sharp eyes watching the flocks; separating the sick from the healthy, and encircling the disorder. The result is, that the pestilence is at once put out.

I will not weary you with further details; but will attempt, while these two pictures are fresh on the mind, to draw the natural inferences to which they lead. In the first place, they indicate that an air charged with the gases emanating from organic matter during its ordinary decomposition, is capable of creating disorder, but not specific communicable disease. From this we may infer that cases of specific disease exposed to these gases become complicated by the nature of the air which the sufferer breathes, but not more; the precise symptoms which mark the communicable and specific disorder are still the same, in so far as they are developed, and, in themselves, run the same course.

Next, we are driven to allow that, under the best hygienic conditions, the specific poisons may produce a fatal catastrophe by virtue of their own action; by virtue of that action which differentiates them from the negative poisons; by virtue of that action which begins with this fact, that the poisons lay hold of the organism, enter into its composition, interfere with its natural actions, and destroy its integrity.

If, finally, we are asked, Why, then, do sanitary measures effect so much real good? One answer is clear, decisive, and simple. When the sanitarian improves the house, he improves the inmates. If into a dirty, dark, ill-ventilated, badly drained dwelling, an epidemic poison shall enter, and shall multiply there; there shall it remain long, because the conditions for its removal and its destruction are most unfavourable. In the better class of house, the house well aired, well lighted, well traversed with water, the poison has many exits, and finds them; in the opposite condition, it is neither burned nor buried; but rests for years ready to be distributed, and to afflict with its power any one who, susceptible to its action, is offered up to it as a victim.

In the agricultural districts of this fair country, in those hovels of our labourers, which call back to our minds the song of the sweetest of Roman poets, and tell us how, from the days of Cæsar until now, small has been the change, how contemptible, after all, our civilisation; in every cottage of many villages, we see the very granaries of these poisons. In the thatch "*pauperis tuguri culmen*"—in the dust beneath the rickety floors—in the cracks of the miserable couch—in the mud wall—there they rest, and from century to century they remain, lost only in conveying to new generations fresh evils, and in becoming renewed for further transmission to generations yet to come.

Let us, then, as scientific epidemiologists, join hands with the sanitarian; let us not, for a moment, think little of his labours, nor breathe a breath that shall reduce them in the public estimation. Let us ask him simply not to embarrass his good work with untenable theories as to origins of disease; and, while we leave him to discover means that shall prevent the causes of twenty-four deaths *per cent.* from being harboured in human habitations, let it be our aim to second his efforts by subjecting these causes to more rigorous investigation; and by learning how, when in spite of every precaution they have been brought into action, they may be successfully met and neutralised.

Non-recurrence of Diseases: Prophylaxis.

Still standing on the past, we have two further facts before us, each of great importance and each very wonderful. The first of these is, that epidemic diseases belonging to certain classes do not, as a general rule, recur in the same person; and the second, that in one disease—I refer, of course, to small-pox—we have in our hands an almost certain prophylactic. These facts require no comment and no exposition; but they had to be included in our summary, or the researches of past labourers had not been fairly presented. When they are spoken, all the *reliable known* is discovered.

Prospects: Work to be Done.

From the land over which we have glanced, we must look next to the prospects that lie in view. Which way shall we go with cheerfulness, hoping for success? That is the question before us.

As it appears to me, there is promise of successful travel in three directions:

1. Towards a better knowledge of the sources of the poisons of the epidemic class.

2. Towards a more correct appreciation of the changes produced in the body by these poisons, and of the way in which they cause the destruction of life.

3. Towards a more correct view, in respect to the modes that should be adopted to destroy the effects of the poisons in the living organism; in other words, the means of cure.

Epidemic Poisons.

As regards the source of the poisons of the various communicable disorders, our attention ought to be very sharply and earnestly directed to the vegetable world. I think I may say that, for ages past, certain speculations have been afloat as to a connection between the existence of what are called fungoid vegetable growths and communicable spreading diseases; but within the last few years observation of a direct and practical kind has tended to transform the speculative into the real. In the year 1847, I myself made an observation, which was recorded in an inaugural thesis written for the Faculty of Physicians and Surgeons of Glasgow in 1850, and afterwards was reported at this Society in 1853, which had an important bearing on the question under consideration. The observation was to this effect. Three men who were working in a barn, thrashing corn, on arriving towards the close of their task were exposed to dust coming from the floor on which the sheaves of corn (wheat) had laid. At the moment of exposure to the dust, they were conscious of some unpleasant sensation, and soon afterwards were seized with rigors and signs of febrile disturbance, ending, in each case, in erysipelas of the face and head.

In commenting on these cases, I suggested that it was possible the disease arose from the inhalation of some vegetable fungus pertaining to the straw; a view which the evidence supplied fairly supported.

From then until within the last two years, nothing occurred in medical science to sustain this view. At last, in 1862, an American physician, Dr. Salisbury, made a series of researches in regard to measles, which, in a singular, and, so far as they go, conclusive way, indicate that a disease resembling this epidemic may have a direct origin from the vegetable world.

Dr. Salisbury's first observations were to the effect, that a disease known in armies as camp-measles, had its origin amongst some soldiers under his care in Ohio, from their sleeping on straw which was covered with the spores of a fungus, commonly known as "must". Believing that the disorder observed arose from the inhalation of these fungi, Dr. Salisbury, on February 11th, 1862, had the courage to inoculate himself in the arm with some sporules derived from wheat-straw similarly musty. The result was, that on the 15th the experimentalist was suffering from a disease in every respect analogous to measles. On the 19th, he inoculated his own wife, with the same resultant phenomena; and ultimately, he subjected his children to a similar process, also with like results. Further, he found that, after one inoculation and production of the disease, a second inoculation took no effect.

In the present year, Dr. H. Kennedy, of Dublin, has recorded a case in which an affection closely resembling measles was induced in a youth from exposure to some musty flaxseed-meal, which, in a joke, had been thrown in the face of the patient, and which he had inhaled.

It is unnecessary for me to dwell on the immense importance of these observed facts. They open up, obviously, a new line of experimental inquiry, which it is the duty of our Society at once to follow out. If such diseases as erysipelas and measles can be induced by the inhalation of vegetable fungi, the inference is fair that other of the epidemic disorders have their first origin in a similar cause. In the virus of small-pox, there are bodies which resemble closely the sporules of the yeast-plant. What would be the effect of inoculation with the sporules of the plant named? The fungi which form on moist bread and flour, what would they do if introduced into the blood? Various analogies seem to tell me that these bodies must exert in the organism an effect, similar at least to the virus of common contagious disorders.

Pathology of the Epidemic Diseases.

The second line of progress in which our steps should be directed, has relation to the changes produced in the living body by the communicable poisons, and especially as to the mode in which these poisons destroy life. We are accustomed to speak of these poisons as ferments, and as exciting some kind of action analogous to fermentation out of the body. Regarding this hypothesis, which rests by the way on no experimental proof, I must state that it is a question which this Society ought to subject to very rigid inquiry. Looking at the question from a physiological point of view, I am inclined to assume, although I would not be dogmatical, that the process is one in which the natural zymosis of the blood is perverted, rather than that there is a new and active zymosis established. As the phenomena are presented to me, we ought to consider that in health the respiratory constituents of the blood are at all times, under the influence of the albuminous compounds, undergoing a natural fermentation; and that, when foreign matter is introduced, this normal change is checked and a new series of products, marking a modified form of oxidation, are evolved. Whichever view be correct, the evidence all tends to the inference that the actual dangers of those epidemic diseases which present inflammatory symptoms—so-called—are due to a peculiar modification of the fibrinous constituent of the blood, under which it proceeds to undergo separation, and to be deposited in the right chambers of the heart. In diphtheria, scarlet fever, measles, hooping-cough, croup, and influenza, I have many times proved, both by the symptoms that preceded death, and by the pathological findings, that the immediate cause of dissolution was unmistakably the separation of fibrine in the heart, and consequent suppression of the current of blood through the body. The same observations have been made by Dr. Jones in relation to the remittent fevers of tropical climates.

Opposed to these conditions there is, I think, another class of epidemic diseases in which the fibrinous constituent of the blood undergoes extreme solution, owing to excessive alkalinity or to the production of one of those peculiar ammoniacal substances known as compound ammonias, which at the present time are receiving so much interesting and important observation in the chemical world. In these cases, if my suspicions are well grounded, the cause of death is traceable ultimately to dissolution of the fibrinous or albuminous envelope of the red corpuscles, and to discharge of the free hæmatine into the blood-current. The forms of disease which appear to be classifiable under this head are: the true petechial typhus fever, yellow fever, and plague.

An investigation of the disorders named, with a view to the solution of the problems suggested, would be another fair and most useful prospective labour for the learned members of our body.

Treatment of Epidemics.

In the third place, light appears to be breaking in upon us in respect to the treatment that should be

adopted in cases where the epidemic disorders have seized on suffering humanity. We ought neither to hesitate, nor pause, nor tire, until we have determined some means, definite in their design, by which some reduction of their 25 per cent. of mortality shall be secured. At the present moment our practice, although successful in regard to symptoms of a superficial kind, is vague, contradictory, and unsatisfactory. It will remain thus until an effort is made to reform it. Worse it could not well be; better it must be. To inaugurate the reformation, to ascertain the way we should go, we must first determine the essential differences of various epidemic disorders. If it be true, as has been suggested, that one class of these affections is accompanied with excessive formation and with separation of fibrine, it will follow that those remedies should be as nearly as possible specific which check this formation, tend to hold fibrine in solution, and prevent decomposition. Such remedies are certainly in our hands, and in a rude way their value has been determined; what is wanted is a more rigorous analysis of their worth. At this moment, the remedies to which reference is made are two in number: ammonia and the sulphites. Ammonia, first introduced into practice in the treatment of scarlet fever by Dr. Peart, has since been used by Dr. Witt, by myself, and by other physicians, with a success in this particular disease which may be considered almost as specific; it has also been used with equal success by Mr. Swann of Barrowden, in the treatment of the allied disease diphtheria.

The sulphites of soda and potassa, introduced first to notice by my honoured friend Dr. Polli of Milan, appear to act equally well, and even to prevent death after the injection into the veins of animals of pus, decomposing albumen, and decomposing blood. The action of both these remedies is the same; both produce their effects, not by removing oxygen nor by combination, but simply by arresting the modified fermentative process that has been excited. But in using these remedies we must be cautious that we overstep no bounds; and that with each disease we determine whether it be advisable to increase or to reduce the fermentative change. In that class of disease where there is great solubility of blood, it appears to be a more reasonable practice to facilitate the organic changes, by remedies which hasten metamorphosis, and neutralise the alkaline products. Hence the acknowledged although partial value of mineral acids in typhus; hence, probably, the reason why typhus disappears, as a disorder, beyond a certain degree of temperature. And, again, as every fermentative change, as every organic change, turns in fact for its development on the motion imparted to the ultimate molecules through heat, we have a great lesson yet to learn in miniature, from those grand series of geographical facts to which I have briefly referred on a previous page. What is true of the world at large as a great chamber, is surely true in smaller chambers; and it is not unlikely that experience will yet show that, by artificial variations of cold and of heat, all the epidemic diseases may be effectually commanded.

In conclusion, in the matter of treatment, we have had recently opened for our inquiry certain important lights relative to the removal and the destruction of those organic poisons which float from the bodies of the sick. I do not refer to ventilation, nor to cleanliness; those are implied and are locked up in the conscience of every well informed medical man; but I refer to the employment of various vapours which, diffused through the air of the sick room, destroy the organic particles, and render the air pure and inoffensive. Through an observation of Mr. Hoffman of Margate, which I have endeavoured to elaborate, we have now placed in our hands, a means so simple, so practical, so effective, that I have ventured to break through the dignity of an introductory address to bring it here in the way in which it is applied. The substance employed is simple iodine. It is used both in a permanent, and in a special manner. For permanent use, the iodine is merely placed in a common chip-box, or in a glass, covered with a layer of muslin. For special purposes, the iodine, placed in a saucer, is volatilised by the heat of a candle into the air of the sick room, until the odour of iodine is just perceptible at all points. By this means, in one of the severest cases of confluent smallpox I ever saw, and which I attended last summer in consultation with Mr. Hubbard of Kensington Gardens, we were enabled to deodorise the air of the patient's apartment with a facility and a comfort I have never before experienced. The process contributed, I think I may say, largely to the recovery of that case.

Iodine, thus used, also affords a good practical index as to the purity of the air in an apartment. If, on volatilisation, the odour of the metalloid be long in being developed, the evidence is clear that the air is proportionately charged with organic matters.

But our prospect must come to a close; not because there is an end of it, but because the time presses, and in that which has been presented, there is ample work offered for all our thoughts and all our hands. The work, moreover, is hard, and for a time inglorious; but in its aim and end, it is one of the greatest of all pursuits in medical science and art. It is the kind and form of work moreover, which can alone give to our profession a vitality amongst vitality, and a voice amongst the voices of mankind. So long as we only loiter and hide ourselves in the sick chamber, we are entombed with the living dead, and we appeal merely to the judgments of those who are too feeble to test whether our art, as represented by us, is pretence or reality. It is not our duty, it is not the duty of any one of us, to leave the sick chamber; for he who knows not intimately what is going on within, knows little more of what is influencing from without; but it is the duty of all of us in this advancing day to know the outer as well as the inner chamber; and to make ourselves appreciated as men who understand disease in its social and moral, not less than in its scientific bearings.

Through no section of the body medical does the opportunity offer itself for proving the breadth of our learning, so perfectly as through this Society; and in the sketch I have ventured to draw, as preliminary to the labours of another session, I have tried to indicate the readiest and most sure way by which our efforts may be crowned with success; by which we may appear to the world as statesmen not less than citizens, and as kings as well as priests.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page 522.*]

The feelings or moral faculties are the first to be affected in melancholia, and also, it is true, in most other forms of mental disease. In fact, the prominent phenomena of insanity, in the majority of the cases, are connected with this division of the mental faculties. In melancholia, the disease involves also, as it advances, the intellect on the one hand, or the motility on the other; or, in some instances, both the intellect and the motility together.

Motility is affected in two modes in melancholia. In some cases, there is excess of motion—restlessness, fidgetiness, or constant movement; and the disease in these cases has been called *melancholia agitans*. In other cases, there are torpor, inaction, hebetude; and in these the disease has been named

melancholia with stupor, and also, but less correctly, acute dementia.

The last case narrated was one in which there was an amount of restless motion, which approximated it to the kind of disease to which the name of melancholia agitans is given. The term is merely descriptive of a variety: it is not pretended that there exists any essential difference in such cases. Such shades of variation are met with in the non-morbid expression of grief. For example, around the deathbed of a patient, or at any other scene of a painful character, we may see the genuine and normal feeling of grief very differently manifested in different individuals, and even among different members of a single family. In some, there is a perfectly quiet state of the muscular system; a torpor even of the muscles of expression; a fixed gaze; a semi-stupified or blank stare, in which grief does not even seem portrayed. The individual also sits or stands motionless. In others, especially in females, there is seen a restless motion of the entire system; the face is expressive of the mental pain. If the person sit, she is constantly twisting or altering her position, or she rocks backwards and forwards; or, if up, she will walk to and fro, frequently changing the position of the hands—now on her neck, now clasping them, now twisting a string, with a greater or less amount of control, according to the amount of education, etc. Among the Irish poor, the muscular system is much brought into action: there are wringing of the hands, sawing of the air, etc. In one class of persons, grief is attended with silence; in another, with loud lamentation. And it is so in disease. My notes furnish me with many more or less perfect cases of this form of melancholy.

Case vii. A. H. A second or third attack, and a re-admission. The patient was first admitted in 1856. She was then 30 years of age. The attack commenced during a first pregnancy; but it was reported at the time that she perfectly recovered prior to her delivery, but was taken again (making the second attack) immediately after her child was born. The labour was easy; the child was healthy. The patient, a few days after its birth, became much excited, and was taken to the workhouse. There she speedily improved; and, on her discharge from the workhouse, she went to her own relatives in the country, became worse, and was brought back and admitted into the asylum within three weeks after parturition. On her admission, it was stated that she raved, screamed, and was excited and depressed alternately; while at home, she tried more than once to jump out of the window, and made an attempt to strangle her infant. She gradually recovered, and was discharged cured from the asylum six months after the date of admission. She was readmitted after a lapse of five years.

She was then 35 years of age, the wife of a coach-painter. There was hereditary tendency to insanity in the family. She had a sister, and an uncle on the maternal side, insane. Her mother was a person of feeble intellect. The patient had been subjected to severe privations of late. The husband had been out of work for some months, and they had had to part with the furniture and clothes for food.

Since the former attack, the husband related that he had found his wife to be much altered in disposition. She was formerly cheerful and particularly lively, but had since been melancholy and suspicious. She was confined with twins five months ago, and was suckling both when she was taken ill. One of the children was born blind; they were both very feeble and sickly. (Both children died soon after the patient's admission.) She had been gradually becoming more and more dull and neglectful of herself and home since her confinement. She had been several times violent, and had attacked her husband.

150*th Day*. She was emaciated and exhausted; was very perverse and restless, struggling to get away, resisting any attempt to lead her, and always endeavouring to go in the opposite direction. She was constantly exclaiming, "I am on fire; it's sinking; we shall be burnt." She refused her food; would not go near the dinner-table. She had an anxious and wild expression.

On the following day, she had passed a restless night; she had an anxious frightened expression. She said, "It is the gas; I can taste it and smell it." She addressed me by name; evidently, therefore, remembering me. The pupils were both small; the conjunctivæ injected; the hands were tremulous. She was constantly on the move, rocking to and fro on her feet. She looked back, or from side to side, clasping her lips with her hands, etc. The tongue was furred. Her bowels had not been open. She took food, but with reluctance. Her pulse was rapid. The skin was moist.

152*nd Day*. Her mental agitation remained the same. She was constantly saying that she was on fire. She said I was writing down what a wicked wretch she was; accused herself constantly of different things, frequently iterating, "I have done it; I have done it; I have burnt all." The expression of the countenance was wild and anxious. She was restless, constantly moving. She went hither and thither in an unsettled kind of manner, and looked about nervously. The eyes were glossy; the conjunctivæ were not injected; the cheeks were flushed; the skin was moist, greasy. A few spots of acne were seen on the face. The tongue was moist. She took her food. She had had no stool since admission. The pulse was rapid; the breathing quiet. There were no morbid chest-signs. She was ordered to have half an ounce of castor oil directly.

153*rd Day*. The oil acted well. She required persuasion to make her take her food.

155*th Day*. She slept all night, and was less wild in expression. She had taken food well to-day, and talked less about fire.

The notes from the 156th to the 162nd day show a gradual diminution in the restlessness. On the latter date, she was quiet; no longer restless, nor so distressed; but was still depressed. She was little disposed to speak. She took food well. The castor oil was repeated on the 159th day.

179*th Day* (or 29th after admission). She was more calm and comfortable, but had not employed herself yet. The expression was stern; the eyes were glassy and ferrety. She sat tranquilly, and slept well. She could not remember being admitted. The tongue was moist and clean; appetite good; pulse 80.

From this date, her condition progressed very slowly. She remained tranquil; but was dull and reserved, though she gradually improved and became industrious. Her bodily health also underwent a very gradual amelioration. She required the occasional use of aperients; and she remained pale and thin for some time. She was ultimately discharged recovered, but not until nine months after admission, or at about the fourteenth month of the attack.

The treatment consisted as much, of course, in the regular exercise, occupation, and diet, etc., as in therapeutical agents; and also of the moral means employed, as the association with trained attendants, the cheerful amusements and occupations provided, the effect of which must not be lost sight of in the treatment of all the cases narrated.

In the next case to be related, the motility was involved to a still more marked degree. The notes are somewhat lengthy; and the case will, therefore, be given more in the form of a narrative.

Case viii. A. J., a female, single, aged 23, was admitted in April. She had been formerly a domestic servant, but lately a dressmaker. She was reported by her aunt to have had, when a child, a slight strangeness in her conduct, and to have had the idea that she had

committed some unpardonable sin. The aunt, however, gave but a very obscure account of this circumstance; and nothing satisfactory could be made of the story. The attack was reported in the order of admission to be of fourteen days' duration; and nothing more is known about it.

On admission, the patient gave a lucid account of her own mental state. She appeared clear in her intellect and memory with respect to what had passed. She talked in an excited, rapid manner; said she was tormented with the thought that she had rejected Jesus; that she had felt that she did not and could not believe in him; that she had curious sensations and violent beatings of her heart; and felt that her "thinking mind" was gone. All this, and much more of similar kind, was told in a fervent, anxious tone of voice. The sentences were uttered in a very rapid but connected manner, and were interspersed with deep groans. She complained also that she could not sleep; she said, "Oh, when I close my eyelids, the events of the past fortnight come before my eyes." She was all the while on the move; resting first on one foot, and then on the other; looking anxiously about her; frequently turning her head; even while speaking, fidgeting with her apron-string; biting her nails, which bled and were torn by her frequent biting. The expression was anxious, piercing. Her trunk was bent eagerly forward toward the person she addressed. Nevertheless, she did not appear ill, except from a slight pallor which was present. The tongue was moist; the bowels were regular; and she took her food well. Pulse 90. Not much variation in the case occurred up to the thirty-fifth day; the admission being on the fourteenth. The constant mental anguish, restlessness, and agitation of body; the same gloomy thoughts on religion—that she had neglected the Saviour—continued.

35th Day. She said she was possessed of the devil; that she was obliged to say, "God preserve my body, and the devil take my soul;" and since that she had been worse. She felt strange sensations in her inside, like something hot. The countenance was more haggard; the restlessness was unabated. She had no pain in the head; she ate heartily; the bowels acted regularly; the tongue was furred.

Aperients were repeated every other day for ten days, without any apparent benefit. The tongue remained furred; her mental anguish and constant restlessness continued. The pupils on the thirty-seventh day were observed to be dilated, but equal. On the forty-third day, opiates at bedtime were prescribed, and continued for five days. She slept rather better for three nights; and then no further benefit accrued, as noted in the following remarks.

48th Day. The same mental condition continued. The draught had been gradually increased in strength, but now produced vomiting; and the appetite was not so good. The restlessness and agitation, and the belief that she was tormented by the devil, were unabated. The pupils were large, but equal. The head was ordered to be shaved, and a blister applied to the scalp.

49th Day. She was worse. She was extremely agitated; made several attempts to seize the carving-knife at dinner, both yesterday and to-day. She continued to exclaim, "The old devil's got me." She rushed about from place to place.

50th Day. A slight difference was observed between the pupils, the left being rather larger than the right.

52nd Day. She had an anxious, wild expression; and was constantly moaning aloud, "Oh! that old devil!" The restlessness continued; she rocked from foot to foot while standing; twisted her apron-string; pinched her flesh; bit her nails. She made repeated attempts at suicide; but took her food, and slept well after taking a drachm and a half of tincture of henbane at night. Pulse 120.

56th Day. She was more tranquil. The same illusions and delusions continued, but with less force. She said she was prompted to evil by the devil; that the devil made her think all sorts of wicked things. She said she was to live for ever. She had continued to take the henbane regularly. The pupils were both large, and acted irregularly. She slept better. The tongue was clean. She took food well.

78th Day. The notes do not show that her condition was materially altered up to this date. The anxious expression, restlessness, and agitation still continued. On this day, she said "she was married to the devil", which was a new horror to her. She had also the delusion that one of the other patients was the Saviour, and was constantly going down on her knees and praying to her. The patient addressed was worried and annoyed by her importunate entreaties, and treated her rudely, repulsing her; by which A. I. became greatly agitated. She was thinner, but ate well. The bowels acted daily.

84th Day. She had a fresh delusion—that a newly arrived patient was the Virgin Mary; and that a baby in the ward, belonging to another patient, was the infant Saviour; and that the father of the infant, who called to see his wife, was God. She addressed her prayers to all of them. The agitation and constant motion continued. She had not made such determined efforts to injure herself. She was constantly tortured by vain regrets; as, if she had done or said this or that, then other consequences would have occurred. She was constantly imploring God to pardon her.

From the 84th to the 123rd day, there was a slight amount of improvement. On the 123rd day, she had constant mental torment, but slightly less severe. She still followed me about, saying, "Oh, do give me one more chance." She was in a restless state; had picked her ears, which were bleeding. The nails were sore from being constantly bitten. The tongue was clean. The bowels had been inclined to be constipated for some time past. She said she felt as if she had no inside. She had not menstruated since admission. She was ordered to take aloes and mastich pills daily.

128th Day. She was more tranquil, but still moaned when addressed. The bowels acted regularly. She had gained flesh.

144th Day. She was depressed, and cried when spoken to; but continued more tranquil. She was ordered to be taken out for continuous walking exercise twice daily.

She was induced to work in the laundry on the 154th day, where she continued gradually to improve; and on the 182nd day, it is noted that she was occasionally dull, but continued to work well. On the 187th day, menstruation became re-established. Her improvement progressed daily from this time. She continued to be constantly employed in domestic work from the above day up to the date of her discharge, which was on the 390th day; but the last two months of the time she spent at home with relatives, being "absent on trial".

Medicines did not appear to have much influence on the foregoing case. Aperients were fairly tried, without any marked benefit at the earlier period of the case; though towards the close they appeared to assist in re-establishing the catamenia. Opiates and sedatives were tried to relieve the restless agitation, and their administration appeared to have a temporary benefit only; but the transient effect appeared to be of use in allowing the moral means of employment in the laundry to be commenced. Shaving and blistering the scalp were followed by no good result; the patient was more excited, indeed, after them than before; but the suicidal excitement commenced before the remedy was applied. The greatest benefit was derived from the moral treatment, and with exercise, occupation, and constant employ-

ment, which were resorted to as early as the patient could be made to use them.

[*To be continued.*]

Transactions of Branches.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By H. Colley March, M.B.

[*Continued from page* 549.]

Puerperal Cases.

Infection from Erysipelas: Puerperal or Typhoid Fever. A deeply interesting puerperal case was related by Mr. Harrinson. He stated that, on Sunday, March 16th, 1862, a lady was delivered of her fourth child by an easy natural labour. She progressed perfectly well till Tuesday evening, when she was seized with a decided rigor. The lacteal and the lochial discharges, however, were not interrupted. On Wednesday, she took a dessert-spoonful of castor-oil; this caused one fæculent evacuation, which was followed by a continuous involuntary watery discharge from the bowels. Late in the evening, when forty minims of tincture of opium were given, the skin was moist; the countenance distressed; the pulse soft, flickering, and very irregular. She complained of severe pain over the whole of the right side of the body, but especially over that of the thorax, increased by turning towards it, and aggravated by the movements of respiration. When she lay quite still, her breathing did not seem embarrassed; nor could any abnormal sounds be discovered by percussion or by auscultation. She was not distressed by gradual firm pressure on the abdomen, which was not at all tympanitic; but the entire surface of her body was intensely sensitive. She complained of acute pain when she was touched ever so gently, and almost screamed when the finger was suddenly laid upon her tongue. This organ was moist, and its papillæ were slightly elevated. Three grains of calomel were administered, and two hours afterwards, as the diarrhœa still continued, a starch enema, containing twenty minims of laudanum.

On Thursday morning she appeared better; the diarrhœa had ceased, and she had slept. The lochial and lacteal discharges continued natural; but, as the effort to suckle her infant fatigued her, it was abandoned. She took some citrate of ammonia every three hours. At ten o'clock in the evening she was seized with a sudden collapse, and vomited a large quantity of greenish odourless liquid; after which she felt relieved. A similar seizure came upon her towards morning, and again in the evening, when, in spite of the administration of stimulants and nutritive enemata, she expired; her death occurring on the sixth day after labour. There was no *post mortem* examination. Mr. Harrinson did not see the case till the last day, and it was then hopeless. Its interest arises from a consideration of the nature of the disease that proved so destructive.

Dr. H., who saw the patient, considers that she died of typhoid fever. Mr. Harrinson, on the contrary, believes the malady to have been *puerperal* fever; but both gentlemen agree as to the mode of infection. There was in the neighbourhood, a virulent case of erysipelas. The same medical man, and the same nurse that had attended the case of erysipelas, came to assist the delivery of the woman in question. Under these circumstances, if no evil consequences had arisen, she would indeed have borne a charmed life. The accoucheur, it is true, between his attendance on these two cases, delivered a woman who most fortunately did well; but the nurse, though strict ablution and change of attire were enjoined upon her, went directly from one bedside to the other.

Dr. H. believes that a poison of an erysipelatous origin, was imported by the nurse, and being received into the system of the patient by her lungs, was developed into typhoid fever; and he bases his opinion on the facts, that there were no signs of pulmonary or hepatic abscesses, and that the very prominent intestinal symptoms were of a decidedly typhoid character.

But, on the other hand, no one has ever known the poison of erysipelas to produce typhoid fever, or that of typhoid fever to give rise to erysipelas; while it has been proved by countless instances that erysipelas and puerperal fever are convertible—either into the other. Thus, there are very strong *à priori* reasons for believing that the case in question was one of puerperal fever; and it is left to inquire whether the symptoms necessarily *exclude* such a conclusion. Quite the contrary, as it would seem; for, while the absence of an autopsy leaves undecided the existence or non-existence of pyæmic suppurations, there was undoubted evidence in the painful breathing of some pulmonary mischief; and nothing is more certain than that, in instances of putrid infection, there is often a violent natural effort towards the elimination of the poison by the intestinal mucous membrane. And in fine, the very marked hyperæsthesia of the skin is a symptom explicable far less by the typhoid, than by the puerperal theory. The means of preventing the occurrence of puerperal fever was a subject that the Society earnestly discussed; and strongly recommended that gentlemen engaged in obstetric practice should exercise extreme caution in attending any patient whose disease might be of an inflammatory nature, and should never, on any account, personally make a *post mortem* examination.

Death of Fœtus in Utero: Removal: Recovery. Mr. Vines related the following case. On July 15th, 1862, he saw Mrs. H., a woman of strumous habit, aged 32. She had been married six years, but had had no child. The catamenia had ceased eight months previously, and she quickened at the usual time. Seven days before she was seen, some water came away *per vaginam*, followed by a continuous offensive sanious discharge, and by aching pains in the back and bowels. On an external view, the uterus, instead of lying in its usual site in the median line, occupied a laterally oblique position. On a vaginal examination, the pelvis was found much contracted; Mr. Vines estimating the antero-posterior and lateral diameters of the brim respectively at 2½ and 3¼ inches, and of the outlet respectively at 4 and 3 inches. By no efforts could the os uteri be reached with the finger. A solid tumour was felt pressing down, as it were, towards the hollow of the sacrum. It was conjectured that the uterus was displaced, and its os tilted forwards behind the symphysis pubis; but the woman had at no time any difficulty in evacuating either rectum or bladder.

The pains continued of the same non-parturient character, and the symptoms remained unaltered, till the 17th, when portions of a brain-like substance passed down the vagina. On the 18th, on examination, the head of a child was felt presenting; the scalp loose, and the cranial bones collapsed. As the labour did not progress, ergot was administered; and when the uterus in three hours had given no response, the child, in an extremely decomposed state, was removed by the blunt hook. The rotten funis gave way in an attempt to remove the placenta; and several endeavours to introduce the hand into the uterus, with the same object, entirely failed. Until the 21st, as the woman seemed comfortable, no further steps were taken; but, as she then complained of tenderness on pressure over the abdomen, and as the bowels had not acted since her delivery, a turpentine enema was administered, with the result, in three hours, of emptying the rectum and expelling the

placenta. Her subsequent recovery was natural and complete.

Mr. Vines quoted a very similar case, reported by Dr. Merriman.

Disease of the Suprarenal Bodies.

Three cases of Addison's disease were brought before the Society.

Tubercular Disease of Suprarenal Capsules: Slight Bronzing of Skin. Mr. F. Workman presented two suprarenal capsules from a man aged 33, who had been a cavalry soldier. About four years prior to his death, his horse fell on him, and he sustained considerable injury in his loins; and for some months subsequently he was treated in a military hospital for lumbar pains and general debility. Though he partially recovered, he was discharged from the army as unfit for duty; and after a time was engaged at some iron-works. In such occupation he remained for six or eight months, when increasing debility, accompanied with occasional sickness, compelled him to abandon all labour. About eighteen months before his end, his face and upper extremities became slightly bronzed; but this colour did not progressively deepen. The only prominent symptom was weakness, which increased in intensity till he died, after a long and painful struggle for breath.

At the autopsy, both suprarenal capsules were found filled with tubercular matter. The lungs contained a few miliary tubercles. The heart was not examined; but some members of the Society thought that the man's final agony might have been due to fibrinous concretions in that organ.

Tubercle of Suprarenal Capsules: Enlargement of Liver: Partial Discoloration of Skin. Dr. Woodhouse related the case of a gentleman who died on August 3rd, 1862, aged 63. He had always had a sallow complexion, and was of gouty descent. He came under treatment in the spring of the year, suffering from a variety of slight ailments. In April, some spots appeared on the palms of his hands. Debility and emaciation came on gradually. His legs became œdematous, and covered with purpuric spots of the size of a crown-piece, which disappeared under the use of lemon-juice, returning whenever it was discontinued. Colliquative sweats and diarrhœa troubled him. No organic disease could be detected. Some patches of a slightly tawny tint were observed on his forehead and left temple. There was, however, no nausea or vomiting. In July, it was evident that the liver was enlarged; and some fluctuation was detected in the abdomen. He finally sank from asthenia.

At the autopsy, the peritoneum was found to be granular. The liver was very large, and generally granular. The stomach was healthy, but elongated and displaced by the liver. The spleen was very large and friable, and adherent to the abdominal wall, and bore on its surface a walnut-sized tubercular concretion. The pancreas was healthy. No deposits could be felt in the lungs. The heart was not opened. The kidneys were natural, but surrounded by much fat. Both suprarenal capsules were enlarged, and infiltrated with tubercular matter.

Disease of Suprarenal Capsules: Bronzed Skin: Death from Asthenia. Mr. Harrinson related the case of Mrs. P., whom he saw on June 16th, 1862. She was 44 years old, married, had had two children, and still menstruated. Four months previously, she was well, and of a fair complexion. Then she began to fail. She was attacked by great and increasing weakness, constant nausea, occasional vomiting, variable appetite, frequent lumbar and abdominal pains, and restless nights, while her skin was becoming swarthy. When seen by Mr. Harrinson, this discoloration was most marked on the forehead and face, and at the bend of the elbows and hams. No organic disease could be detected, and she died of asthenia six weeks afterwards.

At the autopsy, only the abdomen was examined. The cæcum was greatly distended with air, and occupied the centre of the hypogastrium. The interior of the left suprarenal capsule was softened and broken up, leaving only a coriaceous shell. The right was in a similar but less advanced condition. Both capsules were of a natural size. The kidneys and the other abdominal organs were healthy.

Remarks. The disease thus illustrated remains a pathological puzzle. It has hardly one constant symptom. There may be decided bronzing of the skin, and the suprarenal capsules may be healthy; or these organs may be extensively diseased, and the skin be immaculate. There may be no irritability of stomach; and even when there is ulceration of the mucous membrane of this viscus, it is doubtful whether a disturbed cerebral circulation may not have excited vomiting, and continued vomiting have produced gastritis.

The condition of the semilunar ganglia was not observed in any of the above three illustrative cases.

Finally, nothing is known of the causes of the disease. A blow on the loins seemed the starting-point in one case; and in others, intense grief and insufficient food have been mentioned; while tubercle, fatty degeneration, and cancer are commonly the destructive agents. Dr. Addison mentions a case in which an occlusion of the vein was the only mischief in the suprarenal capsule.

[*To be continued.*]

SOUTH MIDLAND BRANCH.

ON THE DANGER OF EMPLOYING EXTRACT OF NUX VOMICA IN HABITUAL APERIENTS.

By Ashby G. Osborn, Esq., Northampton.

[*Read at Northampton, October 22nd*, 1863.]

The more frequent relation of untoward events in practice would contribute, I think, almost as much to the improvement of our art as the detail and discussion of rare and successful cases; for we all know the deep impression which is left on our minds by an unfortunate and unlooked for event, though, perhaps, but for the occurrence of the particular case which has terminated unfavourably, we might still have used a hazardous mode of treatment, or been ignorant of some important pathological fact.

It seems probable that nux vomica and its alkaloid strychnia have been employed therapeutically much more of late years than formerly, since it has become generally known that the addition of either of these drugs to laxative preparations or stomachic tonics is of great value where constipation is dependent on debility of the muscular coat of the intestinal canal, or where oppression and fulness at stomach arise from the chyme remaining too long in an indolent viscus. I have hence drawn up the following case, where, though the extract of nux vomica was prescribed apparently with good effect for a long time, yet tetanic convulsions at length manifested themselves; and, though death seemed caused rather by syncope than spasm, as I think the case will show, yet the practical lesson to be learned is, that the extract is a hazardous adjunct to an habitual aperient, since we are not secure from the poisonous action of nux vomica, though it may have been exhibited with the best possible effect for weeks and months.

G. W., aged 60, a tall spare man, of sedentary habits and melancholic temperament, had had complete paraplegia for more than a year, probably from disease of the spinal cord, when I first saw him, December 1st, 1859. I was consulted simply to prescribe an aperient, as he had found his ordinary purgative medicines ineffectual to overcome the torpidity of the semi-paralysed

bowel; and a friend, an eminent surgeon, had told him that the constipation would increase till the rectum might require to be scooped out. I prescribed half a grain of extract of nux vomica, with five grains of compound aloes pill, directing him to take one or two such pills at bed-time, always allowing two nights between the doses. With their aid, he could ensure a movement within thirty hours of taking them; and as he sometimes found two act rather powerfully, he lessened the dose to a pill and a half.

He continued their use till the following July, often expressing the comfort he derived from them. During these seven months, I frequently inquired if he felt any spasm or anything unusual, but he assured me that the spasms were no worse than ordinary, and that he had had them more or less since his paralysis.

As far as I could judge, no ill effects seemed to have arisen, or to be likely to arise, till Monday, July 2nd, 1860, when he was seized after his dinner with a strong convulsion; during which, the nurse said, he stretched out his legs and arms, lay with his mouth open, his eyes staring, the nostrils and fauces livid. Whilst convulsed, he seemed to gasp for breath, and was in the fit more or less for nearly half an hour. As he was unconscious after it had passed away of what had happened, his nurse did not send for me, thinking that the fit arose from having eaten a hearty dinner.

On Wednesday, he had a similar attack, both before and after breakfast, and his face and hand continued stiff and cramped. I was then first informed of these attacks, and found him suffering from severe muscular contractions of the face and hands; there were remissions of these, but no entire cessation, whilst every now and then the facial contortions were hideous. Concluding that the convulsions were due to the accumulative action of the strychnia on the spinal cord, I ordered a dose of castor oil immediately, with colocynth and henbane at bed-time, as he had taken two of his pills the previous night which had not operated. The twitchings were continued with diminished force till the bowels were relieved in the evening.

The following day he was comfortable, and there were no twitchings, only he was much prostrated, and scarcely had strength to expel the phlegm which collected in the bronchi.

On July 6th, whilst being supported to eat his mutton-chop, for, feeling stronger than usual, he declined to use the bed-rest, the nurse noticed him two or three times very faint, and once the meat lay motionless in his mouth; however, he rallied sufficiently to eat another piece, but soon again became faint and died; there was no catching of his breath, indicative of spasm of the diaphragm, nor convulsion of any sort.

In the seven months, he took forty-eight grains of the extract, generally in three-quarter grain doses, being under two grains per week.

Remarks. 1. I fear he may have weakened himself by taking the pills too often, as he found them relieve his bowels.

2. The specific action of nux vomica may be manifested, though long taken with impunity, and though it move the bowels and do not lodge there so as to accumulate in bulk in the canal, yet its forces collect in the spinal system, and are manifested powerfully and without warning.

3. Hence arise its dangers as an adjunct to an habitual aperient.

4. The faintings were from the weakened heart, and his death arose from syncope, for he had had no spasm for about forty hours before his death.

Desiderata. I will only add that, we seem to need some drug or plan of treatment which, without counteracting the aperient effect of nux vomica, may render it less liable to bring on convulsive actions, just as the exhibition of chlorate of potash during a course of mercury is said to prevent ptyalism. I do not know if camphor would have that effect; and, in the absence of any drug that can be relied on for the purpose, I think we should prescribe a second aperient without any preparation of the nux vomica, to be taken at long alternations of the drug, of whose capricious action this paper affords a painful example.

[Dr. Paley remarked that probably organic disease of the spinal cord or cerebellum existed in this case, and that the convulsions might have been dependent on it rather than on the drug. In the only case of death from strychnia that he had witnessed, the patient was conscious during the paroxysm, whilst here there was unconsciousness, which would probably be the case if the convulsions arose from disease.]

British Medical Journal.

SATURDAY, DECEMBER 5th, 1863.

A POOR-LAW MEDICAL OFFICER'S DUTIES.

Dr. Griffin, three months ago, was appointed surgeon to one of the Poor-law districts of Southampton, and is now unable to discharge his duties in consequence of an attack of scarlet fever. Dr. Griffin, it must be observed, is the successor of Dr. Dusautoy, who, we are told, attributed his death to the enormous amount of work he had done in this very office.

"Of your late district officer" (writes Dr. Griffin from his sick room) "I would add that there is not one man in a million who could work, work, work continuously on as he did; not going to bed for two or three nights together; and often taking only one meal a day. His was an untiring, ever-active nature; but it killed him. The disease he suffered from did not; he died used-up, worn-out, exhausted."

The sudden incapacity, through illness, of Dr. Griffin, has thrown the Guardians into a difficulty, and has been the cause of bringing up revelations well worthy of especial note. At a meeting of the Guardians, the Deputy-President of the Board thus details his woes on the subject:

"He was sorry to hear of the illness of Dr. Griffin, whose father came to him on the evening of that day week, and told him that in consequence of the doctor's suffering from scarlet fever he would be unable to discharge his duties as medical officer of No. 2 district. He thereupon saw Dr. Cheeseman, who said that it would be impossible for him, with his own private practice, to undertake the task. He consulted with the clerk; and they went, during the following day, to more than a dozen medical gentlemen in the town to ask them to undertake the duties; but all of them refused the responsibility. On Tuesday evening, a deputation from the Board waited upon Dr. Hearne, to solicit his assistance; and he, to his great credit, readily undertook, with his assistants, the laborious duties. Had it been otherwise, he did not know what they could have done. There they were, then, when they called upon Dr. Hearne, with 150 patients, who had not been seen for two days—some of them, no doubt, in a dying state—with no medical gentleman to render assistance; and he

really thought the earnest thanks of that Board were due to Dr. Hearne for the handsome manner in which he undertook the duties. Dr. Lake would give them further information.

"Dr. Lake said that he attended the Board at the request of the deputy-president, whom he, with Dr. William Bullar, happened to meet at the Infirmary in search of a medical gentleman to undertake Dr. Griffin's duties. Being acquainted with Dr. Griffin—and, in fact, attendant upon him during his illness—he stated to the deputy-president what he requested him (Dr. Lake) to report to the Board. It was to the effect, that the work which he understood from Dr. Griffin he had to do was so enormous that it was simply impossible for any one man to do it. If one had thirty distinct visits to make in a day, it was a hard day's work; but yet Dr. Griffin told him that he had an average of sixty per day to see, besides his own private patients. He truly said 'to see', because it would be utterly impossible for them to be properly attended to. Dr. Griffin's letter showed the enormous amount of work a man could get through when forced to do it. He had the pleasure of conversing with the late Dr. Dusautoy a few days before he died, and he to him entirely imputed his death to the enormous amount of work which he had been foolish enough to do; and he (Dr. Lake) thoroughly believed that overwork was the cause of Dr. Dusautoy's death. Dr. Griffin was clearly going on in the same way. Although he had only held his appointment something like three months, yet such was the effect that every one could see his altered condition; and although it would, of course, be absurd to say that his present illness was due to overwork, it was, no doubt, partially attributable to the exhausted state to which he had been brought. He was sure that the Guardians had only to be made acquainted with such a state of things in order to take some steps with a view to reducing the enormous amount of work which was expected of the one man appointed to this district. He could only say that it was simply impossible for one man to do the work Dr. Griffin had lately been doing, with justice to the patients, or even long surviving it himself. Dr. Dusautoy was a man of iron strength, and appears to have done more than a great many men could have done. If some alterations were not made, Dr. Griffin's health would suffer most seriously."

The Board, after some discussion, determined to refer Dr. Griffin's letter (containing a detailed account of his work, and referred to below) to a committee; and also passed a resolution thanking Dr. Hearne for undertaking, temporarily, the unenviable and admittedly suicidal business of Poor-law surgeon, and mildly condemning the doctors who refused the honour and glory of the thing:

"That the thanks of this Board be given to Dr. Hearne, for the kind manner in which when called upon he took upon himself the responsibility of attending to the duties of Dr. Griffin, after more than twelve medical men had been waited on and refused to have anything to do with it, except Mr. Bencraft, who promised to take half."

We differ from the Board. We think that the thanks of the profession are due to the twelve gentlemen of Southampton who refused to have anything to do with such an affair. We know the profession too well to believe that these gentlemen would not have given their services to the Board of Guardians, if the Board had thought fit to pay for such services as they ought to be paid for. Those gentlemen, in our opinion, entered a most righteous protest against the abominable system revealed by this affair—of working their professional brethren to death, not metaphorically but literally; and paying them wages which a crossing-sweeper would not accept. *Three farthings a visit*, Dr. Griffin says are his wages. Here are his words:

"It is well to inform your Board that, supposing all the visits made, the medicines dispensed, the attendances given to paupers in the surgery, the certificates written—all four items clearly separate, and deserving of remuneration—were all added together, and the salary divided by them, it would not give more than *three-farthings a piece*. Three-farthings for a visit, when the doctor's brain has to be so worked that on its decision may often stand the death or life of the pauper.

"Three-farthings for a hurried midnight walk in a cold biting wind or drenching rain; and then to remain wet and cold in a wretched chair-less hovel, until another unit is added to the inmates of an already too densely populated court. Three-farthings! Per case it amounts to 9d."

Three farthings a visit! And these Guardians are surprised that no doctor is to be found to help them in their distress; that no doctor is to be found ambitious of earning this sort of wages. And they have the impertinence to cast an implied censure on the profession at large. Of course, the very last thing they think of doing is to inquire whether the blame of all this difficulty does not lie at their own door; whether it is not to be charged to the account of their own egregious and shameless parsimony. Instead of blaming these twelve righteous men—instead of whining over the miseries of 150 patients, some dying, without medical attendance—why did not the Board instantly say to the medical profession, Gentlemen, here is work to be done; do it, and we will pay your fees. Never will we believe that twelve medical men would then have been found to refuse to do this work. And what earthly claim have the Guardians upon them that they should do this work at the rate of ninepence per case, of three-farthings a visit, or of something after this kind of payment?

We have spoken of Dr. Griffin's letter to the Board, and we call especial attention to some of the facts contained in it. The letter, we may observe, was referred to a committee of the Board; but no one at the Board pretended that the statements contained in it were untrue. In this long letter to the Board, written in his sick room, Dr. Griffin details his sufferings—we can call them nothing else—during his three months' experience of office. He says he kept an account of the work done in order that he might at the end of six months show the Board "its enormousness; in truth, the utter impossibility of any man to perform it, or even half of it." But being taken ill, he sends in the account of the work for three months. Dr. Griffin shall tell his tale in his own words:

"During the three months, I have attended 1009 paupers, dispensed 5124 bottles of medicine, made 4801

visits to the paupers at their own homes, given 1541 attendances to paupers at the surgery, attended 25 midwifery cases, and written 502 certificates for the paupers.

"The probable work, then, for a whole year would be 4036 orders, 20,496 bottles of medicine, 19,204 visits, 6164 attendances at surgery, 100 midwifery cases, and 2008 certificates.

"Why, gentlemen, it is as much work nearly as is done by both Infirmary and Dispensary together; and yet these institutions have between them twelve medical men constantly acting, besides keeping dispensers and pupils.

"I entreat the Board, for the sake of the sick poor, not to hurry over these figures. Do, I pray you, gentlemen, consider well their meaning. Of what an amount of cruelty are they not significant when entrusted to the care of one man.

"On the 7th of September, I attended at the surgery 45 paupers; visited at their homes, 106; dispensed 101 bottles of medicine for them; wrote them 12 certificates; performed 2 serious operations; and confined 1 pauper; making in all 267 separate acts; and I received as a recompence for my work that day *eight shillings and two-pence three-farthings.*

"But what I have enumerated does not include all the parish requires from its medical officers; there is a 'parish book' to keep, in which the names, ages, residences, and diseases, are to be stated, and the days on which each separate act done is to be inserted—whether the pauper was visited by the officer, or came to the officer's surgery, and whether medicine was given to a patient without seeing him; also, the result of the patient's case, and observations—an incredibly hard task when the number on the book is nearly 300, and each one of those 300 is to be thought of: when you saw him—where—and then ticked down; a work which there has been only time to do on Sundays, and which always took six hours for the first week in the month, and three hours on the three succeeding weeks, and would have taken more had there been time to keep the book neatly and correctly.

"Doubtless, some members of your Board will say that these statements must be incorrect; our late officer did not complain; and, if he had thought there was any cruelty to the poor, he would soon have sought for a remedy.

"I must say of the late Dr. Dusautoy, that he, like as many district officers, did not trouble to make the poor get orders, if he knew they were paupers, and he well knew most of them. Then, again, if he had an order for one person in a family, and others subsequently sickened, he attended them without requiring further orders. In my list, your Board will see that numbers of families have had several ill in their houses; in some, the whole family, one after the other, with scarlet fever, measles, chicken-pox, and the like—each one of which, however, I made get a fresh order, thereby obtaining much disgrace at the first.

"Please, gentlemen, remember that there is not one man in a hundred who will sacrifice his private practice for the parish. Any well-to-do medical man will tell you that if he has thirty patients to visit in a day, it is more than he can well do.

"I sincerely trust your Board will consider earnestly and calmly these statements, and not permit any longer a system to go on, under which, in truth, 'seeing a pauper' expresses, in most cases, no more than a peep in at the door. How are you, my man?—well, you seem bad—send up for some medicine—and off goes the officer again, for a certain number must be seen.

"I would suggest that five shillings be paid for each case, supposing that the surgeon found the medicine; but four shillings only if the Guardians provided it—not too large a sum, when clubs pay four shillings a head, ill or well. Believing, gentlemen, that you really care that justice should be done to and by all parties, I trust you will not look to by-gones for the amount you may deem it requisite to pay your medical officers; but that you will pay them that which will allow the duties to be performed, not in a manner that will just keep all things quiet, but in one that will be just to every one."

We have not given a sixth part of this letter, but have culled the above slips from it. And what are we to say of the state of things disclosed in it? There is really something sad, sickening, and disheartening, in the reading of these lines. Here we are told that Dr. Dusautoy sacrificed his life in the performance of these miserable and degrading labours; and here we find another gentleman ready to offer up his life also for the miserable wages of these Poor-law Guardians. We do not like to say a harsh word to Dr. Griffin in his distress; but we cannot help asking, Why all this tender and pathetic appeal to the mercies of the poor's guardian angels? Has he not, and has not the profession, the power in its own hands in this matter? And how can a man reconcile it to his conscience to undertake duties even the half of which, as he asserts, no man can perform? When we turn upon the Board of Guardians, and ask them how they can have the barefaced cruelty of paying Dr. Griffin 8*s.* 6¾*d.* for a day's work, comprising attendance, etc., on 276 cases, including two serious operations and one confinement, what does the Board naturally answer? "Dr. Griffin is a man of years and experience, and a man of education: if he can't do the work, and don't like the pay, why does he accept the pay and undertake to do the work?"

However, we will now restrain our pen; and, truth to tell, the facts stated in Dr. Griffin's letter need no illustrating; they speak too eloquently of themselves. This only we will add—what we have too often had occasion to repeat—that the worst enemies our profession has to deal with do not live outside our professional ranks.

But what will the Board of Guardians do now? we cannot help but ask. They have been told by their own medical officer that the medical treatment of the sick, as now carried out, is a complete farce; that no one man can do one-half the work they have set one man to do; and that the daily routine of calling on and seeing patients is simply a routine affair of calling on and seeing them. Now that the truth has been told to these gentlemen, who can play the indignant so well against their medical officer when any one single case of neglect is brought against him, what position do they as a Board stand in, when they are told that the entire management of sick paupers, as carried on under their superintendence, is one huge system of neglect, and that the patients get neither proper attendance nor proper medicine? We verily believe that no more serious a charge was ever brought against a Poor-law system than has been brought against it through

this Board, and as might doubtless be brought against it through almost every other Board in the kingdom. We shall watch the result of this affair with interest—what the Committee will do with their doctor's letter, and how they will deal with its contents.

THE NEW MEDICAL COUNCIL.

The second election of members of the Medical Council is now complete. The election is for five years; and the first quinquennial period having elapsed, a new—this second—election has taken place. The following are the names of the new members:—

J. H. Green, Esq., the late President.

Representatives of Medical Corporations. In England. George Burrows, M.D. (Royal College of Physicians of London); J. M. Arnott, Esq. (Royal College of Surgeons of England); and G. Cooper, Esq. (Apothecaries' Society). *In Scotland.* Alex. Wood, M.D., (Royal College of Physicians of Edinburgh); Andrew Wood, M.D. (Royal College of Surgeons of Edinburgh); J. G. Fleming, M.D. (Faculty of Physicians and Surgeons of Glasgow). *In Ireland.* Aquilla Smith, M.D. (King and Queen's College of Physicians); W. Hargrave, Esq. (Royal College of Surgeons); C. H. Leet, M.D. (Apothecaries' Hall).

Representatives of Universities. In England. H. W. Acland, M.D. (Oxford); G. E. Paget, M.D. (Cambridge); D. Embleton, M.D. (Durham); J. Storrar, M.D. (London). *In Scotland.* J. Syme, Esq. (Edinburgh and Aberdeen); Allen Thomson, M.D. (Glasgow and St. Andrew's). *In Ireland.* J. Apjohn, M.D. (Dublin); J. D. Corrigan, M.D. (Queen's University in Ireland).

Crown Nominees. For England. E. A. Parkes, M.D.; R. Quain, M.D.; W. Sharpey, M.D.; H. W. Rumsey, Esq. *For Scotland.* R. Christison, M.D. *For Ireland.* W. Stokes, M.D.

The new members of Council are, Dr. Parkes, Dr. Quain, Dr. Paget, and Mr. Rumsey; who take the places of Sir C. Hastings, Mr. Lawrence, Dr. Bond, and Mr. Teale.

Sir Benjamin Brodie was the first President of the first Council; and was succeeded by Mr. Green, the then representative of the Royal College of Surgeons. The vacancy thus occasioned was filled by Mr. Arnott. Numerous other retirements and deaths occurred during the past quinquennial period. Mr. Nussey was replaced by Mr. Cooper. Dr. Williams (of the Irish College of Surgeons) died, and was succeeded by Mr. Porter; who, again, soon died, and was succeeded by Mr. Hargrave. Dr. Allen Thomson was elected to fill the vacancy made by the death of Dr. Laurie. Dr. Baly succeeded Sir James Clark, who retired; and, on the death of Dr. Baly, Dr. Sharpey was appointed. Dr. Watson retired, and Dr. Burrows was elected in his place. Mr. Watt succeeded Dr. Watson of Glasgow, who retired; and Mr. Watt, again, on account of bad health, retired, and was succeeded by Dr. Fleming. Hence, only thirteen of the original twenty-four members elected in 1858, now continue in office; viz., Dr. Acland, Dr. Apjohn, Dr. Corrigan, Dr. Christison, Dr. Embleton, Mr. Green, Mr. Leet, Dr. Aquilla Smith, Dr. Stokes, Dr. Storrar, Mr. Syme, Dr. Alexander Wood, and Dr. Andrew Wood.

A MEDICAL PERSECUTION.

Every medical reader, who has followed the four days' reports of the case of Symm *v.* Dr. Fraser and another, must have satisfied himself, from the very first, that the action was what the verdict has proved it to be—most unjust and unjustifiable. Yet who could feel certain as to what the decision of the jury might be until it was delivered? Mr. Chambers, in opening the case, thundered away in his usual style against the outrageous and abominable conduct of the doctors, stirring up everything he could imagine in the way of prejudice against them; but what must we now think of the morality of the proceeding in which this gentleman has acted so prominent and, no doubt, so lucrative a part? We hear of the morality of the bar: how does it tell in a case of this kind? It is now proved to demonstration by the verdict, and we apprehend it must have been from the first equally proved to demonstration to the acute and learned minds of the plaintiff's counsel, that the case had no other leg to stand upon than the money in the pocket of this poor wretched weakened lady, Mrs. Symm; and yet for five days two honourable and worthy members of our profession have been placed in the most painful and cruel of positions before the public—their reputation being at stake—through the legal proceedings taken by this feeble-minded old woman. Dr. Fraser and Dr. Andrews plainly and manifestly did nothing but their bare duty in the management of this patient. To prevent her from injuring other people or herself, they recommended that she should be placed, while suffering from delirium tremens—while raving mad, in other words—under proper control; and for this performance of their duty they are dragged like criminals before a court of justice, assailed in the strongest language by Mr. Chambers, and held up a whole week long to public indignation.

The result of this kind of proceedings is evident enough, as the Lord Chief Justice hinted. Medical men have already begun to fight shy of signing lunacy certificates; and soon they will also cease to protect the drunken madman, and the public, from the consequences of his madness. What doctor will take the responsibility of doing his duty in

these cases, if he is to run the risk of being subjected to such punishment as this? No doubt the existing public prejudice against mad doctors in particular has had much to do with the incitement and getting up of such an action as this. Clever people see which way the wind blows, and trim their sails accordingly. Even the noisy eloquence of Mr. Montagu Chambers would have probably scarcely sufficed to render viable this action, unless the public had been ready to jump at conclusions prejudicial to the profession in the matter of their dealings with lunatics. We believe that the thanks of the profession are due, in this matter, very much to the popular instruction issued by literary purveyors of the stamp of Mr. Charles Dickens and his *All the Year Round* scribes. The public do not read the calumnies on mad doctors week after week issued in *All the Year Round* and elsewhere, without imbibing strong prejudices against mad doctors and all doctors who deal in madness. Is it not more than probable, that some one or other of the jury in this very case may have entered the jury-box with his mind worked into a state of indignation through the calumnious fictions of Mr. Reade against doctors who deal with lunatics?

The utterly unfounded character of this action is shown both by the summing up of the judge and the instant giving of an unhesitating verdict; and we cannot but conclude that a very heavy moral responsibility hangs over those who brought it into a court of law. As the case now stands, it is evident that there were never any grounds or plea for such an action. It is not pretended that Dr. Fraser and Dr. Andrews had any other motive than the good of their patient in view when they recommended that restraint should be put on her. The only witnesses in favour of the charge made (that the lady's liberty was interrupted) were the lady herself and one Bennett; but on the other side were an overwhelming body of witnesses, and even her own friend Dr. Barnes, whom she herself had sent for, all giving evidence that she was properly treated. We must again call in question the nature and value of that article, the "morality of the bar", if it mean that a member of the bar, on the strength of such evidence, is justified in recommending and countenancing actions of this sort, and, above all, in aspersing the characters of—utterly and recklessly ruining, if his eloquence were effective—two honourable and honest doctors and gentlemen. Surely there must be some limit to which the license of the bar can honestly and honourably lead its members. Surely the mere taking of a fee or of the cooked-up dish of a brief from a lawyer does not justify a barrister in adopting all the insinuations and abuse contained in his instructions. Surely it is his duty to satisfy himself that there is some just ground for the cruel aspersions which he is dealing out *ore rotundo*, according to instructions. The opinion of the Lord Chief Justice is clear enough; and we gladly record his honourable testimony to the character of the profession.

"The Lord Chief Justice, in summing up, said this case was one of very great importance, involving as it did the question how far medical men, acting honestly and to the best of their judgment for the good of their patients, were responsible; and the jury ought to be careful not to impair the efficacy of medical assistance by exposing medical practitioners to be harassed by vexatious actions. He remarked that Dr. Barnes was a friend of the plaintiff herself, and had been called in as her choice, not the defendants'; that it was impossible to imagine a witness more reliable or impartial; and that his evidence was conclusive of the case in favour of the defence. And, adverting to the immense preponderance of evidence in support of it, he asked the jury if they could have any serious doubt upon it? What was there to oppose to it? Nothing but the evidence of the plaintiff herself and of Bennett. If they believed the other evidence, then there could be no doubt that it was the duty of the defendants, as her medical attendants, to do what they had done. No doubt the power which the law gave to medical men in these cases might be, and in rare instances had been, abused for interested purposes; but these instances were so rare that he hoped the public might continue to place that confidence in the members of this noble profession which had hitherto been reposed in them, and he believed was deserved. In these rare instances of abuse, however, to which he had referred, there was some interested motive at work. But what possible motive could there have been here, except the welfare of the patient? The learned counsel for the plaintiff himself, after all the evidence, had made no charge of bad motive, and only imputed entire ignorance and error. Could the jury believe that all the immense body of evidence adduced for the defence was a mass of delusion and hallucination, and that the plaintiff's condition had not been what it was described to have been? And, if they believed this evidence, could they doubt that, even if the medical men had directed that the plaintiff should be watched and restrained, they had done what was right, and for their patient's benefit? Let the jury put themselves in the position of these gentlemen, or of the friends and relatives of this person (the plaintiff), and let them ask whether, even supposing that the defendants were responsible for all that had been done to prevent her from getting out into the streets or throwing herself out of window, the jury would not consider that these gentlemen, so far from being proper subjects of condemnation and of censure, were not rather fit objects of gratitude and regard? The Lord Chief Justice, in conclusion, desired them to consider the case not only with reference to the interests of the individuals committed to the care of medical men, but also with a view to their interests in another sense; taking care not to impair or neutralise the energy and usefulness of medical assistance by exposing medical men unjustly to vexatious and harassing actions.

"At the close of the summing up, the jury barely turned round in the box, and at once returned their verdict for the defendants."

We will only add that, if ever there was a case in which the profession was called upon to defend its own rights and position by assisting their injured brethren, this is one. We have no hesitation in saying that it is the duty of our profession to sympathise with Dr. Fraser and Dr. Andrews in the most practical and unmistakable manner; namely, by holding them free from all pecuniary liabilities

in this matter. In thus defending the cause of these gentlemen, the profession is defending itself.

ALCOHOL REDIVIVUS.

Dr. Baudot has submitted to critical and experimental investigation the conclusion of MM. Lallemand, Perrin, and Duroy, concerning the elimination of alcohol. He affirms that their conclusions are utterly erroneous, and that, in fact, *alcohol is completely destroyed* — i. e., *consumed — within the body.*

What will the teetotallers say to this new version of the matter? and when shall we arrive at the bottom of the well of science, and grasp hold on a positive truth? Alcohol, Dr. Baudot tells us, is oxidised and burnt within the tissues of the body. It does not escape from the organism unoxidised. In his papers on the subject, he argues first from analogy, and then from the facts which he has obtained as results of his experiments.

Analogy, he says, would leave not a shadow of doubt, that alcohol is decomposed within the living organism. Most of the analogous ternary principles, such as fat, starch, sugar, acetic, tartaric, malic acids, etc., are transformed by the nutritive powers. Why, then, should alcohol resist oxidation there? *A priori*, indeed, alcohol would appear to have an especial facility for oxidising. It burns in the air more readily than fats; and fats burn more readily than starch, sugar, etc. By the aid of spongy platinum, also, it oxidises in the air at ordinary temperatures. It rapidly oxidises, also, under the action of ferments. This surely is *à priori* evidence of its capacity for oxidising within the body.

Again, there is nothing in the body which should render the conditions for the oxidation of alcohol less favourable than in the open air. On the contrary, the animal machine is a much more powerful oxidising agent than the air and than our best-arranged apparatuses. It burns up—consumes—sugars and fats with facility; and, moreover, animal chemistry possesses powers of decomposition and recomposition which the chemist cannot imitate.

Then he argues, if we consider the profusion in which are spread around us the materials which undergo alcoholic fermentation; if we remember, that wine has been known from the earliest ages, that it has been sanctified by nearly all the religions of the world, and that instinct and taste imperiously lead us to its use—it would, indeed, be strange if the most important principle in wine were a substance useless and hurtful to the body. But hurtful it must be, if alcohol resist animal chemistry so as not to undergo the modifications necessary to render it of service to the body, and if it be merely taken into the body to be ejected from it. By general consent, however, wine has always been accepted as an aliment—not indispensable, it is true, but useful and healthy; and it is a fact universally accepted by the workman, that the use of wine economises his bread and increases his strength. Modern science, also, had accepted this use of alcohol as a fact—without much examination, it is true. Liebig regarded it as a respiratory principle, as serving the purpose of nutrition. Bouchardat and Sandras admitted its oxidation in the body. Duchek pointed out its transformations into aldehyde—though here he was wrong. Vierordt observed that after the ingestion of alcohol, the quantity of carbonic acid exhaled was diminished. Klencke had asserted, it is true, that alcohol passed into the urine and the bile; but his observations were not regarded as of much account.

The opinion of the scientific world, therefore, up to a very recent time, was settled in favour of the oxidation of alcohol in the body—of its being useful as an aliment. But then came MM. Lallemand, Perrin, and Duroy, to disturb these settled notions. Their memoir made a great impression; it was honoured as a prize by the Academy of Sciences in 1861. The conclusions arrived at by these gentlemen were that: "Alcohol is not an aliment; alcohol is neither transformed nor destroyed within the body; alcohol is totally eliminated unchanged from the body, through the lungs, the skin, and especially the kidneys." These conclusions were accepted almost without discussion, and chiefly by reason of the high estimation in which their authors* were held, of the academic honours bestowed on their work, and of the good faith impressed on its pages. Moreover, their conclusions were founded on carefully performed experiments. They took the world by storm. No one protested against their assertions; and no one attempted to show that their conclusions were and are completely at variance with the experiments on which they were founded; and that the experiments, indeed, prove the very opposite of that which the authors themselves deduced from them.

Dr. Baudot then goes on to criticise those experiments; and affirms that from the experiments themselves we must perforce conclude, that alcohol may be completely decomposed within the body. A small—a very small quantity, he admits, may escape combustion, and so pass away with the urine, and through the skin and the lungs; but this happens because alcohol is a very volatile and soluble substance. As for the alcohol which is found in the blood and the tissues, all that can be said of it is, that it has not yet had time to undergo digestion. MM. Lallemand, Perrin, and Duroy, let it be noted, after taking the extremest care, and despite of all their efforts, only obtained 6 cubic *centimètres* of alcohol out of 225 *centimètres* taken into the body;

* M. Lallemand has been since carried off by yellow fever in Mexico.

and if we multiply these 6 by 10 to allow for errors, we shall then have only 60 cubic *centimètres* of alcohol found in the excretions. Consequently, there remain 165 cubic *centimètres* unaccounted for by them. "To me," says Dr. Baudot, "it appears evident and certain, that these 165 cubic *centimètres* of alcohol were destroyed and consumed within the body."

We will, on another occasion, give the experiments and calculations upon which Dr. Baudot founds his conclusions, which, if confirmed, will, we need hardly say, produce another revulsion in the opinions of philosophers concerning the use of alcohol. We cannot, unfortunately, say that it will produce much change in the potatory habits of the people; for, as far as we are aware, the conclusions of MM. Lallemand and Perrin, although crowned by the Academy of Sciences, and widely accepted, theoretically, by men of science, have never yet wrought any of the practical operations which ought to have resulted from men's belief in their truth. These conclusions have, we fear, never stopped the imbibition of a single glass of wine or spirits.

THE WEEK.

It is well to note that the Judges who last week gave judgment in the case of La'Mert *v.* the Medical Council, seemed to hint, that the Medical Council possessed, in the instance alluded to, more power than was proper for such a tribunal to possess. The Judges had nothing to do but to refuse the rule, as the "legislature, in its wisdom, had thought proper to intrust the Council to be exercised under this enactment, and the Court could not review their judgment." Mr. Chambers, however, suggested that the Council possessed "a very formidable power"; to which Mr. Justice Blackburn, replied "that, nevertheless, the Court had no power to interfere." We refer to the point, because it is more than probable that, if the Medical Bill come again under the consideration of Parliament, attempts will be made to subject the opinion of the Council, in such like cases, to a court of law's decision.

Dr. Bence Jones, as secretary to the Royal Institution, has issued, privately, an appeal to men of wealth, calling upon them to forward the great ends of the Royal Institution by enriching it with the needful funds. We trust his appeal may not be in vain; but we, unfortunately, have too many proofs staring us in the face of the neglectful treatment of science, and of men of science, by the Government of the country, that we cannot hope for any adequate response to the appeal. It is well to remark that every now and then, we find men of position and wealth, and even of science, who tell the world that starvation is the best stimulus you can employ to those engaged in the study of nature's works. These labourers, it is said, would become drones if you paid them an adequate reward for the labour.

We are happy to state that the Committee for promoting the testimonial to Dr. Lingen have collected sufficient funds to enable them to defray the whole of his legal expenses of the late trial, in which he was the defendant. Consequently, Baron Martin's suggestion on the motion for a new trial, that the plaintiff should not be called on for costs, will be carried out. The balance will be expended in the purchase of a piece of plate to be presented to Dr. Lingen as a memorial of the estimation in which he is so justly held by his friends.

The American ("The United States") *Pharmacovœia* has got the start, after all, of the London *Pharmacopœia*. Which will beat in the long run has yet to be seen. It has just been published. Fifty-five new articles have been added to the list of drugs—a fact rather to be lamented than matter of congratulation, considering our very great ignorance of the real uses of so many of the drugs already of long established reputation. Twenty-six articles in the old *Pharmacopœia* list have been dismissed. Of new *preparations* it contains 111; and of the old ones, 37 have been left out. This production is "the fourth decennial revision". A vast amount of labour has been bestowed on its compilation. Colleges and corporations, etc., from all parts, have contributed by delegates to the Central Board sitting at Philadelphia. A raging civil war has not interfered with the settlement of the potions, lotions, and salves of the country which are to pass current and standard for the next ten years—"the recurring revision of our *Pharmacopœia* at decennial periods being now a fixed rule of the work." The Committee held 119 meetings, and had subcommittees also at work, which subcommittees sent up no less than 138 reports. It will be a curious incident, if this appearance of the United States *Pharmacopœia* should be the cause of still further delaying the publication of our British article. We may be sure that our British compilers will eagerly refer to this new work; and it will be strange indeed if they do not pick up in it some Yankee notions worthy of their attention. Will they still further delay the press in order to seize upon any such good things?

The Dublin medical press has several important works *in esse et posse*. Professor Churchill is about to produce a new edition of his work on *Diseases of Women*. A reprint of Graves's *Clinical Medicine*, by Neligan, to which will be affixed a translation of

the preface to the French edition, written by Trousseau, is announced. A sixth edition of Neligan's *Medicines, their Uses*, etc., is forthcoming, under Mr. Macnamara's care; and also a new edition of his *Materia Medica*, by Mr. Frazer. Mr. M. Collis is reported to be busied with the elaboration of a work on *Cancers and Analogous Tumours*. Dr. Apjohn has also a manual on the *History of the Metalloids*.

The Academy of Medicine has in one week lost two of its members, MM. Villermé and Pâtissier. Both of them have belonged to the Academy forty years.

THE LATE EDWARD TOWNSEND COX, ESQ.

Mr. Edward Townsend Cox died at Birmingham on the 26th ult. Mr. Cox, until within the last few weeks, notwithstanding his great age, was constantly to be seen in the streets, walking with a firm elastic step, or driving in his pony carriage. His tall, commanding figure, slightly bowed by the weight of years, attracted general attention whenever he appeared in public. His long connection with the local charities, his reputation as a surgeon, and his singular independence not to say eccentricity, of character, had come to be regarded in the light of one of the institutions of the town. Mr. Cox was born in Deritend about 1769 or 1770. His father, the Rev. Thomas Cox, was Chaplain of St. John's Deritend.

Mr. Cox was educated at the Free Grammar School, and afterwards studied for five years at the General Hospital—then newly opened—under George Kennedy, the eminent surgeon. He then became a student at Guy's and St. Thomas's. On the completion of his studies, Mr. Cox settled at Stratford-on-Avon; but, finding a country life unsuited to his taste, he shortly removed to Birmingham. Here he speedily took high position amongst his professional brethren. He was for forty years surgeon to the Town Infirmary, and one of the surgeons to the General Dispensary. Later in life he took a very active part in establishing the Royal School of Medicine, and still later the Queen's College and Queen's Hospital owed much to his judgment and energy. Of the last-named institution he was for many years one of the honorary surgeons, an office he retained until his death. His interest in Queen's College was second only to that displayed by the founder, his son, whom he liberally assisted with funds to establish the institution. In addition to these appointments Mr. Cox had medical charge of the hospital at the barracks.

Of Mr. Cox's professional ability and reputation this is scarcely the proper place to speak. He was thoroughly learned in the science and practice of his art, and was largely endowed with those great qualifications of a good surgeon—clearness and quickness of perception, decision of character, and firmness of purpose. He was specially remarkable as a most successful surgeon accoucheur. To the honour of his memory it should also be recorded that when Jenner's great discovery was virulently opposed, Mr. Cox took an active part in combatting popular prejudice. In short, as a surgeon, he was worthy to be enrolled in the long list of eminent practitioners who have done honour to Birmingham—the Johnstones, Bright, Pearson, Withering, Freer, Dickenson, and Wood. In all his dealings he was remarkable for that high sense of professional etiquette which especially stamped the character of the times and the school to which he belonged.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, December 10th, 6 P.M.

PAYMENT OF SUBSCRIPTIONS: SPECIAL NOTICE.

Members who have not yet paid their subscriptions for the present year are earnestly desired to remit them to the General Secretary before the end of December. Their attention is directed to the following laws of the British Medical Association.

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

10. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, December 1st, 1863.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The tenth meeting was held at the Fountain Hotel, Canterbury, on November 26th. Several members attended from Dover, Folkestone, Ashford, Faversham, and other places. J. Reid, Esq., of Canterbury, was called to Chair.

A letter was read from Dr. Armstrong, regretting his unavoidable absence.

Next Meeting. Mr. Bowles proposed that the meeting on March 24th, 1864, should be held at Ashford; also, that Mr. Wilks be requested to act as local chairman for that meeting. This was seconded by Mr. Andrews, and carried.

Papers. The following papers were read:—

1. On Drowning. By R. L. Bowles, Esq. This paper, which will be arranged for publication in the Journal, was brought forward to induce the members to consider the different ready methods recommended for the recovery of drowned persons. The author himself strongly advocated the Marshall Hall plan, and gave an interesting review of the whole subject. A partial discussion followed; and it is proposed to consider the subject again at the next meeting.

2. Mr. Reid read some very interesting observations on Secondary Cow-Pox. He described the different appearances produced by second vaccination, according as persons were more or less protected by the first; and pointed out the analogy between those modified forms of cow-pox and the various modified forms of small-pox after vaccination. The paper will be forwarded for publication.

3. Case of Placenta Prævia, in which the Air Pessary was applied with good effect. By W. Sankey, Esq.

After the meeting, seventeen members dined together; Mr. Alderman Cooper of Canterbury presided.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

NOVEMBER 4TH, 1863.

ROBERT BARNES, M.D., in the Chair.

FOUR gentlemen were elected Fellows of the Society.

Vaginal Lithotomy. Mr. BAKER BROWN exhibited a calculus, weighing two ounces and five drachms, which he had removed from the bladder by vaginal lithotomy. The stone had apparently been in the bladder for eight years. It was removed through an incision extending from the neck of the bladder to near the os uteri. The wound was afterwards closed by seven silver sutures, and the patient recovered without a single bad symptom.

ON COMBINED EXTERNAL AND INTERNAL VERSION.
BY BRAXTON HICKS, M.D., F.R.S.

The author related twenty cases in which he had operated by "bimanual version," including eight cases of placenta prævia, one of accidental hæmorrhage, and two in which he had changed arm-presentations into cephalic, in both of which the children were born alive. After alluding to the discovery of the mobility of the fœtus made by the Germans, and also to the plan of pushing on the child by one or two fingers through the os, he proceeded to show the mode of combining both movements, by acting on both extremities of the child, with a much greater certainty as to the result in the majority of cases requiring version. He pointed out the principles on which the plan was based—viz., the mobility of the child *in utero*, varying according to the activity of the uterus; the position of a knee within a short distance of the os, when the child was transverse; the ease with which the breech was brought to the os with the foot upon it, when the child was already transverse. The movement of the child *in utero* was accomplished by pressing on one side of the breech at the fundus, in ordinary head-presentations, by a series of gentle palpations; or by a gliding pressure on the abdominal parietes, so as to follow up the fœtus as it receded under the impulse, by continuing of which the breech was brought to the middle of the uterus on one side; at the same time, the head was pushed up by a finger or two through the os, so as to raise it above the brim to the middle of the uterus on the other side. The child being thus more or less transverse, the knee could be generally easily seized; if not, the breech must be depressed to the os, and the foot secured. Dr. HICKS dwelt upon the easy application of the operation to placenta prævia, as shown in the cases he recorded; and stated that it was particularly of use in those cases where the os was so little dilated that the hand could not enter. He, however, laid great stress upon the importance of not using any more traction than the weight of the arm could produce, whereby the child was used as a plug, while time was given to rally the patient, for the os to dilate, and for the pains to come on. In almost every case he waited for natural efforts to deliver, only gently assisting. He had in none seen the slightest bleeding, internal or external, after the leg was once fairly through. Dr. Hicks then pointed out the mode of producing cephalic version, which he had found very practicable in certain cases of transverse presentation, by placing the head, already secured between the outside and inside hand, into the os, and retaining the external hand on the head till the uterus had moulded itself to the form of the head and shoulders. He also showed that this mode of pressing the head into the os was a means of restoring prolapse of the funis in some cases, as occurred in two cases recorded by him, and thought it would in similar cases be found to be a satisfactory mode of treatment. Allusion was then made to the advantages of early version, and to the class of cases to which it was applicable. The circumstances that rose to interfere with the plan were pointed out, and the means of combating them. The author remarked, that although in confirmed arm-presentations it was scarcely possible to expect this plan to succeed, yet these cases need seldom occur to a vigilant practitioner, as he had the means of avoiding such cases, if called early, by bimanual version. Perhaps the greatest value of this mode is the capability of version long before it can be performed by any other method.

Dr. CLEVELAND inquired whether, in practising the operation now recommended, the right hand could be employed within the vagina as well as the left. This was important, as many practitioners were accustomed to use the right hand for manipulations, and to such the use of the other hand might prove awkward.

Mr. BAKER BROWN had no doubt that the plan recommended by Dr. Hicks would be found in many cases most useful, although at first more difficult than the old plan. He (Mr. Baker Brown) looked upon the operation of turning as one of the simplest and easiest in obstetric surgery. In reply to Dr. Cleveland, he believed that the left hand should always be employed, because, the patient lying in the usual position on her left side, the convexity of the hand would pass readily into the hollow of the sacrum; whereas, if the right were used, it would be found very difficult to twist the arm round to introduce the hand with facility into the womb.

Dr. BROADBENT related a case which occurred to him four years and a half ago, when resident obstetric officer to St. Mary's Hospital, in which he was compelled to resort to the method of turning described by Dr. Hicks, from the impossibility of effecting version in the ordinary manner. He was sent for to a woman in puerperal convulsions, so severe that, soon after reaching her, she was for a time supposed to be dead. As respiration became re-established, chloroform was administered. On examination, he found the posterior part of the os and cervix uteri affected with cancer, which involved so large a proportion of the circumference as to leave no hope of dilatation by the natural efforts. Deeming it necessary to effect delivery, he determined to turn. It was, however, impossible to introduce more than two fingers into the uterus, and these only by using a certain amount of force. His right hand was supporting the uterus externally, and the idea occurred to him to attempt the version by the co-operation of the two hands. The child was turned very readily; but great difficulty was experienced in getting the feet one after the other through the rigid os, and the head was extracted only after prolonged efforts. The child died from pressure on the cord; and the mother, becoming violently maniacal, and refusing all food, also died. He had been astonished at the ease with which the child was turned by the method in question, which, however, he had not subsequently again tried.

Dr. HALL DAVIS could from experience bear testimony to the practicability and value of the operation of turning the child by external manipulation, as proposed by Dr. Hicks. He must, however, confess that he had found Dr. Hicks's method most successful when conjoined with the introduction of two fingers of the left hand to hook down the knee, or of the entire hand when the foot could not otherwise be reached. In some cases he had found version by one foot impossible; he had then by bringing down the other foot effected his object with facility. In those cases of placenta prævia in which the patients had lost much blood, and turning was advisable, he thought the method now proposed, with or without the employment of two fingers internally, as circumstances might indicate, particularly valuable; as in these cases, from reflex action being in them more readily set up, the introduction of the hand into the

uterus was attended with greater risk. Dr. Davis had in a few cases, to obviate turning, tested the practice of detaching the placenta from the cervix; but the hæmorrhage had continued. No fatal result followed, however, as the child was immediately brought down, and acted as a plug upon the bleeding orifices.

Dr. GREENHALGH mentioned a case in which he performed the operation of version by Dr. Hicks's method. He had adopted it at Dr. Barnes's suggestion, who had kindly given his assistance. The operation succeeded very well so far as the turning of the child was concerned, and [the circumstances were such that turning by any other method would have been impossible; but the difficulty afterwards experienced in extracting the child—the pelvic inlet being very greatly narrowed—was so great that it was necessary to perform the Cæsarean section.

Dr. BARNES called attention to the extreme value of the paper as tending to advance the cultivation of the hand as an obstetric instrument. The case described by Dr. Greenhalgh was one in which the advantages of Dr. Hicks's method of turning were most remarkably illustrated. The pelvis was so contracted that it was simply impossible to do more than squeeze the two fingers in between the tumour and the symphysis pubis; yet the turning was fairly accomplished, although for want of space it was still impossible to grasp the foot which had been brought down. He (Dr. Barnes) had performed the operation of turning about a hundred and ten times during the last five years, and he might say that in almost every instance he had derived more or less assistance from the adoption of the principle of this method. That principle consisted simply in acting upon the two poles of the long diameter of the fœtus at the same time. Just as in the case of a Chinese ball contained within another, if you pressed upon one point only, the inner ball would not revolve; but if you pressed upon opposite poles in opposite directions at the same time, the ball would revolve easily; so it was with the fœtus *in utero*. The general application of this principle in turning had been developed in his practice gradually as difficulties arose. He had first been led by Dr. Simpson's recommendation to use the right hand externally to support the uterus, and then he was not long in discovering that the hand outside might often be made more useful in effecting version than even the left hand inside. Thus he had for some years put in practical operation the bimanual method, and had frequently turned without introducing more than two fingers into the uterus. But he was glad to acknowledge that he had not fully grasped the principle of the operation, nor carried it into practice with entire comprehension and accuracy, until after reading Dr. Hicks's excellent description. It was right to refer to the history of this operation in reference to the researches of others. In 1807, Wigand published an admirable memoir, in which he fully described the principle and method of turning by internal and external manipulations. But this memoir had been unaccountably neglected. Although his name was quoted, what he had written appeared to have produced little or no effect upon practice. One secret of success lay in obtaining an accurate idea of the position of the fœtus; and there was no true transverse presentation such as was figured in many text-books. In all these cases the fœtus lay obliquely in reference to the pelvic brim; the head was never far remote from the os uteri, the breech was elevated to a higher level than the head, and the knees were generally near the lower segment of the uterus—not far to seek; so that by pushing the shoulder and head on one side, whilst the external hand pressed down the breech, the fingers passed through the cervix might easily seize one or other of them. There was one point in the operation which he did not think Dr. Hicks had described with sufficient care. As soon as the knee was seized, the mode of assisting by the external hand must be changed; at this stage the right hand should be brought down so as to receive the head in the palm, which should then be pressed upwards away from the brim and iliac fossa, whilst gentle traction should be exerted upon the limb grasped by the left hand. He had sometimes even been enabled by this manœuvre to elevate the head and shoulder from the brim in cases of extreme difficulty, so as to give space for the introduction of the hand, which was otherwise impossible. The obstacles which he had found the most difficult to deal with arose in certain cases of dead children where decomposition had advanced so far as to destroy all elasticity and resiliency in the fœtal spine. To effect evolution by acting upon one or other or both poles of the long diameter of the child, it was essential that that long diameter—represented by the spine—should preserve a certain degree of rigidity or elasticity; otherwise, when traction was exerted upon a limb, the only effect was to compress the fœtus into a mass which moulded itself to the resisting structures. Another difficulty arose in cases of premature labour, partly from the small undeveloped condition of the uterus which impeded manipulation, and partly from the want of rigidity of the fœtus, which led to its being compressed by the spasmodic contraction of the uterus into a compact ball. With regard to the use of this method of turning in placenta prævia, he fully recognised its merit. Although insisting upon the advantage of the principles of treating placenta prævia which he himself had introduced, he was always ready to avail himself, according to the necessity of the case, of other aids. The total detachment of the placenta was not true to physiology—it was bad in practice and quite superfluous; but the partial or cervical detachment was indicated, if for no other reason, to liberate the cervix and facilitate its dilatation, and therefore turning. He fully recognised the value of chloroform; but unless full surgical anæsthesia were induced, it sometimes rather obstructed than facilitated turning. With regard to the objection that the bimanual method was liable to cause metritis, he could only imagine that this arose from an utter misconception of the nature of the operation. It was only necessary to pass two fingers into the uterus, and the operation was accomplished with less force than by the old method. So easy was it at times, that he had on one occasion, in a case of placenta prævia, turned and delivered a child without passing more than two fingers into the vagina.

Dr. GRAILY HEWITT believed that all who had heard the paper now read would, however strongly prejudiced in favour of the older method of turning, have recourse to the bimanual method when suitable cases presented themselves. He was unable to speak as to the value of the operation from personal observation. In all cases of turning, he had himself made very free use of the second hand externally, to steady the uterus, and so facilitate the operation, but he had not practised the "bimanual operation" in its entirety. It was undoubtedly a great object to do without the introduction of the entire hand into the uterus, but he would at the same time remark, as, indeed, the author had stated in his paper, that the risk attendant on introduction of the hand into the uterus had been very much over-estimated. He had frequently so introduced the hand, and had never seen the slightest injurious results. There was a point in reference to the operation of turning to which he would take occasion to allude—viz., the necessity for bringing down both feet; otherwise, as he had found by experience, great difficulty was liable to be encountered at a further stage of the delivery. In one case—that of a patient of St. Mary's Hospital Maternity, which he had attended, the difficulty in question was particularly observed, and he now made it a rule to secure both feet at first. The method of turning recommended by Dr. Hicks would be found most difficult of execution, as Dr.

Hicks had stated, in cases of cross-birth where the arm presented and the uterus was forcibly contracted. In such cases the introduction of the hand into the uterus would be absolutely necessary. He would beg respectfully to express his dissent from the opinion just announced by the chairman as to the use of chloroform in such cases. In a case in which he had been called to assist, one arm and one leg lay in the vagina, and fruitless attempts had been made to complete the turning, the uterus being strongly contracted. In this case the effect of chloroform was most beneficial, allowing the introduction of the hand and the easy completion of the operation.

Dr. Hicks replied to the observations of the several speakers. He did not recommend this measure in every case, but advised that mode to be employed which was most readily applicable to each case. He still, notwithstanding Dr. Barnes's opinion, adhered to what he had stated in the paper concerning its advantages. He had not found the premature age of the fœtus any considerable obstacle to delivery. In answer to Dr. Cleveland, he would state that the right hand could be easily used instead of the left, if the patient were placed on the right side.

THREE CASES OF RETROVERSION OF THE UTERUS.
BY ROBERT HARDEY, ESQ., HULL.

The first case was one of retroversion of the uterus, with prolapsus of the vagina, occurring immediately after delivery at the eighth month of utero-gestation. There was also retention of urine. By pressing back the tumour and keeping the bladder empty a cure was effected. In the second case there was retroversion of the gravid uterus about the fourth month, associated with ovarian tumour of the left side. The abnormal position of the uterus was rectified by manipulations, and the patient went to the full term. Unfortunately the patient died fourteen days after labour from strangulation of the intestine, which had become glued by inflammation round the pedicle of the tumour. The third case related was one of retroversion of the uterus with excessive hæmorrhage. The uterus was reduced to its normal position and the ovum extracted, the patient recovering perfectly. The woman thought herself near the end of gestation.

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

Wednesday, November 4th, 1863.

E. Lund, Esq., in the Chair.

Absence of Iris. The discussion of Dr. Samelson's communication on this subject, which appeared in the British Medical Journal of November 7th, was resumed. Dr. Samelson made some observations on the different forms in which the affection may occur. Mr. John Windsor also gave the particulars of two additional cases, both double and congenital. The first was under observation from the age of nine weeks to eleven years, at which latter period she could see well, but was rather short-sighted. Mr. Windsor entered the observation when she was first brought to him (in October 1828), that when light was thrown into the eyes, each presented the appearance of a small red lighted chamber. The other case was similar.

Glaucoma treated by Iridectomy. Mr. Thomas Windsor read notes of a case of acute glaucoma of both eyes. On July 29th, 1863, the patient came to him, having been treated for thirteen days unsuccessfully by leeching, salivation, free purgation, etc. He had noticed nothing the matter with his eyes till three days before this was commenced. There was well marked glaucoma on both sides; the aqueous humour was turbid; the pupils rather dilated and fixed; the vitreous body turbid; the tension of the globe was much increased. The qualitative perception of light was abolished; the quantitative was moderately good. Iridectomy was at once performed on the inner side of each eye.

July 30th. He passed a good night, and could distinguish the divisions of a window. Atropine drops were ordered to be used.

July 31st. He could count fingers at two feet.

August 1st. He counted fingers at eight feet. The right pupil was now well dilated.

August 3rd. He could make out No. 20 with the right eye at fourteen inches with + 12.

August 21st. With + 8 the right eye read No. 12; the left No. 15.

October 13th. With + 6 he read with some difficulty No. 10, and a few words of No. 9.

Acute Epiglottiditis. Mr. John Windsor detailed an interesting case of this disease. The patient, a male, aged 35, seen first on Aug. 21, 1863, had almost complete obstruction to swallowing, coming on for two days previously. The voice was whispering. There was no cough or febrile action. The fauces appeared almost normal; but, on examination with the finger, the epiglottis could be felt as a hard solid ball, filling up the lower end of the pharynx. He was ordered to have three grains of calomel placed on the tongue every three hours. In the afternoon, the symptoms being as urgent, the swelling was punctured in two or three places by a long needle flattened at the point and guided by the fingers, and again in the evening, with slight feeling of relief each time.

August 22nd. He was much the same. The tumour was punctured again, and bled rather more freely. He swallowed a few teaspoonfuls of beef-tea.

August 23rd. He could speak a little better. He swallowed half a cupful of beef-tea. The scarification was repeated.

August 24th. Some salivation having occurred, the calomel was omitted.

August 27th. He was better; he passed a semisolid substance of the size of a filbert. He spoke clearly. He was scarified each day at his own request. Iodide of potash with gentian was ordered.

August 30th. The epiglottis was of nearly its natural size. He swallowed some bread and butter. He expectorated a good deal of muco-sanguineous matter.

September 18th. He was now quite well.

Mr. Windsor remarked that he considered the success in this case was mainly due to the frequent puncturing. The swelling was undoubtedly confined chiefly to the upper surface of the epiglottis, owing to the looser adherence of its mucous covering. He said that such cases, uncomplicated with inflammation of the neighbouring parts, were rare. He had only, after careful inquiry, been able to meet with notices of two cases by Burne, in the *Medical Gazette* for May 1830; two cases by Kesteven, in the *Medical Gazette* for 1849; three cases by Sir H. Marsh, in the *Dublin Medical Journal*, vol. xiii; one case by Mainwaring, in *Medical Facts and Observations* for 1791, vol. i; three cases in the third volume of *Transactions of a Society for the Improvement of Medical Science* (1808); three cases by Professor Lærsen, in *Schmidt's Jahrbücher* for 1852; and a short notice of the subject, chiefly referring to British authorities, in *Wunderlich's Handbuch* (1856). In nearly all of these cases, most heroic antiphlogistic treatment was had recourse to. Lærsen, however, had made use of free scarification. Only one of the cases referred to died; though in most of them there appeared to be imminent danger.

Dr. G. F. Forbes has been set apart for the duty of continuing experiments with New Orleans seed in Dharwar, and superintending the cotton gin factory there.

Correspondence.

IRIDECTOMY.

LETTER FROM CHARLES TAYLOR, M.D.

SIR,—Your endeavour to elicit the truth regarding the operation of iridectomy in glaucoma and some other diseases of the eye deserves commendation. It is, nevertheless, to be regretted that the general tenour of your remarks and that of some others should, as it appears to me, be unreasonably prejudiced against an operation, to the timely performance of which there is no doubt thousands in this country and abroad owe useful vision. Iridectomy is indicated in cases of general inflammation of the eyeball, characterised by increased intraocular pressure and consequent more or less stony hardness of the globe. Under this head may be included acute inflammatory and chronic glaucoma, with obstinate recurrent cases of iritis accompanied by more or less inflammatory implication of the choroid.

Acute glaucoma is characterised by excessive constitutional sympathy, with the phenomena of marked irritation. The conjunctiva is of a deep red colour; scalding tears course down the cheek. There are extreme photophobia followed by dilated pupil, most intense pain, and rapid loss of transparency of the vitreous body. Cases of this description are recorded where vision has been totally lost on the day following the commencement of the attack.

Inflammatory glaucoma is characterised by repeated attacks of deep seated inflammation, which resists all medical treatment, and is accompanied by diffuse exudations into the vitreous and aqueous humours. The patient complains at first of rapid recession of the near point. Photophobia is then developed; flashes of light and floating sparks are seen before the eyes; a halo surrounds the candle; and the sufferer is alarmed by periodical obscurations, etc.; the eyeball then becomes hard and painful to the touch; the pupil becomes permanently dilated; and, after a time, anæsthesia of the cornea is noted, with a deep seated aching pain in the supraorbital region. The patient may or may not continue in this condition for a considerable period (years even); but, in either case, symptoms of increased intraocular pressure are ultimately developed, and blindness occasioned by compression of the retina and optic nerve is the result. In the progress of the case, the vitreous humour becomes opaque; but if the ophthalmoscope be used before this stage, the phenomena of increased pressure may be observed in pulsation of the arteries, with cupping of the optic papilla, also evidenced by alteration of the normal curve of the cornea and consequent astigmatism, diminution of the anterior chamber, and distortion of the iris. The gradual destruction of the function of the retina from pressure is plainly indicated by the progressive limitation of the lateral field of vision.

Chronic glaucoma is more insidious than the preceding; but is characterised by much the same symptoms. Recession of the near point first attracts the patient's attention, by necessitating a frequent change of glasses. Periodical obscurations, rainbows round the candle, diminution of lateral range of vision, with astigmatism, are then noticed; and on examination we find evidence of pressure from pulsation of the arteries and increased tension of the globe. Ultimately, the iris becomes altered in structure; and sight is lost from the same cause and with much the same symptoms as in the preceding case.

It will have been observed that haziness, hardness, and dilated pupil, are the three characteristics of glaucoma, in addition to which, as a disease remediable by iridectomy, I must notice those obstinate cases of recurrent iritis with which every ophthalmic surgeon is but too well acquainted.

These cases, which are complicated by implication of the choroid, seem to resist all treatment, and end ultimately in alteration of the tissue of the iris, complete synechiæ, occlusion of the pupil by exudation, with diminution of the anterior chamber, and at last, in many cases, more or less opacity of the lens, with complete loss of vision.

Increased tension of the globe, with considerable pain, accompanies this state of things; and we not unfrequently have to deplore serious injury to the fellow eye from sympathetic irritation.

It is established, that all these cases characterised by intraocular pressure are instantly relieved, the chain of morbid action broken, and normal tension permanently restored, by the operation of iridectomy; nor does it appear to me very difficult to understand how this should happen. In the first place, a free opening is made into the bulb, the ciliary muscle is incised, and tension is immediately relieved by the evacuation of the aqueous humour; which, with a part of the vitreous humour and diffuse inflammatory products, at once escapes. A greater or less portion of the contents of the globe is then removed by excision of the iris. A free communication between the anterior and posterior chambers is permanently established.* Morbid products behind the uncut iris are thus set free;† and the full bleeding, which always accompanies these cases so long as the iris is sound, at once drains the engorged vessels of the choroid, and relieves the retina of pressure from behind.

To say that such cases recover as well without iridectomy as with it, is bare assertion certainly not borne out by facts. In truth, practical men know that they do not recover; and it would be easy for me now to point out several cases where the eye has perished beyond hope from neglect of this operation, and where iridectomy is even now urgently demanded for the relief of pain.

The benefits of iridectomy being so marked and palpable, surgeons would not be warranted in neglecting the operation, even were the risks attending it very great; but, in fact, this operation, when successfully performed, appears to be singularly safe; indeed, I do not know anything in ophthalmic surgery that has surprised and pleased me more than to notice the slight disturbance which usually follows a procedure apparently so grave. I have tested this operation as a preliminary to extraction in five cases of cataract (the eye being quiescent and of normal tension), where actual disease of the eyeball itself, extreme tenuity of the cornea, great age, debility, or constitutional dyscrasia, on the part of the patient, left me little hope that the ordinary operation would succeed. Four of these patients did well, as far as the subsequent extraction was concerned; and I have not yet operated on the fifth. All seemed to make light of the iridectomy (performed without chloroform); one walked home some distance immediately after the operation, and went about her ordinary household work; the others resumed their usual avocations on the following day. Of course, the above observations only apply to iridectomies successfully performed. When this is not the case, various grave accidents may occur, wounding the lens, and consequent formation of cataract, being the principal; of which accident, I have already seen three instances.

I shall reserve the *rationale* of iridectomy in securing

* As certainly as an iritis that closes the pupillary opening exercises a destructive influence on the cornea and other tissues of the eyeball, so certainly on the other hand that influence ceases as soon as a free communication between the anterior and posterior chambers is established. (Moreen.)

† It has been suggested that the collection of morbid products behind the uncut iris irritates the ciliary processes, and produces a condition that, by rapid extension to Schlemm's canal, excites phlebitis, on which the subsequent destruction depends.

the success of subsequent extraction for a future communication, merely observing now that it presents nothing in the least analogous to its *modus operandi* in glaucoma and other inflammatory affections of the eyeball. With regard to the permanent effects of the operation, I may mention that when the iridectomy is made superior, the colotoma iridis is completely concealed by the upper lid, no deformity is occasioned, and vision does not appear to be impaired, patients after subsequent extraction reading No. 1 with ease.

Having thus indicated in what cases the operation is required—having endeavoured to explain its *modus operandi*, and to prove how little danger to sight attends on iridectomy *per se*—I cannot now do better than conclude in the words of Professor Donders of Utrecht:—"Humanity demands that prejudice and ignorance should cease to oppose the introduction of iridectomy for the cure of glaucoma."

I am, etc.,

CHARLES TAYLOR,

House-Surgeon Nottingham Eye Dispensary.

Mansfield Road, Nottingham, Nov. 16th, 1863.

SIR,—Permit me to say a few words in reply to Mr. Bowman's obliging answer to the question I put to him. I am sure I wish in no way to exaggerate any statement; and sincerely trust that, in so far as the iridectomy subject is discussed, it may be done with perfect calmness. From all I know of Mr. Bowman, I believe that he is the very last man in the world who would deprecate the free discussion of any unsettled point in surgery. Fair discussion can only lead to what all of us desire; viz., the truth. I do not, then, think I exaggerated when I said that we ought, in the days previous to iridectomy, to have met with glaucomatous blind at every corner of the street, if, as is now stated by iridectomists, iridectomy is the sole and only cure for the disease which eventuates in complete glaucoma, unless iridectomy be performed. No greater proof of the frequency of the disease which requires iridectomy can be given than the fact of the numbers of operations which are reported in the journals. Mr. Bowman forgets that, before the days of iridectomy, there must, if his doctrine be true, *have been years of accumulations of blind glaucomatous.* Every year, or rather every week and day, must then have added to the number of blind, because the operation which, as we are assured, can alone effect the cure of the disease, was unknown and unpractised. I must again ask the question, therefore, How comes it that, before the days of iridectomy, glaucoma was comparatively so rare a disease?

I am, etc., A SURGEON.

LETTER FROM HAYNES WALTON, ESQ.

SIR,—I beg to acknowledge the receipt of your note, in which you ask me "to give the profession the benefit of my great experience respecting iridectomy." I do agree with you in the remark "that the subject is deserving of serious consideration, as the opinion, and I conclude the practice, of surgeons, differ so materially, in reference to the treatment for which it is asserted that iridectomy is needed."

I had almost decided to be silent during the present question, as I have discussed the subject in a separate chapter in the last edition of my work on the Surgical Diseases of the Eye; but I accept your invitation, because perhaps now I have more knowledge, and because my example might possibly induce surgeons who have not yet spoken, to record their opinions.

I may say at once, that I have not been able to discover that the removal of a piece of the iris has ever exercised the slightest influence over any inflammatory condition of the eyeball, nor over the disease called glaucoma, while the operation always, more or less, damages the eye. I may add that, several surgeons attached to eye hospitals and infirmaries, assure me that their experience is the same. I do not include among them any of my colleagues.

But I must not be satisfied with a mere assertion. I intend to send you a statement of my views in a practical paper, so soon as I can find time to settle to the work; at present I am very busy. I am, however, determined not to enter into any controversy, but merely to say what I think, and cease.

I am, etc., HAYNES WALTON.

69, Brook Street, Hanover Square, November 30th, 1863.

SUSCEPTIBILITY TO DISEASE.

LETTER FROM GEORGE F. GILES, M.D.

SIR,—The unusual susceptibility to the reception of disease, more especially fever, during the last few years, must have been sufficiently evident to have attracted the notice of the profession generally; and perhaps some may have been struck with the anomalous character of some fevers falling under their observation. Diseases which usually attack but once, or in the event of a second attack a long interval has occurred between them, have appeared in rapid succession. Vaccination, which after the first successful performance of the operation had been repeated occasionally without any effect, has, when undertaken of late, frequently produced considerable annoyance and sometimes serious consequences. I have now under treatment a woman 40 years of age with small-pox; her arm bears the mark of successful vaccination performed in early life; she was re-vaccinated about five years ago without producing any results.

The following two cases are instructive in illustrating the above remarks:—

W. C., aged 12, at a boarding school with about forty other boys, was attacked with slight sore-throat, a pink look in the conjunctiva, and a red tongue with elongated papillæ. I advised his removal to a remote part of the house and the cutting off of all communication between him and the other boys. The following day he was allowed to come down stairs, as he appeared well. I still advised caution and isolation. The third day he said he was perfectly well, and before I saw him he had mixed with his schoolfellows. A few days afterwards he went home for the Michaelmas holidays. During his absence about twenty boys were attacked with scarlet fever. On returning to school, he again took the disease and died. It proved that the first slight attack, though sufficient to infect nearly the whole school, was no safeguard either as to receiving the disease a second time, or in modifying its severity.

W. F., aged 3, was suffering from general anasarca and albuminuria. The tongue was red, with elongated papillæ. I pronounced the child to have lately had scarlet fever. This was denied; but the mother admitted that about a fortnight before the boy had complained of slight sore-throat. Under a treatment of a daily warm bath and citrate of potash and citrate of iron, the child improved. He was removed to the country. On the day of leaving, the mother was seized with scarlet fever, and had a severe attack. Two children of another family left in the house were taken immediately afterwards, one of whom died. At the end of a fortnight, the mother and child returned; the boy almost immediately again had the disease, well-marked on this occasion; he again had albuminuria and dropsy, and again recovered.

I have not thought it necessary to go into details of these cases; my object being merely to endeavour to show, that so great is the disposition in the human family (it may go beyond it for ought I know) to receive disease, especially fever, at the present time, that a slight attack received only a few weeks previously does not lessen the liability to a second, on returning to a house with what I would call a concentrated infection.

I considered the present an opportune moment for forwarding you these two cases as bearing to some extent upon your late article of "Foul Air and Fevers."

I may here add, that so unsatisfactory have my humble individual efforts proved to discover causes for the various kinds of fevers that I have seen in my own practice during the last two or three years, that I have almost given up seeking them, and I have been satisfied that there exists now, and has existed for some time past, an unusual disposition to receive disease and I cannot tell why.

I would ask the cause of the sudden and deadly attack of influenza about the year 1836? of the cause of the cholera attack in 1849? of diphtheria for the last five or six years? A scientific explanation of course would be of immense advantage; but if we look to a knowledge of cause as a means of cure, I am afraid we are doomed to disappointment, for, so long as these apparently cyclical bearings of disease still go on, we shall only lose some to find others. Sanitary laws and regulations will doubtlessly greatly modify the mortality of these grave visitors, but I fear nothing will entirely check their approach. I am, etc.,

GEORGE F. GILES.

Victoria Park Road, Hackney, N.E., November 5th, 1863.

EFFECTS OF DISEASED MEAT.

LETTER FROM RICHARD W. MARTYN, ESQ.

SIR,—I have lived more than forty years in this parish, which is chiefly agricultural; and during that time I have constantly observed and known farmers, whose cattle (chiefly beef and mutton) have been affected with various diseases and sometimes injured by accidents, to kill such animals and sell the meat at a low rate to their workmen and others. I have never known any illness or disease caused by eating the flesh of such animals, and were it not for the means of procuring animal food to which I have referred, the great majority of the labouring class would seldom taste it. If a bullock in good condition, suddenly attacked, say with peripneumonia, be immediately killed, I do not think the carcase much impaired. I am certain that it is not injurious to health if the animal have not been suffering long from the disease and have not been drenched and physicked. From experience, I know it is the wisest plan to kill the animal at once; for, if it recover it will be so reduced that it will not pay for the trouble and expense of keeping it. As the country from this place to Bridgwater and Taunton is often under water, our sheep are very liable to be diseased. The liver becomes affected with hydatids; and the vessels are filled with flukes. These sheep will often get fat; and although the mutton is certainly inferior, as it wants juiciness and flavour, yet to destroy this quantity of food would be a public calamity and perfect ruin to hundreds of farmers. There is another disease chiefly affecting hog-sheep or sheep one year old: this is giddiness, and arises from water on the brain. The animal had better be killed at once, as it never recovers, although I have known them live until the brain is nearly absorbed and the animal gets quite blind. If in good condition and killed early, the carcase is not much impaired, and certainly not injurious to health.

I think it would be a great public calamity if Mr. Gamgee's and the public inspectors' opinions were to be enforced, and nothing but prime fed animals allowed to be used as food: but sellers, I think, ought to be prosecuted for selling inferior meat for sound, which they often do and charge the highest prices for it.

Like most medical men living in the country, I do a little in grazing, and have for many years studied the diseases of cattle.

I am, etc., RICHARD W. MARTYN.

Martock, Somerset, Nov. 11, 1863.

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on Nov. 19th:—

Bell, Hutchinson R., Endsleigh Street, Tavistock Square
Boulton, Albert Edward, Horncastle
Ffrench, Thomas Edward Digby, Galway
Fulton, John, M.D., Canada
Hawthorn, Frederic John, Uttoxeter, Staffordshire
Julius, George Frederic, Richmond
Leach, Matthew, Wisbech
Libbey, Henry Cornelius, Fulneck, near Leeds
McNair, Frederic, London
Mosely, Isaiah A., Newcastle
O'Flynn, Andrew, Sligo
Rogers, William Richard, Oxford
Shuldham, Edward Barton, Cheltenham
Smith, Cleveland, Horsleydown
Smith, Henry F., M.B., Cornwall Terrace, Regent's Park
Stott, Thomas Lilley, Holloway
Trenerry, Charles James, Gibraltar
Von Stieglitz, Lewis Frederick, Tasmania
Weller, George, Mile End Road
Whipple, Connell, Plymouth

Admitted on November 20th:—

Atkinson, James, Hyde, near Manchester
Baetcke, Emil Julius, M.D., Finsbury Square
Bligh, Alexander Murray, Liverpool
Cooke, Richard Edward, Southwell, Notts
Diver, Ebenezer, M.D., Yately, Hants
Fuller, James, Rectory Place, Woolwich
Gwyther, James, M.B., Manchester
Hayden, William G., High Wycombe
Hedley, William Snowdon, M.D., Alnwick, Northumberland
Leith, Ralph James Forbes, Mintlaw, Aberdeenshire
Lichtenberg, Philipp J. L., M.D., Finsbury Square
Nash, Frederic, Royston
Ryder, Francis James, Greenwich
Senior, Augustus Reeves, Richmond
Vipan, William Henry, Ely, Cambridgeshire
Watermeyer, William Godfrey, Cape of Hope

Naval Surgeons. The following members of the London College of Surgeons passed their examinations for full Surgeons in the Royal Navy, at a meeting of the Court of Examiners, on November 19.

Kipling, Thomas, H.M.S. *Canopus*; diploma of membership dated April 15, 1859
Skene, James Alexander, H.M.S. *Cumberland*; May 19, 1856
Warren, Thomas Roberts, Plymouth Division of Royal Marines; December 15, 1852

UNIVERSITY OF CAMBRIDGE. Degrees of Master in Surgery conferred November 26th, 1863.

Burd, Edward, Caius College
Graham, Arthur Robert, St. Peter's College

APOTHECARIES' HALL. On November 26th, the following Licentiates were admitted:—

Everitt, Herbert, University College
Forde, W. B., Queenstown
Milner, J. F., Hull
Seabrook, W. M., Brighton
Ward, C., Tollerton, Nottinghamshire
Miller, R. F., Barnstaple

APPOINTMENTS.

*BLACK, C., M.D., elected Mayor of Chesterfield.
BOARD, Edward C., Esq., elected House-Surgeon to the Bristol Royal Infirmary.
COOPER, Herbert, Esq., elected Assistant House-Surgeon to the Bristol Royal Infirmary.
CROFT, John, Esq., appointed Assistant-Surgeon to St. Thomas's Hospital.
HALL, Cornelius S., Esq., appointed Certifying Factory Surgeon, Carlisle.
HODGSON, T., Esq., elected Mayor of Chipping Norton.
MAIN, William, M.D., appointed House-Surgeon to the Alnwick Infirmary.
*MORGAN, W. W., M.D., elected Mayor of Newport, Monmouthshire.
NELSON, Samuel C., M.D., appointed Surgeon to Her Majesty's Household.
O'CONNOR, M. J., L.R.C.P.Ed., elected Mayor of Morpeth.
SISSON, Richard S., M.D., appointed Physician to the Royal General Dispensary, Bartholomew Close.

*Turnour, A. E., M.D., elected Mayor of Denbigh.
Walshe, R., L.R.C.P.Ed., appointed Surgeon to the Carlisle Fever Hospital.
Willis, G., M.D., elected Mayor of Monmouth.

Poor-Law Medical Service.

Blackford, John C., Esq., to the Cannock District of the Penkridge Union, Staffordshire.
Carson, Alexander T., M.D., to the Articlave Dispensary District of the Coleraine Union.
Cocks, Benjamin, L.R.C.P.Edin., to the South-East District of the Buntingford Union, Herts.
Corbet, Rae, Esq., to the Stanford District of the Orsett Union, Essex.
Fendick, Robert, Esq., to District No. 2 of the Bristol Corporation for the Poor.
Fraser, Wm., Esq., to the Parish of Old Machar, Aberdeenshire.
Hood, William, Esq., to District No. 2 of the York Union.
James, Joshua, Esq, to District No. 3 of the Bristol Corporation for the Poor.
M'Carthy, Joseph M., M.D., to the Tobercurry Dispensary District and the Workhouse of the Tobercurry Union, co. Sligo.
Miles, Thomas, Esq., to the Stoke Gabriel and Dartington and Rattery Districts of the Totnes Union.
Parsons, Frederick J., L.R.C.P.Edin., to the Second District of the Yeovil Union.
Soffe, William E., L.F.P. and S., Glasg., to District No. 4 of the Guiltcross Union, Norfolk.
Turner, John S., Esq., to District No. 5 of the Mansfield Union, Nottinghamshire.
Walter, Walter W., Esq., to the Sixth District of the Yeovil Union.
Warburton, Edward, Esq., to the New Workhouse of the Pateley Bridge Union, Yorkshire.

Army.

Irwin, Assistant-Surg. C. G., M.D., 28th Foot, to be Staff-Surgeon.
Wood, Staff-Assistant-Surgeon T., M.D., to be Assistant-Surgeon 45th Foot, *vice* R. Atkinson.

To be Staff-Assistant-Surgeon:—

Atkinson, Assistant-Surgeon R., 45th Foot.

Indian Army.

Rose, Surgeon J., Bengal Army, to be Surgeon-Major.

Royal Navy.

Evans, Richard, Esq., Surgeon, to the *Rosario*.
Johnson, W., Esq., Assistant-Surgeon, to the *Impregnable*.
Keenan, C., Esq., Assistant-Surgeon, to Haslar Hospital.
Kelly, A. H., Esq., Assistant-Surgeon (additional), to the *Fisgard*.
Williams, Charles, Esq., Assistant-Surgeon, to the *Cambridge*.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Aldersey, W. H., Esq., to be Assistant-Surgeon 1st Surrey A.V.
Helm, G. F., Esq, to be Surgeon 3rd Cambridgeshire R.V.
Marsh, N. K., Esq., to be Assistant-Surgeon 1st Administrative Brigade Lancashire A.V.

To be Honorary Assistant-Surgeons:—

Dickson, J., Esq., 95th Lanarkshire R.V.
Griffin, W. H., Esq., 3rd Oxfordshire R.V.

DEATHS.

Alexander, James, M.R.C.P.Ed., at Wooler, Northumberland, aged 66, on November 25th.
Axford, Henry, Esq., Surgeon, at Bridgwater, aged 83, on Nov. 28.
Birkett. On December 1st, at Northumberland House, Stoke Newington, aged 11 months, Rosa, youngest daughter of G. Birkett, M.D.
Beaman, George H., Esq., Surgeon, late of Henrietta Street, Covent Garden, at Hammersmith, aged 39, on November 29.
Caswall. On November 25th, at Peckham, aged 90, Mary, widow of the late John Caswall, Esq., Surgeon, of Alvescott, Oxfordshire.
Cox, E. T., Esq., Surgeon, at Birmingham, aged 93, on Nov. 26.
Dunn. On November 29th, at 31, Norfolk Street, Strand, aged 60, Anne Margaret, wife of *Robert Dunn, Esq.
Ellis. On November 27th, at Crowle, Lincolnshire, of scarlatina, aged 6, Emily Beatrice, youngest daughter of *Henry W. T. Ellis, L.R.C.P.Ed.
Kelson. On November 29th, at Sevenoaks, aged 19, Hamilton Mortimer, sixth son of *George Kelson, Esq.
Vidal. On November 28th, at Aveley, Essex, aged 2 years and 10 months, Charles L., only son of Wm. F. Vidal, Esq., Surgeon.

Donation. Dr. Westall has presented to Croydon, the town where he lately resided, a Drinking Fountain.

The Charity Commissioners have commenced an inquiry into the state, etc., of Bethlehem and Bridewell Hospitals.

The Royal College of Veterinary Surgeons intend to propose to the Legislature a Bill, entitled "The Veterinary Medical Act."

The Edinburgh Municipal Council contains three medical men: Dr. Alexander, Dr. Buchanan, and Mr. Miller.

Usurpation of Titles. A Mr. Denton of Clay Cross has been mulcted in the penalty of £5 and costs, for improperly using the title of Licentiate of Medicine.

Edinburgh Speculative Society. Prince Alfred, and Prince William of Hesse, have been elected Members of the Farmers' Speculative Society of Edinburgh.

Royal Hospital for Incurables. This institution has received a legacy of £2000 from the late Joshua Field, Esq.

The Extra-Academical Schools of Edinburgh have lost two lecturers; Dr. Murray Thomson, who goes to Roorkie; and Dr. John Struthers, who has gone to Aberdeen as Professor of Anatomy.

Rheumatism in Paris. The medical returns for the month of October give the most extraordinary increase of rheumatism in Paris. The hospitals are full of patients suffering from what a few years ago was called an "English disease."

Hydrocyanic Acid. It was found by Dr. Matthiessen, in his investigations in reference to a recent poisoning case, that if 120 minims of prussic acid (*Pharm. Lond.*) containing 2 per cent. of pure acid, be mixed with a pint of *fresh* porter, the peculiar odour, and taste of the acid are entirely lost.

The British Pharmacopœia. The Lords Commissioners of the Treasury who have the power under the Medical Act, of fixing the price per copy of the *British Pharmacopœia*, have determined that the price of the octavo size shall be 10*s.* 6*d.*, and of the duodecimo size 6*s.*

Infringement of the Lunacy Act. A fine of £25, or two months imprisonment, has been inflicted on Mr. Lawrie of Gilmer House, near Edinburgh, for "detaining, etc., lunatics" contrary to the Lunacy Act. The license of Gilmer House had been withdrawn by the Commissioners some time ago on account of the bad condition of the establishment.

Deleterious Effects of Diseased Meat. The gentlemen appointed to investigate the cause of the spread of pleuropneumonia in Victoria could only discover one instance of diseased meat producing sickness, although cases are not uncommon; but, from the symptoms ceasing on discontinuing the meat, they very seldom come under the notice of medical men. (*Medical Review.*)

Lectureship Vacant. *No one need apply.* The Council of the University of Melbourne have issued a notice, that a lecturer on surgery is wanted for the academic year 1864-65, and invite communications from gentlemen willing to accept the appointment. It is a pity that any gentleman should waste his time in applying; it has long since been decided who is to fill the post. (*Medical Record.*)

Health of Scotland. The weather has been very close and moist, and typhus, typhoid fever, and diphtheria, have been prevailing over Scotland. Dundee Royal Infirmary has had two resident physicians cut off by typhus within four months, both being young men of high talent in their profession. One of them, Dr. Glen, who died first, had considerable literary and metaphysical ability and was the gainer, when at Edinburgh University, of Sir Edward Bulwer Lytton's prize for the best essay on "The Influence of the Mind on the Body in Disease." Singularly enough, he was a candidate for the chair of anatomy in the University of St. Andrew's, and had a fair chance of it, but he died on the day of the election. A victim of diphtheria who fell on November 21st, was Mr. George Ross, professor of Scots law in the University of Edinburgh. He was appointed professor two years ago, and was only 48 years of age.

An Association for International Education—originally proposed by M. Eugène Renu, and seconded by Doctor Farr, at the Statistical Congress of Berlin—is about to be established. It is proposed to found a series of colleges in England, France, Germany, Italy, and Spain, the students at which are to move about from university to university, finding always the same standing as that which they held in their last college, and continuing their education only with a change of language. There will be two classes of students, one commercial, the other scientific.

Light Wines. In the eight months ended August 31st last, 6,750,000 gallons of wine were entered for home consumption at the various ports of the United Kingdom; compared with the corresponding months of last year the increase is 172,812 gallons. The produce of Portugal, Spain, and Italy seems most in favour, Spain especially, which has an aggregate larger by 267,944 gallons; while that of South Africa, Holland, and France has a much diminished return, which indicates that the lighter descriptions of wines, as yet introduced, have not received, to the extent anticipated, the public approval.

A Poisoner. The *Berbice Gazette* states that an old man in Berbice, known as "Daddy Joe", has on his deathbed confessed to having had a part in an immense number of murders by poisoning, a crime which, there is reason to suspect, is but too common in the colony; almost every piece of bush-land yields the most subtle poisonous plants to those acquainted with them. He also told the place where a great quantity of valuable ornaments were to be found, which had been the hire of his services in these atrocities.

Radcliffe Infirmary, Oxford. A special Court of the Governors of the Radcliffe Infirmary was held on the 28th ult., when the Building Committee formally handed over possession of the south wing, which had been erected at a cost of about £6000. The Governors, with ladies and other subscribers, assembled in the new out-patients' hall. The Duke of Marlborough, President of the Institution, occupied the chair, and amongst those present were the Duchess of Marlborough, Lady A. Churchill, the Dean of Christ Church, the Vice-Chancellor, the Warden of All Souls', the Warden of Merton, the Provost of Worcester, the Master of University, the Warden of New College, the Rev. Canon Ogilvie, the Rev. F. Trench, Rev. J. Pullen, Rev. J. Dodd, Rev. O. Ogle, Dr. Acland, etc.

Guy's Hospital. The following prizes have been awarded. *Third Year's Students : Treasurer's Gold Medals for Clinical Medicine, and for Clinical Surgery, and First Prize* (£40), Edward W. Thurston, Ashford, Kent; *Second Prize* (£35), E. Baxter Formen, Derby,—*Second Year's Students : First Prize* (£35), Henry G. Howse, Reading: *Second Prize* (£30), not awarded. *First Year's Students : First Prize* (£30), Henry Denne, Sandwich; *Second Prize* (£25), James Rawlings, Liskeard; *Third Prize* (£10 : 10), presented by one of the governors, William A. Brailey, Rochester; *Honorary Certificates*, John Gill, Weston, Hawkstone, Shrewsbury; Henry S. Taylor, Alton; Frederick E. Manby, Rudham.—*Entrance Examination* in Classics, Mathematics, etc., October 1863: *First Prize*, William B. Giles; *Second Prize*, Frederick Taylor; *Honorary Certificates*, George Rootes, Arthur B. Miott, Matthew O. Coleman.

Medical Reform. The intention of Dr. Ogle, in his paper read at the Social Science meeting, was to show that the present mode of dealing with members of the medical profession is found to be injurious both to the doctor and the patient, and to propose an arrangement which would be more convenient for both parties. The plan recommended was to dispense with the fee system, and to pay the doctor so much *per annum*, to include all ordinary work, and a fee to be paid for extraordinary work. Ordinary work was defined to mean periodical visits, attending to the health of the patient, etc.; and extraordinary work was held to be such exceptional services as calls to attend on patients immediately, accidents, and so on. This arrangement, it was considered, would make prevention as well as cure the object of the doctor's care, and assimilate the interests of the physician and patient. (*Social Science Review.*)

A Victimiser of Medical Men. Charles Dupré, a Prussian, has lately been sentenced to hard labour for nine months for stealing a silver lancet-case and two lancets, value seven shillings, the property of Edward Phillips. The prosecutor is a physician, living in Harley Street, and on the morning of October 30th the prisoner went to the house, and asked to see him. As the prosecutor was then engaged, the prisoner was requested to wait, and was shown into the study. Horsford, one of the constables of the Mendicity Society, had been watching him, saw him leave, and followed him to a pawnbroker's and there saw him offer the silver lancet-case to pledge, giving the name of "Phillips," which was engraved on the case. He told him he should take him into custody for stealing it, when he said it was his own property. Mr. Phillips said there was a gang of fellows going about victimising medical men.

Foreign Body in Air Tubes. On November 3rd, a young man was admitted into the hospital at Wolverhampton, suffering from the effects of a threepenny piece, accidentally swallowed on the previous day. While walking along the street, he placed the coin in his mouth. He then commenced running, and suddenly felt the coin glide down his throat, or, as he termed it, "go down the wrong way." The next day he found great difficulty in speaking, owing, as he rightly considered, to the coin having effected a lodgment in his windpipe. It continued to give him great pain, causing him to cough very much, and almost entirely preventing inspiration. In this difficulty he made application at the hospital. An opening was made into the windpipe, and a tube inserted, as it was found that the threepenny piece had nearly stopped up the windpipe altogether. For nearly fifty hours, he breathed through the tube. At the expiration of that time he was then made to hold his head downwards, and, after a sharp shake, the threepenny piece loosened itself from its place of lodgment, and rolled out of his mouth on to the floor. (*Wolverhampton Chronicle.*)

The Medical Act. A meeting of metropolitan druggists, was held on the 27th ult., to consider the alterations in the Medical Act as proposed by the General Council, and also to consider "the best means of preventing such unwarrantable interference." Mr. Linden moved, "That the chemists and druggists now present recognise the desirability of giving all possible encouragement to scientific and education qualifications for the trade of chemist and druggist, but they consider themselves, in common with their brethren, quite competent to accomplish all needful reform in their own body, and indignantly repudiate the 56th and 57th sections of the proposed Act of the Medical Council as being unjust in principle, and an unwarrantable attempt to interefere with their rights as independent citizens." Mr. Roberton next moved, "That an Act of Incorporation, based upon existing rights, and subjecting every future candidate for the trade to an educational test, as suggested by the United Society of Chemists and Druggists, is most desirable, and they would urge upon the trade the necessity for a constant and determined effort for its attainment." Mr. Ablett moved, "That the proceedings of this meeting be made known to the Medical Council, with the intimation that the chemists and druggists of this country require to be consulted upon any measure affecting their own interests, and that they will accept of no proposal which does not

recognise the desirability of an incorporation of the entire trade, giving them the right of self-government." The above resolutions were unanimously carried.

Donation. Mr. Thomas Kerr, of the Grange, Monifeith, has given a donation of £2000 to the Dundee Royal Infirmary. (*Scotsman.*)

Fees for Medical Attendance on Police. The fee allowed by the London Police to a medical practitioner called in by them is 3*s.* 6*d.* per day, and 7*s.* per night visit.

Medical Students: Edinburgh University. The number of medical students matriculated on the 23rd November was 446. Last year the number up to that date was 470. Hence, there is a falling of 24, exactly the number by which the medical students of 1862 fell short of those of 1861. The deficiency, however, is accounted for by the small number of third year's men. There was in 1861, an unusually small entry of first year's students; but during the last two years the number has increased. (*Edinburgh Journal.*)

A Family of Giants. Robert Hales, known as the Norfolk Giant, died of consumption on the 22nd November. Hales was 43 years of age. His father was 6 feet 6 inches in height, and his mother 6 feet. An ancestor of his mother's was said to have been that famous warder of bluff King Hal, who stood 8 feet 4 inches in height. Of such Patagonian parents the progeny were worthy; the boys averaged 6 feet 5 inches each, and the girls 6 feet 3½ inches. Robert was the flower of the flock, and stood 7 feet 6 inches, weighing 452lbs. One of his sisters, with whom he exhibited some years ago, was 7 feet 2 inches, but she died in 1842, being then only 20 years of age. Hales was stout in proportion to his height, though somewhat clumsily put together. When in his prime he was 64 inches round the chest, 62 round the waist, 36 across the shoulders, and 21 round the calf of the leg.

Health of Scotland. The Registrar-General's monthly report on the eight principal towns of Scotland shows that the deaths last month considerably exceeded the deaths in the October of any year since the commencement of registration, in 1855. The zymotic (epidemic and contagious) class of diseases proved fatal to 850 persons in the eight towns, constituting the very high proportion of 39 per cent. of the deaths. Typhus (including gastric) fever caused 129 deaths, but scarlatina was by far the most fatal epidemic. In Glasgow 22·8 per cent. of all the deaths were from scarlatina, and in Dundee 30·5 per cent. Of the 354 persons carried off by scarlatina only four were adults above twenty. The weather of the month was for the most part rude, boisterous, and inclement, the number of days with rain large beyond example, but the depth of rain fallen not quite equal to the average.

Chemical Society. At this society, on the 19th, several interesting papers were read. Mr. Riley referred to the existence of the rare metal vanadium in English pig iron. Vanadium has been found hitherto in very few substances, chiefly in vanadiate of lead; it has also been detected in a kind of iron ochre and in the French mineral bauxite, which is now so largely employed in the manufacture of aluminium. Vanadium has already received an important application in the manufacture of writing ink. The very finest black ink, perfectly indelible by chemical reagents, or by exposure to the combined influences of air and moisture, is made by adding a minute proportion of vanadic acid to water containing some tincture of nutgalls. The next paper read was by Dr. Frankland and Mr. Baldwin Duppa. It referred to a mode of uniting ethyl, methyl, and amyl with metallic mercury. The compounds produced are of high interest in a scientific point of view. One of them, although a liquid resembling water in appearance, possesses so high a specific gravity that the heaviest lead-glass floats on its surface. A paper by Dr. Thomson was next read. It consisted in the first part of an extract from elementary works of the properties of sulphuretted hydrogen, and consequently provoked much merriment in an audience composed of the most illustrious chemical authorities of the age. The second part contained a description of an apparatus for producing this gas, devised by Dr. Pisani. A fourth paper was read, on the constitution of certain organic radicles by Mr. Schorlemmer.

The Hunterian Museum. This collection has just had a very interesting addition made to it by Mr. Henry Christy, F.L.S., of Victoria Street, who has presented a skeleton of the Manatee (*Manatus Australis*), better known to our English sailors as the Sea-Cow and the Woman-Fish, and by the French as the *Bœuf Marin* and *Vache Marine*. There can be little doubt that not a few of the tales of mermaids and mermen have had their origin in the appearance presented by these animals, when seen at a distance with the anterior part of their body out of the water, as the muzzle is thickly set with hairs, and the head is frequently covered with long seaweed, giving it somewhat the effect of human hair. Thus the Portuguese and Spaniards give the Manatee a denomination which signifies Woman-Fish; and the Dutch call it the Little Bearded Man. A very little imagination and a memory for only the marvellous portion of the appearance sufficed doubtless to complete the metamorphosis of this half-woman or man, half-fish, into a siren, a mermaid, or merman, and the wild recital of the voyager and treasured up by such writers as Maillet, Lachesnaye-des Bois, Sachs, Valentin, and others, who, as Cuvier well observed, have displayed more learning than judgment. The skeleton in question is nine feet in length.

The Queen and the Wakefield Clayton Hospital. A report of the recent proceedings in connection with the opening of the Albert Ward at the Wakefield Clayton Hospital has been printed on white satin, and made up in the form of two bannerettes, finished with cords and tassels of royal purple, and, through Sir John Hay, M.P., presented to her Majesty. The following acknowledgment was sent to Sir John Hay: "Whitehall, Nov. 24, 1863.—Sir, I had the honour to lay before the Queen the report of the proceedings at the opening of the 'Prince Albert Ward,' in the Clayton Hospital, at Wakefield, which accompanied your letter to me of the 17th instant; and I have received her Majesty's commands to convey to you the assurance that her Majesty has been deeply touched by the marks of respect and admiration thus shown to the memory of her beloved husband, by the town of Wakefield. I am to add that her Majesty has directed that the reports of the opening of this ward shall be placed with the other documents relative to memorials to the Prince Consort, which are preserved in Windsor Castle.—I have the honour to be, etc.

(Signed) G. Grey."

POPULATION STATISTICS AND METEOROLOGY OF LONDON—November 28, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys..1011 / Girls..927	1938	1442
Average of corresponding weeks 1853-62		1901	1550

Barometer:
Highest (Th.) 30.212; lowest (Sun.) 29.661; mean, 29.943.

Thermometer:
Highest in sun—extremes (Sat.) 78.2 degs.; (Th.) 55.3 degs.
In shade—highest (Wed.) 57.0 degs.; lowest (Sat.) 35.7 degs.
Mean—47.9 degrees; difference from mean of 43 yrs. +6.7 deg.
Range—during week, 21.3 degrees; mean daily, 8.9 degrees.

Mean humidity of air (*saturation*=100), 89.

Mean direction of wind, S.W. & S.E.—Rain in inches, 0.25.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. C. H. F. Routh, Lettsomian Lecture "On Midwifery and Diseases of Women."—Epidemiological Society, 8 P.M. "On Epidemic Pleuropneumonia and Phthisis in the Mediterranean Fleet." (Communicated by Dr. Bryson, Inspector-General of Fleets and Hospitals, R.N.)—Geological.—Entomological.—Odontological.—Royal.

TUESDAY. Royal Medical and Chirurgical Society. 8 P.M., Ballot. 8.30 P.M., Mr. Moore "On Popliteal Aneurism"; Mr. Durham, "Treatment of Popliteal Aneurism by Flexion of Knee-Joint."—Zoological.

WEDNESDAY. Society of Arts.—Microscopical.—North London.

THURSDAY. Royal.—Antiquarian.

FRIDAY. Astronomical.

SATURDAY. Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

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COTTAGE HOSPITALS.—SIR: I have been asked by a lady in this county for information as to the success of Cottage Hospitals, and the steps required for establishing one on a permanent footing. Can any of your readers help me in this matter?

I am, etc., C. L. ROBERTSON, M.D.Cantab.

Sussex Lunatic Asylum, Hayward's Heath, Nov. 25, 1863.

COMMUNICATIONS have been received from:—Mr. OLIVER PEMBERTON; Mr. LOWNDES; Dr. W. H. O. SANKEY; Dr. THOMAS BOYCOTT; Dr. B. W. RICHARDSON; Mr. J. CROFT; Dr. JAMES RUSSELL; THE HON. SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Mr. J. Z. LAURENCE; Dr A. MEADOWS; Mr. HAYNES WALTON; Dr. BURD; Dr. C. TAYLOR; Mr. NAPPER; Mr. SPENCER WELLS; Dr. ELLIS; THE SECRETARY OF THE ODONTOLOGICAL SOCIETY; Dr. HUMPHRY; Mr. T. S. FLETCHER; THE HONORARY SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. CARR; and Dr. WILLIAM NEWMAN.

BOOKS RECEIVED.

1. The New Zealand Handbook; or, Guide to the Britain of the South. London: 1863.
2. Topics of the Day: Medical, Social, and Scientific. By J. A. Hingeston. London: 1863.
3. The Diseases and Infirmities of Advanced Life. By D. Maclachlan, M.D. London: 1863.
4. The Immediate Treatment of Stricture of the Urethra. By Barnard Holt. London: 1863.
5. Introductory Address. By Henry Lee. London: 1863.
6. A Familiar Epistle to R. J. Walker. By an Old Acquaintance. London: 1863.
7. Seventh Report of the Sanitary Condition of St. Pancras. By T. Hillier, M.D. London: 1863.

ADVERTISEMENTS.

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Abstract of Two Lectures

ON

LARYNGEAL DISEASE, AS EXHIBITED BY THE LARYNGOSCOPE.

Delivered to the Students of the Birmingham General Hospital.

BY

JAMES RUSSELL, M.D.,

PHYSICIAN TO THE HOSPITAL.

[*Concluded from p.* 574.]

I SHALL take leave of this subject by bringing before you briefly the particulars of three or four cases which have occurred under your observation; they will afford illustrations of the remarks I have already made. In all but the first, I shall be content with a summary of their leading features.

CASE I. *Warty Growths within the Larynx.* (Mr. T. H. Smith.) A case closely resembling the following one, is reported by Dr. Walker of Peterborough in the *Lancet* for 1861. F. W., aged 26, single, gardener. He presented a history of perfectly good health; his habits have been temperate; he has not had syphilis. He used to sing a good deal; but, when about twenty years of age, he observed that he could not reach such high notes as previously; neither could he articulate so distinctly. In the course of some months, he became quite unable to sing. The state of his voice varied somewhat. The voice was better in the morning, and worse at night, or *vice versâ;* and a cold always aggravated the defect. Two years after the commencement of his symptoms, he left off malt liquor entirely; and his voice improved.

About three months since, he observed a small swelling just above the thyroid cartilage (probably a purely subjective sensation); and at this time his breathing became affected for the first time. His first intimation of any infirmity in this respect was his discovery that, when holding his head backwards, in the act of pruning his vines, he had a sensation of something falling into his windpipe and hanging there,* attended with difficulty of breathing and cough. On restoring his head to its ordinary attitude, the dyspnœa at once subsided. The same thing happened, though to a less extent, when he held his head down; and occasionally he was awakened from sleep by a sense of choking, attended with cough. He thought this occurred when his head sank back on the pillow. He was relieved immediately by resuming the sitting posture, or by lying with his head high.

On several occasions within the last three months, he coughed up pieces of flesh "like a seedy wart", varying in size from a pin's head to half a pea, and always with relief. He has never had constant cough. He has fallen off much in flesh of late; his appetite has become impaired; and he has had frequent bleedings from the nose. He has also experienced lately difficulty of breathing even whilst sitting at rest. He "seemed to have to use more force in getting his breath than he used to do;" and he had a wearied oppressed feeling at the pit of his stomach. He thought he made a noise in breathing when asleep; but, when he was awake, his respiration was noiseless.

On admission, his appearance supported his assertion that he had emaciated to some degree. He had a dry husky voice, and was unable to raise it to a high pitch, or to speak with sufficient loudness to be audible at a distance. During quiescent breathing, a faint sound was produced in the region of the larynx; deep breathing was attended with distinct stridor. He seldom coughed; but cough performed voluntarily was very hoarse. He was liable to be awakened in the night by sudden attacks of "strangulation", which on one or two occasions assumed an alarming degree of severity, and even suggested the probability of tracheotomy becoming necessary. He had at times a sense of swelling occurring in his larynx.

By the laryngoscope, a large warty-looking growth (Fig. 2) was seen lying over the aperture of the glottis; it



Fig. 2.

appeared nearly of the size of a small hazel-nut, had a warty surface, and a remarkably jagged border. It was attached by a broad base in front of the larynx, just at the angle, and extended along the anterior portion of the right false vocal cord. It moved freely during respiration, being drawn into the trachea below the glottis during inspiration, and again expelled into the larynx during expiration. During vocalisation, it was embraced by the vocal cords, which closed upon it, and were thereby entirely prevented from approximating.

The growth has been mostly removed, with the exception of the base, which still remains at the anterior angle of the glottis. It was composed simply of the ordinary scaly epithelium of the cuticle, each epithelial cell containing a large nucleus.

Extraction was effected by means of an ordinary pair of curved forceps, directed by the finger previously introduced within the larynx, after this organ had been itself rendered tolerant by the systematic introduction of instruments within its cavity. The plan was proposed to me by our house-surgeon, Mr. Bracey, who was assisting me during an examination. Mr. Bracey at once succeeded in removing a considerable portion from the tumour by a series of successive attempts during the same sitting. My colleague Mr. Bolton subsequently repeated the same operation two or three times, with the fortunate result already mentioned. It was singular to mark the extent to which tolerance was secured on the part of the larynx; but, notwithstanding this fortunate circumstance, the process of extraction necessitated the possession of no small amount of surgical tact.

[Since the above notes were written, the subject of this case has returned, with some renewal of the warty tumour.]

CASE II. *Chronic Laryngitis.* (Messrs. Hiron and Ure.) J. S., aged 48. February 4th, 1863. He has presented, during the last four winters, symptoms of bronchitis, increasing in severity, accompanied by copious expectoration of opaque white mucus, and dyspnœa. Last winter he also suffered from dysphagia, and some hoarseness from Christmas to March. His cough continued through the whole of last year. In November, his voice again became reduced to a hoarse whisper, and has so continued, with pain and soreness in the region of the larynx. The dyspnœa then became aggravated in paroxysms; and he had to sit up for a short time on first going to bed, from difficulty in drawing his

* The foregoing history was obtained after the patient had been made aware of the nature of his disease: probably the description is rendered more precise by the information he had gained.

breath. He has emaciated on each occasion of the laryngeal complication, and especially during the present one. He has never spat blood.

He has been a great drunkard, often lying about in the street during the night. He is a stoker at gas-works; and, besides being exposed to very sudden and wide alternations of temperature, he is liable to inhale irritating fumes and small dust whilst charging the retorts. He has twice had gonorrhœa, with a suppurating bubo; but never has presented any evidence of syphilitic infection. His family history is free from traces of consumption.

On admission, he complained of hoarse cough, at times of extreme violence, and then producing retching and straining. The paroxysms of cough occurred chiefly in the morning on rising from bed, but would come on in the night, if he moved in his bed. He expectorated scantily, of grey mucus, streaked with opaque yellow mucus, or small masses of opaque mucus floating in glairy fluid. He had pain in the throat and choking during deglutition. His voice was depressed in pitch, feeble, and whispering, and, when he was excited, decidedly rough. Ordinary breathing was noiseless, but effected with preternatural effort; deep inspiration was attended with distinct laryngeal stridor. He was much emaciated. Physical examination yielded negative results as regarded the lungs, excepting the presence of dry *râles*. The sounds of the heart were exceedingly feeble.

The cartilages of the larynx were healthy. The epiglottis was everted and very erect, and its under surface was exposed. The arytenoid cartilages were permanently approximated, and exhibited none of their usual movements. (Fig. 3) The glottis was permanently closed

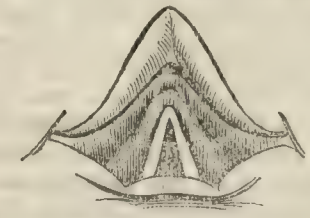


Fig. 3.

in a considerable degree, only a narrow triangular chink separating the vocal cords. The posterior edge of the opening of the larynx was much thickened by swelling of the mucous membrane; and from the same cause the interior of the larynx was much reduced in capacity; its cavity resembled a broad funnel, at the bottom of which was the nearly closed glottis. The mucous membrane was of a bright red colour, and was bathed in puriform secretion; white strings of mucus stretching across the cavity. The membrane covering the false vocal cords projected in broad folds, partially concealing the true vocal cords, which preserved their natural whiteness; but the left cord presented a superficial ulceration.

Case III. *Chronic Laryngitis.* J. S., aged 18, single, baker. April 25th, 1863. He has been exposed to sudden and considerable alternations of temperature in the course of his business, and to the inhalation of dust. He has never had syphilis.

Symptoms of laryngitis first developed themselves fifteen weeks ago, in consequence of the operation of cold. They were confined to slight dysphagia, with hoarseness. The hoarseness increased slowly; but varied remarkably in degree. It affected chiefly medium tones. He used to possess a good tenor voice; but has been quite disabled from singing by his complaint.

In the course of a month or six weeks, he began to experience some dyspnœa; and on the 9th of last March suffered sudden aggravation of his malady, with much difficulty in breathing, amounting to gasping. It was relieved by treatment, and respiration again became tranquil. Cough has never been a prominent symptom; and appears to have consisted simply in a voluntary effort to relieve a sense of uneasiness in his larynx. He has not expectorated. His health has been impaired, and he is now emaciating. His disease has been prolonged by the necessity of following his business. His habits have been perfectly temperate.

I found his voice feeble and very rough, but subject to great variation in this particular. On deep inspiration, loud laryngeal stridor was produced; and he stated that if he hurried himself, he became like a broken-winded horse. During sleep, his respiration was so noisy as to disturb those who occupied the same room.

It was not easy to obtain a satisfactory view of the interior of his larynx, owing to the very prone attitude of the epiglottis; I, however, succeeded, by desiring the patient to sound a high-pitched E, following the sound immediately by a deep breath. I then found the arytenoid cartilages permanently approximated; the mucous membrane of the larynx was much thickened, and projected into the interior below the insertion of the arytenoid cartilages as a thick rim. (Fig. 4.) The pos-



Fig. 4.

terior margin of the larynx was massive and rounded, especially over the apices of the arytenoid cartilages, where the mucous membrane formed large rounded prominences. At the lowest part of the laryngeal cavity there lay, from front to back, a prominence which had just the appearance of the kernel of a plum-stone, occasioned by great thickening of the mucous membrane covering the upper vocal cords. During inspiration, each half of this body separated from the other to about one-eighth of an inch; not sufficiently, however, to afford a view of the true cords, until the swelling was reduced at a later period of the case; the true cords were then seen to present their normal aspect. The mucous membrane had its natural colour, and was free from secretion.

Case IV. *Chronic Laryngitis.* E. H., aged 37, married. She has been much exposed to damp, and to alternations of heat and cold in brewing, as she keeps a public-house, and brews herself. Her habits are stated to be perfectly temperate, and her appearance fully confirmed the truth of her statement. She has never had syphilis. She has been subject to symptoms of bronchitis for four or five years; her health failed; and she emaciated more than once. She has been losing her voice gradually for some months, without any change having been apparent in her cough, and without dyspnœa; she had, however, some "choking" on going to bed. Speaking distressed her, and increased the cough, and she avoided it as much as possible. She had to draw in her breath very frequently whilst speaking; her voice was always worse when she rose from bed.

We found her voice feeble and whispering; but without much roughness. She spoke easily, and with only slight occasional cough; but when, after a long sentence, she drew a deep breath, laryngeal stridor was produced during inspiration. She was troubled with cough only the first thing in the morning, when she "got the phlegm up", unless she exposed herself to sharp air. Her breath was short. She had no dysphagia.

Externally, the larynx was healthy, and no uneasiness was produced by pressure upon it. The epiglottis was healthy. The posterior edge of the larynx was considerably thickened; within its cavity the disease affected principally the posterior wall, where a collection of large massive granulations projected into the interior of the

larynx, occupying a considerable space. The mass resembled a low pyramid with a very broad base; at the apex, the highest granulation stood up alone, thrown into strong relief by the dark opening of the glottis. (Fig. 5.)



Fig. 5.

The mucous membrane was throughout of natural colour, and free from secretion. The glottis did not open during normal breathing to one-half its usual width; but I was unable to ascertain to what extent closure could be effected during vocalisation. The vocal cords were healthy; the upper vocal cords were free from thickening.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

SUSSEX COUNTY HOSPITAL.

DISEASE OF THE TEMPORAL BONE AND INFLAMMATION OF THE BRAIN.

Under the care of E. L. Ormerod, M.D.

[*Reported by* R. J. Rogers, Esq., *House-Surgeon.*]

Case I. *Disease of the Left Temporal Bone: Inflammation of the Brain: Death: Autopsy.* O. F., aged 26, was admitted on December 7th, 1861, from the Deaf and Dumb Institution in Brighton. He had been always liable to pain, with discharge, from the left ear. The discharge suddenly ceased before the present symptoms set in; and had not thoroughly returned since. He had never had any rigors. He stated, through an interpreter, that, a week ago, pain first set in round the lower jaw; thence it extended over his face, head, and left side of the neck, and had continued ever since. He had always perfect sight in both eyes.

On admission, he had an anxious, heavy expression. The tongue was covered with a brownish-white fur; pulse 108, soft. His bowels were open properly. The urine was clear. No rash was perceptible. The pupil of the left eye was contracted; the conjunctiva was injected, and the sight of the eye much impaired. The neck was tender to the touch, and slightly swollen on the left side. He was ordered to have low diet; and three grains of calomel and one-sixth of a grain of tartar emetic in a pill three times a day.

Dec. 9. He was restless during the first part of the night, when the ear broke out bleeding, and after that he was much easier. The tongue was as on the previous day, but drier; it was twisted towards the left side. The left pupil was still contracted. The bowels had been opened twice, scantily. Pulse 120, soft. He stated that he was much easier; and that his sight was quite restored.

Dec. 10th. He was not so well; his expression was anxious. The tongue was dry, with a broad, brown streak down the centre. Pulse 150; the beats being confluent. The bowels were relaxed. The left pupil was closely contracted. He was ordered to repeat the pill twice a day; and to be cupped to eight ounces in the nape of the neck.

Dec. 11th, 9 A.M. He was moribund. His breathing was short, irregular; 50. His pulse was irregular, feeble, very frequent. He had severe pains in the chest. The cupping produced no immediate effect. He could not swallow the pills. Two ounces of wine were ordered. He died the same day at 2 P.M.

The body was examined eighteen hours and a half after death. The skin was generally jaundiced. The skull was singularly thin. There was great congestion of the larger vessels on the surface of the brain; the minuter vessels were not so notably congested; but the bloody points on section of the brain were singularly distinct. The *brain* was otherwise healthy; the convolutions were not flattened. On the under surface of the left middle lobe, the *dura mater* was adherent for about half an inch square. The brain was of a bright yellow in the central part to this extent, and the neighbouring part was injected. The dura mater was thick, yellow, with black, sloughy patches hereabouts. It lay on the petrous bone, separated from it, covering over a cavity as large as a pea, full of black sloughy matter. The left *lateral sinus* was filled with matter of the same kind, and the cut surface of the bone was infiltrated with the same. The pterygoid muscles were black and sloughy. The *heart*, *lungs*, and *liver*, were quite healthy.

Case II. *Disease of Left Temporal Bone: Inflammation of Lateral Sinus: Death: Autopsy.* A. S., aged 23, was admitted October 28th, 1863, at 12 noon. His friends(?) placed him in the ward and immediately left him, so that no history could be obtained, further than that five days previously he had applied at the out-patients' room, complaining of headache and pain in the ear of eleven days' duration. He had not been seen by any medical man since that time up to his admission.

He had a dusky looking, anxious expression. His pulse was 96, soft; tongue dry and brown. He was wildly delirious, complaining only of pain down the back. The muscles of the neck were in a state of spasm, resembling tetanus. There was general dulness over the cardiac region. No friction-sound was audible. He was ordered five minims of dilute hydrocyanic acid in an ounce of water every four hours; a pint of beef-tea; and six ounces of wine.

8 P.M. He had lain quieter since admission, and the spasm of the neck had passed off to a certain extent. Pulse 120, soft. He now lay on his back, muttering incoherently. The bowels had not acted; and he had not passed urine. There was no distension of the bladder. The tongue was, as before, dry. There was an obscure mottling over the surface of the abdomen. No tenderness existed.

Oct. 29th. He died at 5 A.M.

The body was examined thirty hours after death. The *heart* was healthy; the *lungs* were small, collapsed, somewhat loaded with blood, otherwise healthy; the *liver* was externally healthy; the *spleen* soft; the *kidneys* were healthy; the *hollow viscera* were externally healthy; there was no enlargement of the *mesenteric glands*. The *skull* was thin; the bone was unusually vascular. The *brain* was injected on the surface; the convolutions were flattened. On removing it, some fœtid pus appeared at the base, free in the cavity of the arachnoid, and some involved in the meshes of the *pia mater*. Nothing beyond a slight increase of vascularity appeared on section of the brain and cerebellum. The *spinal cord* was not removed for examination; but the purulent infiltration extended down the canal as far as could be seen. The *dura mater* in the fossa behind the left petrous bone was smeared with adherent fœtid pus. The left *lateral sinus* was obstructed by a hard, dark, adherent clot; and the bony groove in which this vein lay was rough and dark. This dark colour was more strikingly shown on section, contrasting with the natural pink colour of the bone elsewhere. One section was fortunately carried through the original seat of the dis-

ease—a small abscess in the mastoid portion of the temporal bone, with rough bare walls in immediate continuity with the darkened bone.

Although the history could not be gathered during life, the case is clear without it. A chronic abscess in the mastoid portion of the temporal bone suddenly set up active mischief in the neighbourhood; involving the dura mater, the left lateral sinus, and then the brain and upper portion of the spinal cord. The spasm of the neck was probably voluntary—to obtain relief by position; not tetanic.

Transactions of Branches.

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By William Eddowes, Esq., Pontesbury.

[*Delivered October 27th*, 1863.]

Cancer: Especially with Regard to the Propriety of Operation for its Removal.

As we watch the progress of the various sciences, especially of those most nearly allied to our own, and see by what certain though slow steps they are attaining what seems to us perfection, we are often and involuntarily led to ask ourselves, whether the science of medicine is advancing at an equal pace with others, or, if not as fast, yet as certainly and safely. And, probably, our first thought in answer, is most frequently disappointment, in remembering how many things which once seemed to us to be truths in medicine have turned out to be errors; how often the very best things in theory have proved the very worst in practice; and how many things which seemed to be the best in practice have been shown to be not so good as nothing at all. And it is not because the science of medicine is alone in being subject to such errors, but because it seems more than any other to be so, and because the errors are so startling, that we are apt to be disappointed at our progress, and, it may be, disheartened. Who would have believed some years ago, that inflammation would be proved curable without bleeding; that syphilis, in many of its forms at least, would often disappear without the administration of mercury; nay, much more, that the majority of what we know as acute diseases would get well without any help from physic, and, indeed, that many of them may be almost said to have a natural tendency to do so? But although changes such as these, in the theory and practice of medicine, are apt for a time to shake our belief in it, yet it is only when we look at the matter superficially that they are likely to do so. On a more thorough examination, we shall find that, so far from the present being an age in which we ought to be dissatisfied with our profession, and with what it is doing for ourselves and others, rather is it one of great hope; because, if lately it has been engaged more in pulling down than in building up, yet never before, perhaps, have we had such a chance of a good foundation for the new structure which is to replace the old, as at present, when, as it were, we are so often brought face to face with nature—to use a common expression—and see in what manner she, by herself, repairs the ravages of disease. Even from our opponents we can be gaining strength; for the trial by them of such treatment as that by infinitesimal doses, for instance, is to us, or, at least ought to be, a source of improvement by showing us what may be done, so to speak, in the treatment of disease by no treatment at all.

In surgery, especially, the tendency of late has been to more and more simplicity. Dr. Humphry of Cambridge, in the interesting paper which he read at the Cambridge Branch of the Association, has shown what may be done in the treatment of wounds, by leaving them exposed to the air, without any kind of dressing; and this method, at least in his hands, has been very satisfactory. Nobody, again, can have read the lectures lately delivered by Mr. Hilton before the College of Surgeons, on the influence of mechanical and physiological rest in the treatment of disease, especially of the joints, without feeling how very valuable records of cases, such as he has related, are, in showing us what may be done by such rest alone. These are but examples, however, of the tendency of modern surgical inquiry, namely, to find mistakes in an old plan of treatment, rather than to discover a new one; but, if a step backward from the path of error is not so good as one forwards in that of truth, yet, if error be—and we know that it is—unavoidable, we must not be dissatisfied.

But not only in the treatment before and after operation, has there been lately much change of opinion, but we may hope now that we are going in the right direction towards deciding what cases are to be treated without any operation, or, at least, with some less heroic than those which were formerly undertaken. As in the practice of medicine we are too ready to think that all diseases require physic, in some shape or other, and that it has been ordained that they should not get well, or that they should not get well so quickly, without it; so in surgery, operations have been and are often undertaken, because we cannot rest satisfied with doing nothing; we are too unwilling to confess not merely to others, but quite as much, though perhaps, unconsciously, to ourselves, how limited our power frequently is, and how often we are absolutely impotent. In no direction, however, is improvement so necessary as in this—in finding out what cases are fit for operation, and what are not; where it should be performed, not with a certainty of success, for that is impossible, but with, at least, a reasonable probability of it; and where it should be avoided, as likely to lead, not merely to disappointment, but perhaps to an aggravation of the disease, which the operation was intended to cure.

There is no disease to which this remark is more applicable than to cancer, and there is none which is more likely to make us discontented with the progress of surgery than this is. Dr. Walshe, in his work on *Cancer*, after reviewing the various and conflicting opinions on the question of operation for the removal of cancerous growths, says: "The accumulated experience of intervening ages, dispassionately scrutinised and fairly interpreted, pronounces the very verdict that was upwards of two thousand years ago rendered by Hippocrates in his memorable aphorism. The lapse of centuries of civilisation has done no more, in respect of the question of operation, than furnish elements for demonstrating what the observant genius of one man had in an era of comparative barbarism so acutely divined." (*The Nature and Treatment of Cancer*, 1846, p. 244.)

But although, in one sense, it may be said that surgery has done less than might have been expected for the relief of those who suffer from malignant disease, yet in the last few years the result of careful inquiry seems to show that more may be done with careful discrimination, than would be inferred from the somewhat sweeping opinion just quoted. It is especially this, the surgical treatment of cancer by operation, which most concerns us, and which will be chiefly spoken of in this address. Very much has been done of late years in investigating the history, anatomy, and pathology of the disease; but this part of the subject of cancer will be only slightly touched upon, and only so far as it comes into relation with the surgery of cancer, and especially with the propriety and results of operation for its removal. For, though very few surgeons probably doubt that in some cases, at least, life may be prolonged by the removal of the primary growth, many think that such

cases are very rare, and not a few suppose that what good is done to these is, on taking a more extended view of the question, found to be more than equalled by the harm which, from the same method of treatment, is done to others. On the other hand, some are so sanguine as to the results of operation, that they seem to look upon the propriety of its performance in the majority of cases as unquestionable; and there are others, though these are very few indeed, who think that cancer may be, in many instances, really cured by such treatment. It becomes, therefore, an interesting and instructive work to find out what facts with their proper deductions should lead us to a definite creed in this matter, and remove some at least, of the doubt with which it is invested. And, in order to this, it will be best to separate the varieties of cancer, and examine each of them by itself. It would indeed, be impossible, in the time allowed to us, to speak fully of this—the surgical part of our subject; an outline only can be drawn, and that a faint one, of the three principal forms of cancer: scirrhus, medullary, and epithelial. These are chosen, not only on account of their greater frequency, and therefore larger interest, but because two of the others, melanotic and osteoid, are closely allied to the medullary, so that the same remarks will nearly apply to the three, and the villous and colloid occur too rarely to be treated separately, as regards the question of operation.

I.—Scirrhus.

First, let us consider scirrhous cancer, the most frequent, and, in many respects, the most typical form of the disease.

From recent statistics, we learn that out of 520 cases of cancer of all kinds, in both sexes, in 191 the disease was seated in the female breast: (*Contribution to the Statistics of Cancer*, by S. W. Sibley: *Med.-Chir. Trans.*, vol. xlii.); and, from another set of 500 cases of cancer in external organs only, 269 were cases of cancer in the same organ. (*Contribution to the Statistics of Cancer* by W. M. Baker: *Med.-Chir. Trans.*, vol. xlv.) The frequency, therefore, of the occurrence of cancer of the breast shows pretty nearly that of scirrhus; for this variety of cancer rarely attacks any other organ than the breast, and the breast is very seldom attacked by cancer of any other kind. It will be as well to pass over the pathology of scirrhus, and to enter at once upon that which especially concerns us as surgeons, viz., the propriety of operation; to find out what may be, and what may not be expected from the performance of this; and to explain, if possible, the discrepancy of opinion which has, in all ages, existed on this point. And, taking the last of these first, it seems very probable that much of the difference of opinion which has prevailed, though it may be traced to many causes, has been produced mainly by two; 1. By errors in diagnosis; 2. By expecting too much from the removal of the primary disease. There can be no doubt that many of the cases which have been related many years ago, as those of cancer, cured by operation, have not been cases of cancer at all: and that this happened, not so much from the fact of those who related them being wilfully blind, or more ignorant in proportion to their opportunities than their successors, but because they had not the same means of diagnosis at their disposal that we now have. How often, now, would tumours of very different kinds be classed together, were it not for the correction of the diagnosis by the microscope; so that we may fairly suppose, viewing the matter in the light of modern pathology, that our predecessors were often unavoidably misled by fancied success—success which would in time surely lead to much disappointment when a better diagnosis showed how few of those who suffered from genuine cancer were free for any length of time, after an operation, from a return of the disease. In this manner we can best understand how it has happened in the case of cancer, as it has and will in all similar cases, where expectations have been raised on no certain basis, that the change from too much confidence in success, has been to too much despondency of doing any good whatever by operation. And this fluctuation of opinion has happened not once or twice, but very frequently, and will continue to do so as long as isolated instances of success or failure are taken for guidance, instead of a widely embracing record of facts.

Therefore, in considering the propriety of operating in cases of scirrhus, it will be necessary to assume that in all, or very nearly all cases, the hope of permanently curing the disease must be given up. It is scarcely necessary to refer to statistics for the proof of this. Mr. Paget, on this subject, writes: "In deciding for or against the removal of a cancerous breast, in any single case, we may, I think, dismiss all hope that the operation will be a final remedy for the disease. I will not say that such a thing is impossible; but it is so highly improbable, that a hope of its occurring in any single case cannot be reasonably entertained." (*Lectures on Surgical Pathology*, edited by Turner, p. 635.)

If, therefore, the hope of curing cancer must be given up, what benefits are to be expected from the performance of an operation for its removal? These: 1. Lengthening of life. 2. Relief of urgent symptoms; and diminution of the total amount of suffering, whether mental or bodily, or both. 3. The satisfaction of the patient or her friends. 4. The procuring a comparatively easy death.

1. *Lengthening of Life.* The most recent statistics concerning this, agree in showing a favourable result, as regards length of life after the operation. Thus, among seventy-eight patients with cancer of the breast, on whom no operation was performed, the average duration of life was 32·25 months, while in fifty-seven cases of the same kind, but in which the disease was removed, the average length of life was 53·2 months—an advantage of about twenty-one months, therefore, being on the side of the operation. (*Med.-Chir. Trans.*, vol. xlii, p. 123-7.) Again, in another set of cases tabulated by a different writer, the advantage on the same side, though not so great, is very marked. (*Med.-Chir. Trans.*, vol. xlv, p. 405.) Thus, in eighty-four cases of scirrhous cancer, almost entirely in the breast, in which the disease was not removed, the average length of life was 43 months; while it reached 55·6 months in those who had undergone operation; the advantage, therefore, on the side of those operated on was rather more than a year.

But, although such records as these seem to prove pretty conclusively the fallacy of the notion that removal of the primary growth, even though the operation be recovered from, causes a worse outbreak of the disease in the end, yet they must not be taken as altogether conclusive, for the reason stated by those who recorded them; viz., that the greater part of the cases in which the operation was done, were those also in which the disease was not very far advanced, and in which it might have been expected that it would run a tolerably long course, even if not interfered with. Again, the mortality arising from the operation in itself must not be forgotten. In the first of the records just quoted, the mortality, in about sixty operations for removal of the breast, was nearly 5 per cent.; and, in the second collection, it was about 10 per cent. in one hundred and nine operations. But, even allowing for these things, the advantage may be said to be decidedly on the side of the operation, when performed in appropriate cases; especially because the increase in the duration of life, whatever it may be, is added to the other advantages derivable from the operation, which may be now considered. Before doing so, however, it may be as well to notice a fact regarding the operation which may lead to mistake. It is sometimes supposed that, in proportion to the early or late performance of the operation, will be the interval

before recurrence, and the duration of life be longer or shorter; and, other things being equal, there is little doubt that such would be the case. But, by merely classifying them according to the time that the disease has been noticed before operation, the result by no means corresponds with such a supposition. Mr. Paget has shewn that no such proportion exists in scirrhus; and that recurrence is, on the whole, not later after early than after delayed operations. And, again, in another table, he shows that the duration of life is not greater after early than after late operations. (*Lect. on Surgical Pathology*, edited by Turner, p. 634.) The explanation which he gives is doubtless the true one: it is, that the most acute cases—those which, in any case, will run the shortest course—are, on the whole, the most early removed. It would, of course, be a fatal error to suppose that, in any particular case, it would be well to defer the operation.

2. *The Relief of Urgent Symptoms and the Diminution of Suffering, etc.* Of the benefit to be gained, under this head, in many cases, there cannot be a doubt. The cases related by Sir B. Brodie, in his *Lectures on Pathology and Surgery*, p. 204 *et seq.*, are particularly interesting and conclusive, and similar instances are by no means few. And, more often than bodily pain and distress, to which such cases as those referred to more particularly relate, do we see mental trouble assuaged, by removing from her sight what the patient considers to be her whole disease. There is, perhaps, among all maladies, not one which so frequently stays all present enjoyment, and, what is far worse, so completely prevents hope of any further happiness, as cancer; and to remove it is, at all events for a time, to restore to the sufferer a state of mind, the value of which cannot be over-estimated. For how long a time, however, supposing an operation to be successful, can we hope for this respite from suffering?

The two sets of statistics, before quoted, agree very nearly as to the average date of recurrence of scirrhus, after the removal of the primary disease; in one it is given as 14.8 months, in twenty-four cases of known recurrence (*Med.-Chir. Trans.*, vol. xlii, p. 126); and in the other as 13.9 months, in sixty-two cases (*Med.-Chir. Trans.*, vol. xlv, p. 400). But no statistics will decide the term for any particular case; and, unfortunately, the average is much raised by those comparatively few cases, which remain, without recurrence, for more than two years. Thus, of the sixty-two cases last mentioned, the disease recurred in fifty-four in less than two years. But statistics alone will not decide the value, any more than the term of freedom from the disease in any special instance. Each must be judged upon its own merits; the removal of a cancer out of sight and mind for a few months, may be worth to one patient very much more than to another. And this may be so, not only on account of a smaller power in one patient than another of bearing disease and pain, or of bearing the consciousness of possessing a fatal and incurable disease—circumstances which may often guide the surgeon in the advice which he gives, on his own responsibility; but on account, also, of many considerations with which he has little to do, but which have, perhaps, more influence on the wishes of the patient than any amount of mere bodily suffering.

3. *Satisfaction of the Patient or her Friends.* We have to consider, in the third place, under what circumstances the surgeon may now and then consent to operate, for the satisfaction of the patient or her friends, even though he feel that the surgical decision, if taken by itself, should be against interference.

It will be enough to refer, for examples, to one or two instances only in which this has happened. Sir B. Brodie relates the case of a lady, who had a scirrhous cancer of the breast on the point of ulceration, as well as enlarged glands in the axilla—the case being one which he considered unfit for operation; but he consented to remove the breast, as the patient was willing, and indeed anxious, to undergo its risk, for the chance of living a short time longer than she otherwise would have done, for the sake of an only child. (*Lectures on Pathology and Surgery*, p. 202.) And Mr. Paget, after remarking that acute cancers are, as a rule, bad for operation, on account of rapid recurrence, gives an instance in which he removed one from a lady who was five months advanced in pregnancy. The benefit, he adds, was very great. She went to her full term, bore her child, and was able to suckle it for a year before she died; so that her most anxious wish was fulfilled in comparative comfort. (*Med. Times and Gaz.*, Sept. 27, 1863.)

4. *Procuring a Comparatively Easy Death.* Lastly, the motive of procuring a comparatively easy death may be sometimes, indeed often, allowed to add weight to other reasons for operating, even though no material lengthening of life can be reasonably anticipated. If, indeed, it were true that the operation caused, ultimately, a worse outbreak of the disease, we should not be justified in entertaining such a reason. But, looking at the statistics previously quoted, it may be believed that this, if it ever occur, happens so rarely, as scarcely to weigh in the decision; and we may surely consider it a gain if, instead of by the effects of a painful and loathsome external disease, the patient die by a painless internal one, of which she is unconscious.

II.—Medullary, or Encephaloid Cancer.

This form of cancer, which is more frequent than any other in childhood and youth, and among external organs is found chiefly in the bones, the testicle, the eyeball, and the deeper soft parts of the limbs, generally runs a more rapid course than either the scirrhous or the epithelial kinds. But, although its duration is usually shorter, there is no form of malignant disease so liable to strange and marked contrasts in this respect in different cases as this is; and none whose progress is so likely to be interfered with, or stopped for a time, by degeneration or disease in its own substance. Some interesting examples of this fact are related by Mr. Paget (*Lectures on Surgical Pathology*, edited by Turner, pp. 672-5); and Mr. Moore says, "No form of cancer can be more rapidly fatal, none of longer duration." (*System of Surgery*, edited by T. Holmes, vol. i, p. 525.)

It is, therefore, more difficult even than in the case of scirrhus to obtain a correct notion of what the length of life in any individual case will be, by means of an average obtained from the records of many cases put together. But, in comparing the duration of life with and without operation, the exceptional cases on one side should pretty nearly balance those on the other, and it is possible to get some idea of what benefit may be expected from the removal of the primary disease. Thus, from the statistics which have been referred to more than once, we find that in thirty-two cases of medullary cancer in which no operation was performed, the average length of life was 20 months; while it was, on an average, 33.4 months in sixteen cases in which the primary disease had been removed. (*Med.-Chir. Trans.*, vol. xlv, p. 404-5.) There seems to be a difference, too, in the effect of operation, as well as in the general length of life, according to the part affected; thus, the average duration of life in medullary cancer of the bones was 23.6 months, both for the cases operated on, and for those not interfered with. The recurrence of this form of cancer after operation is, for the most part, very rapid. Its average date in sixteen cases was 7.4 months only; and of these, the disease returned in ten within six months from the time of the operation. (*Ibid.*, p. 400.)

The same remarks as to the qualifications necessary in the reception of all statistical records may be applied, as well to this variety of cancer as to scirrhus; the same allowance must be made for the fact of the best cases being those in which an operation is undertaken,

and for the mortality which, in some proportion or other, must of necessity happen after such large operations as those which are often required for the removal of encephaloid tumours, whether by themselves or with the limbs in which they are seated. But we have the same compensation also, not only in some increase in the length of life, as just mentioned, and in the other benefits, mental and bodily, which were referred to when speaking of scirrhus, but also in the chance, though a very small one, of operating on cases in which, almost certainly, the progress of the local disease would have soon killed the patient. An instance of this kind is mentioned by Mr. Moore (*op. cit.*)—that of a woman, the middle and outer part of whose leg was occupied by a very large and rapidly growing soft tumour. "The limb was removed above the knee, and in the stump there soon appeared livid blood-coloured tumours as large as plums, which rapidly grew, and could not be distinguished, before or after section, from fungous hæmatodes. The limb was amputated a second time; and the patient was alive seven years afterwards, and free from disease." Mr. Paget refers, also, to some few occasional cases of long-absent recurrence. (*Lectures*, p. 678.) The same distinguished writer, after noticing the reasons for and against operation, remarks, that another "motive for operation in cases of supposed medullary cancer may often be drawn from the uncertainty of the diagnosis. This is especially the case with those of the long bones, for the removal of which the peril of the necessary operation might seem too great for the probability of advantage from it. I have referred," he adds, "to cases of cartilaginous and myeloid tumours of bone, in which during life the diagnosis from medullary cancer was, I believe, impossible. In all such cases, and I am sure they are not very rare, the observance of a rule against the removal of tumours or of bones, believed to be cancerous, would lead to a lamentable loss of life. All doubts respecting diagnosis are here to be reckoned in favour of operation."

III.—Epithelial Cancer.

This species of malignant disease, which most commonly affects the lip and tongue, though it is far from infrequent in many other parts, occurs more often in males than females, and especially in middle and advanced life. Sometimes its progress, at all events for a time, is so slow, and its symptoms so mild, that many have doubted its being really of cancerous nature; especially as it is found, as a secondary disease, in internal organs much more rarely than any other form of cancer. But its progress to incurable ulceration, and its often rapid recurrence after removal; the affection of neighbouring lymphatic glands with structures like those of the primary disease; and its occasional, if rare, dissemination in internal organs (Paget's *Lectures*, p. 706), seem to point, almost conclusively, to the need of classifying this with the other kinds of cancer. But, if this be the case, there is less doubt of the good to be had by operation in removing the primary growth, than in either scirrhus or medullary disease. And this is not for one reason only; for, 1. The growth being slower in its progress, there will be more chance of removing it before it has spread out of reach. 2. Its usual situation in the skin and the outlets of the mucous canals is equally advantageous for a thorough removal. 3. There is only a small chance of present internal cancerous disease, which so often spoils what seems like a thorough recovery in scirrhous and encephaloid cancer. This fact, indeed, besides being an advantage, also, so far as recovery from the operation is concerned, is an especial inducement to its performance; for, as Mr. Paget remarks (*Lectures*, p. 726), the interval between the recovery from the operation and the recurrence of the disease may be considered as so much added to life, because it is by the progress and consequences of the local disease that, in the majority of cases, the time of death is determined. 4. From their situation, and often small size, epithelial cancers may be often removed at a comparatively small risk to life.

The latest statistics show the average duration of life in cases of epithelial cancer to be somewhat greater than that in scirrhus, though this is only in some of its forms, or perhaps, more correctly speaking, in some of its situations. Taking epithelial cancer of all organs together, the average for cases in which no operation was performed is given as given 27.4 months; and in cases of operation, 57.6 months—a great advantage on the side of operation. But there is a marked difference, according to the part affected; for while, in cases of operation in cancer of the lips and cheeks, the average length of life is 79.3 months, and in the integuments of the limbs and trunk 58.0 months, the average for cancer of the tongue was, for cases in which there was no operation, only 22.7 months, and 35.0 months when an operation was performed. (*Med.-Chir. Trans.*, vol xlv, p. 406.) Mr. Sibley gives, from the Middlesex Hospital records, the average of 53 months for cancer of the lip, not removed. (*Ibid.*, vol. xlii, p. 125.)

The recurrence of epithelial cancer is subject to great variety in the length of time which elapses between the time of the operation and its occurrence. In 23 cases, its average date after the operation was only 5.1 months; but, as a set-off against this, there were 8 cases in which no return of disease had taken place at intervals of 41 to 110 months after the operation. (*Ibid.*, vol. xlv, p. 401.) Similar instances of very long freedom from disease are to be found in treatises on the subject; so that in this, more than in either of the other kinds of malignant disease that have been here noticed, it is evident that much good may be done by operation.

It is not necessary to add to the reasons in favour of operation, in this form of cancer, which have been just mentioned, those general considerations for and against it which were entertained when speaking of scirrhus and medullary disease; nor to speak of the necessity in this, as in them, of not operating rashly or needlessly. The remarks there made may be applied here also.

Leaving, then, the consideration of the particular kinds of malignant disease, each by itself, what conclusion may be fairly drawn from the preceding facts concerning scirrhus, medullary, and epithelial cancers? Scarcely any other than this—that, by careful examination of each case, and by weighing well not only especially such elements in the question as belong strictly to our own province, but other circumstances also with which we are less concerned, we shall be often able to do much in lengthening and comforting the lives of those who suffer from this disease, and who come to us for assistance. Too much stress cannot be laid, however, on the necessity of deciding what are, and what are not, fit cases for operation. In an address like the present, it would be out of place to enter into the details of the particular conditions, local and general, which should influence the decision on one side or the other; but it may be said that, if these be not most carefully considered for every case separately; if the surgeon be guided either by mere fancies of his own, without good ground for them, as to interference or non-interference in cancer, by love of operation for its own sake, by *hope* merely, instead of *expectation*, of success from it,—the results will be vexation and disappointment to patient and surgeon, and more or less harm to all surgery.

It has been attempted in this paper to give a short outline of the results of the latest inquiries, as to what good may be expected from operation for the removal of cancer; and the subject has been taken also as an example of the necessity for carefully judging each case in surgery which comes before us by itself, with all the circumstances connected with it, before deciding on

measures for its relief; that is to say, for avoiding the being led to any single plan of treatment by the mere name of the disease. But cancer, in the various and many fluctuations of opinion which have existed concerning its cause, nature, treatment, etc., offers another moral of wide application; namely, the necessity and the difficulty of recording facts. Nothing is easier than to frame a theory; and nothing, it might be almost said, at all events in our profession, is much harder than to record a fact; not a statement merely, but a fact that will bear looking at in all lights, and yet remain what it seemed to be at first—a fact; and yet the opposite opinion to this seems to be the rule. In what other way than because of a want of power, or from carelessness in discerning the difference between suppositions arising from mere coincidences and facts, can we account for the almost daily accounts of new remedies and new methods of treating disease, whose fame lasts only until something else, with equal pretensions to stability, is put forward to replace them? Of course, there can be no progress without novelty; and too much scepticism is as fatal to it as too much belief. But the only hope for a true and definite progress for our profession, is in the recognition by its members of the necessity and duty of a careful study and record of facts. The greater part of the errors which stop the advance of the profession of medicine towards being more like what are called the exact sciences, have not their origin in wilful dishonesty in those who practise it, nor in the conscious record of untruths. It is rather by looking only at what are called "good cases", because they are good; by disregarding bad ones, because they are bad; and, what is more, by refusing to recognise them in our own minds as examples when they interfere with some pet theory of ours; by taking theories for guidance instead of facts; by being too ready to form the opinion first, and then bring the facts down to it; by these things it is, and by many others like them, that our progress is constantly hindered. The only way to avoid them is by keeping truth steadily in sight, and working up to it for its own sake. Every member of the profession can do something. Everybody can, if he will, watch and record the course of a disease, or the effect of a drug; he can, that is to say, if he will, take care to keep what he *thinks* apart from what he *sees*. All of us may work in different ways; but this matters not—it is all the better—so long as we have the same end in view; the present, as was said before, is a time of much hope, for the mist of many errors has been taken away for us, and our path is comparatively clear. If then, while we cannot walk so blindly, we still walk carelessly, it will be our own fault alone if we lose our way.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By H. Colley March, M.B.

[*Continued from page* 605.]

Embolism.

Chronic Rheumatism: Embolism of Left Brachial Artery: Gangrene. Dr. Wells related an interesting case of embolism. A lady, aged 60, had suffered for six months from chronic rheumatism, with emaciation; indeed, she had reached the last degree of marasmus and debility. On August 30th, she experienced a sudden sharp pain in the left arm, followed by numbness. When seen on the 31st, the arm and hand were found to be cold and of a bluish colour. There was no pulsation to be felt below the axilla, where the artery beat strongly. An opinion was given that the vessel was plugged, and that mortification of the limb would ensue. On the next day (September 1st), strange to say, the hand was warm, and of a natural colour; and the radial pulse beat as usual at the wrist. On the 2nd, the hand was again cold and discoloured, and no circulation was perceptible. On the 3rd, the pulsation was once more restored, and the limb was again naturally warm. On the 4th, the coldness and blueness of the hand returned; and pulsation was arrested at the axilla, just below which a firm plug could be felt filling the brachial artery. This state of things continued; and the patient died of asthenia on the 8th, when gangrenous vesicles had formed on the hand, which was quite black.

The heart and the plugged portion of artery were presented to the Society. The cardiac cavities were healthy, and the valves were perfectly free from fibrinous concretions. The brachial artery was seen to be perfectly occluded by a plug of fibrine about an inch in length.

Although it used, not very long ago, to be thought that the wad of fibrine in cases of embolism was the result of arteritis, and was poured forth, or produced *in situ*, by the inflamed vessel, it is now quite evident that in the majority of instances, and probably in all, speaking only of the systemic portion of the arterial system, the occluding material is concreted in the heart, is washed free by the blood, swept into the aorta, and at length arrested by the ever lessening calibre of some artery. The instantaneousness of the affection, as shown by the sharp pain and sudden cessation of circulation; the frequent absence of adhesion between the plug and the vessel, which is often quite healthy; or, when adhesion and inflammation occur, the fact of the presence of a distinct fibrinous nucleus; and the further fact of the occasional existence within this nucleus of a calcareous substance clearly corresponding with similar depositions on the valves of the heart,—all these things place the cardiac origin of embola beyond a doubt.

In all verity, it is rare enough to find, in such cases, the heart and its valves absolutely destitute of every form of fibrinous concretion. But when it is remembered that if, in a perfectly healthy state, the finest possible thread be drawn across the current of blood, fibrine is rapidly and surely deposited upon it; it must be conceded that in a diseased, and especially in a rheumatic, condition of the system, it is by no means unlikely that such depositions should take place on the chordæ tendineæ—depositions, perhaps, of so slight a consistence as to be easily whirled off into the aorta.

While embolism serves to account for grave events, such as some mysterious cases of "senile gangrene", who can say that so slight a thing as a whitlow may not be caused by a particle of fibrine being driven down into a digital artery?

But what makes Dr. Wells's case one of the most remarkable on record, is the fact that *twice* the symptoms disappeared, and the circulation through the artery returned; for it is explicable only on the hypothesis of the dual dissolution of the embolon. It is certainly not a little extraordinary that three successive times a concretion should form in the heart, and be driven down the same artery to be arrested in the same place; especially as the left subclavian is the last of the three great vessels, the first two of which must have been passed by each clot, in order to fulfil its fatal predilection. But this wonder is surpassed by the dissolution of the embolon and the clearance of the vessel on two successive occasions. Perhaps this may indicate a line of treatment in such cases. When at the onset of acute rheumatism a *bruit* announces a deposition of fibrine on the cardiac valves, it is undoubted that its dissolution and dispersion can often be accomplished by a rapid alkalinisation of the blood. Is it altogether impossible that the administration of the fixed alkalies should produce the same result in embolism?

Diseases of the Brain.

Abscess of the Brain. Mr. Harrinson related a remarkable case. On July 6th, 1862, he was called to Mrs. R., aged 60. Four months previously there had appeared

on the lower part of her right parietal bone, a swelling which was hard and painful, and which gradually increased in size. During this time there had come over her a physical and mental change. She had been in robust health; but had become pale, anorectic, and sleepless. She had been lively and energetic; but had become dull and listless. One day, on sitting down to the pianoforte, she found to her alarm that once familiar airs were all forgotten, and that the fingers of her right hand refused to press the keys. Thereupon Mr. Harrinson saw her, and found that the parietal tumour, which was of the size of a small orange, was beginning to ulcerate at the summit. Aided by superficial incisions, the tumour slowly separated, and, when it was become loose at its base, it was cleanly dissected out; the scalp and pericranium being removed to the extent of a crown piece. The subjacent bone was pale and smooth. The structure of the tumour was hard and fibrous. It was removed five weeks after it was first seen, or about the middle of August. Thereafter, having recovered sufficiently to superintend her domestic duties, she was seized, on September 28th, with strong convulsions, which continued for more than three hours, and which were chiefly, but not entirely, confined to the left side of the body. She was bled and purged. When the convulsions had ceased, the left side seemed to be wholly paralysed; but she presently arose, announced her intension to relieve her bowels, and walked upstairs without assistance. Soon afterwards the convulsions returned. Thereupon it was resolved to trephine the denuded bone. This was soft, dry, and easily removed. Then nothing was seen but the dura mater, which was bloodless and discoloured. So this membrane was incised; and, to the satisfaction of all, about two drachms of pus escaped.

For five days afterwards, though there were no convulsions, there were frequent spasmodic twitchings; but then, a fresh gush of pus having occurred, these entirely subsided. From this time matters went on well till October 27, when an attack of convulsions ushered in sinistral hemiplegia and partial aphonia.

On October 31st, after a free discharge of pus, the paralysis was suspended; but recurred on November 8th, and continued to the end. Hernia cerebri frequently took place. The protrusion was ligatured, and, after a day's interval, cut off. The purulent discharge was copious and offensive. Convulsions occurred on the 21st March; and coma and death on the 27th, just six months from the day of operation. No *post mortem* examination was allowed; but Mr. Harrinson exhibited to the Society an excellent cast to illustrate the external appearances.

It was thought that the steps of the disease were as follow. The tumour, though innocent in its nature, brought about the destruction of the underlying portion of pericranium. Through this structure the cranial bones derive the main part of their pabulum, especially in those situations in which the diploë is scanty, or altogether absent. Upon just such a spot the pericranium was in this case destroyed, and consequently the bone perished. A slough or sequestrum is often sufficient to arrest the vitality of any piece of the body in contact with it; so a corresponding portion of dura mater died also. But destruction does not, unless in very unfavourable cases, spread indefinitely from a dead centre. The *destructive* process of inflammation at an end, a process of *production* begins; and of this, suppuration is the very frequent result. Thus it happened that pus was formed upon the arachnoid membrane, and symptoms of cerebral compression arose.

Convulsions: Death: Cerebral Softening and Hæmorrhage. Mr. Walford related the case of Richd. Watmore, a dissipated man, aged 40. On the afternoon of Friday, December 5th, he had a fit. He was seen shortly afterwards, and a purge was given. Every five minutes he was shaken with violent and chiefly dextral convulsions. No reflex action could be excited by pinching the extremities.

On the following day, Saturday, as he was no better, leeches were applied to the temples, and another purge was given.

On Sunday neither the unconsciousness nor the convulsions were relieved; so the jugular vein was opened, and a pint of blood abstracted. By this means he was somewhat benefited; as he protruded his tongue when bid, and to his assembled children made signs, supposed to be indicative of affection. This improvement did not continue; and he died the next day.

Forty hours after death, an autopsy revealed the vessels of the meninges gorged with blood. The brain, much congested, was adherent to the orbital plates, and was a little softer than natural; while the left anterior lobe was almost diffluent.

Cancer.

A few specimens of cancer, having an ordinary interest, were presented.

Abdominal Cancer. Dr. Burnett related the case of a man, aged 65. Fifteen years ago, he fell and fractured some ribs. Three years after this, he was attacked with severe hæmorrhage from the kidneys. The eminent physicians of the day were consulted, but they neither diagnosed his disease, nor relieved his symptoms. From this time forth he constantly complained of deep seated lumbar pain, which was lessened, ever and anon, by the recurrence of the hæmorrhage. Notwithstanding all this, he daily took active exercise. But at length the bleeding became excessive, and he died.

On opening the body, a cancerous mass was discovered, occupying half the abdominal cavity, and weighing twenty-two pounds. In its centre was the right kidney, carcinomatous, and enormously enlarged, weighing fourteen pounds. A melanoid growth, larger than an adult thumb, was found projecting into the vena cava; though this vessel could not have been entirely obstructed, as the lower extremities had not been much swollen. As similar growths were found in the right renal vein, it was conjectured that they were all due to the passage into the circulation of cancer-germs from the kidney.

The occurrence of carcinomatous vegetations on the lining coats of the veins was stated to be very rare.

Anomalous Case.

Death from Shock? or from Pyæmia? Mr. Harrinson related a case of extreme interest, not only intrinsically, but on account of certain medico-legal relations. Into these, however, it would not be proper to enter. It was the case of a man, the subject of no known disease, who died three days after the receipt of a severe local injury. This man had, only a few months before, recovered from a compound fracture of the leg. It seems that he went in dread of some other mishap, for he had just obtained a policy in an Accidental Death Insurance Society. It is undoubted that, at the moment of his second misfortune, he received a terrible shock, both mental and physical. The point of interest is, whether he died of a state of system brought about *simply by shock*, or whether he died of *pyæmia;* remembering, at the same time, that shock would probably modify the symptoms, but certainly facilitate the origin and accelerate the termination of putrid infection. Pyæmia is an unfortunate term. It suggests to the mind only the type of a disease. It brings up before the mental vision, 1, intense prostration; 2, rigors, sweats, diarrhœa; 3, foulness of any wound, offensive exhalations from the skin and lungs, a discoloured surface of body, whether sallowed or jaundiced; and, above all, secondary abscesses.

But there are infinite shadings off from such a typical portraiture. There may be no rigors; the discoloration of the skin may be slight or marked; " patches of erratic

erysipelas may make their appearance on the skin"; a scarlet rash may appear for a few hours; the symptoms may be slender, and recovery may ensue: but, from the most ephemeral case to the most pronounced pyæmia, they all come under the denomination putrid infection—that is to say, the absorption into the system of certain poisonous products of textural decomposition.

It may be observed, too, that a *reactive power* is essential to the formation of secondary abscesses; and it seems pretty clear that this very capability of reaction might be destroyed by an intense physical and mental shock. So that it is possible that death might be occasioned from what is called pyæmia, without the occurrence of a single metastatic suppuration.

To return, however, to the case in question. A man, aged 60, on Saturday night, October 11th, 1862, fell, and sustained a compound dislocation backwards of the extreme phalanx of the right thumb. During its reduction, which could be effected only by the clove-hitch, the patient was pale, faint, and sick, though no expression of pain escaped him. The thumb was put up in wet lint, supported by strips of cardboard. He passed a quiet night, but was so weak the next morning, Sunday, that he fainted whilst dressing. He went into a neighbouring street to make a short call, and on his return fell asleep, and slept on through the day. In the evening, attention was arrested by the peculiar mottled, congested appearance of his face. His expression was dull, and his eyes were red. Diarrhœa had come on, and vomiting was frequent. This latter so far from being violent, was effected without the least effort. His surface was cool, and his pulse depressed. He passed a restless night.

The next morning, Monday, the vomiting and purging were stayed. His expression was unaltered. The face was of a brighter colour, and the surface was warmer. The tongue was clean, red, and dry; the pulse low. The thumb was dressed. There was no discharge, and no pain or redness. He was drowsy all day; muttered in his sleep, and answered strangely when addressed. The heart's action was regular, though feeble. In the evening, his pulse was become so irregular as not to be counted; and he was bewildered in manner and in speech. In the night he had two convulsive attacks. He constantly wanted to get out of bed. His fæces and urine passed involuntarily.

At five o'clock on Tuesday morning, the last day of his life, and the third since the accident, he was found semi-conscious; answering questions, but at once lapsing into torpor. The pulse could scarcely be felt, but the cardiac beats were regular. The thumb was dressed, and the end of it was found to be *black* and *cold*.

At 10·30, on the chest and inside of the arms, but on no other part of the body, a scarlet efflorescence had appeared. The fauces were not reddened in the slightest degree. The face was congested; the skin *decidedly moist*; the pulse irregular; the brain more oppressed. At two o'clock he was sweating profusely, and at 4·30 he died comatose. Stimulants and nourishment had been administered throughout.

Soon after death the heart was examined. It was small, but perfectly healthy, and contained no coagula nor concretions. Two days later the head was examined—nothing abnormal was found. Three days after death the upper extremities were examined. The right thumb was blackened as far as the first joint. The right hand was discoloured as far as the wrist, and the cuticle was loosened. The veins of the right arm were larger, more distinct, and more discoloured than those of the left. On account of advanced decomposition, no other organs were examined.

Thus it would seem that shock and putrid infection, meet hounds of death, hunted this unfortunate man, as it were, in couples. Shock held him down, while pyæmia fastened in her poisoned fangs; and so, while

> "Presently through all his veins ran
> A cold and drowsy humour, which did seize
> Each vital spirit,"

shock, like a good dog, still held on, till the great killer cried "Dead"!

[*To be concluded.*]

SOUTH MIDLAND BRANCH.

RUPTURE OF THE AXILLARY VEIN, FROM A DISLOCATION OF THE HUMERUS INTO THE AXILLA.

By Hammett Hailey, Esq., Newport Pagnell.

[*Read at Northampton, October* 22, 1863.]

The subject of this case having been attended in my absence by a friend, I have enclosed that gentleman's notes of the case, from November 15th to December 2nd, inclusive.

"T. H., aged 59, was suddenly precipitated from a dog-cart on the night of November 15th, 1862. On examination, a dislocation of the humerus had taken place, the head of the bone being in the axilla. Reduction was speedily accomplished with so little force as to astonish the surgeon, and surprise the bystanders. The man was a very attenuated person, and exceedingly weakly, as though habitually feeble. He was removed home, the arm being safely secured. On the following morning he was visited, and all seemed going on well, except that he then complained of great pain in his wrist, which was reddened, and appeared to have been sprained, for which a fomentation was prescribed. On the 19th he was visited again; the pain in the wrist continued, and the hand and some distance of the forearm were œdematous; a bandage was applied, extending to the shoulder. The shoulder was not interfered with, as the pain experienced in it was not more than a common dislocation would produce. On the 24th, the pain and swelling of the hand, wrist, and forearm, were intense. A spirit lotion was ordered to be constantly applied, and morphine given every four hours. This plan somewhat allayed the pain, and gave occasional sleep. On December 2nd, the last time I saw him, he was sitting with his friends in the parlour, and appeared to be going on pretty well."

On December 7th, I visited the patient, and found him in the condition about to be described. The whole limb from the acromion process of the scapula to the extremity of the fingers was much swollen, and the cuticle very sodden; in fact, almost elephantised, exciting the suspicion in my mind, that the head of the bone was unreduced, and was compressing the great vein. The patient himself thought, from the pain in the axilla and the loss of power in the limb, that the bone was out of place. On raising the heavy arm, and rotating the limb, the head of the humerus was clearly ascertained to be in position.

The treatment consisted of anodyne applications, a generous diet, tonics, and opium to produce sleep. This condition continued without much alteration for upwards of a month, when (on January 14th, 1863) a tumour presented itself between the acromion and coracoid process. There was a serous discharge from the axilla, which, with slight encouragement, appeared to increase; but, the fluctuation not being sufficient to convince me of the presence of matter, I punctured the swelling with a grooved needle, and blood only escaped. Symptoms of pyæmia were now present, accompanied by diarrhœa, delirium, and great prostration of strength, and he died comatose a few days after the tumour had first appeared.

Post Mortem Examination, seven hours after death. Upon dissecting back, the skin and superficial fascia from the middle of the great pectoral muscle to its insertion into the humerus, so as to bring into view the anterior wall of the axillary space, the projection seen

during life near the coracoid process of the scapula was fully exposed, distending the fibres of the pectoralis major on its way to the humerus. On division of these fibres, the nature of the tumour was explained. A substance apparently solid, of the size of the fist, presented itself through the opening as if bound down by great pressure. This substance was found to be coagulated blood, with part of the muscular tissue of the lesser pectoral, whose tendon was left attached to the humerus. The axillary space being now explored, every part of it was found to be filled with coagulated blood, a little of which appeared recent. The arteries and veins extending from the axilla to the chest could not be discriminated; and not a gland could be perceived. More than two pounds of coagulated blood with altered tissue were removed from the axillary space. The head of the humerus was found in its proper position; but on close inspection, no axillary vein could be perceived; and after searching for some time, its subclavian portion was discovered; on carrying the dissection down the arm, the upper portion of the cephalic vein was found enveloped in a coagulum of blood. In the forearm, not a trace of the vein could be found. The veins at the bend of the elbow could not be traced. The enlargement of the whole limb was the result of infiltration into the tissues, in some parts more than an inch in thickness. The muscles and arteries were healthy, and apparently well nourished.

Remarks. The interest in this case consists in the extreme rarity of such an injury as rupture of the main vein by dislocation of the humerus. I am not aware of any similar instance being on record, and it is somewhat difficult to understand how the rupture of the vein could have been effected, when so little violence was used in restoring the head of the bone to its original situation. It therefore becomes a question as to whether the injury must not have been inflicted at the time of the original accident. When we take into consideration the spare habit and age of the patient (about 60), this hypothesis appears very tenable; for at that period of life a great change is taking place in the tissues of the body; and although pathologists do not allow that a change in the structure of the veins similar to that of the arteries is undergone, they fully admit that the former are subject to lesions of another nature, such as softening, etc., which will render them at this particular period of life as much prone to rupture on the application of any undue violence as the latter. Therefore, I think the reasonable theory of the case is, that there existed a diseased condition of the coats of the axillary vein at the time of the original accident.

As to the treatment, it might be suggested whether, if the nature of the contents of the cavity had been discovered earlier, and it had been cut down upon, and the large quantity of blood there enclosed removed, the life of the patient could not have been spared. If any of my readers should meet with a similar case, and be fortunate enough to make an early diagnosis, this question may be solved; but, as to myself, such a course was not open to me; for on reference to the case, you will find the only intimation of the nature of the formation was the prominence between the coracoid and acromion processes; and this did not take place until the pyæmic symptoms had made their appearance, and the health of the patient had become very much shattered. The autopsy proves beyond a doubt that, if the blood had been removed at the time of discovery, the patient could not have recovered; for there was not that œdematous condition of the parts below the seat of injury usually present in cases of pressure upon large arterial or venous trunks; but the condition usually present in cases of entire occlusion, or obliteration of large veins, a perfect mass of fat, as Hasse so clearly describes it, "like bacon fat"—not a vein to be perceived. We read of cases of restoration of circulation through collateral branches, even when so large a trunk as the vena cava has been ruptured; but, I think, taking every circumstance connected with this extraordinary case into consideration, such a prospect could not for one moment have been here entertained.

Reviews and Notices.

On the Influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases, and the Diagnostic Value of Pain. A Course of Lectures delivered at the Royal College of Surgeons of England in the years 1860, 1861, and 1862. By John Hilton, F.R.S., F.R.C.S., etc. Pp. 499. London: 1863.

Of daily occurrence in practice are instances in which the value of rest as an aid to the reparative powers of nature is manifested, and also in which the disturbance of rest renders the exercise of these powers nugatory. We often, indeed, see and recognise the influence of rest—as, for instance, when we fix a fractured limb in splints or starched bandage; but, if our ordinary surgical proceedings are to be judged by the doctrines which Mr. Hilton lays down and ably supports in these lectures, we do not yet fully appreciate the value of this apparently simple though great therapeutic agent.

After some remarks on the subject of rest in relation to the body generally, Mr. Hilton proceeds in his first Lecture to inquire into some of the expedients by which rest is secured to individual organs. To secreting organs, which undergo a temporary enlargement from vascular turgescence during their active state, rest is secured by the elastic capsules in which they are enveloped, which, aided by other forces, bring the organs to and maintain them in a quiescent state, "allowing the individual minute secreting parts to recover their physiological strength and their tone".

The greater part of the second and third Lectures is occupied with an examination of the means by which the brain and spinal cord are enabled to obtain rest. The author attaches great importance to the cerebro-spinal fluid contained in the internal arachnoid (subarachnoid space of other anatomists). This internal arachnoid cavity passes through the whole length of the vertebral canal, and is continued into the skull. The fluid contained in it acts, Mr. Hilton says, in the manner of a water-bed.

"It not only passes down the whole length of the vertebral canal, but the fluid lies under and supports the cerebellum, as well as the most important parts of the base of the brain; and it further passes upwards into the interior of the brain, and is the fluid which we generally find, after death, occupying to a smaller or larger extent the various ventricles of the brain. In fact, the central parts of the base of the brain, instead of resting upon the bones, rest upon this collection of cerebro-spinal fluid, which forms for it a most beautiful, efficient, and perfectly adapted water-bed; the water-bed itself being sustained in its position by the force of the venous circulation, and also by the elasticity of the dura mater in the vertebral canal." (P. 22.)

Hence injury of the base of the skull may take place without at the time producing any evidence of serious lesion; unless the fracture occur in the anterior part, where the brain rests closely on the bones.

The cerebro-spinal fluid, according to Mr. Hilton, performs a function analogous to that of the elastic capsules of secreting glands; during the vascular turgescence of the optic thalami and corpora striata, for instance, the cerebro-spinal fluid in the lateral ventricles is slowly displaced into the third and fourth ventricles and spinal canal; and, when the physiological excitation ceases, the fluid returns—slowly, as it had receded, through the narrow openings between the ventricles—and acts a mechanical support to the cerebral structures while in a state of rest.

To illustrate the importance of the cerebro-spinal fluid in acting as an equipoise to the intracranial circulation, Mr. Hilton mentions an experiment, in which, on opening the lower part of the spinal canal, compressing the jugular veins, and forcing the blood in them towards the head, the spinal dura mater is seen to be raised by the cerebro-spinal fluid; while, on the other hand, if pressure be made on the dura mater so as to displace the fluid, blood will rise in and flow from the divided veins of the spine. He also relates a case of fracture of the base of the skull, in which, on producing cerebral congestion by desiring the patient to take a full breath and then holding his mouth and nose and compressing the jugular veins, the watery discharge from the ears (which usually attends such cases) became greatly increased in quantity. This experiment, for obvious reasons, he does not recommend others to repeat.

Another proof of the importance of the cerebro-spinal fluid lies, Mr. Hilton shews, in the phenomena observed where the communication which should exist between the cranial and spinal internal arachnoid cavities is closed. This state he has found in many cases of internal hydrocephalus; and he also gives an instance of a gentleman in whom, though not exhibiting all the phenomena usually regarded as denoting hydrocephalus, an occlusion of the cerebro-spinal aperture, probably congenital, was found. He had at various times during life manifested symptoms which, according to Mr. Hilton, indicated that, when any mental or physical exertion produced an increased accumulation of blood in the head, pressure on the brain arose from the cerebro-spinal fluid being unable to escape.

Proceeding now to the more immediate consideration of rest as a therapeutic agent, Mr. Hilton shews its importance in the treatment of injuries of the brain and spinal cord.

"I would," he says, "solicit the attention of the profession to what observation has taught me—that recognised lesions of the brain and its membranes, associated with blows on the head (whether the cranium be fractured or not), do not generally, or as a principle of treatment, obtain that extent of mechanical rest and long continued freedom from occupation which is consistent with the expectation of perfect and complete structural repair." (P. 45.)

A similar observation, as he points out in another page, is applicable to injuries of the spinal cord—such as those which have been frequently produced in railway accidents. He regards the brain and spinal cord, when these parts have undergone concussion, as in a state analogous to that of contusion of external parts; there is probably some structural or molecular disturbance, although it may not be easy or possible to detect this even by minute examination after death. In external injury, the surgeon seeks to secure rest for the parts; if this be not secured, they manifest their want of it by pain, and by the occurrence of chronic inflammation, the presence of these symptoms pointing out to the surgeon what it is that Nature requires. But in concussion of the brain,

"The surgeon ought to keep it under his professional surveillance and protection during its prolonged convalescence; because the brain, not manifesting its disturbance by pain, neither gives the same warning to the patient against use, nor by such marked indications, as do injuries to external parts, which express their derangement by pain." (Pp. 48-9.)

In the fourth Lecture, after some observations on the effusion of coagulable lymph as a means of securing rest to serous and mucous membranes in inflammation of these structures, Mr. Hilton offers some remarks on the value of pain as a symptom of disease. In doing this, he enlarges on the value of so-called sympathetic pain—permanent local pain, unattended by signs of inflammation of the part—as a means by which the surgeon, following centripetally the course of the nerve in the ultimate fibres of which the pain is felt, may arrive at the real seat of disease. He relates some instances shewing the importance of an accurate observation of the seat of pain, especially, for example, when this exists in the scalp or external ear, the different parts of which are supplied by nerves from different sources.

The existence of local and fixed pain—simple pain, without increased heat—at some point of the body, Mr. Hilton regards as of very great importance in the detection of disease of the spine. He "feels quite certain that, through the medium of this symptom, properly employed, we may be led to the recognition of morbid conditions of the spine long before there is any evidence of disease by special deformity". He then gives some illustrations of the manner in which, by tracing the nerves from a surface-pain towards the spine, and observing the absence of any sign of disease in the parts through which the nerves pass in their course, the surgeon may arrive, by the law of exclusion, at the spine as the seat of disease.

In the fifth Lecture, he relates several cases illustrative of the value of pain (especially symmetrical pain) as a means of diagnosis of disease or injury of the spine; and also demonstrative of the value of rest as a means of remedy. In more than one case, where symptoms existed indicative of structural disease or injury of the upper part of the spine, and warning the surgeon of the liability to serious interference with the functions of the upper part of the cord, Mr. Hilton has observed the best effects produced by keeping the head and neck perfectly at rest, even for months, by means of sand-bags placed at each side. These sand-bags, *en passant*, he regards as much more valuable articles in surgery as a means of securing rest of parts, than, from their rare use, appears to be generally admitted. As shewing further the importance of rest, Mr. Hilton relates, among his cases, one of a child who had symptoms indicative of disease of the upper cervical vertebræ. Mr. Hilton prescribed absolute rest of the parts; and the pain, fever, loss of appetite, and other symptoms improved at once, and recovery appeared to be procured. At the end of a fortnight, however, an officious nurse made the child sit up to breakfast—she did so; the head fell forwards, and she died.

"The *post mortem* examination proved that disease existed in the articulations between the first and second cervical vertebræ, that the bones were loose, and that, when the head with the atlas fell forward, pressure had been made upon the spinal marrow close to and below the medulla oblongata at the point of decussation, as in pithing animals. This was a case in which both the surgeon and Nature were completely thwarted. The local disease .... was the result of a blow. It was not constitutional .... and in all probability would have been improved and cured by proper and long continued rest." (P. 102.)

In the sixth Lecture, the author brings under notice the agency of rest in the cure of abscesses, sinuses, and certain ulcers. In opening an abscess, the ulterior object is to give its internal surfaces rest, so as to permit of their union; and herein lies the *rationale* of the well-known precept, to open the abscess at its lowest part, where the contents are most easily evacuated. This is sometimes difficult; and Mr. Hilton gives illustrations of the modes of overcoming the difficulty. For instance, in suppuration under the temporal aponeurosis, the floor cannot be readily reached; the surgeon may open it above the zygoma, but this is not its lowest part; and it is not until the abscess opens spontaneously into the mouth that a cure takes place. Mr. Hilton in such cases anticipates Nature—he "passes a probe through the aperture made above the zygomatic arch, toward the mouth, feels the end of the probe through the walls of the mouth, and then makes a small aperture opposite the point of the probe." Again, a difficulty often arises in the case of deeply seated abscesses. The precept, to "plunge in a knife" in such cases, Mr. Hilton repudiates, on account of the danger attendant on the proceeding. "Persons have died, and many lives have been endangered, by hæmorrhage consequent on opening a deep abscess by a bistoury or lancet." To obviate such danger, Mr. Hilton has for many years adopted the following plan of opening deep abscesses. Taking abscess of the axilla as an example, he says:

"Cut with a lancet through the skin and cellular tissue and fascia of the axilla about half or three-quarters of an inch behind the axillary end of the great pectoral muscle. At that point we can meet with no large blood-vessel..... Then push a grooved probe or grooved director upwards into the swelling in the axilla; and, if you will watch the groove in the probe or director as it is being passed up through the comparatively healthy tissues into the axilla, a little stream of opaque serum or pus will shew itself. Take a blunt (not a sharp) instrument, such as a pair of 'dressing forceps', and run the closed blades along the groove in the probe or director into the swelling. Now opening the handles, you at the same time open the blades situated within the abscess, and so tear open the abscess. Lastly, by keeping the blades of the forceps open during the withdrawal of the instrument, you leave a lacerated track or canal, communicating with the collection of pus, which will not readily unite, and will permit the easy exit of matter. In this way you may open an abscess deep in the axilla, or in other important parts of the body, without fear of inflicting any injury upon the patient..... During many years I have not opened a deep abscess in any other way; and I can say, honestly and truly, that it has never failed, and that I have never observed any inconvenience from it." (Pp. 120-1.)

Mr. Hilton relates cases, in which this plan has been adopted by him, of orbital, deep cervical, post-pharyngeal, iliac, subgluteal, subfascial, and submuscular abscesses.

In the next place, Mr. Hilton takes into consideration those cases where "abscesses, or sinuses after abscesses, are moved by muscles, and therefore are very difficult to heal." Here Mr. Hilton points out that the great requirement is rest—to be obtained by impeding the action of the muscles, and by exerting gentle pressure on the abscess or sinus. Where such a proceeding is necessary, as in the case of anal fistula, rest is to be obtained by dividing the anal sphincter. In illustration of the efficacy of procuring rest by simple pressure, Mr. Hilton relates cases of abscesses about the head, face, and neck, and in the popliteal region.

This lecture ends with some remarks, showing how painful irritable ulcers and painful granulations may be relieved by carefully searching with a probe for the spot which is the seat of pain, and dividing the branch of nerve which leads to the spot, or excising the painful granulations.

In the succeeding Lectures, from the seventh to the twelfth, both inclusive, Mr. Hilton demonstrates the importance of an accurate acquaintance with the anatomical distribution of nerves. The proposition which he lays down is that

"The same trunks of nerves whose branches supply the groups of muscles moving a joint, furnish also a distribution of nerves to the skin over the insertion of the same muscles; and—what at this moment more especially merits our attention—the interior of the joint receives its nerves from the same source. This implies an accurate and consentaneous physiological harmony in these various co-operating structures." (P. 157.)

At another part, he extends this principle still further, and finds that it holds good with regard to mucous and serous membranes. If, he says, what has been said regarding the nerve-distribution of joints be true as a broad principle, we ought to find that

"The same trunks of nerves that supply the muscular apparatus should supply the serous membranes, as the pleura or peritoneum, which those muscles move. With regard to the mucous membrane also, the same nerves that supply the muscles which move the walls" (of the larynx, for instance) "should supply the mucous membrane which lines those muscular walls." (P. 236.)

We cannot follow Mr. Hilton through all the interesting examples which he adduces in proof of his doctrine of consentaneity in various structures brought about by their nerve-supply; but we will endeavour to state the principal points which the author seeks to demonstrate.

1. Disease of the interior of a joint produces a reflex nervous action on the muscles moving that joint, so as to produce a fixed position, and consequent rest. Here, however, Nature, if left to herself, very often errs; for, the flexor muscles of joints being the most powerful, the limb becomes bent, and serious structural disease (over and above that which originally existed) is very apt to ensue.

2. Pain, or other disturbance (local inflammation or injury excluded) in a part, should lead the practitioner to seek the seat of the disease in the course of the nerve which supplies the part. Thus, among other illustrations, Mr. Hilton relates cases of furred tongue on one side, connected with decayed teeth and disease within the skull, the state of the tongue

being in all the cases referrible to an interference with the function of the fifth pair of nerves. As to pain, in the knee especially, the remarks which Mr. Hilton makes shew the necessity of great care in the appreciation of this symptom, in order to ascertain in what part of the course of the nerve the diseased condition giving rise to the pain is really seated.

3. Permanent rigidity and flexion, denoting an effort of Nature—though faultily directed—to obtain rest for diseased joints, indicate to the surgeon the necessity of using proper mechanical means (as splints) for keeping the parts in that state of rest which is necessary for their recovery.

4. The pain in the cutaneous branches of the nerves which supply the diseased joints and their muscles being the result of an irritation reflected through the nerves, we may rationally endeavour to act in a reverse direction on the joint and its muscles; viz., by the external application of anæsthetics, such as poppy fomentations, opium, belladonna, or hemlock. In this way, says Mr. Hilton,

"The sensibility of the filaments supplying the skin being reduced, that influence is propagated through the sensitive nerves to the interior of the joint, and to the muscles moving the joint. This diminution of sensibility tends to give quietude or perfect rest to the interior of the joint." (P. 175.)

5. The therapeutic indications pointed out in the preceding two paragraphs are applicable also to other structures than the joints. Thus the contraction of the abdominal muscles in acute peritonitis, and the (probable) spasmodic contraction of the intercostal muscles in pleurisy, are analogous to the contraction which takes place in cases of diseased joints. And Mr. Hilton not only insists strongly on the importance of keeping the intercostal muscles in a quiescent state during pleurisy, but suggests further, that, when the acute mischief has passed off, the chest may be plastered or bandaged, on the same principle as we apply a splint to an inflamed joint to keep it at rest. Again, we may avail ourselves of the cutaneous nerves as a means of applying anæsthetic remedies. Thus

"We know by experience that if we apply strong poppy or opium fomentations, hemlock or belladonna poultices, or anæsthetic embrocations, to the exterior of the chest in inflammatory conditions of the interior, they give a great amount of relief through the medium of the intercostal nerves which come to the surface." (P. 250.)

Again, in speaking of the abdomen, Mr. Hilton considers that the phenomena observed in peritonitis, and the known distribution of the nerves of the part, point to the external use of anæsthetic fomentations; and he refers to a case under his care, in which severe abdominal pain and spasmodic contraction of the abdominal walls were relieved by rubbing a strong solution of opium on the abdomen.

We must now go on—not that we have exhausted all the practical matter in these six lectures—to the remaining portion of the book.

In the thirteenth Lecture, Mr. Hilton expresses his dissent from the opinion that diseases of joints are most commonly the result of a constitutional cachexy—*i.e.*, scrofula. He believes that

"They are almost invariably the results of local injury, and that, if they were recognised early, and treated by rest, nearly all of them would get well.....I will admit that the untoward consequences or results of such cases, originating confessedly in slight local injury or overexertion, are in some measure owing to the unhealthy constitution of the patient; and that the same amount of injury in persons perfectly healthy would, in all probability, have caused no lengthened manifestation of a consequent diseased state. But, then, it should be remembered that, if the general health be bad, it is equivalent to the confession that the powers of reparation are feeble, and that therefore rest, or freedom from local disturbance, becomes necessary." (Pp. 297-8.)

In support of his views, Mr. Hilton shows that disease is of most frequent occurrence in those joints that are most exposed to overexertion or to injury; while in these articulations, such as the costo-vertebral, the pelvic, and the tibio-fibular, which are much less exposed to these accidents, disease rarely occurs. Again, the successful results which follow excision of joints denote, in Mr. Hilton's opinion, that the bones can scarcely be in an unhealthy and scrofulous condition.

The remainder of the lecture is occupied with answers to the objections that may be taken against the long prolonged employment of rest in cases of diseased joints; viz., that the general health may become deteriorated, and that anchylosis of the articular ends of previously healthy bones may be produced by long disuse; and with observations on the differences observed, as regards the phenomena of disease and repair, in children as compared with adults.

The remaining five Lectures consist principally of narratives of, and comments on, cases of diseased joints, illustrating the beneficial effects producible by long continued rest of the parts. The length, however, to which this notice has extended warns us that we must resist the temptation of noticing the valuable practical suggestions arising from a consideration of these cases, which Mr. Hilton makes in the course of his remarks.

Mr. Hilton has done surgical—and it may also be said medical—science and practice good service in thus directing attention to the importance of rest as a therapeutic agent. For putting forth, as he has done, his views on the subject, he deserves the thanks of the profession. An excellent anatomist as well as an able surgeon, he shews throughout the work the application of anatomical knowledge to practice; and in enunciating his doctrines, he never fails, whenever he speaks at all positively, to illustrate them by the relation of some case or cases that have occurred under his notice. His book is, therefore, a thoroughly practical one; and we strongly recommend its study to all practitioners of medicine and surgery—its careful study, we would say; for it is a book which demands and deserves a close perusal.

On the Characters, Actions, and Therapeutic Uses of the Ordeal Bean of Calabar (*Physostigma Venenosum*—Balfour). Edinburgh Graduation Prize Thesis, 1862. By Thomas R. Fraser, M.D.Edin.; Assistant to the Professor of Materia Medica in the University; late Resident Physician, Royal Infirmary, Edinburgh; formerly President of the Royal Medical Society. Pp. 44. Edin.: 1863.

The treatise now before us is one of no ordinary character. We sometimes hear it alleged that the profession has in a measure lost some of that pecu-

liarly earnest and acute observation which was so largely manifested towards the close of the last century; but such, we think, is not the case. At no period, probably, has the profession ever had a greater number of exact observers than at the present time. Every discovery and advance in medical science tends to stimulate further both professor and student, and every day brings us in valuable additions to the store of well-ascertained facts. In the occasional production of treatises such as Dr. Fraser's, we believe we have convincing proof that the investigators of our own time cannot be charged with deficient observing powers.

Certainly in no school was the observing spirit, at the time to which we have alluded, more fostered and developed than in that of Edinburgh. She has ever prided herself on her production of exact observers, and of men of that somewhat rare order who "think for themselves".

The present treatise is typically an Edinburgh one, being a graduation thesis which was awarded a gold medal last year by the Medical Faculty in the University. If we are rightly informed, it is no light task to compete for a graduation prize at Edinburgh; and certainly the merits of the prize theses which are annually published are of high order. We believe it is a *sine quâ non* that they shall either contribute some new fact to science, or elucidate some hitherto unexplained phenomena. Such conditions have been fully complied with in the present instance.

We find that Dr. Fraser was one of the first experimenters with the Calabar bean. Professor Christison in 1855 made the first three experiments with it; of these, two were practised upon rabbits, and one upon himself. All further investigation of the subject was suspended until Dr. Fraser, in the winter of 1861, commenced a definite series of investigations. In the meantime, the minute botany of the plant had been recorded by Professor Balfour. In the course of the present year, we have had occasion to notice some of the results obtained by its employment in the hands of several distinguished members of the profession, including Drs. G. Harley, J. W. Ogle, and Argyll Robertson, Messrs. Ernest Hart, Soelberg Wells, Nunneley, and Hulke. On the continent, the subject has likewise attracted much attention, and has been discussed in the Academy of Sciences at Paris, where M. Giraldés has brought forward well-nigh a dozen communications upon it. At Berlin, Professor Von Graefe has introduced the subject to the notice of the Medical Society there.

Dr. Fraser, we notice, makes no allusion in his treatise to any fellow-worker; and for this reason—that at the time his thesis was presented to the University (March 1862), he stood alone as the only exponent of the properties of the Calabar bean. True, he frequently cites the opinions of the learned professor to whom he is now assistant; but we gather that he conducted his experiments entirely by himself.

The thesis is divided into five sections. In Section I, we are introduced to the subject by a short History of the plant which yields the famous bean; and from this we find that, so far back as 1846, a scientific notice of it was communicated to the Ethnological Society by Dr. Daniell. Next we have a concise account of the trial by ordeal, as it still exists in various uncivilised countries. A minute description is given of the process as conducted in the present day in Old Calabar, and some most interesting details are introduced into this portion. We have likewise in this section the botany of the plant, with a histological account of the bean. Extreme care is evinced under this head. The description of the bean—or seed, as it should be termed—is most elaborate and praiseworthy, shewing an unusual amount of minute observation. In fine, Dr. Fraser has exhausted this part of his subject.

Section II is devoted to the Physiological Actions of the Bean. It seems that the active principle resides in the seed only; and, while severe effects were produced by an alcoholic extract of the *spermoderm* upon rabbits, death did not ensue in any case, although the equivalent of sixty-four grains of the powder was sometimes administered. The leading symptoms are described as general muscular paralysis, slight contraction of pupils, with frequent diuresis and passage of fæces. Recovery occurred in from two to three hours. Fæces and urine continued to be passed for about twelve hours after recovery from the paralysis. Dr. Fraser sums up the actions of the *spermoderm* as being *sedative to the spinal cord, hydragogue cathartic, and diuretic.*

Infinitely more potent are the results arising from doses of the kernel. Paralysis of the limbs is an early symptom; contraction of the pupils is well marked; the respiration becomes slow; a few muscular twitches occur in the extremities. Next follow complete abolition of reflex action, and death. Consciousness remains unaffected till the power of expression is lost. The contractions of the heart sometimes persist for an hour and a half after death, and blood of different colours is found in its chambers. The viscera are engorged.

Dr. Fraser mentions the fact that the stomach is usually found full. This is noteworthy; but, as far as experiments upon rabbits are concerned, we are not surprised to learn this; for we believe it is impossible to meet with an empty stomach in a rabbit, however long it may have been deprived of food.

The posterior extremities appear to have been first affected in most of the cases.

Elaborate experiments were conducted to discover in which manner the poison acted most speedily. Thus there were practised injection into the circulatory system by means of wounded surface; contact of the poison directly with the nervous, muscular, and mucous tissues; injection into the lungs and serous sacs; and introduction into the stomach and rectum. Of these, direct injection acted most speedily. It appears that a local paralysis follows a topical application of any preparation of the bean. Thus vermicular action is suspended when the bowel is painted with the alcoholic extract. Muscular tissue loses its power of contractility, and the cardiac muscle becomes similarly affected, if the poison be brought into contact with the endocardium.

Amongst the important actions of this poison, that exerted upon the pupils deserves attention; for it appears that contraction is produced, whether the application be topical, or through the system. Now, physiologists and ophthalmic surgeons have been seeking such an agent as this for some time past, and Dr. Fraser was the first to demonstrate that the Calabar bean possessed the required properties. We have thought it due to the author to record this fact; as, in some of the papers since published, the

honour of the discovery has unwittingly been awarded to Professor Christison. Had Dr. Fraser published his thesis sooner, such a mistake could not have occurred; and certainly a fact of such importance should have been made known to the profession as early as possible.

From the results of experiments, the author is led to believe that the Calabar bean influences primarily the spinal marrow, and that its action is of a depressing character. The special actions are paralysis of the heart and contraction of the pupils; the latter effect is held to afford a clue to the elucidation of the general action of the poison. This part of the subject is considered with an amount of caution which it fully demands; and Dr. Fraser brings a sound knowledge of the advanced physiological doctrines of the day, and a logical method, to bear upon it. Only those who have had experience in such investigations as these can know the enormity of difficulty to be overcome. Inaccurate observation is useless; hasty generalisation perhaps worse. Knowing this full well, the modern physiologist feels his way warily, and seeks ardently to embrace all the phenomena presented to him; while he is no less careful to exclude all possible causes of fallacy.

No question perhaps presents more scope for research, or more difficulties in the way of solution, than that relating to the physiology of pupillary action. Dr. Fraser quotes Valentin's views, and he might have given us those of other equally eminent experimenters; but we believe they all come short of the ultimate facts. We are not acquainted with the exact influence that each system of nerves to the iris exerts. The scalpel and needle have not as yet taught us their exact anatomy, and all experiments have hitherto failed to satisfy us completely as to their physiology. The element of difficulty lies in the fact, that both cerebral and spinal filaments are supplied to the circular and radiating fibres of the iris. We are familiar with the experiments which teach us that pupillary dilatation is induced by section of the third nerve and stimulation of the sympathetic, while the opposite condition is entailed by stimulation of the third nerve and section of the cervical sympathetic. Such data as we have at present for the nervous supply of the circular and radiating fibres of the iris are, therefore, physiological, and not anatomical; and we are thus led to believe that the third nerve supplies the motor filaments of the circular muscle, and the sympathetic the motor filaments of the radiating muscle of the iris.

Mr. Nunneley, we observe, is disposed to doubt Dr. Fraser's statement that the systemic action of the *Physostigma* will produce pupillary contraction; but we have not as yet before us the facts obtained by this eminent surgeon to compare with those of Dr. Fraser.

Our author sums up this question in the following statement.

"We can thus refer the action of the bean of the *Physostigma venenosum* to the spinal cord. The contraction of the pupils may be caused in three ways: positively, by cerebral irritation; negatively, by spinal depression; and complexly, by a combination of cerebral irritation and spinal depression. The symptoms disprove any cerebral irritative action; so neither the first nor last of these can be regarded as the cause of the contraction. On the other hand, they distinctly indicate a depressing action on the spinal cord; by this action the power of the cord to transmit impressions is destroyed, and, necessarily, the power of transmitting the nervous influence to the iris. The balance between the dilator and contractor muscles is thus removed by the nervous supply of the dilator being stopped; the circular fibres act, and the pupil is *contracted*. In a few experiments, it was observed that, some time after the contraction of the pupils had commenced, if the animal was excited to muscular exertion, as in struggling when irritated, the pupils very distinctly *dilated*. (Experiment 25.)" (P. 15.)

As to the cause of death, Dr. Fraser has shown that it is produced in two ways, either by *asphyxia* or *syncope;* but he states that, from the special action of the poison on the cardiac muscle, it is very probable that the results are complicated by the *special* weakness of the heart's action. He concludes that the kernel of the bean has the following actions.

"1. It acts on the spinal cord by destroying its power of conducting impressions.

"2. This destruction may result in two well-marked and distinct effects,—

"α. In muscular paralysis, extending gradually to the respiratory apparatus, and producing death by *asphyxia*.

"β. In a rapid paralysis of the heart, probably due to the extension of this action to the sympathetic system, thus causing death by *syncope*.

"3. A difference in the dose accompanies the difference in effect.

"4. This action does not extend to the brain proper *pari passu* with the action on the spinal cord. The functions of the brain may, however, be influenced secondarily.

"5. It also produces paralysis of muscular fibre, striped and unstriped.

"6. It acts as an excitant of the secretory system, increasing more especially the action of the alimentary mucous glands.

"7. Topical effects follow the local application of various preparations; these are,—destruction of the contractility of muscular fibre when applied to the muscles, and contraction of the pupils when applied to the eyeball." (P. 18.)

Those who have studied the action of aconite in poisonous doses cannot fail, we think, to be struck with the apparent similarity that exists in the effects of the two toxic agents.

Section III contains an account of the various preparations of the bean that have been made. A strong tincture, prepared with rectified spirit, seems to be Dr. Fraser's favourite preparation; and of this, five minims is an average dose for the human subject. It appears that the entire active principle or principles may be removed from the kernel by means of rectified spirit. Both the author and Mr. Hanbury have found that the exhausted fæcula may be given to animals, with no other effect than that of ordinary starch. No alkaloid has as yet been separated from the kernel, though doubtless we may not have to wait long before its discovery is announced. For producing topical action on the pupil, a syrupy extract is preferred. Of this, a small minim, when applied, will maintain a contracted state of pupil for five days. It appears to be an *inelegant* preparation.

In Section IV, the therapeutics of the *Physostigma* bean are discussed. From its action, Dr. Fraser is led to suppose that it will prove of service in all

conditions of spinal hyperæsthesia; thus he recommends its trial in cases of centric or eccentric tetanus and in epilepsy. Its action on the heart entitles it to a place in our list of sedatives to the circulatory system. A feeble pulse is considered a decided contraindication to its employment in any case. Dr. Fraser details a number of instances in which he made trial of his tincture; and they comprehend sthenic cases of erysipelas, delirium tremens, febricula, acute bronchitis, and rheumatic fever. Of its powers in producing a condition favourable to sleep the author has a high opinion, and he urges its employment in the insomnia of delirium tremens. Its local anæsthetic action seems likewise to be noteworthy in cases of neuralgia.

Section v is devoted to a minutely detailed account of all the experiments performed by the author, and they certainly form a valuable appendix to the treatise, and reflect the highest credit upon Dr. Fraser.

We cannot conclude this notice without paying a further compliment to the author for the literary merits of his thesis. The combination of minuteness and perspicuity manifested throughout each section is cleverly achieved, and thus the interest of the reader is maintained to the end.

In the publication of one of the Edinburgh prize theses for 1862, Dr. Fraser has undoubtedly laid the whole profession under obligation to himself.

British Medical Journal.

SATURDAY, DECEMBER 12TH, 1863.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS.

A CORRESPONDENT deprecates all further discussion respecting the power of the King and Queen's College of Physicians of Dublin to grant the diploma of Doctor of Medicine. But he gives no reason for so doing; and his deprecation is not flattering to the College whose interests he would advocate. He is, moreover, quite mistaken in supposing that the question has already undergone long discussion. What has been so much debated in the journals is quite another thing; viz., whether or not Licentiates of Colleges of Physicians, non-diplomatised, may properly call themselves Doctor. Now, as far as we are concerned, this latter question is settled. A fair and liberal consideration of all the facts touching that matter has brought us to the conclusion that a Licentiate may prefix to his name the title of Doctor; but this is a very different affair from a College of Physicians suddenly assuming the power of granting the degree of Doctor in Medicine. It is a very different thing also from a Licentiate assuming to himself the title of Doctor in Medicine, or putting M.D. after his name.

The King and Queen's College of Physicians in Ireland has lately discovered and declared that it has the right to grant the diploma of Doctor in Medicine, as well as a license to practise; and, in fact, it does at this moment actually grant the degree of Doctor in Medicine, and enjoins its Licentiates that they may affix M.D. to their names. Now, what we naturally ask, on hearing the startling announcement, is simply this; viz., the grounds upon which this newly made claim is founded. Certainly it is a very tempting physician's license, and a completely novel physician's licence, which bears with it the positive and legal right to the diploma of Doctor of Medicine. Certainly a lucky and highly privileged College of Physicians that must be, which is possessed of so happy and remarkable a privilege and power. No other College in the country possesses, or pretends to possess, such a remarkable power and so great a privilege. Possessing this, it has within itself all that men of medicine require in that way. It can make them physicians, and can give them the degree and title of Doctor in Medicine; and all at one great go!

Well, we suppose that the profession in the United Kingdom will not remain wholly blind to this great chance now opened to them. Surely the Dublin College offers to give men for their money that which neither of the other Colleges does or can give; and therefore, according to the ordinary commercial code of the country, we may reasonably suppose that it will draw to itself plenty of applicants for its good things. It is only natural to suppose that such will be the case.

Well, as the claim is new and very peculiar, we consequently, as critical guardians of the interests of the profession, venture, or rather feel ourselves called upon, to ask the Dublin College, just simply for the satisfaction of the profession at large, to tell us what the grounds are upon which it bases the exercise of this great, this newly exercised and remarkable privilege. It is, of course, enough for medical men in general that so highly renowned a College should solemnly assert its possession of the right. They may argue, that no great public and highly honoured corporation like this would venture to claim or exercise such a power, if its right to the exercise were not as clear and undeniable as is the possession of its very charter. But men who, like ourselves, have to watch over the affairs of the profession, have no right to be so easily satisfied; and it is our duty not to be so. When we find a College of Physicians which has had more than two hundred years of existence, and whose last charter dates from the days of William and Mary, suddenly, on the occasion of that famous year of grace, putting forth a new claim, exercising a novel function, which all the world previously had believed was in modern days vested solely in Universities (and in a stray archbishop), viz., that of granting degrees of medi-

cine,—we naturally say: "But pray give us the terms of your charter, or the words of the Act of Parliament, upon which this new and surprising claim is based." Is not such curiosity on our part most natural, praiseworthy, and legitimate? And why should the College hesitate to satisfy so reasonable a curiosity? Whose ends are we serving in making this demand?—whose, manifestly, but those of the College itself, and of the gentlemen who seek its license and newly attached diploma? The College possesses the right, it is said. Of course, thereby is meant the legal, the legitimate right to grant diplomas. What, then, can it desire better, than that the grounds—the legal grounds—on which the right is based, should be widely known, and publicly declared from one end of the kingdom to the other? The public exhibition and recognition of the grounds of the claim will only more solidly fix the just right in the minds of the profession. And sure we are that the very last thing which a great corporation like the King and Queen's College would desire is, that there should be any mystery or concealment as to proclamation of the grounds of right. Neither can the College be surprised if the profession ask for such proclamation at their hands; their claim being novel, one seriously affecting the position of the other Colleges and of the Universities, and possibly of considerable interest even to the antiquarian researchers of old records.

Just at the very time, let it be remembered, when there was a great demand for the article—viz., for the title of Doctor—comes forth this new claim, and the exercise of it. How the right was discovered, who first suggested the claim, what are the documents on which it is founded, are the things we are now asking for, and, as it seems to us, most reasonably asking for. Certainly the College has given some response to these questions. It has not made and exercised the new function without some kind of legal authority. The once Attorney-General of Ireland, Deasy, did, at the request of the College, peruse their charters and several Acts of Parliament bearing thereon; and says he: "I *think*" (the italics are ours) "the Licentiates and Fellows, as such, of the King and Queen's College of Physicians, are entitled to the degree and title of Doctors in Medicine, and to use the letters M.D. after their names." Mr. Deasy *thinks* that what the College desires, it possesses; and on the strength of Mr. Deasy's thinking the College acts. It issues diplomas in medicine, and makes men M.D.s But a difficulty arises here, at least in our mind. The value of Mr. Deasy's thinking seems to be neutralised by an opposite legal opinion, into which no thinking at all appears to enter. The very same case, as we conclude, which was laid before Mr. Deasy, is laid (by other parties, of course) before Sir Hugh Cairns and Mr. Hobhouse; and what say they to it? "Supposing the College to have no larger powers than are disclosed in the case laid before the Attorney-General of Ireland, we are clearly of opinion that it has no power to confer the degree of Doctor of Medicine; and, without the degree, there can be no right to title, etc." Naturally enough, the College prefers Mr. Deasy's *thinkings* to Sir Hugh Cairns's and Mr. Hobhouse's *clear opinion*. But what are we outsiders to do? Are we put in a fair position, so long as these contraries in opinion exist?

Moreover, it must not be forgotten that the College has actually failed in one attempt which it made to get a legal recognition of its claim. The College tried to get the name of one of its Licentiates inserted in the *Medical Register* as Doctor of Medicine; but the learned judges (and, we believe, Baron Deasy among them, the late Attorney-General, and the College's once counsel, who gave the "thinking" opinion) decided that such title could not be inserted in the *Register*. Hence, then, at all events, its diploma is not one which bears the tokens necessary for admission into the *Medical Register*.

Now what is the profession to think, in this dilemma? Has it not a very good right to ask a College which, under such circumstances, exercises this newly acquired privilege, to come forth and tell us how it has satisfactorily squared off the opposing legal opinions of Sir Hugh Cairns and Co. and Mr. Deasy, and the negative opinion of learned judges? The College may have other overwhelming proofs in its favour; but, as far as we can understand the matter, it rests its authority to grant degrees in medicine solely on the strength of Mr. Deasy's "I think", which, as we have said, unfortunately appears more than neutralised by the "clearly of opinion" of Sir Hugh Cairns and Mr. Hobhouse.

Surely this position of so important a matter can be hardly satisfactory to so highly placed a College. A large number of our brethren in the country are deeply interested in it. On the strength of the College's asserted and exercised claim, many gentlemen have doubtless joined the College, have taken the title of Doctor in Medicine, and write M.D. after their name—being possessed of no other qualification to the title. It is in their name, and in the name of all those gentlemen who may hereafter go to Dublin for a similar purpose, that we call upon the King and Queen's College to give the profession plenary satisfaction in this matter. Surely it must possess something stronger to back its claim than the "I think" of Councillor Deasy, which, as we have said, seems swallowed up by the "clearly of opinion" of the magicians Cairns and Hobhouse. We, therefore, ask the College what this "something stronger"—this to us *nescio quid*—is. We need hardly add, that the strength of a just claim is only made stronger by publicity. The more closely

the character of a virtuous woman is investigated—the more it is tried in the fire of opinion—the more clear does it show before the world.

POOR-LAW GUARDIANS' MEDICAL RELIEF.

Our readers will be curious to learn the answer which has been handed to Dr. Griffin by the Southampton Poor-law Guardians, and the sequel of the affair told of in our last number.

Dr. Hearne, who undertook the work of the Poor-law people during the illness of Dr. Griffin, continued his attendance upon the pauper-sick for a fortnight; and we are not at all surprised to learn that he had had enough of the business at the end of that time, and declined any further operations of the kind. Thereupon, the Guardians insisted that Dr. Griffin should find a substitute, as it appears they have the right to do, in accordance with Article cc of the Poor-law Board's Orders—Dr. Cheeseman, his originally appointed substitute, having declined to act. Three medical gentlemen of Southampton here stepped in and kindly volunteered their assistance, and are now doing the visiting part of the duties of Dr. Griffin.

But what answer have the Board given to Dr. Griffin's letter? The Board, in reply, passed a resolution, by a majority of two :—

"That if Dr. Griffin is dissatisfied with the terms on which he holds his appointment of district medical officer, that he be requested to tender his resignation of the same."

Dr. Griffin is, doubtless, placed in a difficult position by this resolution; for he has distinctly told his masters, that two doctors even could not do the work which he has to do. Assuredly, there never was a more fitting or proper occasion offered to the profession on which to fight the battle of the Poor-law doctor. We cannot agree with the idea that Parliament alone can come to our aid here. We have the ball in our own hands, if we only had the good sense and professional spirit enough to roll it. The Poor-law Guardians are not half as cruel to us as we are to ourselves. What right have we medical men to complain of cruelty, if we knowingly accept the cruel work of such masters? Medical men have taught the Army and Navy Boards a lesson—why should they not equally teach the Poor-law Guardians a lesson? Why should not the profession at large call upon their medical brethren to pause before they seek employment in such a labour as that offered them by the Poor-law Guardians of Southampton. Let every man reject such terms with scorn, as he is bound to reject them in honour—if he know that he cannot perform the duties attaching to them—if he know that in accepting the office he is doing so to the injury of the sick as well as to the injury of himself, and to the injury of the whole profession.

We must candidly say, that whoever accepts such appointments as is this—where the pay is counted by farthings and the visits to the sick by hundreds—has no right to complain of the cruelty and the hardship of the employment he has undertaken; nor has he any right to apply to the profession for sympathy.

But in what position is the Board of Guardians placed? We now hear that the Medical Society of Southampton have taken the matter up, and have passed a series of resolutions and presented them to the Board, to the effect that no one man can do the work now allotted to Dr. Griffin. In what position are they placed, if they still wilfully persevere in forcing the work into one man's hands—now that they are so authoritatively told that, in doing so, they must of necessity do that which will prevent the poor having proper medical aid?

THE WEEK.

The St. Mary's Hospital has already, on more than one occasion, set a good example to London hospitals. It has this week done so again. Its Medical Committee have recommended to the Board (and there is no doubt that the Board will accept the recommendation) that a chloroformist be appointed as one of the regular staff of the hospital. We lately showed, in speaking of the numerous deaths which have occurred through chloroform in this metropolis, how necessary it was that such a fearfully powerful instrument should only be used by one who was well accustomed to its management; and certainly we could not but fear lest that some of the accidents referred to might be traced to want of due knowledge in its application. We sincerely trust all the other hospitals of London will follow this excellent example; and, more than this, we hope that the Medical Committees will urge on their hospitals the propriety of paying their chloroformist a suitable salary for his services.

Our French brethren have a law under which the practice of medicine is protected, so that, in fact, it is illegal for any non-diplomatised and not properly licensed person to practise the healing art in France; and yet on all sides quacks prevail, and in all directions French medical men are exclaiming against the abuses committed by these unlicensed parties. All attempts to put them down by legal prosecutions appear in vain; nay, the prosecutions in many cases only add to the celebrity of these gentry, and the punishment-fine of a few francs inflicted on them only converts them into persecuted martyrs, and so worthy above all of the special regards of the faith-

ful credulous. Perhaps we may here, in this country, take a lesson from the fact. We also cry out against the doings of quacks, the injury which they inflict on the public, and the robbery which they do to the profession; and we call upon that legislative Jupiter Olympius which sits at Westminster to come and help us. But how can government help us here more than it can in France? *Populus vult decipi.* The people will have quacks; and we may be sure that no penal enactments will shut up so lucrative a business as is that of quackery. Here we find at this moment our French friends demanding, as the only remedy, more protection, and in some such terms as these: "Everywhere there is a cry out for a new legislative protection of the rights for which we have paid in becoming doctors; but the time for obtaining the satisfaction seems indefinitely adjourned. In vain do we petition and re-petition. The money for our diplomas is still regularly taken from us; but where is the protection given us in exchange?"

In the *Temple Bar Magazine* of November 1863 is a description of a marriage not *à la mode.* The writer is explaining how a man may live married on £300 *per annum;* and mentions, amongst other means of economising, that "gratuitous medical services" are always to be had. Here are the words.

"But I have forgotten doctors' bills? If you do not come across somebody who is *but too happy* to feel the pulse and draw the teeth of your placens uxor *for nothing*, all I can say is, that you are a great muff. *I speak advisedly.* Such gratuitous healing is of every-day occurrence, not among the rich rampantly respectable classes—why should it be?—but among the set who will now be yours."

To this complexion has our profession at last been brought by this villanous system. The public now have begun *openly* to laugh at us whilst accepting our attentions gratis!

In the recently published second edition of his work on *Urine*, Dr. Beale, in speaking of Diabetes, notices the several views which have been propounded as to the formation of sugar within the body. He goes through the subject in a very careful and complete manner, and expresses his adherence to the doctrines of Bernard, and his dissent from those of Dr. Pavy. Regarding the statement of the last named physiologist, that the formation of sugar in the liver is a *post mortem* phenomenon, he says:

"I cannot think that the life of the animal can make all the difference which is supposed in the action of the liver. Surely, if a considerable quantity of sugar can be demonstrated to exist in the liver immediately after death, we are not justified in considering this a mere *post mortem* change. A piece of cat's liver, the instant death has taken place, exhibits the presence of sugar in precisely the same manner as a piece of the same liver removed during life. It is doubtful if the great central organs of the nervous system produce that immediate change in many of the nutritive and secreting operations of the body, which the supposed necessity for this very quick removal of the liver seems to argue.

"Nor is it an answer to this objection to say that, as certain of the nerve-cells cease to manifest any activity the instant death takes place, it is possible that the liver-cells may as instantly cease to perform their functions. We know that there are some cells which may exhibit their actions for a long time after death, and which will retain their vitality, so that they can be removed from one organism to another. . . . . There is no reason for supposing that the liver-cell, unlike many other cells connected with different secreting organs, dies the instant the death of the animal takes place. . . . Moreover, it is most probable that the changes taking place in the amyloid matter of the liver-cell are not vital changes at all, but due rather to chemical and physical actions only."

This last sentence is in accordance with the views held by Dr. Beale regarding the structure of cells. He believes that the outer part of these structures—the "formed material", as he calls it—does not possess vitality; and that all the changes which go on in and through it are merely physical and chemical. In the twelfth chapter of his book, he makes an ingenious application of his theories regarding "germinal matter" and "formed material" to the production of amyloid and sugar in the liver.

Ovariotomy has found its way into Spain. Dr. Rubio of Seville appears to be the first Spanish operator in this way—on the 5th of October last. The tumour was an encephaloid degeneration of the ovary; and, we need hardly add, the operation was not successful. An ounce of chloroform was administered, we are told, without producing anæsthesia; consequently, the operation was performed without its aid.

There are, says the *Gazette Médicale*, but few master minds and great thinkers in the Faculty of Medicine. Consequently, any one with an easy flow of speech can attain a high position there; so that, as Pliny says, the man who is distinguished in the use of his tongue takes the first place. *Ut quisque inter istos loquendo polleat.* In truth, nothing is rarer than eloquence, nothing more common than a ready talker; and, with the mass, ready talking goes for eloquence. We must not, therefore, be surprised at the lecture-room success so often obtained by men whose only merit is to speak without hesitation, and so earn for themselves a reputation out of their inexhaustible verbiage—*ingenti garrulitate.*

In this country, as we have so often stated, the hospital and other public authorities are far behind the scientific knowledge of the age in the matter of the therapeutical use of water. Another example has been set us in the matter, and this time by the Belgian Government. On the recommendation of M. Vleminckx, Inspector-General of the Army, a hydro-therapeutical hospital has been established for the treatment of certain diseases of the troops at Brussels.

Naples, like the rest of the world, has had its Medical Congress, under the presidency of Senator Prudente. The *prêfet* gave the Congress a grand *festino*, and a fraternal banquet was held in the Jardin d'Hiver. Rome was selected by acclamation as the place of the next meeting of the Congress; but, as it was possible some objection might arise as to the assembling there of so many liberal and enlightened men, it was prudently arranged that, if Rome could not be had, Florence should be the place.

Hirudiculture is a tolerably disgusting business. Leeches are produced on an extensive scale in the neighbourhood of Arcachon, near Bordeaux. The old method of feeding the animals was to drive into the marshes, where they are bred, wretched, lame, and worn-out horses. But these poor beasts, unfortunately, died too quickly for the leech-growers' account. The veins which were opened by the annelides did not heal up, and so let out the life-blood of the animals. It is now found more economical to feed the leeches on cows. The heavy, dull animal, haggard, frightened, and yet resigned to its fate, bears the onslaught of the leeches, which are attached like bunches of grapes to its belly and legs, with a sort of stupid surprise. When, however, the animal is about to expire from exhaustion, it is driven off into new pasturage, to renew its life and prepare it for another attack of the leeches; and in this way, from fortnight to fortnight, the animal is eaten up in detail, until death arrives. The donkey is employed for feeding the young leeches, and is less resigned than the cow. He rushes about, kicks, and bites; and at last he falls into the swamp, under the repeated attacks of the leeches, and then shakes with terror. The bites in him, like those in the horse, remain a long time open; and he generally dies after serving twice as food for the leeches. A breeder in Andenge, who has four *hectares* of marshes, drives into them every year upwards of two hundred cows and many dozens of donkeys for the nourishment of 800,000 leeches. Every year, 1,500,000 leeches are sent to Bordeaux from the neighbourhood of Arcachon.

Dr. Chissault of Orleans, in his inaugural thesis on Marriages of Consanguity, asks why "France should be more retrograde than China, where marriages of this kind are forbidden? Why should not France, ever at the head of all great movements, not be the first country in Europe to set an example in this question, which interests families and society in so many ways?"

Spontaneous generation being still the subject of continued and warm debates in the French Academy of Sciences, M. Flourens has proposed the nomination of a Committee to settle the question once for all. "Spontaneous generation," he said, "is an error twenty centuries old; it is the popular error of *savants*. It cannot, therefore, be refuted orally—*verba volant*. We must have a lasting record—*une trace éternelle*—of the refutation; that is to say, an academic report in due form."

M. Vigna, a Venetian physician, states that "scald head" is unknown almost in Venetia. He had seen but one case in Venice.

M. Quatrefages, in the name of MM. Filhol and Garrigon, lately placed before the Academy of Sciences a variety of articles found in caverns in the south of France. These articles, it was said, show that the men who used them were cotemporaneous with the men who constructed the lake habitations in Switzerland, and left arms, utensils, and monuments characteristic of the age of stone in Switzerland. Some philosopher, we may remind our readers, lately asserted that these lake Swiss dwellings were built by beavers!

The known fact of the comparative immunity from yellow fever of the negro race has been again confirmed in Mexico. The French army has suffered and is suffering most severely from yellow fever; but the negro troops—Egyptian and others—employed by the French, had entirely escaped the fever.

A very lengthy and learned discussion has been for some time past going on in the French Academy of Medicine concerning hydrophobia. Many leading French authorities have delivered themselves of much eloquence on the subject; but we have not been able to note that anything new or important has been added thereby to our scientific knowledge respecting the origin, symptoms, or cure of the disease.

The Parisian medical students appear to be in a riotous mood this year. Several disturbances have already occurred at opening lectures; and we now read that M. Robin's histological opening lecture was marked by *dèsordres regrettables*—on account, it was supposed, of the professor's severity as an examiner.

Some time ago, M. Courty declared that intra-uterine cauterisations were very efficacious and innocuous. M. Nonat, *per contra*, asserts that accidents often result from such cauterising.

Balloons are at present the order of the day at the Academy of Sciences. Communications from all sides are addressed to the learned assembly, and at once delivered into the hands of the ruthless and spiritual M. Babinet.

M. Aremberg has addressed to the Academy of Sciences a paper on Social Morality founded on Cephalometry.

Dr. Shrimpton has published a pamphlet entitled *The War in the East, the English Army, and Miss Nightingale*. In this pamphlet he draws a comparison between the French and English sanitary administrations, and wholly in favour of the former.

THE HEALTH OF THE NAVY: HOME STATION.

THE statistical report of the health of the navy for 1860 comprises the returns from the medical officers of the ships on the nine stations where a permanent fleet is kept, and of those of the irregular force. The report gives no information respecting the effects of iron-clad vessels upon the health of their crews.

The force on the home station is estimated at about 23,500 men. The daily average on the sick-list amounted to 935, or about 4 per cent. The loss by invaliding amounted to 690, or about 3 per cent. of the whole force, and by death to 263, thus making a total loss to the service on that station of 953 men in the year, more than 4½ per cent.

Of diseases, influenza and catarrh take the lead, being 20 per cent. of the whole. Abscesses and ulcers come next. There were 1633 cases of rheumatism, and 3000 cases of venereal disease, of which there is a large increase. Three-fourths of the total number are ascribed to the infected communities of Portsmouth, Devonport, and Sheerness. It is there alleged that "whenever the crew of a sea-going ship is permitted to land on liberty at either of these ports, the indulgence is sure to be followed by a sudden rise on the sick-list; this, in fact, is so certain, that the arrival of the ship and the granting leave might be ascertained by the medical returns alone."

Of 641 cases of inflammation of the lungs and pleura, 30 were invalided and 27 died; and of the cases of phthisis and hæmoptysis, 132 were invalided, and 71 died. Consumption is thus on board ship no less than land the fertile cause of death in these latitudes.

FRENCH ACADEMY OF SCIENCES.

FERMENTATION AND FERMENTS.

M. Lemaire denies that a special ferment for every kind of fermentation exists. He finds the same microscopic beings present whether sugar is being changed into alcohol, or alcohol into acetic acid. But in the case of *neutral* animal and vegetable matters he has assured himself that microzoa begin the decomposition, which, when the matters become acid, is carried on by microphytes. By means of a little acid, these latter may be made to appear at will, and the author consequently argues that mycoderms do not make the acid, but appear in consequence of its presence. The acidity of the perspiration it is thought may cause the development of certain microphytes which are observed in some obstinate cutaneous affections.

PAINTED WINDOWS.

M. Chevreul, in speaking of the superior effect of old glass, attributes this superiority to what we moderns call defects. In the first place, much of the ancient glass is of unequal thickness, or, in other words, the two surfaces are not parallel, so presenting convex and concave parts, which act very differently on the light, and produce agreeable effects. In the next place, the old coloured glass is not a colourless glass, *plus* the particular colouring material, such as protoxide of cobalt, etc. Old glass contains a good deal of oxide of iron, which coloured it green, and to this must be attributed the peculiar effects of antique glass coloured by cobalt and manganese. M. Chevreul appears to think that modern coloured glass is too transparent to produce the best effects.

RAIN WATER.

M. Robinet has collected and examined the water falling in Paris during the last eighteen months, having made a hundred and thirteen observations. He found the water always more or less charged with saline matter, the larger quantities always being found after prolonged drought. On collecting the water during continued rain, he found that the amount of fixed matters diminished as the rain continued. The saline matter was principally sulphate of lime, always accompanied by a little organic matter, not well understood. The amount of sulphate of lime sometimes rose to as much as twenty *grammes* and more in a cubic metre. Rain water froths on agitation more than any water the author compared with it. Nitrate of silver dissolved in the rain water gave in time various shades of red, and formed a reddish deposit, which contained silver. The exact nature of the substance which produces the phenomena of colouration is unknown.

ORGANISMS IN HUMAN BLOOD.

Signor Tigri presented on October 12th, a memoir in which he drew the following conclusions. 1. Under certain special states of disease, bacteria may be developed in human blood during life. 2. After death, monads and vibriones appear in the blood, and may be regarded as the agents of putrefaction.

CORN EIGHTEEN HUNDRED YEARS OLD.

M. De Luca has analysed some unground corn found in the bakehouse at Pompeii. The grains had kept their shape, but when found were of a brownish-black colour. All trace of starch had disappeared, and there was nothing left which would reduce the cupro-potassic tartrate or undergo fermentation with yeast. The amount of nitrogen found in the corn corresponded exactly with the amount found in recent grains, and it is worthy of note that after eighteen hundred years the corn which had lost all its hydrogen and nearly all its oxygen still retained its exact amount of nitrogen and perhaps of carbon. The loss is probably due to the action of time and atmospheric agents. In the ashes the author found precisely the same mineral ingredients as are found in ordinary corn; that is to say, phosphoric acid in excess, potash, soda, magnesia, lime, chlorine, sulphuric acid, silicia, iron, and traces of manganese. In summing up, the author remarks that the corn found at Pompeii, while retaining its original form, had lost all trace of organic product, containing neither starch, gluten, sugar, nor fatty matter; and yet had decomposed in such a way that there still remained all the nitrogen and nearly all the carbon usually found in corn.

EXPERIMENTS ON THE PHYSIOLOGICAL ACTION OF THE SALTS OF THALLIUM.

The conclusions under this head, drawn by M. Paulet, are the following.

1. Thallium is a more energetic poison than lead; it may be classed among the most poisonous metals.

2. Carbonate of thallium in a dose of one *gramme* kills a rabbit in some hours.

3. A small dose kills in some days, producing an enfeebled action of the respiratory organs, and difficulty in locomotion (general trembling, and want of coordination of movement).

4. The effect is the same whether the poison is used by friction on the skin or injected into the subcutaneous cellular tissue; in the latter case a very much smaller dose will cause death.

5. In every case in which death was produced the animals seemed to die of asphyxia.

6. Spectrum analysis is a very good means of discovering very small quantities of thallium in any organs which may contain it.

7. Lastly, carbonate of thallium administered in very small doses may be tolerated, the effects a good deal resembling those of mercurial salts. Perhaps they may be employed with advantage where mercurials are indicated.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
WEST SOMERSET. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20, 1864.

PAYMENT OF SUBSCRIPTIONS: SPECIAL NOTICE.

MEMBERS who have not yet paid their subscriptions for the present year are earnestly desired to remit them to the General Secretary before the end of December. Their attention is directed to the following laws of the British Medical Association.

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

10. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, December 1st, 1863.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 24TH, 1863.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

SUPPOSED ABDOMINAL TUMOUR, BEING A STICK, TEN INCHES LONG, INTRODUCED PER ANUM. BY W. OGLE, M.D.CANTAB. (OF DERBY).

A LAD, aged 17, came under the care of Dr. OGLE, suffering from a tumour of the size of a pigeon's egg, just below the cartilages of the right ribs. It was stated to have been first perceived four months previously, when there were abdominal pain and jaundice. The nature of the "tumour," owing to the lad's reticence, was not diagnosed; but after being sixteen days in the hospital, he passed from the bowels a stick, ten inches long, and it was only after much cross-questioning that he was now induced to confess that he had himself introduced it *per anum.* The peculiarity of the case consisted partly in the moral obliquity of the youth, and partly in the fact of the stick having been introduced so high up into the bowel as to be quite across the abdomen.

UNUSUAL DIFFICULTY IN LITHOTOMY ARISING FROM GREAT DISTORTION OF THE PELVIS BY RICKETS. BY HENRY THOMPSON, F.R.C.S.

In this case there was very considerable obstruction to the removal of a stone from the bladder, arising from the pelvis being extremely narrowed and deformed by rickets. The author is not aware of any similar case in the records of lithotomy.

G. S., aged 4½, was first seen by Mr. THOMPSON, Aug. 20th, 1863. The symptoms of stone were severe. The child was much emaciated. A cicatrix existed in the perinæum, with a fistulous opening, showing the site of a median operation for stone performed by Mr. Erichsen about ten weeks before, on which occasion several portions of the outer layers were removed. The stone was grasped, but the forceps could not be removed with it; and owing to the condition of the child, it was deemed at that time prudent to desist, and postpone the attempt. The wound healed kindly up to a fistulous aperture; but diarrhœa came on, and the child left the hospital to recruit its strength.

At the time of its re-admission, Mr. Erichsen, being from home, authorised Mr. Thompson to do what he considered necessary with the case. The sound passed easily into the bladder, and a large stone was detected. The child was admitted into University College Hospital on August 31st, and was placed on the operating-table on September 2nd. Mr. Thompson made his incisions in the old track, and, introducing his finger, recognised the sacral promontory as remarkably prominent; beyond this the finger passed with difficulty flatwise, and touched the end of a stone lying in the bladder, which was altogether in the abdomen. There was no room to pass lithotomy forceps up by the finger. Finding, then, by placing the right hand on the abdomen, that the stone was easily felt there, and could be pushed down to the upper outlet of the pelvis, Mr. Thompson directed his assistant to maintain it firmly there by pressure, while, with a slender-bladed polypus-forceps, he extracted the stone, with some difficulty, entire. There was no bleeding of any consequence. Peritonitis set in next day, and proved fatal in three days.

At the *post mortem* examination, the pelvis was removed. This was exhibited to the Society. The deformity was very remarkable. In the dried bone, when the soft parts were taken away, only sufficient room existed for the stone to pass through in its long axis, the dimensions of the outlet only just exceeding the smallest diameter of the stone. The upper opening of the pelvis was obliquely caudate; the sacral promontory being within one-eighth of an inch from the left pubic ramus, and barely five-eighths of an inch from the right; from the pubic symphysis it was nearly seven-eighths of an inch. The stone was hard uric acid, of a flattish oval form. It was one inch and one-eighth in length, seven-eighths of an inch in breadth, and five-eighths of an inch in thickness.

A NEW TRUSS.

Mr. T. P. SALT (Birmingham) exhibited a new truss, invented and patented by himself, which, he considered, was possessed of the following advantages.

1. It afforded, in addition to the usual inward pressure of ordinary trusses, a second or upward (lifting) pressure always required for support of hernia, and attempted to be given by a variety of contrivances, the chief of which was the linen strap from behind fastened upon a peg at the lower part of the pad. This was the only truss which gave the lifting pressure in an unobjectionable manner.

2. By the peculiar mode in which the vertical or lifting springs were attached to the pads, no displacement of the pads could take place when once put in position; neither could there be any friction on the skin over the hernial openings.

3. The position of the pads might be with facility placed in relation to the median line of the abdomen; and, the spring across the abdomen having curves coincident with it, the spring of the truss lay more evenly against the body.

4. The back support, consisting of two pads instead of one—one placed above the horizontal line (spring), the

other below—gave greater stability to the front part on which the pads were suspended; hence this truss was more likely to remain *in situ*.

5. Every part of the patent truss was made by machinery, instead of by hand; hence any portion damaged or soiled could be rectified without the necessity of sending the truss to the instrument-maker.

6. The pads were an eminent improvement. The fringed edges of ordinary trusses, in which the cushions were made by stitching, were constantly chafing the skin; but by turning these cushions into a metallic capsule or clip, the edges and surface of the pads became exquisitely smooth and soft.

LIVERPOOL MEDICAL INSTITUTION.

NOVEMBER 12TH, 1863.

R. GEE, M.D., Vice-President, in the Chair.

Perforation of the Skull by a Poker. Mr. NASH shewed this specimen. The patient, a woman, came about two months ago to the Royal Infirmary as an out-patient; she was drunk, and had a scalp wound of apparently little importance. This was dressed with wet lint; but, instead of coming again next day, she went on drinking, and was brought a few days afterwards in a serious state. She had had rigors; her pulse was 150; she had convulsions and muttering delirium; there was unhealthy ichorous discharge from the wound of fœtid odour, and a probe could be passed deeply in without difficulty. Mr. Bickersteth made a crucial incision, and found the perforation in the skull. The patient never became sensible, and gradually sank. The opening in the bone was situated about an inch below the left parietal protuberance, and was completely circular. The dura mater was adherent around the opening; and there was an abscess in the brain communicating with the left lateral ventricle. At the inquest, it was stated that her husband had struck her with a poker which had stuck in her skull; the poker was thin and tapering, and from the size of the hole must have entered to the extent of about an inch and a half.

DR. NOTTINGHAM said in these cases, where the wound communicates with the lateral ventricles, there is generally a great flow of this fluid. The holes that are sometimes made in the skull may become of interest in a medico-legal sense from the slight nature of the external injury; thus a woman in Germany drove a nail into her husband's head; he died and was buried, and the cause of his death was never known until she confessed some time afterwards during an illness.

Mr. HODGSON stated that two patients in whom he had been interested had been taken to one of the hospitals; in each case depression of bone existed, and was not detected at first; in each case severe symptoms came on, and trephining had to be performed. He mentioned this to shew how necessary it is that these wounds should be carefully examined at first.

Dr. DESMOND said these specimens are curious in a mechanical point of view. A woman, in a case he had seen, punched a perfectly round hole in a man's head with a poker. He had seen another hole, perfectly round, from a blow with an iron pot.

Fracture of the Skull with Depression. Mr. LOWNDES showed a specimen in which there was a mere fissure of the external table, while the internal shewed a considerable starred depression. The injury was said to have been inflicted by a blow with a tumbler.

Case of Poisoning by Belladonna. Mr. BAILEY related the case of a child two years old, whose mother had been using belladonna as an application to her breast; a portion of the extract mixed with water had been left in a cupboard, and it was supposed the child had taken some of this. The symptoms were those of delirium; the child muttered and mumbled, grasped at imaginary objects, brought his closed fist to his mouth, champed his teeth as if eating, etc.; the skin of the body was red and hot; the pupils were dilated and did not contract with a strong light; the face was congested. He had been placed in bed about 6 P.M., and awoke screaming, and, as the mother thought, in convulsions. A neighbouring druggist gave an emetic and purge, neither of which had acted. Mr. Bailey ordered a warm bath and a scruple of carbonate of ammonia, which was given at 2 A.M., and caused free vomiting of slime and mucus. About 4 A.M. the child fell asleep, and, when seen next morning, was free from all unfavourable symptoms, and next day was quite well.

Mr. STEELE observed that, according to Dr. Fuller, belladonna could be given to children in larger doses in proportion than to adults.

Mr. HIGGINSON thought it a pity the stomach-pump was not more frequently used in these cases. A very simple apparatus only was needed; a common India-rubber pump, and an elastic catheter fitted to it, would answer admirably in the case of children.

Dr. SHEARER, speaking of the antagonistic effects of opium and belladonna, quoted a case in Edinburgh, where poisoning by opium was treated by the injection of atropine. Some of the symptoms had given way when the man died.

Dr. SKINNER said that in America this matter had been largely experimented on with remarkable success.

Dr. NOTTINGHAM said that, as far as the state of the pupil is concerned, the Calabar bean is the proper antidote to belladonna.

Dr. GEE said that at the Workhouse Hospital, the plan of treatment alluded to had been tried without effect. In one case a belladonna plaster caused symptoms of poisoning, and it was remarkable that in this case the patient always showed very great intolerance of opium.

Mr. HARRISON could not see that the fact of substances acting on the pupils in different ways was a sufficient cause for them to be considered antagonistic in every respect.

Diet Suitable after Child-birth. By H. LOWNDES, ESQ. He said that a paper on the same subject had been recently read by Dr. Graily Hewitt. Mr. Lowndes read extracts from Celsus, Mauriceau, and a number of authors down to the present time, and shewed that the tendency in the most recent authorities was to revert to the severe regimen of Celsus. In his own practice he had for some years adopted a more nutritious diet; he generally gave a little wine or ale immediately after the delivery of the child, then tea, and perhaps gruel and toast, for the next twenty-four hours; next day a breakfast cup full of strong broth for dinner, on the following day a little chicken or chop, and then he allowed the patient to return to her usual diet with a little ale or wine. He strongly objected to the excessive administration of gruel, as a substance differing entirely from any of our usual articles of diet, and as tending to produce a relaxed state of the tissues, and giving that appearance which is often characteristic, the flesh pale and soft and moist, and the abdomen full of flatus. With the dietetic treatment he had indicated, varied a little according to the case, Mr. Lowndes thought he saw much less of those affections of the breast and nipple in which the suffering is out of all proportion to the actual lesion, and of those muscular pains that are so apt to occur when the patient begins to sit up. Even if labour were what it has been called, a great traumatic lesion, an immediate and long continued course of gruel and tea would not be justifiable, but most likely to lead to great evils; labour, however, he would rather look on as a great physiological process, differing little from the processes of defæcation and micturition except in frequency of occurrence. These and also the phenomenon of sneezing would create great alarm if they were of rare

occurrence. He concluded with some remarks on the subject of puerperal fever, and on the secretion of milk as far as the question of diet affected them.

The CHAIRMAN said it was very pleasant occasionally to be reminded of what the old authors say on subjects of interest. If these opinions are not always valuable they are often expressed in a quaint and amusing manner.

Mr. STEELE agreed with a good deal in the paper, but took exception to what was said about gruel; if well made, it is a most valuable thing, but he did not think that in the North here it is so well made as in some other parts of the country. We must he guided in every case by the constitution; but he believed that more nutritious diet is now generally given. Stimulants certainly can be given with impunity, and a custom prevails here of giving a glass of cold ale immediately after delivery. In one case he found a patient taking a glass of porter and a chop the day after her confinement, and it did no harm.

Dr. SKINNER thought we could lay down no rules; we must temper the diet to each patient. He thought gruel a most valuable agent.

Dr. IMLACH agreed with the author of the paper that labour is no disease, and as a rule it requires no interference. He was taught in Edinburgh, when he was young, that labour was a disease, and likely to be followed by disease. He went to live in Kent, and tried to make his patients confine themselves to gruel; but they would not take it, and he used to find them eating chops and drinking porter. Here, he allows *no* gruel for the first week; the milk comes naturally, and there is much less tendency to inflammation of the breasts. Within the last twenty years there has been a great change in the treatment, more pure air, better food, etc. He did not, however, give stimuli. He believed ladies when well fed, were very much sooner independent of their nurses.

Mr. HAKES had not found the same difficulty in getting his patients to take gruel, which he thought very useful. Each case must be treated according to circumstances, but he would not press solid food upon the patient against her inclination.

Dr. VOSE said that once, when in the remote valleys of Westmoreland and Cumberland, he used to ask the people how they got on without medical aid, particularly in regard to midwifery cases; people wondered that he should ask. He found they had no midwives even; when a woman begins her troubles, they told him, they give her warm beer; if she is worse, more warm beer; but if that fails, then she "maun dee." So they gave stimulants from the first. One word in the paper read seemed to contain the gist of the matter; we must treat the patients according to "common sense."

Dr. BALMAN approved of the views brought forward in the paper generally. He questioned, however, the analogy between the act of micturition and that of labour. When there is exhaustion after labour we may use stimulants, but it is a question how long we should continue their use.

Mr. DENTON always gave gruel at first, but with a little brandy. As an example of what women may do with impunity in some cases, he remembered a person who did not wish it to be known that she had been confined. He met her at the door the day after delivery, and found she had been a long walk to market. She suffered no harm.

Dr. DESMOND said there is no doubt the great mass of women will recover whatever is done with them. Patients have been maltreated in every conceivable way, and yet get well. Certainly the tendency of late has been to give a better diet. In his early days, he was taught to give gruel in large quantities. He was now satisfied of one thing; and that is, that the lower the patient is fed the higher the milk-fever will run.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—I would willingly, if I am able, remove the difficulty that seems to press so much on the mind of "A Surgeon", as to lead him to repeat his question to me, "How comes it that, before the days of iridectomy, glaucoma was comparatively a rare disease?", whereas now it appears, he says, by the number of iridectomy operations reported in the journals, to be a frequent one.

First asking your readers to peruse my answer to his first letter (BRITISH MEDICAL JOURNAL, Nov. 28, p. 593), which, I think, was to the point, though apparently too brief, I now add this ampler explanation.

1. According to the view I maintain, glaucoma was *not* rarer then than it is now, for we are speaking of only seven years ago; its frequency was, no doubt, the same, whatever that frequency be, and we will say no more about "the corners of the street".

2. A large number, we cannot now tell how many, but probably a great majority of all the cases of glaucoma that actually occur in practice (that occurred then as now) *were not then recognised as glaucomatous at all*, on account of the vagueness and inaccuracy of our knowledge at that period. Thus the simple non-inflammatory glaucoma was merely "a form of amaurosis", that term so large, so comprehensive, as now to have hardly any scientific value; or it was "the failing sight of age"; and the inflammatory subacute and acute forms, together with other varieties occurring as complications of diseases, were all often confounded with affections of quite another type, under such common, and of course then improperly applied, names as "ophthalmia", "sclerotitis", "irido-choroiditis", "choroiditis", "retinitis", "arthritic inflammation", or more indefinitely "inflammation of the deeper tunics", etc. All these we now know may occur without any tension of the eyeball, without any glaucoma.

3. These inflammatory forms of glaucoma, thus confused with other forms of inflammation, I may incidentally say were constantly, to the great misfortune of the poor patients, treated too indiscriminately by bleeding, leeching, blisters, mercury, colchicum, opium, etc.—remedies ineffectual in glaucomatous disease, and of which, though some may be palliatives, the greater number are only too surely aggravations of the misery they are intended to relieve. I have formerly given them myself a hundred times, and am heartily thankful that the necessity for using them in glaucoma can never occur again. I am heartily sorry when I see that they have been given now, with the best intentions but the worst results, by practitioners who have overlooked the glaucomatous nature of the case, not being yet aware of the recent advances in knowledge, or who, being partially acquainted with these advances, reject an effectual remedy, infinitely less onerous to the patient than a course of mercury. The excuse formerly was, that we knew no better, we did our best, and hoped against hope, leaning on reeds that had constantly failed us in these glaucomatous cases, though they had often succeeded in others that we could not then distinguish from these. *But we know better now.* Iridectomy supersedes these severe measures in glaucoma. Those who reject it have to explain whether they still employ these unavailing remedies, or leave their patients practically untreated; and, if these be employed, whether they prove adequate now to arrest a disease against which they were formerly directed in vain. I assert, in the most explicit and positive terms which I can use (with only such qualifications

as most general statements require, and which may be understood by a reference to my former paper, BRITISH MEDICAL JOURNAL, October 11, 1862), that *iridectomy is as effectual a remedy for glaucoma as is any remedy for any disease of which the tendency is progressively, up to the moment when the remedy is applied, to destroy the integrity of the tissues in which it occurs.* Iridectomy acts by permanently lessening undue tension, and thus allowing the oppressed organ to recover, *so far as it has not already suffered change of structure*, under either long continuance of slight pressure, or great intensity of it for a shorter period.

4. "Glaucoma", *in the old sense of the word* (though then also often used with a vagueness betokening the want of exact knowledge of the real nature and history of the disease), meant generally that *last stage*, which we now know the inflammatory forms of glaucoma frequently, but not always, reach, where the pupil is widely dilated, the lens greenish yellow and freely exposed to view, the ciliary and muscular veins varicose, the globe stony hard, the sight utterly extinct. The "glaucoma" of our predecessors, and of ourselves up to the publication of Von Graefe's memoir in 1857, was this last stage reached by only a certain number, a minority, of all the diseases which we now call "glaucomatous".

5. *Besides this last stage*, we now include under the term glaucoma *all the earlier stages of the inflammatory forms*, various in character and frequently protracted, which may, but do not always, lead to this last stage, although they destroy sight; and we include, *in addition to these*, a considerable number of *other non-inflammatory cases* (called "simple glaucoma"), which seldom, if ever, cause the globe to assume those obvious and striking appearances of the old glaucoma, though they do terminate like it, if unchecked, in total blindness.

6. Thus, rightly or wrongly, the meaning of the term "glaucoma" has been greatly extended of late; and it now comprehends *a family group of diseases*, while formerly it meant only the destructive ultimate result of glaucomatous action presented in a certain number, but not all, of the cases of certain members of the group. All this may be easily gathered from various English notices of the subject, to none of which I refer with more pleasure than to Mr. Hulke's excellent recent paper in this JOURNAL. (See also my letter to Mr. Syme, *ante*, Nov. 7th.)

7. All the members of this group have certain characters in common; and therefore it is highly conducive to a right knowledge of them, and also to the *practical treatment* of them, that they should bear a common designation; and that of "glaucoma" (or "glaucomatous", as I prefer to call the entire group) having been employed by those who have mainly advanced our knowledge of them to its present standard, it will tend to clearness of thought and expression if we now limit the term to its modern sense. I need not say that every advancing science offers parallel instances of either restricted or expanded meanings of old words, accompanying corresponding modifications of the ideas they are intended to represent.

8. Lastly, let us not confuse ourselves or others by using the same word in two different senses within the same sentence, and argue as if the meaning remained the same. This is one of the most common fallacies, for the exposure of which a careful analysis of the meaning of some single word is oftentimes sufficient. I hope "A Surgeon" will now see how this matter really stands. The *old glaucoma* before the days of iridectectomy was comparatively a rare disease, and it is so still. Moreover, by the use of iridectomy, if not by some better means perhaps to be hereafter discovered, it will certainly by degrees become rarer still.

The *modern glaucoma* was as frequent then as now, only it was not recognised in the greater number of its forms, being confounded with other types of disease.

The length to which this note has extended obliges me to defer till next week some remarks, which it will be my duty to make, upon Mr. Walton's letter in your last number. I am, etc., W. BOWMAN.

5, Clifford Street, December 8th, 1863.

DR. GRIFFIN AND THE SOUTHAMPTON BOARD OF GUARDIANS.

SIR,—Cordially agreeing with most of the remarks made by you relative to the letter of Dr. Griffin to the Southampton Board of Guardians, still, I think, there is a part needing explanation. You say, "We do not like to say a harsh word to Dr. Griffin in his distress; but we cannot help asking, why all this tender and pathetic appeal to the mercies of the poor's guardian angels? Has he not, and has not the profession, the power in its own hands in this matter? And how can a man reconcile it to his conscience to undertake duties, even the half of which, as he asserts, no man can perform?"

If you, Mr. Editor, will look at an early part of Dr. Griffin's letter, you will see he says that "it was only about a week before I was elected that the chief portion of the parish work fell into my hands, or I think I should have considered £150 a-year had better not be applied for." The truth is, Dr. Griffin, at the time of his election, was not aware of what he was about to undertake.

The facts are briefly these. Dr. Griffin had very lately entered into partnership; and almost immediately afterwards his partner died, leaving a son, not qualified, who is to enter into the partnership. Dr. Griffin was, therefore, according to his engagement, compelled in honour to accept all the appointments of the deceased to enable him to meet his engagements; and so he became a Poor-law medical officer. In a very short time, he found it impossible, conscientiously, to do his duty to the poor; and he determined to take steps to remedy the abuses of the present system. Unfortunately, illness prematurely brought matters to a crisis; and this he tells the Guardians in the first paragraph of his letter. "I commenced to keep an account of the amount of work I had to perform, with the intention, at the end of six months, of showing to your Board, of what I was sure you could not be aware, its enormousness; in truth, the utter impossibility of any man to perform it."

You attach blame to Dr. Griffin for taking this appointment and retaining it. You say, "he has the power in his own hands"; the Guardians tell him to the same effect by their resolution, "that if he is dissatisfied on the terms on which he holds his appointment, he may tender his resignation of the same." But were he to adopt your and their advice, it would serve no good purpose; it would not amend the present system of medical relief, as another would take it, and the same system would be perpetuated. There is one medical man ready to do so; and if an advertisement were issued, many others would be found quite willing to take office, as £150 *per annum* would be considered a fine thing for a man to start practice with.

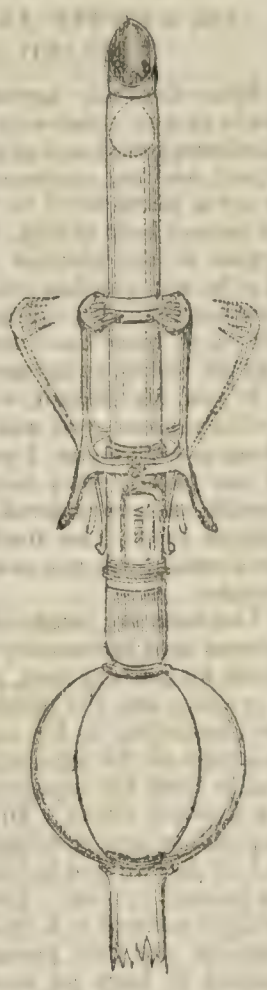
Dr. Griffin deserves credit, not blame, for the manly course he has pursued; too many would have pocketed the £150 *per annum*, and procured an assistant at about a fourth of that sum, and let him do the duties; and would not have asked the Guardians to make four appointments, and so cut down his salary. Dr. Griffin's case is, I fear, but an illustration of numerous others; but few Poor-law medical officers dare to make known their grievances; for, as a body, they are poor, and must take what the Guardians will give, or starve. We, therefore, must strike at the root of the evil, and endeavour to improve the present system of medical relief of the poor, which, as it now exists, is a disgrace to the nation.

I am, sir, etc., A POOR-LAW MEDICAL OFFICER.

SYPHON-TROCHAR AND HOOKED CANNULA FOR OVARIOTOMY.

LETTER FROM T. SPENCER WELLS, ESQ.

SIR,—As I have received several letters lately from our associates and other medical men, asking for an account of the instruments which my experience has shown to be useful in ovariotomy, I send you the enclosed wood-cut of a syphon-trochar, with a hooked cannula, which I have found very useful in practice. By its use, we gain the following advantages.



1. Instantaneous escape of the contents after the cyst has been punctured. This is of great consequence, as the short time occupied in withdrawing a solid trochar from the cannula may permit some escape of fluid from a tense cyst between the cyst and cannula, and lead to an enlargement of the opening.

2. Complete protection (by withdrawing the point) from injuring or piercing the cyst involuntarily.

3. Secure compression of the opening in the cyst against the cannula, and a safe mode of drawing the emptied cyst from the abdomen by one instrument.

4. A convenient mode of carrying off the fluid without wetting the patient's clothes or bedding, and (by means of the India-rubber ball which forms part of the tube) of exciting some force of suction and ejection, and so cleaning the cannula or tube of any obstruction.

The drawing must render any account of the way in which the instrument is used unnecessary; but it must be stated that the artist should have drawn the cannula behind the hooks fully as large as the rim which receives the points of the hooks; for if the cannula does not completely fill the opening made in its introduction, escape of fluid between the opening and the cannula would not be effectually prevented.

Messrs. Weiss have made several of these instruments for me and my friends remarkably well.

I am, etc., T. SPENCER WELLS.

8, Upper Grosvenor Street, December 1st, 1863.

THE DEAF AND DUMB.

LETTER FROM WILLIAM PARKER, ESQ.

SIR,—Your number of the 7th inst. contains a report from the Irish Commissioners on the Deaf and Dumb, wherein *congenital* and other minutiæ of their state are particularised. As there are about 23,000 in the United Kingdom, and no knowledge of medical assistance having been afforded to them *at any period*, perhaps you will kindly ventilate these observations in your pages, especially as the following remarks have been published and concurred in.

"The absence of medical assistance to the deaf and dumb in infancy, and the present idea of intermarriage and deficiency of the organs causing deaf-mutism being so entirely conjectural and completely devoid of scientific interest, suggest the following brief plans for a knowledge of the cause and treatment.

"1. Registration of infants at birth, or month old, in all parishes, whether deaf or not. 2. If deafness is found at this period, no remedy is suggested; but if deafness come on afterwards, its detection is easy, and it probably arises from teething, scarlet fever, measles, or hooping-cough—diseases that are closely connected with the relative parts of the organs of hearing and speech. 3. At two or three years of age, the local treatment should consist of inflating detergent powders into the throat, or applying lotions to the diseased parts, and applying external revulsive means, together with appropriate general treatment and generous diet, united to equable atmosphere.

"The desirableness of the above views being made known to the general medical practitioner can scarcely be disputed, whilst the aurist only treats of deafness in children and adults."

By the united concurrence of the medical press, the legislature would be directed to institute the proposed inquiry, if it be not too late to do a kind action and cultivate a promising soil in our own flesh and blood.

I am, etc., WILLIAM PARKER.

Bath, November 9th, 1863.

FOREIGN BODY IN THE RECTUM.

LETTER FROM WM. ALLISON, ESQ.

SIR,—In a recent number of the JOURNAL, Mr. Soper relates a case of fish-bone in the rectum, which reminds me of a traveller in this town, who apparently suffered great agony from rectum-pain.

On introducing my finger whilst he was making a sudden bolt to the other side of the bed, I managed to follow him with a hasty push of the finger as far as it could go; and, calling louder than he was bellowing, told him that my finger was fast, and that, if he would not let me extricate it carefully, a sharp substance would be thrust through his bowel, which substance was stuck into my finger. I felt some two or three sharp points, as if of glass. Just then, kneeling upon the bed, I introduced a finger of my left hand through the sphincter muscle, to dilate it until I could push it on the opposite side of the substance. With the tip of the right side finger, the apex of the substance was pushed off and downwards, so as to bring its lower extremity towards the palm of my hand; and, on withdrawing both fingers together, the prickly substance was brought away sticking to each finger, and proved to be about half the backbone of a fowl. Fortunately, the man was wriggling about upon his face, instead of beating me upon my head, as he acknowledged he would have done, if he had been upon his back. I thought he must have swallowed the bone after having taken too much wine; but he denied having been intoxicated.

These cases show how some men bolt their food without mastication—men who, if asked the question, would probably say they always chewed their food very carefully. I am, etc., W. ALLISON.

November 18th, 1863.

PRIVATE SECRETARY OF THE NEW GOVERNOR-GENERAL OF INDIA. Sir John Lawrence, the new Governor-General of India, has appointed Dr. Charles Hathaway to be his private secretary. Dr. Hathaway has long been recognised in the official blue books as an active inspector-general of the prisons in Punjaub. In October 1861, in consequence of the fatal outbreak of cholera among the soldiers at Meean Meer, he was appointed special sanitary commissioner; and most of the practical suggestions contained in his report with respect to ventilation have already been adopted, by order of the Commander-in-Chief, in the barracks and cantonments of India.

Medical News.

APPOINTMENTS.

GRANT, J., M.D., appointed Medical Officer and General Superintendent of the Dundee Royal Infirmary.

JONES, Walter, Esq., appointed Junior House-Surgeon to the Queen's Hospital, Birmingham.

TANNER, John, M.D., elected District Surgeon of the Royal South London Dispensary.

TAYLOR, James, L.F.P. & S., Glasgow, appointed Surgeon to the National Model Schools, Bailieborough, co. Cavan.

ROYAL NAVY.

HARAN, T. J., Esq., Surgeon (additional), to the *Curaçoa*.

BROWNLOW, Thomas D., M.D.
CANNON, Richard, Esq.
HOLLINSWORTH, John McK., Esq.
SEDGWICK, Henry D. M., Esq.
WARD, Cornelius H., Esq.
WOOD, Henry, M.D.
} Acting Assistant-Surgeons, to the *Victory*, for Haslar Hospital.

GOODALL, Alexander, M.D.
MCDONALD, Alexander, M.D.
MILNE, James G., Esq.
SMITH, James D., Esq.
TREVAN, Matthew, Esq.
} Acting Assistant-Surgeons, to the *Royal Adelaide*, for Plymouth Hospital.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

FLETCHER, W., M.D., to be Assistant-Surgeon 2nd Derbyshire R.V.

To be Honorary Assistant-Surgeon:—

KNIGHT, G. L., Esq., 14th Surrey R.V.

BIRTH.

CURGENVEN. On December 2nd, at 11, Craven Hill Gardens, W., the wife of J. Brendon Curgenven, Esq., of a son.

MARRIAGE.

STEVENSON, Henry, Esq., of Norwich, to Ann Emilia, eldest daughter of William SELF, Esq., Surgeon, of Richmond Road, Hackney, on November 25th.

DEATH.

FLETCHER, John, Esq., Surgeon, at Feltham, aged 82, on Dec. 2.

TOYS FOR SICK CHILDREN. The Hospital for Sick Children in Great Ormond Street has received a valuable present of toys, sent by command of the Queen; also a similar present from her Royal Highness the Princess Helena and his Royal Highness Prince Alfred.

BEQUESTS. Charles Rawlings of Chelsea, has made the following charitable bequests:—To the Chelsea, Brompton, and Belgrave Dispensary, £500; City of London Truss Society, £500; Blind Institution, Euston Road, £200; and Westminster Hospital, £500.

NORTH STAFFORDSHIRE MEDICAL SOCIETY. William Henry Folker, Esq., has been elected president; James Yates, Esq., treasurer; and Ralph Goodall, Esq., honorary secretary. Professor Allen Thomson was elected one of the vice-presidents of the Philosophical Society of Glasgow for the ensuing year.

GLASGOW MEDICAL SOCIETY. The fiftieth annual meeting of this Society was held in the Faculty Hall, St. Vincent Street, on Tuesday, December 1st, when the following office-bearers were elected for the session 1863-64:—*President*, Dr. James Stewart; *Vice-Presidents*, Dr. A. M. Smith, Dr. G. H. B. Macleod; *Treasurer*, Dr. Perry; *Secretaries*, Dr. W. R. Hatrick, Dr. Maclaren.

GERMAN HOSPITAL. His Royal Highness the Prince of Wales has become one of the protectors of this charity, in conjunction with Her Majesty the Queen and the King of Prussia, in place of the late Prince Consort. The anniversary dinner of the institution will take place at the London Tavern, on February 17th next, when the Right Hon. the Earl of Carnarvon has consented to preside.

JUNIOR MEDICAL SOCIETY OF LONDON. At a meeting of the Council held on November 17th, the following officers were elected:—*President*, Mr. S. G. Freeman (St. George's Hospital); *Treasurer*, Mr. Duke (Guy's Hospital); *Secretaries*, Mr. F. H. Gervis (St. Thomas's Hospital); Mr. Murray (King's College).

THE LICENSE IN MEDICINE OF THE UNIVERSITY OF DUBLIN. We understand that the Board of Trinity College have had lately under their consideration certain alterations in the regulations at present in force, having for their object to facilitate the granting of the Licence in Medicine of the University to Licentiates of the Royal College of Surgeons in Ireland. (*Dublin Med. Press.*)

AMERICAN INDIANS AND NEGROES. In his chapter on *Race*, Dr. Hammond furnishes some interesting facts respecting the American Indian and the Negro. His own observations have convinced him of the "manifest inferiority of the American Indians to the whites in muscular strength." And of the negro he states that, "by transferring him to a temperate climate he has positively lost rank physically."

EFFECTS OF INDISCRIMINATE ENLISTMENT. "The present rebellion," says Dr. Hammond, "has opened our eyes to the evils flowing from the indiscriminate enrolment of men unfit, by reason of physical infirmities, to undergo the hardships incident to a soldier's life." And he states, that in a hospital under his charge in the early part of the war, containing six hundred patients, he discovered at one time, on inspection, fifty-two cases of inguinal hernia.

THE FEDERAL ARMY MEDICAL SERVICE. The government of France has made large advances in the recognition of the rights of the medical department of its army. The British Government was forced to a recognition of the value of the medical services to the army of the Crimea, and successful efforts were made to place its medical department on a more independent footing. Our own Government seems less disposed than any of its contemporaries to listen to the voice of reason and experience. The medical department of its army remains where the present war found it, entirely subordinate to other authorities. In its present position it may become the sport of every political trickster, and be perverted to the accomplishment of partisan purposes. (*American Medical Times.*)

SOCIETY OF ARTS. The next award of the Swiney Prize (a silver goblet of the value of £100 sterling, containing gold coin to the same amount) will be awarded on January 20th, 1864, to the author of the best published treatise on jurisprudence. The sum of £70, placed at the disposal of the Council by Sir W. C. Trevelyan, Bart., with the Society's medal, is offered for the discovery of a process for preserving fresh meat better than by any method hitherto employed, applicable to the preservation of meat in countries where it is now almost valueless, so as to render it an article of commerce and available for stores on ship-board. Specimens, with detailed accounts of the process employed, must be sent to the Society. The Society also offers medals for communications or discoveries in relation to certain specified subjects, 114 in number, among which are the following:—The manufacture of a brilliant green colour, not containing arsenic, copper, or other poisonous materials. The manufacture of chlorophyll from grasses, suitable for dyeing silk and other fabrics of a green colour. The manufacture of green dyes from coal or wood tar. A thoroughly decolorised blood-albumen, or any economic and efficient substitute for egg-albumen for calico-printing. A new, large, and economic use for the yolks of eggs, with particulars of the mode of preparation and preservation. An account of the methods at present in use in the various coal-mining districts for ventilating and lighting the mines, with suggestions for their improvement. An improved diving-apparatus, in which

divers may work free from the influence of great pressure, and at greater depths than by means of the diving-bell, helmet, or other existing appliances. The best chemical and assay balance, suitable for the use of students and experimentalists, which will (with 600 grains in each pan) show a difference of .005 or less: to be sold at a moderate price. The best and cheapest form of spectroscope. The best and cheapest form of dialysing apparatus, capable of being packed in a small compass, but of sufficient size to aid the country practitioner in the detection of poisons and adulterations, and in the preparation and purification of salts and drugs. A more economical process of obtaining oxygen gas than any in present use. The discovery and introduction into this country of any new edible root useful as food for man or cattle, and capable of extensive and improved cultivation. A means of rendering seaweeds generally available as a wholesome vegetable food on board ship. The introduction into commercial use at a moderate price of the essential oils shown at the late International Exhibition from Australia, or of any other new essential oil likely to be useful in medicine or the arts.

Royal Society. The anniversary meeting of this society was held at Burlington House on Monday, November 30th, when the officers and council for the ensuing year were elected as follows:—*President*, Major-General Edward Sabine, R.A., D.C.L. LL.D.; *Treasurer*, W. Allen Miller, M.D., LL.D.; *Secretaries*, William Sharpey, M.D., LL.D., and George Gabriel Stokes, M.A., D.C.L.; *Foreign Secretary*, Professor William Hallows Miller, M.A.; *Other Members of the Council*, James Alderson, M.D., George Busk, sec. L.S., Colonel Sir George Everest, C.B., Hugh Falconer, M.A., M.D., John Hall Gladstone, Ph.D., Joseph Dalton Hooker, M.D., Henry Bence Jones, M.A., M.D., Professor James Clerk Maxwell, M.A., Professor William Pole, C.E., Archibald Smith. M.A., Professor Henry J. Stephen Smith, M.A., the Earl Stanhope, P.S.A., D.C.L., Professor James Joseph Sylvester, M.A., Thomas Watson, M.D., D.C.L., Professor Charles Wheatstone, D.C.L., and Rev. Professor Robert Willis, M.A. At the same time medals were presented to Professor Sedgwick for his observations and discoveries in geology; to the Rev. M. J. Berkeley, for his studies in botany; and to Mr. J. P. Gassiot, for his researches in electricity.

Appointments in India. Dr. A. C. Macrae, has been appointed surgeon to his Excellency the Viceroy and Governor-General of India, and has left Calcutta to join his excellency at Lahore. Dr. Beatson, hitherto officiating as surgeon to the Governor-General since his departure from the presidency to the upper provinces, succeeds to the civil surgeoncy of Simla. The Governor of Bombay has appointed Dr. Forbes a commissioner, with instructions to devote his exclusive attention to questions regarding the improvement and extension of the cultivation of cotton and the invention and manufacture of cotton-cleaning machinery, on a salary of 1,600 *rupees* per month.

University of Cambridge: Degree of Master in Surgery. The questions below are the first of their genus put in an English University. The examination appears to have been very searching and practical. *Principles and Practice of Surgery.* November 23, 1863. 1. Explain the different modes in which mortification of a limb may be induced, and state under what circumstances you would recommend amputation. 2. What are the microscopical character of pus-cells? Wherein do they differ from those of cancer-cells? How are pus-cells probably formed? What are the indications of acute suppuration deep in a limb, the thigh for instance? 3. Give a description of the aspect presented by a case of glaucoma when fully developed. What ophthalmoscopic appearances have been observed in glaucoma, and what treatment adopted? 4. How are calculi formed in the urinary organs? What are the symptoms of stone in the bladder. 5. What are the symptoms and treatment of wounds in the chest implicating the lung? 6. In what parts of the clavicle and tibia is fracture most frequent, and why is it so? In what direction does the displacement at the fracture usually take place, and the reason for this? 7. State the process of formation and the diagnostic symptoms of a popliteal aneurism. What accidents may follow after the ligature of an artery for aneurism, and upon what principle does compression effect a cure? 8. What position does the limb usually assume in inflammation of the hip-joint? In what position would you place it to give relief, and on what principle? What symptoms indicate that ulceration of the cartilages is taking place? 9. Mention the modes of treatment which have been recommended for asphyxia from drowning. 10. The symptoms and treatment of fracture of the neck of the thigh-bone. The causes of the frequent failure of bony union. What changes take place at and about the fracture? 11. Explain the chief causes of retention of urine in the male and female, and state the treatment required in each case. 12. What symptoms would lead you to suspect the existence of cancer of the rectum?—*Midwifery.* November 23, 1863. 1. Mention some of the cases demanding the induction of premature labour, and the chief methods of inducing it. 2. What are the indications of extra-uterine pregnancy? In what parts is the fœtus likely to be lodged? 3. Give the symptoms of rupture of the uterus. 4. How is hæmorrhage prevented in natural labour? What precautions would you take in attending a patient in labour who on former occasions had suffered from flooding? 5. What are the symptoms and treatment of puerperal peritonitis, and what the morbid appearances observed after death? 6. What changes in the breasts are indicative of pregnancy? 7. What is the condition of the fœtus at the sixth month?—*Practical and Surgical Anatomy.* November 24, 1863. 1. What are the position and the connections of the superficial veins in front of the arm? On which of them is venæsection usually performed? With what possible danger to the brachial artery? What superficial nerves may be divided according to the vein selected? How is the vein, usually selected, separated from the brachial artery? Since a high division of the brachial artery may occur with a superficial course, what precaution is always to be taken by the operator? 2. How are the arteries of the forearm distributed to the hand and fingers? What is the practice when a deep wound in the palm is accompanied by much hæmorrhage? If the vessel that bleeds be discovered, how ought it to be tied? What other means to control the hæmorrhage may be employed? 3. By attending to what superficial marks is the course of the femoral artery understood? When the artery and vein have passed under Poupart's ligament, by what structures and fasciæ are they covered? How are the femoral sheath and femoral canal formed? Where does the Saphæna vein fall into the femoral? What is the relative position of the artery and vein within the sheath at its upper part? When it has been crossed by the Sartorius muscle, how do the relations of the artery differ? 4. In what different conditions may inguinal hernia exist? Define the direct and the oblique hernia. What is the guide to the internal border of the internal ring? How are the epigastric artery and cord generally placed when a protruded viscus is passing through the ring? How is the inguinal canal formed? 5. What are the three stages of the subclavian artery? At what point does it end in the axillary artery? How do the relations of the artery differ on the left side and on the right? How does the subclavian vein correspond to the artery? What nerves are interposed between them?—There was, in addition, an examination *vivâ voce* in each subject; that in anatomy and pathology was held at the

anatomical school; and that in clinical surgery at Addenbrooke's Hospital, the candidates being requested to examine and report upon selected cases which they had not before seen.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. I. Baker Brown, "On the Treatment of Hypertrophy and Ulceration of the Os Uteri."—Asiatic.

TUESDAY. Statistical.—Pathological.—Ethnological.

WEDNESDAY. Society of Arts.—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Dr. W. Tilbury Fox, "On Porrigo".—Chemical.—Zoological.—Royal.—Antiquarian.—Linnæan.

FRIDAY. Western Medical and Surgical Society of London, 8 P.M.

SATURDAY. Association Medical Officers of Health.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—DECEMBER 5, 1863.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....	Boys.. 941 / Girls.. 854	1795	1376
Average of corresponding weeks 1853-62		1867	1460

Barometer:

Highest (Fri.) 30.183; lowest (Wed.) 28.990; mean, 29.710.

Thermometer:

Highest in sun—extremes (Sat.) 74.8 degs.; (Tu.) 52 degs.

In shade—highest (Th.) 54.2 degs.; lowest (Mon.) 29.8 degs.

Mean—42.1 degrees; difference from mean of 43 yrs. +0.5 deg.

Range—during week, 24.4 degrees; mean daily, 14.3 degrees.

Mean humidity of air (*saturation*=100), 85.

Mean direction of wind, S.W.—Rain in inches, 0.78.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—In Dr. Charles Taylor's letter on Iridectomy, published last week, he was, through error, designated House-Surgeon Nottingham Eye Dispensary, instead of Honorary Surgeon.

IGNORAMUS.—You should apply to Mr. Upton, at the Apothecaries' Hall. The Society alone can give you the information you desire.

F. W. P.—A subscription in behalf of Dr. Fraser and Mr. Andrews has already been started. We shall be glad to take charge of any sums, and forward them to the proper quarter.

MR. NAPPER's letter shall appear next week.

WE accidentally omitted the name of Dr. John Cochrane as being one of the medical men on the Town Council of Edinburgh.

THE LATE MR. ANCELL.—It should have been stated in the biography of Mr. Ancell, published in the JOURNAL of November 28th, in speaking of his connection with medical politics, that he was joint-secretary to the "National Association of General Practitioners", in conjunction with Mr. James Bird. The names of "Bird and Ancell", indeed, appeared together in all reports and other documents relating to the proceedings of the Association.

M. MARVILLE'S EAR-COVERS (*Couvre-Oreilles*).—M. Marville has invented a very ingenious elastic caoutchouc covering for the Ear. The covering takes admirably the shape and form of the ear, is very readily applied and readily removed, and cannot fail to be of much service in all those cases in which such a covering is required for the organ.

A MEMBER is referred to the JOURNAL for November 21st, 1863, page 568, column 1. The M.D. list has not yet been made public.

IRIDECTOMY.—SIR: What we want in the matter of iridectomy, is a report of fifty or a hundred cases of the operation and its results, faithfully related, as practised at some public institution. I do not think that the publication of a few isolated, and I suppose I may conclude successful operations observed in a man's practice, can give us any fair idea of the real value of the operation.

When a new operation of this kind is introduced into surgery, which is not generally accepted by surgeons, and when principles are not easily understood, it is necessary that the uses of it should be impressed upon the profession by clinical proofs of the character above referred to.

I am, etc.,

December 8th, 1863. QUERY.

THE MARTIN MEMORIAL.—A correspondent writes:—

"I highly approve of your correspondent's suggestion as to a Memorial Scholarship at the College, to commemorate my much esteemed friend Peter Martin's noble exertions in that, as well as many other good causes. Peter Martin was much devoted to the College at Epsom, and worked very hard for it in all ways. I may safely say that, mainly through his instrumentality, the College benefited to the extent of nearly £3000! I should indeed much desire to have something at the College to perpetuate the name of so noble a friend."

COMMUNICATIONS have been received from:—Mr. H. COLLEY MARCH; Mr. J. WINDSOR; Mr. J. H. SHEPPARD; Mr. WILLIAM EDDOWES; Dr. C. TAYLOR; Mr. CURGENVEN; Dr. COCHRANE; Mr. T. P. TEALE, JUN.; Mr. B. E. BRODHURST; Mr. RICHARD GRIFFIN; THE HON. SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Mr. PRANKERD; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. MERYON; Dr. HATRICK; Mr. WILLIAM BOWMAN; Mr. GARRAWAY; THE REGISTRAR OF THE MEDICAL COUNCIL; Mr. W. JONES; Mr. EDWARDS; and Mr. PITTOCK.

ADVERTISEMENTS.

Horological Productions.—"Ranged around the base of the clock were the Watches which Mr. Benson exhibited, and which have been universally admired for the beauty and elegance of the designs engraved upon them. The movements are of the finest quality which the art of horology is at present capable of producing."—*Illustrated London News* Nov. 8, 1862. Chronometer, duplex, lever, horizontal, repeaters, centre seconds, keyless, split seconds, and every description of watch, adapted to all climates. Benson's Illustrated Pamphlet on Watches (free by post for 2 stamps) contains a short history of watch-making, with prices, from 3 to 200 guineas. It acts as a guide in the purchase of a watch, and enables those who live in any part of the world to select a watch and have it sent by post. Prize Medal and Honourable Mention, Classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

Watch and Clock Maker by Special Warrrant of Appointment to H.R.H. the Prince of Wales.

Price's Glycerine, its Uses and Purity. See "De la Glycerine, de ses Applications à la Chirurgie et à la Médecine," by the eminent French Surgeon, M. Demarquay. pp. 240. Paris: P. Asselin. 1863. Or, "On Glycerine, and its Uses in Medicine, Surgery, and Pharmacy." By Dr. W. Abbotts Smith. London: H. K. Lewis.

NOTICE.—The first number of a New Series of the MEDICAL CIRCULAR (Vol. 24th) will be sent on Wednesday, January 6th, 1864, to every Member of the Profession whose name appears in the Medical Directories for England, Scotland, and Ireland. The intention of this large issue of the Journal is to draw attention to its many improvements, in size, in paper, and in the arrangement of its contents, which, under new Editorial management, will be of a more practical character, and better adapted to the requirements of the busy practitioner than heretofore.

Advertisements on this occasion cannot be received later than Saturday January 2nd.

OFFICE: 20, KING WILLIAM STREET, STRAND.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture IV.

ON CURVATURES OF THE SPINE.

(*Continued.*)

Scoliosis.

Scoliosis, or Lateral Curvature of the Spine, is that distortion in which the vertebræ deviate, as the term implies, in a lateral direction away from the mesial line of the trunk.

This affection may be divided into two stages, or periods; namely, first, *incipient curvature;* and secondly, *confirmed lateral curvature.*

It is important that these terms should be rightly understood; and I would, therefore, define them thus. Incipient curvature is removable in the horizontal position, either by slight lateral pressure or even by throwing certain muscles into action; while a confirmed curve requires long-continued mechanical means to effect the same object.

The *causes of scoliosis* are various. They are debility, general or local, rachitis, thoracic disease, obliquity of the pelvis, etc. Debility is, without doubt, the most common cause of this affection. It shows itself in various ways. Thus, muscular debility during convalescence, and weakness of the ligaments during too rapid growth, are the most frequent causes of this common affection. Let us take, for instance, the case of a child whose health has been rendered delicate from whatever cause. If it be treated in the same manner as a stronger companion, some irregularity of form will probably develope itself; but the particular form of distortion will depend mainly on the habits of the child. For instance, if the child stand or walk much, it is probable that the internal lateral ligament of the knee-joint will yield, and give rise to genu valgum; and it is probable that this distortion will be followed by yielding of the ligaments of the ankle-joint, and of those in the sole of the foot—valgus. And let us suppose, moreover, that, in consequence of resting too much on one leg, as is very common with such children, the ligaments of that extremity have yielded more than those of the other. Virtually, that leg is shorter than the other; and, therefore, both feet resting on the ground, the pelvis necessarily becomes oblique to accommodate itself to the difference in length of the extremities. But an oblique pelvis must give rise to spinal curvature, as will be explained farther on. Fig. 6 was drawn from such a case.

The child was 12 years of age. She habitually stood on the right leg. The prominent features of the case may thus be described:—genu valgum much more on the right than on the left side; right side of pelvis half an inch lower than the left; right lumbar curve, left dorsal curve; right shoulder three-fourths of an inch lower than the left.



Fig. 6.

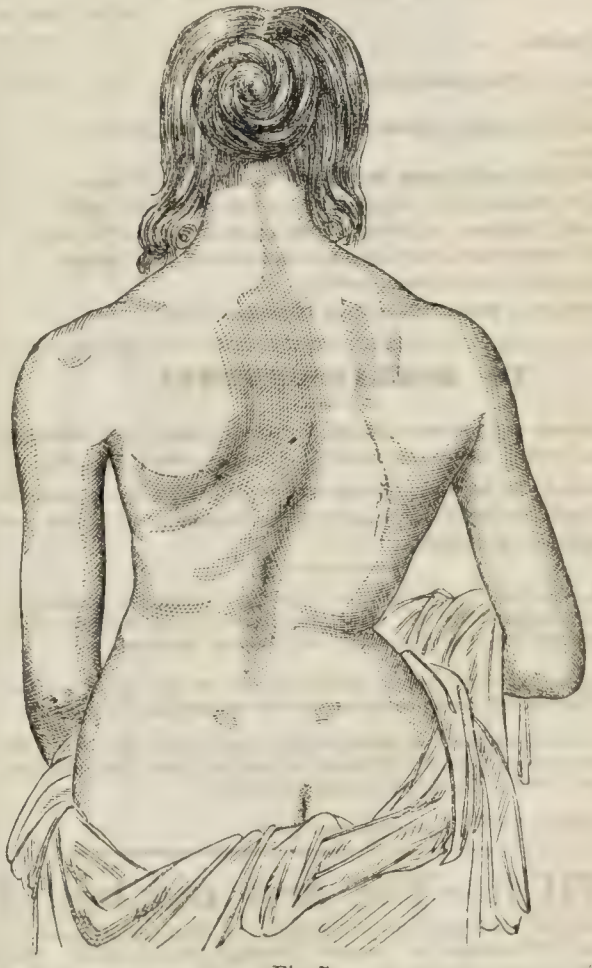


Fig. 7.

I may here mention, that all the figures which I shall have to use, have been taken from drawings

made by Mr. Bagg with the camera lucida ; and that they have in no instance been exaggerated or modified ; but that they are true, and exemplify well the nature of the several affections which they are intended to represent.

Fig. 7 was taken from a young person, 16 years of age, who, from overgrowth, had become feeble. The spinal distortion had been four years in forming. She habitually stood on the right leg.

Those who are feeble, whether from overgrowth or during convalescence, constantly change their position while standing ; so that they rest for a short time only in one position and then change it for another—from both feet to one foot, for instance, and back again. And it is found that it is habitually the right foot in some cases, and in others the left foot, which has, in this way, to bear very frequently almost the entire weight of the body, until, at length, it becomes more natural to stand on one leg only, than fairly on both. It becomes so natural to do this, that it is done unconsciously ; and until it is pointed out to her, the patient is frequently not aware of the habit. It was so in the case from which Fig. 7 was taken. She denied it until it was pointed out to her three times in about as many minutes.

It may be said that debility alone will not cause a spinal curve ; but that there must be superadded bad habits of standing or sitting, which shall occasion obliquity fo the pelvis and a primary lumbar



Fig. 8.

curve. These habits to which I have alluded, depend on debility, however ; and, therefore, it is right to speak of debility as the cause of these distortions. But just as cyphosis is induced by debility, so debility will induce scoliosis. It may commence as a dorsal curve, as was the case with the patient from whom the preceding figure was taken (Fig. 8), and this is a form of curvature which commonly begins during convalescence ; and commencing as a dorsal curve, it shows that it does not depend on obliquity of the pelvis nor on any affection of the lower extremities.

Every distortion is produced by a special cause ; and it only requires attention to discover the cause. Scoliosis is seldom hereditary ; when it is hereditary, it is due to rachitis, or to malformation of the spinal column itself, or to nervous irritation.

Paralysis of one side of the trunk always gives rise to lateral curvature of the spine ; the healthy muscles drawing the spinal column away from the mesial line. And the length of the curve will depend on the paralysis ; it may be a single curve, all the muscles of one side being paralysed ; or it may occupy a part of the column only. After amputation at the shoulder, the latissimus dorsi, etc., become useless, and, therefore, atrophic ; and, in consequence, the opponent muscles exercise undue power on the spinal column, and curve it in the direction of their own force. Such had occurred in the case from which Fig. 9 was taken. In this

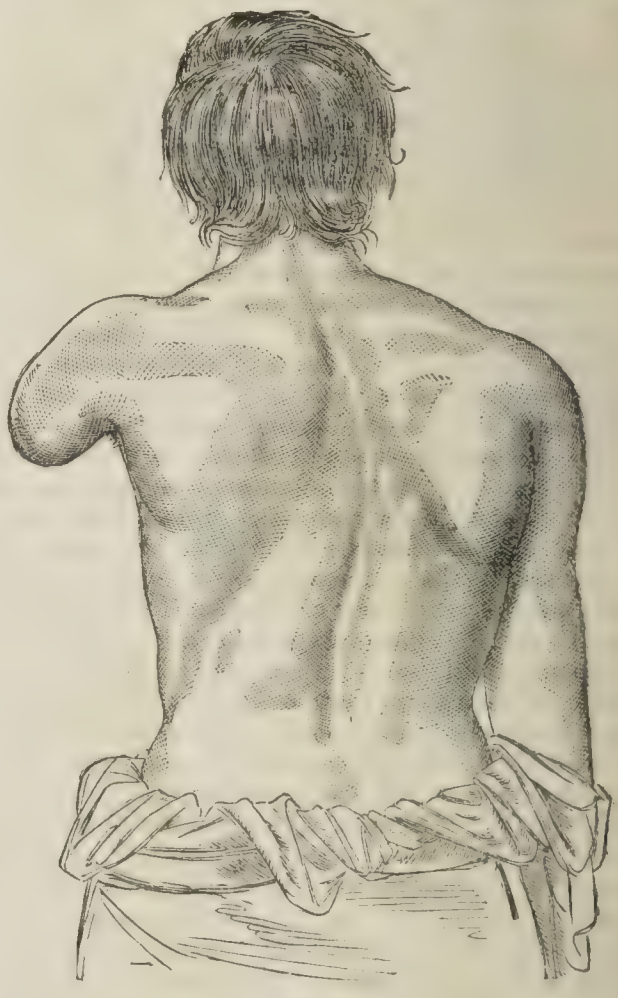


Fig. 9.

instance, however, the muscles were very powerful, and produced consequently more than the usual effect.

It has already been said that the particular form of distortion depends on the habits of the individual. The following figure was taken from a delicate young girl, 16 years of age, who habitually carried a child on the left arm. This gave rise to a left dorsal curve, as is shown in Fig. 10 ; and Fig. 11 shows the reverse of this distortion. Here, in an equally

weak condition, the right arm was used to carry the child.

And whether debility be local or general—whether it be induced by impaired health or by diminished power of the muscles of the back, for instance—curvature may be induced equally, when the conditions are such as shall give rise to it.

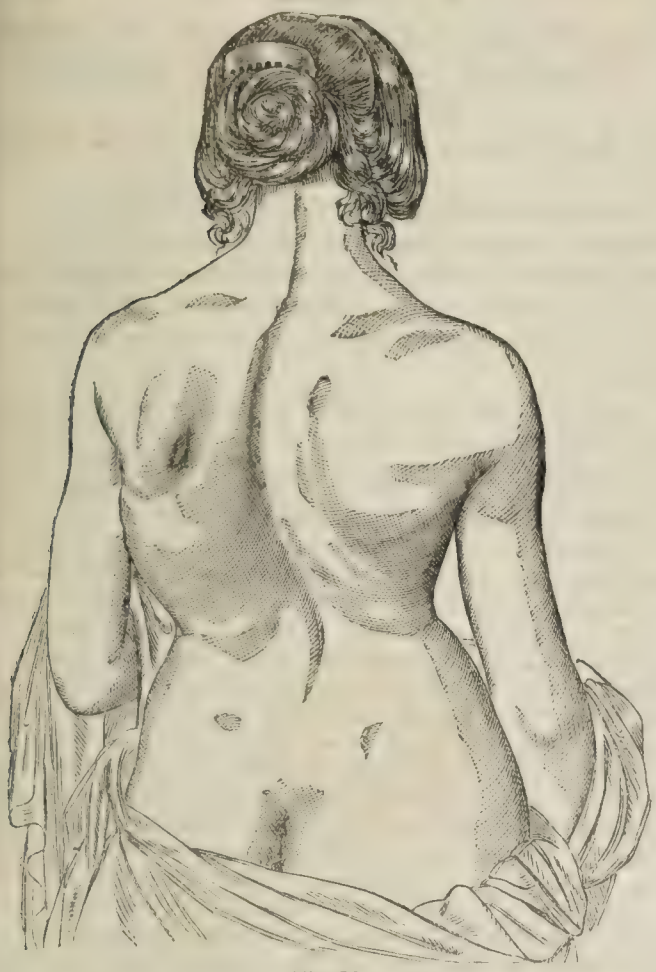


Fig. 10.

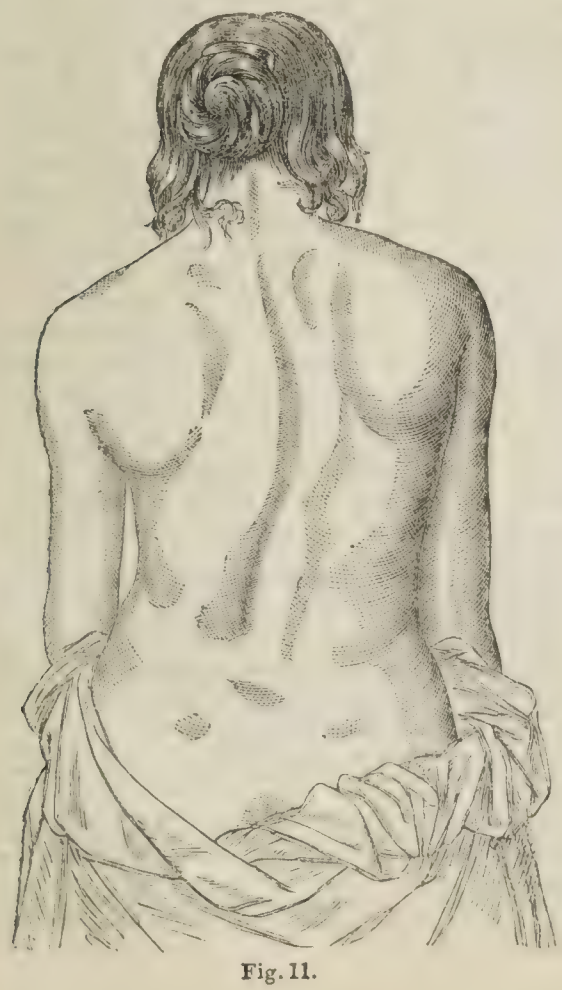


Fig. 11.

It is probably well known that the muscles of the back of those who wear stays are not red and firm, but that they are, for the most part, pale and weak, and frequently atrophic and indistinct. The want of development which is thus occasioned conduces notably to the formation of lateral curvature of the spine; and, consequently, in those countries where stays are worn, and especially in the stay-wearing class, spinal curvatures are frequent; whereas, in the countries and communities where these are not worn, spinal curvature is much less frequent. Dr. John Gregory has, however, almost exhausted this part of the subject.

It will, perhaps, be said that debility of the muscles of the trunk being induced equally on both sides, there is no reason why lateral curvature of the spine should follow. It should be remembered, however, that in its normal condition the spinal column deviates slightly from the perpendicular line of the trunk. Even at birth this deviation is frequently observed; but later it becomes more marked, as the right or the left hand are habitually used; the employment of the muscles of one side or the other being sufficient to determine the mode of deviation. And it is only because those who have constantly worn stays are, for the most part, exempt from manual labour, that confirmed lateral curvature is not much more frequently met with in this class than is at present the case. The effort to hold the spine erect is great in those who have discontinued the use of stays, and in these spinal curvature is readily induced.

Also, through the use chiefly of one arm, certain trades very commonly give rise to lateral curvature of the spine. Hence, tailors, shoemakers, compositors, dressmakers, embroiderers, needlewomen, and others, are especially prone to this distortion. But, perhaps, nurses who always carry the child on the same arm, suffer more frequently from this distortion than any other of these classes.

Again, spasmodic action of the muscles of the back, neck, and shoulder, occasionally gives rise to scoliosis. This is very rarely found to exist at birth, but it is occasionally met with, together with other manifestations of morbid action.

In the anencephalous and the hemicephalous infant, every variety of distortion of trunk and limb is to be found. And in the same way, distortions are seen, together with hydrocephalus and hydrorachis. Irritation is, however, for the most part, much more limited in extent; and thus a set of muscles only may be retracted—as, for instances, in torticollis, talipes, strabismus, etc. These and other forms of muscular retraction exist, both as congenital and non-congenital distortions; they are each induced by a like cause, and they differ only in degree and form.

When the muscles of one side of the back are alone affected, scoliosis results; but when both sides are affected, lordosis is produced. Congenital curvatures are sometimes excessive in degree; so that the trunk may be reduced to two-thirds of its normal height. Fig. 12 is taken from one of the most remarkable cases of spasm that I remember to have witnessed. In this instance, there were torticollis and

scoliosis to so great an extent, that it was difficult, and even impossible during more than the shortest period, for the patient to remain upright.

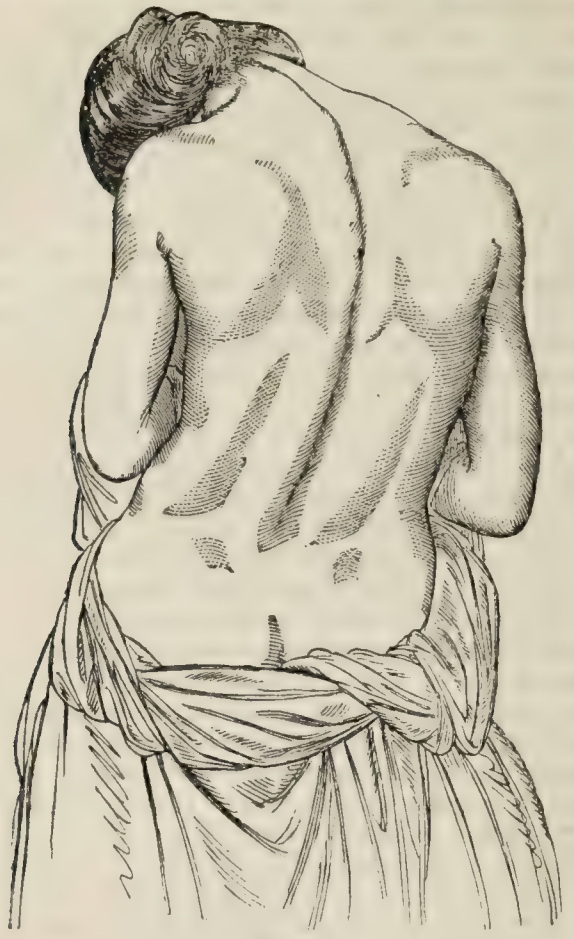


Fig. 12.

After some duration of spasmodic action, loss of power, partial or complete, may ensue.

Obliquity of the pelvis, however induced, whether by hip-joint disease, by rachitic curves of the tibia or femur, by genu valgum, or other cause, is a very common occasion of lateral curvature of the spine.

Wisdom and Knowledge. "With all becoming deference," says Dr. Latham, "to those who so loudly trumpet forth the praises of knowledge, and fright the trembling student with a portentous array of the wonderful things he has to learn, I would venture to crave some little regard for what is not so much as named by them, but what is pre-eminently more important than knowledge itself. I mean wisdom, as a thing distinct from knowledge, but not opposed to it; requiring, indeed, knowledge to work upon, but taking care to proportion that knowledge to the real end which itself (wisdom) has in view. I marvel that this wisdom is not enumerated among the ingredients of the physician's character, since it is conspicuously the chief of all." "If we content ourselves," says Harvey, "with the observations of others, the sprightly edge of our own wit will languish, and we extinguish the lamp which they lighted to our hands. It is those who follow nature's conduct with their own eyes (sometimes through a perplexed yet faithful tract) who attain the highest pitch of truth." "Let us blush", he observes, "in this so ample and wonderful field of nature, where performance still exceeds what is promised, to credit other men's traditions only. Nature herself must be our adviser. The path she chalks must be our walk. While we confer with our own eyes, and take our rise from meaner things to higher, we shall at length be received into her *closet* secrets. For nature being divine and perfect, is always consonant to herself."

Original Communications.

ADDITIONAL OBSERVATIONS ON TRANSPOSITION OF THE GREAT VESSELS OF THE HEART.

By John Cockle, M.D., Physician to the Royal Free Hospital.

In the current volume of the *Medico-Chirurgical Transactions*, a case of transposition of the great vessels of the heart is detailed by me, which was associated with simple patency of the foramen ovale. This case is, moreover, compared with the others on record, three in number.

In these four cases, were it not that some interchange of blood must have taken place through the foramen ovale, two circulating systems, perfectly distinct, would have existed. The right, or aortic system, would have constantly circulated black blood through all the organs connected with it, the muscular tissue of the heart inclusive; and the left or pulmonic system would have as constantly circulated oxygenated blood through the lungs. Indeed, even with a patent foramen ovale, the actual state of the circulation must have been nearly as described, so far as regards the systemic vessels. But, as Meyer* has pointed out, there are mechanical causes for an easy transit of blood from the right to the left auricle. The blood from the left or pulmonic heart, while circulating through the lungs, receiving no substantial additions, would have exhibited a constant tendency to concentration from loss of its watery portion by pulmonary exhalation. The absolute quantity consequently transmitted to the left auricle would have been a constantly decreasing one, and inadequate to the physiological distension of the chamber. On the other hand, the blood of the caval system, constantly receiving substantial addition from its tributaries, would exhibit as constant a tendency to repletion of the right auricle. Hence the necessary result would be, that any surcharge of venous blood would enter the left auricle through the patulous foramen ovale to restore the equilibrium. That this result did follow in the author's case is probable from the increased thickness of the walls of the right auricle.† It would, he imagines, be greatly more difficult to explain the manner in which oxygenated blood could pass from the left into the right auricle.‡ But that such passage was effected, we must admit. Such also seems to have been the opinion of most of the observers of the recorded cases. After carefully considering the whole question, the author is unable to give a satisfactory answer to the following question: How is the absence of cyanosis during the first three months, and its comparatively sudden supervention at the close of that period, to be explained?§

There are no *data* from which to infer the actual period of closure of the arterial duct.‖ Even if there

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* Virchow, *Archiv*, B. 12, 4tes-5tes Heft, p. 371.

† Upon this point, Cruveilhier, *Anat. Path.*, t. ii, pp. 477-84, makes the following statement. In hearts presenting no other complication than simple though ample communication between the auricles, the following changes are observed; general enlargement of the right cavities of the heart and dilatation of the pulmonary artery and its branches. The left cavities stand in striking antithesis to those of the right side, being below the average size.

‡ For arguments upon this matter, consult particularly Louis, *Research. Anat. Path.*, p. 337; and Allan Burns, *Observations on Diseases of the Heart*, p. 15.

§ For some interesting examples of malformation shewing the length of time prior to the supervention of cyanosis, see Naumann, *Klinik*, B. 2, s. 321 *et seq.*; also, Meckel, *Path. Anat.*, B. 1, s. 441; and Louis, *op. cit.*, p. 340.

‖ For the most detailed accounts of the period of closure, see Haller, *Element. Physiol.*, t. viii, p. 10; and Billard, *Mal. des Enfans*, pp. 486-94.

were, they could hardly serve to explain the phenomenon in question. The small quantity of blood transmitted through this channel into the aorta during three months would scarcely have tinged the mass of venous blood in the systemic vessels. Its closure, consequently, at this period, could hardly in any way have influenced the production of cyanotic tint.*

In the case recorded by Gamage, the child was born perfectly healthy. No cyanosis supervened for some days; yet the arterial duct seems *never* to have existed. The foramen ovale was largely patent. In these cases, one is almost led to think that perhaps one or more organs, probably with varying activity, have for a time performed some work of compensation—the liver, kidney, skin,† mucous tracts,‡ or thymus gland. In very many cases of cyanosis,§ this latter organ remains unusually large.‖ According to the very careful experiments of Friedleben, related in his work upon the *Physiology of the Thymus Gland*, a diminution of carbonic acid, naturally exhaled, to the extent of 14 per cent., occurred in animals deprived of this organ. Furthermore, in support of this view of the vicarious action of the thymus gland in malformation of the heart, we have the concurrent testimony of Meckel, Sandifort, Duretus, Cailliot, and Burns. This hypothesis, perhaps, receives some support from the author's case, in which the organ was very large.

Causes of Transposition of the Great Vessels. There is, as may be well supposed, great uncertainty attending the determination of the proximate cause of transposition of the vessels. The very important results that have followed the study of the changes which the vascular arches undergo, in certain cases of abnormal development of the branches of the main vessels of the chest, have hardly yet extended to the explanation of the phenomenon of transposition of the main vessels themselves. Kürschner,¶ so far as I know, is the chief upholder of the view that faulty metamorphosis of the vascular arches may determine transposition of the great vessels. The researches even of Von Baer, Rathke, and Bischoff, in vascular embryology, have not removed the difficulty. Von Baer** has indicated the manner in which the rotation of the embryo in the yolk to the right determines the transposition of the heart to the right side; but he has not shown how the main trunks *alone* undergo transposition. Perhaps the more commonly received opinion is, that the phenomenon is dependent upon some irregular torsion of the aortic bulb after its division into the systemic and pulmonary trunks. There is one other very interesting question connected with these and other kindred changes, which is, how far they may be influenced by external exciting causes. D'Alton†† has given good reasons for supposing that unnatural compression of the abdomen during pregnancy may be productive of the change. At the same time, he admits the difficulty of the explanation.

Prognosis. Considering the serious nature of transposition of the great vessels of the heart, and occasionally the apparently insufficient nature of the compensation afforded—viz., simple patency of the foramen ovale—it is difficult to conceive how life could be long maintained. Its duration, however, appears to range within comparatively wide limits. While in some cases death has happened almost in a few hours, in others the subject has survived even for years. In the case I have narrated, the child lived two years and eight months. In that recorded by King, two years and nine months were attained. These, with one most remarkable exception, are the longest known instances of the duration of life under such circumstances. This exception is in the case recorded by Nasse.* The subject actually reached the age of nineteen years and some days. Here the foramen ovale was patent, but only to the extent of admitting a crow's quill. The ventricular septum was also defective to the extent of nine lines. From the anatomical results in this remarkable case, it might be inferred that deficiency of the ventricular septum was much more favourable to the prolongation of life than might perhaps appear from an analysis of the cases of transposition extant. But, in some cases with both auricular and ventricular septa defective, life has not been long maintained. In the case observed by Meckel of transposition of the vessels occurring in a lamb, the foramen ovale, ventricular septum, and arterial duct were all open; yet the animal only lived two days.†

Diagnosis. It has been generally considered impossible to arrive at a knowledge of the existence of transposition of the vessels during life, either by the symptoms, or by the usual methods of physical investigation. And, considering the extraordinary rarity of the affection, it is certainly probable that this opinion will long maintain its ground. Still, reflecting carefully on the morbid anatomy of the cases recorded in the third series, there are, unless I greatly mistake, at least the elements existing for a possible diagnosis. Cases of transposition may at once be separated from the more ordinary congenital malformations connected with obstructive change of the orifice of the pulmonary artery. In this common class, the narrowed outlet reveals itself mostly by murmur, and by inference we estimate the coincident or consecutive changes. In transposition of the vessels, abnormal though the circulation be, yet in no sense can it be said to be obstructed. The cyanosis, as before hinted, when existing, can certainly depend upon no pulmonary stasis from impeded egress through the pulmonary artery. The blood freely passes the outlet, and permits the valves to close normally after it. But it is from the manner in which these valves close that some information may possibly be derived. If we glance at the cases of the third series (and at some of the first and second), it will be perceived that, in all the former, the pulmonary artery was absolutely or relatively much enlarged. In D'Alton's case, and in my own, this is obvious. On examining D'Alton's plate, it will be seen that, as in my case, the pulmonary semilunar valves are remarkably large. These valves, then, theoretically, should close with a sound proportionately louder and more marked than those of the aorta. This occurred practically in the case now brought forward. It would, therefore, appear that if, in a case presenting the ordinary symptoms of malformation of the heart—without pulmonary or other disease to complicate it—the heart, though increased in impulse, has its sounds clear and normal, save in regard to an unusually marked second sound at the second and third left costo-sternal cartilages, we may

* We must bear in mind that, no obstruction of the orifices existing, the *necessary* permanence of this channel was not essential. The cases of the series show that *one* permanent fatal way suffices. But, even if thought necessary to reserve this point, the explanation of cyanosis is, certainly, not afforded by the more ordinary theory of *pulmonary stasis*. The theorem of Cruveilhier (*op. cit.*, t. iv, p. 374) would demand modification. The tint must obviously be due to the circulation, through the systemic vessels, of non-oxygenated blood. For the consideration of the question how far the blood, *per se*, can influence cyanotic tint, consult Kreysig (*opus posth.*), *Krank. des Herz. im allgemein und auf ihrer erst. Entwickelungstufe*, pp. 232-3; also, Hamernjk, quoted by Henle, *Handbuch der Rationel. Pathol.*, B. 2, s.

† Farre, *op. cit.*

‡ Nasse, *Reil's Archiv.*

§ Gintrac, *Sur la Cyanose.*

‖ It must be admitted, however, that a case by Nasse, *Leichenöffnungen, Erst. Theil*, p. 167, opposes this view, he expressly states "Von der Thymus was nichts zu finden."

¶ *Vide* Friedberg, *op. cit.*, p. 96.

** *Vide* Von Baer, *Erster Theil.*

†† *Op. cit.*, p. 23.

* *Leichenöffnungen, Erster Theil.*

† For much valuable and interesting detail respecting the epochs at which death occurs in cyanosis generally, I must again refer to the elaborate and practical essay of Nasse, in the *Archiv für die Physiologie* of Reil and Autenrieth, Band 10, s. 239 *et seq.*; also Horner, *Diss. de Cyanosi*, 1832.

be justified in *suspecting* that it is one of transposition of the vessels of the heart.*

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

REMOVAL OF RIGHT SUPERIOR MAXILLARY AND MALAR BONES.

By Robert M. Craven, Esq., Hull.

[*Read Sept.* 23, 1863.]

I purpose to-day to give you an account of a successful case of removal of a large growth, involving the right superior maxillary bone, to effect which it was necessary to remove the whole of the superior maxillary and malar bones.

I have the more satisfaction in doing so, because I have the opportunity of showing you the morbid growth removed, and also the patient, who, I am justified in saying, behaved most heroically under this formidable operation. The interest in a case such as this is, of course, very much increased when one can illustrate a description, and thus give a more practical bearing to the subject. I also had a photograph taken before the operation; and you can, therefore, see him as he was and as he is.

Erichsen, in his work on *Surgery*, states that the operation of excision of the upper jaw together with the malar bone, was first performed by Gensoul in France, and Lizars in this country. To Liston and O'Shaughnessy, we are very much indebted for our knowledge of the diseases and operative procedures necessary for the removal of diseases of the jaws.

I will now proceed to give a brief history of the case, the subject of my remarks.

Thomas Hotham, married, aged 44, agricultural labourer, residing at South Cave, near Hull, was admitted into the Infirmary under my care on June 25th, 1863, with a large tumour of the right cheek.

Projecting from the right cheek was a rounded tumour having the size of an orange. It extended from the external process of the frontal bone and zygoma above to the angle of the mouth below (almost completely closing the right eye), and from the side of the nose to the ramus of the lower jaw. The colour of the integument was natural, except at the upper part below the eye, where it presented a rather livid appearance, and several veins, not of large size. It was very firm to the touch, but elastic, especially at the outer part. Pressure and handling caused little or no pain. The interior of the mouth on the right side, from the alveolar process (which was concealed by the growth or embraced in it) to the inside of the distended cheek, presented a large excavated sore of a greyish sloughy aspect and fœtid odour. This part of the tumour was softer to the touch than that which showed itself externally. It did not encroach on the palate, which was of the natural width. There were no enlarged glands beneath the jaw. The patient seemed a healthy man.

History. The tumour had been growing seventeen weeks. His attention was first attracted to a general swelling of the cheek (at that distance of time) and inside the mouth, resembling the swelling caused by a gumboil. He had no pain in it, but a feeling of numbness. At the end of about five weeks, he showed it to a medical man in his village, who recommended him to use soothing applications, and to have a tooth drawn if the swelling did not subside. The gum was lanced shortly afterwards. Several of the teeth became loose; and as they were much in his way, he pulled them out himself. He had not noticed that the tumour had grown more rapidly of late; and there had been no increase of pain in it. He had always enjoyed good health. There was no history of tumour nor of malignant disease in his family.

The tumour was believed to be of malignant character.

A consultation was held on the case; and all unanimously recommended the operation, which I will now describe, and to which the patient most readily assented; indeed, he seemed to have made up his mind before he came to the hospital to be rid of it if possible.

June 27th. Chloroform was administered, but could not be continued on account of the seat of the disease, except by every now and then discontinuing the operation, which, of course, would have considerably lengthened the proceeding. All were struck with the firmness and heroism of the man, who hardly ever murmured or groaned. The central incisor tooth of the right side was first extracted. An incision was then made in a semicircular line, from the external angular process of the frontal bone into the angle of the mouth. From the upper end of this incision, a cut about an inch in length was carried along the zygoma. Another incision was made from the nasal process of the superior maxillary bone down to the side of the nose round the ala, and through the centre of the upper lip into the mouth. The flap thus formed was carefully dissected upwards, and detached from the tumour in front up to the margin of the orbit. The finger was passed into the orbit to separate the eye, etc., from the floor. The zygoma and external angular process of the frontal bone were then cleared of their soft parts and defined, so as to allow of the correct adaptation of the bone-forceps. The zygoma was first divided by the forceps; and then the external angular process of the frontal bone. The nasal process of the upper maxillary bone was then cleared of all soft parts, defined, and divided by forceps. An incision was now made with a bistoury along the side of the nose, and through the soft parts covering the alveolar process and extended along the soft parts of the palate near to the mesial line. A small saw was used to cut through the alveolar process; and the palate process of bone was divided with bone-forceps. The whole mass, being now only attached by some soft parts and a portion of the palate bone, was easily removed by a stroke or two of the bistoury and forcibly pulling it down. There was nothing like the hæmorrhage one has seen, and would expect, considering the formidable nature of the operation. Two or three ligatures only were required.

The appearance presented after removal, and before the edges of the wound, etc., were brought together, was most ghastly. All bleeding having ceased, and no doubt existing that the whole of the diseased growth had been removed, the cavity left was filled with charpie to give support to the cheek. The flap was then replaced, and carefully brought into neat apposition by means of hare-lip pins and silver wire sutures. A pin was placed in the upper lip, and another at the angle of the mouth. The remaining parts were brought together by suture.

Scarcely any deformity was apparent after the operation; and the man was removed in a comfortable state to his bed. A pad of wet lint was placed over the face. Milk or gruel were ordered as diet.

When seen in the evening, he was very comfortable and tranquil.

June 28th. He passed a very good night; and took milk readily and easily. The wounds looked very well; there was little or no oozing.

* The case recorded, seems also to bear upon the question of murmur as engendered at the foramen ovale. Here, if ever, the condition would probably have existed for the production of such murmur from the apparent necessity of a current through the foramen, guarded, in part, by the remains of the valve. Murmur, however, was at no period detected.

June 29th. He was doing well. Beef-tea was ordered.

June 30th. The dressings were removed from the wound. The incisions had united by the first intention throughout their entire course. There was a little discharge from the right nostril. Simple dressing was applied on lint to the wound. He had a little œdema of the lower eyelid.

July 2nd. About half of the charpie was removed by dressing-forceps. The pin was removed from the upper lip.

July 3rd. More of the charpie was removed, and a little fresh inserted.

July 5th. Two or three sutures were removed. There was not much discharge.

July 7th. The wound was all healed, except where the ligatures were hanging out. All the charpie was removed, and, as the cheek kept its form, no fresh was applied. Four ounces of wine daily were ordered.

July 8th. He began to eat a little, very carefully.

July 9th. More of the sutures were removed. The ligatures came away with the dressing. The wound was quite healed by the middle of the month.

August 1st. There was some depression of the cheek. He could not voluntarily close the right eye, apparently from inaction of the orbicularis palpebrarum; but he said it closed during the night. He now took solid food easily; but had some little difficulty in drinking.

August 6th. He was discharged cured.

He has been once or twice at the hospital since he left. There is very little deformity of face. The eye appears more natural; the patient seems quite well.

Examination of Tumour after Removal. It was rounded and lobed, especially that part which occupied the pterygo-maxillary fossa; and was firm on section. The cut surface was smooth, becoming slightly granular after prolonged exposure. The central part had a pinkish or yellowish-white colour. The circumference was more vascular and purplish; in places even of a green colour. There was no appearance of fibrous tissue on the cut surface. To the naked eye, the tumour had the appearance of a malignant growth. Under the microscope, the juice scraped off the cut surface showed no fibrous element; but simply a mass of apparently broken-up cells and granular matter.

In concluding my remarks on this case, I wish to express the obligations I am under for the valuable assistance and advice rendered me by my colleagues during the operation. Without further comment, I will ask you to examine for yourselves, the photograph, the morbid growth, and the subject of the operation himself.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By H. Colley March, M.B.

[*Concluded from p.* 634.]

Small-Pox.

There was an interesting debate on the subject of small-pox, in consequence of that malady having broken out in the town. Recent writers have looked upon contagion as of two kinds, *common and specific*, and consider that they present the following four distinctions.

1. For common communicable inflammation to be communicated, no *predisposition* is requisite, but only sufficient immediate contact; whereas specific inflammation can engraft itself only where certain *textural predispositions* exist.

2. Common communicable inflammation seems to be related to *growth*, or *corpuscular development*; whereas specific inflammation relates to *corpuscular destruction*.

3. The susceptibility to common communicable inflammation seems to reside in the common vitality of the germs of textural growth; whereas the susceptibility to specific contagion seems contingent on the parenchymatous presence of lifeless, or relatively lifeless, organic compounds.

4. In the products of common communicable inflammation, the predominance of *pus* is a marked, and probably essential fact; whereas the specific contagia seem *not* to produce suppuration, except by indirect inessential ways. (*Simon.*)

Now, such inflammations as small-pox and measles are undoubtedly of a specific kind, and as such belong to the second part of the preceding propositions.

Concerning such a specific inflammation as small-pox, it has been noticed: "That in the first evolution of certain textures of the body, there normally arise certain *waste products*, which, it seems, under ordinary circumstances, are difficult of destructive conversion, and therefore tend to an indefinite loitering in the part, or in the system; and these waste products can be stimulated into destructive conversion *only by the contact* of *similar material already thrown* into its *specific process of decay*."

Small-pox is a beast of prey, from which Jenner has extracted the claws and the teeth. Before this operation, the horror of its ravages was unutterable. Perhaps its most notabte doings were upon the American continent. When Columbus visited its shores the disease was unknown, and consequently whole nations were absolutely unprotected. Hence, when three hundred years ago it was imported into Mexico, the slaughter it caused was terrible; and in the single province of Quito, in twelve months, it destroyed a hundred thousand Indians. Indeed, of some tribes, such as the Mandans and the Assiniboins, it made a clean sweep.

In Europe its effects were equally deadly, though, being spread over a wider interval of time, they were less noticed. It is a curious fact that, in the East, its onslaught had been resisted for ages past by the practice of inoculation. This artifice is known to have been employed by the Chinese as early as the sixth century, and by the Brahmins from the most remote antiquity.

It is a wonderful thing, and very interesting too, when viewed in connection with certain phenomena of vaccination, that when the contagion of small-pox enters the system by its ordinary path—the lungs—it produces such terrible effects, speaking of unprotected persons, as to kill as many as 35 per 100; but when, on the other hand, it is introduced by a puncture in the skin, its effects are usually slight, and it kills as few as 1 in 376.

But though inoculation is a good thing in its way, there are two very great objections to it. 1. It acts fatally on a certain, though a small percentage; and 2. A person inoculated with the disease is just as dangerous to others, exhales a vapour just as contagious, as one who has received the disease naturally; and so would be a constant source of infection to those numerous individuals whose feeble state of health would not permit inoculation to be practised upon them.

Vaccination, on the contrary, when performed with good lymph on a healthy person, is simply harmless to himself, while he diffuses no atmospheric infections to others.

Vaccination, however, had to pass through the usual ordeal. At first, the "bestial humour", as it was called, was set at nought; then Leviticus was quoted against it; and finally, it was asserted that it had been previously discovered in Germany.

It seems certain that vaccinia and variola are practically identical; for a cow has often been inoculated with variolous contagion, and from the pustule produced children have been vaccinated, the result being a true Jennerian vesicle and nothing more, with absolute protection from small-pox. As the system of the cow merely produces some modification in the poison, it is rather to

be expected than otherwise that occasionally it shall happen that in some peculiar *human* system the vaccine contagion will be *reconverted*, so to speak, into the variolous. This, some observers say, they have seen; and Mr. Ceely states that there is often an eruption which, occurring on or about the acme of the vaccine disease, appears in solitary or grouped papulæ, which in less than twenty-four hours become vesicular, and run the course of varicella, sometimes causing serious indisposition. Mr. Young has seen similar cases.

It would seem probable that the occurrence of such secondary vaccine eruptions renders the protective influence of vaccination more complete. At all events, it is certain that, when such a state of things is imitated; when, that is to say, a large number of vaccine vesicles is produced, there is afforded greater protection than when a smaller number is effected. And this is the proof. The number of deaths from post-vaccinal small-pox, when the number of cicatrices on the arm of the vaccinated person has been four, is less than 1 per 100; with three cicatrices, 2 per 100; with two, 4 per 100; and with only one cicatrix, the number of deaths has been 7½ per cent.

That the protection that a vaccinated person enjoys should be liable to be lessened in the course and changes of time is not to be wondered at, when it is found that persons may have small-pox itself a second time. Thus, in fifteen years, there were admitted into the Small-pox Hospital forty-seven cases of post-variolous small pox; and nine of these died.

It has been calculated from copious statistics, that of persons vaccinated in infancy, as many as a *full third* are, when twenty years old, susceptible of re-vaccination. These persons, therefore, though it is not certain that they would all take small-pox, were they exposed to its contagion, yet are undoubtedly endangered. The question, therefore, arises, whether re-vaccination *restores* protection to those who have thus lost it. Unquestionably it does. Before re-vaccination was established in the Prussian army, the yearly average of deaths from post-vaccinal small-pox was 104; while, since its establishment, the annual number for twenty years has been two.

It may be stated, however, as Mr. Marson's very strong opinion, that if vaccination be performed with bad lymph, or otherwise mismanaged, in infancy, it may never afterwards take effect properly; *and yet* protection from small-pox is not afforded.

Mr. Young has made an observation somewhat similar: that if a primary vaccination have been followed by no visible result, and a re-vaccination be made on the eighth day, this will, if successful, run its course more quickly than usual.

It is an important matter that there is reason to believe that the vaccine contagion loses some of its power and protectiveness by long descent from the cow—by long continued transmission from arm to arm. In Prussia, such continued transmission has prevailed very extensively, and the following seems to be the result. Re-vaccination was introduced into the Prussian army in 1833, and was then successful in 33 cases out of 100. Every year this percentage has steadily increased till, in 1854, 70 successful vaccinations were obtained out of every 100 previously vaccinated. The experiments made amount to above a million in number, and are highly suggestive.

The following observations, relating to the same subject, have been made in this country. The vesicle produced by contagion freshly derived from the cow maturates on the eighth day, and desiccates on the seventeenth. This was the case with the vaccinia that Jenner introduced in the year 1797. In 1836, or forty years afterwards, the vesicle produced by the same transmitted lymph, though maturating on the eighth, desiccated on the twelfth day. In this year fresh lymph was procured; and the vesicle it caused was found to desiccate, as it ought to do, on the seventeenth day. This lymph continued to be propagated till 1844, or for eight years, when the desiccation was found to occur on the thirteenth or fourteenth day. Moreover, it is well known that the febrile symptoms of vaccinia are much more marked when the disease is of recent, than when it is of old descent.

These facts seem to proclaim the desirableness of recurring to the cow for fresh lymph every few years.

One of the most important points of all, however, is whether diseases, especially syphilis and skin-diseases, can be communicated by vaccine lymph. A few striking facts may be mentioned.

Sometimes it happens that a person has been vaccinated too late to prevent an attack of small-pox, and the two diseases come to be present and well marked at the same time. Now, if lymph from the vaccine vesicle be introduced into the arm of a child, what happens? *Simply vaccination; never* the communication of variola.

Again, a person has been purposely inoculated with a mixture of vaccine lymph and the ichor from a chancre; and the result has always been *simply a chancre; never* a vaccine vesicle.

Once more, the same operation has been performed, this time with a mixture of vaccine lymph and gonorrhœal matter; and the result has been reversed—*always* a true Jennerian vesicle, capable of healthful propagation; and *never* any evil consequences.

In all these cases, however, the person operated upon was previously in perfect health; for the great principle to be observed, and which was first put forth by Dr. Mead, is, that "it is more material into what kind of body the virus be infused, than out of what it be taken;" or, in other and more definite words, let the subject of vaccination be healthy, and let the lymph be taken from a true *Jennerian vesicle* at the *proper period of its development*, and bad results are impossible, even though the vesicle were developed on the arm of a strumous, eczematous, or syphilitic child. For it is the result of the observation of the greatest authorities, that, if the lymph be bad or contaminated, the vesicle will not be a true one, but, by its departure from its typical character, will at once betray itself.

But the vesicle must not only be *true*, but at its *proper period of development*—about the eighth day, but certainly before the development of the areola; otherwise erythema and erysipelas may be produced.

It is true that, in unhealthy subjects, vaccination will cause mischief; and in *predisposed* subjects, it may excite eczematous or even syphilitic eruptions; and, if blood be drawn with the lymph (if the great Rivalta case can be relied on, and this is not certain), it is quite possible that syphilis may be propagated. But, concerning such things, it has been well observed, that "it is no argument against bread, that alum constipates the bowels; still less is it an argument against quinine, that some drunken shop-boy may give one strychnia instead of it."

With respect to the vaccinal cicatrix: to be good and typical, it must be "radiated, indented, foveated, and averaging five-eighths of an inch in diameter."

Such were the chief points touched on in the interesting debate of the Society.

The outbreak of small-pox in the town seems to have presented no unusual characters. Mr. J. Workman has had a case, in the person of a strong navvie, in which the vesicles, as they formed, became filled with bloody serum; and, as they were pretty thick, he appeared almost black. There was also some bloody discharge from the mouth and bowels. This peculiarity, however, did not seem to affect him, as he passed through the disease very favourably, and rapidly convalesced.

Finally, we may ask whether the hope that Jenner expressed to Parliament, that small-pox will be ultimately

annihilated by vaccination, is likely to be fulfilled. In order to answer this, another question must be asked: How did small-pox originate? Clearly, it must either have been specially created by the Deity, or have arisen spontaneously. The first alternative I absolutely refuse to believe; while, if the second be accepted, it must follow that, *under favourable conditions*, small-pox may at any time arise *de novo*.

A recent writer in one of the medical journals has asserted that, if one accept the spontaneous origin of such a disease as variola, one must, by a parity of reasoning, accept the doctrine of the spontaneous generation of organic life. It is hardly necessary to expose a fallacy that lies so close to the surface. What is called "spontaneous generation" relates to the production of life: the spontaneous origin of disease relates to the processes of decay and of death. It is one thing to say that a being can, by a fortuitous concourse of atoms, come into existence: it is a widely different thing to say that the living particles of matter of which organic beings are built, and which must die in some way or other, may, by a favourable concurrence of circumstances, die in some strange mode, and under chemical reconversion in some new manner.

Hence it may be believed, that till vaccination be perfectly and universally performed, and till the conditions out of which small-pox may arise be understood and removed, this revolting disease will ever and anon revisit us.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

ABSTRACT OF A PAPER ON PUERPERAL INSANITY.

By S. Monckton, M.D., Maidstone.

[*Read at Maidstone, October 30th*, 1863.]

[Dr. Monckton, after speaking of the peculiar interest, domestic and professional, that usually surrounds a case of puerperal mania, and of the want of clearness in our knowledge of this sort of disease, and of certainty and success in the treatment of it—a state of things that chiefly arise from the hidden nature of the phenomena presented during life, and the almost entire silence of anatomy after death—proceeded to remark, that undoubtedly puerperal insanity, as commonly so called, was a diverse thing, and presented itself under forms widely differing in their essence one from another. He proposed to contemplate the disease under four heads.]

1. Puerperal phrenitis.
2. Mania occurring to a patient naturally prone to insanity, while that patient is under puerperal conditions.
3. Mania partaking more of the character of delirium, and dependent evidently on brain-function disordered from without.
4. Cases where the patient is possibly not maniacal, and in which the grand change consists in altered cerebration, from what may be termed an intrinsic dislocation of brain-function.

To save time and reduce the amount of description, it may be well to take each definition by itself, to recite a case illustrative of that particular group, to give a few words of comment, and then pass on to the next group.

Group I. *Puerperal phrenitis* is a term occasionally met with in systematic writers, and must be held to signify an attack of inflammation befalling the brain-substance or brain-membranes at a time when the patient is more or less affected by childbed conditions. In the sense of a simple inflammation, I never saw a case of this sort, and have failed to find one unmistakably recorded. Such examples must be amazingly rare, and can only be dealt with on general principles, as we would deal with a pleurisy or pericarditis occurring to a woman in childbed, but having no connexion with the puerperium beyond what is derived from contemporaneous existence. Should such a case arise, it would almost infallibly be of a low congestive type, and not improbably the result of some animal poison in the blood. We come next to

Group II. *Mania attacking, under puerperal conditions, a patient prone to insanity.* Of this the following offers an example. Mrs. S., aged 37, mother of three children, was confined, after a severe labour, of the fourth. There was distinct history of insanity on the side of both parents. During the first twelve months of her married life she had evinced very grave eccentricities; and it had become necessary for her husband, a dissenting minister, to change his sphere of duty for the purpose of securing variety of scene and circumstance for his wife. The first three labours were not followed by any unusual mental disturbance; but, about the fifth month of the fourth pregnancy, she experienced a fortnight's attack of what may be called morose mania, unaccompanied by any uterine or physical disorder, beyond depraved appetite and constipation. She threatened the domestic, refused to move out of one room, or to touch food while being looked at. This passed away, and she completed the term of utero-gestation without mishap, suffered a rather protracted and trying labour, and did perfectly well for one week. On the eighth day, an alteration in manner was observed; she disliked her husband; refused to speak for hours, and at last answered, muttered, or shouted incoherently; strong religious delusions, sometimes cheerful, sometimes despairing, took possession of her; and by the end of the third week she was absolutely mad. During this time there had been little bodily disturbance; the pulse was generally quiet; the lochia were diminished, but not suppressed with any abruptness; and the milk continued to a fair amount, so that she could suckle the infant that we dared not leave with her in bed. There was no rigor, no abdominal pain nor headache; and fever of all sort was practically absent. The treatment adopted was simple enough, consisting of purgative and sedative remedies, absolute seclusion, and moderate restraint. In a mental point of view, she became worse every week, and was soon placed, for security and better management, in a large public asylum. Here she remained nearly seven months; and was then, after the manner of such institutions, discharged cured. In ten days more, she poisoned herself with sulphuric acid.

A second case, that may be used to illustrate this particular group, occurred in the person of a middle-aged woman, most respectable, and of exemplary character, though in humble life. She became the mother of three healthy children without the development of any untoward mental manifestations; although, in one branch of the family, lunacy could be traced. Three months after the birth of the fourth child, she shewed evident signs of cerebral disorder, partly as headache and conscious confusion, partly in altered habits and feelings. She took to her bed; lay for hours with closed eyes, though awake all the time; and went occasionally into fits of excitement, either in the shape of unmeaning despair about herself, or of demonstrative affection for her husband. In this instance, again, the bodily health was little deranged; pulse calm; milk undiminished; flesh, strength, and every function, up to an average point. I saw her but once, in consultation, at this stage; suggested a continuance of the rational remedies that had been made use of, and pointed out the probability of her becoming worse and worse for a time in regard of mental soundness. Three months afterwards, she came before me again, raving mad, and was consigned to a lunatic asylum.

Here, then, we have two examples of what can only be regarded as insanity, that might have occurred at any time, taking occasion by the puerperal condition, and occurring then; in one instance during gestation,

and just after delivery; in the other at a later period, when lactation had been going on for three months. The features common to each were the existence of a lunacy taint in the family, the commencement of the symptoms without recognisable or adequate cause, the prominence of the mental disorder, and the absence of mischief to the bodily health. In all the groups before us we shall find, of necessity, disordered cerebration; but the main point of this paper is to invite attention to the fact that this disorder may affect the cerebrum and the patient in very different ways, producing diseases as separate from one another in their nature and effects as delirium tremens, mania, and tetanus; to point out that, though in all cases grouped together in ordinary practice as "puerperal mania" (a term that, according to my views, would require very considerable modification), the encephalic centres will be found to suffer, they sometimes do so as intellectual centres; sometimes as partakers of a general disturbance, as in delirium, toxæmia, and impressions from without; and sometimes, most fatally of all, do they suffer in that relationship to the functions of organic life which undergoes important change as a necessary consequence of the pregnant and parturient conditions.

Group III will comprise those cases wherein the mental perturbation is rather of the nature of delirium than of true insanity at all, and wherein this delirium is traceable, more or less clearly, to some blood-grief or bodily lesion capable of producing it; in which, therefore, as we have already expressed it, the brain has become disordered from without. Here is an example.

Mrs. B., aged 28, was confined in March 1861 of her fourth child. She did well for more than a fortnight; then suffered from sore nipples, obstructed milk-ducts, and final abscess in the left breast. Before confinement, she had been subjected to a series of mental shocks. She had nursed her mother laboriously for some weeks, and then seen her expire, while she herself was completing the sixth month of pregnancy. Her own child had died in convulsions a month later. Then came the labour; then the painful maturation of a mammary abscess. While the matter was forming—*i. e.*, about three months after confinement—she first showed an unwonted timidity, obstinate wakefulness, and foreboding of evil. She sweated intensely; lost much flesh and strength; but the milk in one breast, urine, and lochia, continued to flow. After the abscess broke, she improved in health and spirits for a day or two; then became again excited and aberrant, then delirious and raving. She saw people in her room; declared that absent and dead friends were round about her; that she was still undelivered and flooding. She rattled on very rapidly, and wore a frequent expression of terror and tremulous haste, sometimes eating, sometimes refusing food. Pulse quick; skin often bathed in perspiration; occasionally sleeping, but not often, unless under the influence of powerful narcotics. This went on without a distinct lucid interval for about twelve days; then she became sleepy, slept almost constantly for several days, awoke coherent but exhausted, and then rapidly recovered.

Here we find almost a typical case of traumatic delirium tremens; the breast-abscess consummating the overthrow of brain-equilibrium, for which previous and successive exhausting causes had prepared the way. Doubtless, some of those who hear me have seen cases where temporary mania of the delirious type has been set up after delivery by the onset of scarlet fever or other illness; and I remember one case wherein delirium persisted for four or five days with febrile excitement and vomiting, manifestly as the result of low enteric fever caused by a vast accumulation of scybala and worms, only known to exist a fortnight after delivery. Time will not permit me to discuss the connexion (important as the question is) between this disease and albuminuria and convulsions; still it would be wrong to leave the consideration of the group now before us without observing that in it would fall, according to my views, all such cases of puerperal mania as did coexist with albuminous urine; for, under such a combination, it would be impossible to doubt that the mania was the result of a foreign, most likely a toxæmic, irritation.

Group IV is one in which it is possible enough that the patient may not be maniacal at all, and in which the grand change appears to consist in altered cerebration from what may be termed an intrinsic perversion of that department of the brain-function that regulates the operations of organic life. That material changes do occur in the function of innervation, with reference to the commencing and ceasing requirements of child-bearing, is certain enough. After conception, we often see the sour woman become serene, and the serene sour; the fat woman thin, and the thin one fat. The delicate and sensitive will grow almost stolid and robust; while, on the other hand, the hardy frame may be handed over to the miseries of vomiting, palpitations, and syncope. All these and such-like phenomena indicate the occurrence of a certain shunting of the nervous influences which preside over nutrition and growth; for it is certain that, however unobtrusively, in some cases, gestation may proceed, it is never limited to a mere extension in one line of the ordinary nutritional processes; a fœtus is never grown in the same way as an equal number of pounds of fatty tumour. When we contemplate not only the existence of these phenomena, but their striking coincidences and metastases (as when milk suddenly dries up on the occurrence of a new conception, or still more miraculously bursts forth a few hours after delivery), it is palpable enough that not only increased effort, but special machinery, has been called into play. As a matter of necessity, there comes a time when a return to the *status quo* has to be accomplished. May it not well be that such return, if faulty—such involution of brain-force, if misdirected—may bring about a catastrophe as fatal and more abrupt than that which befalls the infant if the evolution of the fœtal into the complete heart fail to be accomplished? It is quite possible to find something of this sort hinted at in different works as vaguely operating in some way as a general cause of puerperal mania. I am asking your opinion as to how far we may exonerate it from all blame in the causation of the preceding groups, and charge it absolutely with producing the distinct attacks comprehended in this Group IV. The two following cases will serve as illustrations. It will be seen that, in each instance, the patient was whizzed out of existence solely, as it appeared, by a runaway pulse, impelled by some perverted condition of the encephalic centres; just as other patients are hurried off by a similar nervous storm affecting the motor apparatus instead of the nutritional, and called tetanus.

Mrs. J., the wife of an excise-officer in the country, aged 44, the mother of nine children, and in good health, was confined of her tenth after a natural and most satisfactory labour. She did well, in the ordinary sense of the phrase, for a fortnight; that is, she had no rigors, no fever, no pain; there was some milk (not much), perfect collectedness of manner, but a very rapid pulse; so that she presented, for more than a week, the daily puzzle of everything seemingly right, with a certainty that there must be somewhere a serious hidden wrong. So isolated was the pulse-symptom, that I strove to learn whether it was always so with her—whether her pulse was constitutionally one of great rapidity. About the seventeenth day, her milk disappeared, and lochia ceased; she became more sleepless, then excited and incoherent; pulse steadily 160; and she was found to have lost much flesh. On the twenty-first day, she was fairly mad; on the twenty-second,

semi-comatose; and on the morning of the twenty-third day she died.

Mrs. M., aged 28, a carpenter's wife, confined with her first child, at full time, three months after marriage. Labour natural; progressed favourably for a week in most respects, though there was, the medical attendant perceived, a something wrong throughout; still no physical error could be found beyond a rapid pulse. I saw her with him on the seventh day. She was lying on her back, looking calm, but depressed. She had no pains, some confusion about the head, but no delirium. She answered rationally, and took food sufficiently well. No sign of abdominal tenderness, of rigors, fœtid discharge, sweats, or blood-poisoning, could be found; still her pulse ran on at over 160. On going down stairs, I expressed to the medical attendant my conviction that it was a case for which no other name had been provided than puerperal mania, ill-fitting as that term might seem to be; that most certainly there was brain-grief of one of the sorts most commonly included under this name; and that I greatly feared she would die. The next day found her incoherent and rambling, and the day after that she died.

We will not enter, even for a minute, on the question of treatment. Wordy and difficult as the consideration of this subject almost inevitably becomes, no mean practical result will have been attained if your experience, past and future, should bear me out in believing that, when called upon to treat any one of the sad forms of disease that are contemplated above, we may reasonably expect to be able to rank it (setting aside phrenitis) under one of three heads—1. Mania for which we may predict the madhouse; 2. Sympathetic delirium, wherein we may expect recovery; or 3. Perverted cerebral involution, that leads too surely to the grave.

Progress of Medical Science.

Fatal Case of Trichinous Disease. Dr. Tüngel of Hamburg had under his care a sailor aged 16, who had, a short time previously, come from Valparaiso. The patient suffered from diarrhœa, with pain in the abdomen. To these symptoms were subsequently added loss of appetite, headache, and violent pains in the limbs, especially in the legs. The skin was hot and perspiring; the face red; the pulse very frequent; the legs, especially the calves, seemed rather tense; the skin generally was very tender on pressure. At a later date, disturbance of consciousness set in; the features became collapsed; there were frequent involuntary alvine evacuations; the breathing became laborious; the cutaneous tenderness continued. As the loss of consciousness and the collapse increased, the temperature and the frequency of the pulse fell; the voice became weak and somewhat hoarse. The patient died in a state of unconsciousness.

On microscopic examination, the muscular tissue was found to contain a number of living trichinæ, not encapsuled; they were most abundant in the thoracic and abdominal muscles, in the diaphragm, and in the muscles of the calves; the heart and the intestines contained none. There were some adult trichinæ, but not many, in the intestinal mucus. Very many of the muscular fibres had a granular appearance, and presented no transverse striæ; in a few spots the trichinæ were rolled in a spiral form and enclosed, but generally they were free—some being small and extended, others bent in different ways, many rolled up. All were alive, and remained so several days, even when decomposition of the muscles had commenced.

On inquiry it was learned, that the crew of the ship had killed a pig which they had brought from Valparaiso, and had eaten thirty pounds of the fresh meat. When the ship arrived at Hamburg, many of the crew had colds and coughs; none complained of muscular pains; the patient and another man had diarrhœa, but the latter recovered in a few days. In the salted meat of the pig, there were found many trichinæ enclosed in transparent capsules. In the case described above, death took place on the twenty-fourth day after infection. (*Virchow's Archiv*, and *Wiener Medizin. Wochenschr.*, 19 September, 1863.)

Infantile Syphilis: Simultaneous Manifestation of Primary, Secondary, and Tertiary Symptoms. In a child aged 2 years, admitted under the care of M. Roger into the Children's Hospital in Paris, there were observed the following lesions. 1. Near the frænum of the upper lip there was a kind of fissure with slightly indurated edges. M. Ricord, who saw the case, pronounced this to be a manifest chancre. The gums were also rather spongy, and there was inflammation of the submaxillary glands. 2. Copper-coloured spots of syphilitic roseola were present on the thighs, forehead, nose, and cheeks; there were also distinct traces of secondary syphilis in the vulva and anus, with redness of the parts and leucorrhœal discharge. 3. Numerous exostoses existed. There were two projections resembling horns on the frontal eminences; each was of the size of a hazel-nut, and was rather soft in consistence (*demi-molle*); the skin over them was not hot, nor changed in colour, and was but slightly painful on pressure. The projection on the right was reddish at the apex, and gave a tolerably distinct sensation of fluctuation (it subsequently suppurated). There was also an enlargement at the lower and inner part of each humerus, that of the left being least marked; both were painful on pressure, but unattended with heat or change of colour in the skin. The patients still improved rapidly under the administration of calomel and iodide of potassium.

M. Roger found that the mother had an imperfectly cicatrised chancre of the lip, and some probably secondary manifestations. He believes that she infected the child, in whom the series of symptoms succeeded so rapidly as to appear simultaneously, instead of at intervals, as is generally the case.

Another instance of this concurrence of the various stages of syphilis occurred in the practice of Dr. Sicard of Nice. He was called in August to see an infant seven months old, of lymphatic temperament, but well formed, which had, on the upper parts of the thighs, on the genital organs, and on the buttocks, an eruption of thin yellow scabs on a reddish base. Where the disease was most recent, there were, in the centre of large red spots, bullæ containing an opaline serosity; and, according to the nurse, the scabs were the remains of similar bullæ which had burst and become dried. There were some rather extensive patches of roseola on the neck. The child's general health was good; it had no fever, took the breast well, and did not seem to suffer. The disease had been noticed for nine days only. M. Sicard was inclined to believe it to be of syphilitic nature; but no trace of syphilis could be discovered either in the parents or in the nurse; and the infant had, up to a recent period, been in good health. It appeared to recover under simple treatment; but, on September 10th, a new series of symptoms appeared. The skin, which was slightly copper-coloured at the points attacked, presented erosions and ulcerations; the pituitary membrane was ulcerated, and yielded a scanty sanious discharge; the cervical glands were engorged; there were signs of onychia on several fingers; and there was an exostosis on the crapital bone, of the size of a walnut, rather soft, painless, and unattended by increased heat or by redness. The child had slight fever, and was thin and restless. Recovery soon took place under the use of baths of bichloride of mercury, and of

iodide of potassium. There was the cicatrix of an ulcer on the lower lip; and Dr. Sicard suggests that the disease was acquired, not hereditary, and that it was communicated to the child by some person other than the parents or nurse. (*Gazette des Hôpitaux*, 17 et 31 Octobre 1863.)

Subcutaneous Injections in Ophthalmic Surgery. Professor von Gräfe has published an article on the employment of subcutaneous injections in ophthalmic surgery. His experiments have been confined to acetate of morphia and sulphate of atropia. The best point for performing the operation is the middle of the temple. He has repeated the procedure at intervals of one or two days, in this region, in several hundred cases; and uses the temple as the place for injection in all cases in which there are not some special indications, such as neuralgia or spasm, denoting that another locality would be preferable. The skin should be well raised from the subcutaneous layer, the cannula well pushed into the cellular tissue, and the skin should be allowed to close round the cannula, so as to prevent return of the fluid. The quantity of acetate of morphia used in Von Gräfe's experiments varied from one-tenth to one-half of a grain, the average being one-fifth or one-sixth. The solution used consisted of four grains of acetate of morphia in a drachm of distilled water; it should be neutral, or only very feebly acid.

The physiological action is the same as when the morphia is taken by the stomach; but it is generally more powerful, and therefore the quantity injected should be less by about one-third than that which would be given internally. The action on the iris is interesting. Frequently, at the end of a minute, sometimes in a quarter of an hour, "opium-myosis" sets in; this is best observed where the sizes of the pupils are compared by a moderate light. The degree and duration of the myosis vary in an extraordinary manner; it many cases it continues well marked for several hours, and goes off slowly. Sometimes, in very irritable persons, and when the quantity of morphia has been relatively large, there is spasm of the accommodation muscle of the iris; when this occurs, it is at a late period—at the end of the stage of irritation.

The most important therapeutic indications for the subcutaneous injection of morphia, according to Von Gräfe, are the following. 1. Shortly after the infliction of wounds on the eyes, when there is very severe pain; as after the entrance of foreign bodies, superficial burns, or wounds with the finger-nail. The pain is subdued more rapidly by the subcutaneous injection of morphia, than by dropping atropine into the eye and applying pressure. Von Gräfe is opposed to the application of leeches after the removal of foreign bodies, in contusions, and after perforating wounds, as they are more liable to produce than to prevent inflammation and suppuration. 2. After operations on the eye, followed soon by severe pain. 3. In the neuroses of the ciliary nerves which accompany iritis, glaucomatous choroiditis, and many forms of inflammation of the cornea. 4. As an antidote to poisoning by atropine; this action of morphia was first pointed out by B. Bell in 1857. 5. In neuralgic affections of the terminal distribution of the trigeminus in the forehead, independent of disease of the eye. 6. In various forms of reflex spasms; as spasm of the eyelids in keratitis after wounds, and in the spasmodic contraction extending over the course of the facial nerve.

In injection of atropine, the greatest caution is required. In some individuals, one-sixtieth of a grain produces general symptoms. In general, the first dose injected should not exceed this quantity; and it may be gradually increased, perhaps to one-twelfth of a grain. According to Von Gräfe, the use of atropine in injection is very limited; and, to produce its mydriatic effects, it is preferable to drop it on the conjunctiva. Even when a large amount is injected, the dilatation of the pupil is but moderate, and the accommodation power of the iris is not suspended; while the desired effect is produced by a much smaller quantity dropped into the eye. In neuralgia atropine injection produced no result, and in spasmodic affections a very doubtful one; so that its employment seems confined to cases where the conjunctiva will not tolerate the presence of the atropine. (*Archiv für Ophthal.*; and *Wiener Medizin. Wochenschr.*, 31 Oct., 1863.)

Local Treatment of Ozæna. M. Trousseau, in cases of idiopathic ozæna depending on a local organic lesion, prescribes various absorbents and disinfectants, which do not, however, prevent the cauterisation of ulcers when present. He uses a mixture of equal parts of subnitrate of bismuth and Venice talc in powder, to be taken like snuff. As a disinfectant, he employs a mixture of two parts of chlorate of potash with fifteen of powdered sugar. White or red precipitates, in the proportion of one part to sixty of finely powdered sugar, is also used, especially if the disease be syphilitic. The first two of these remedies may be used without restriction; the last requires care in its administration. The mercurial powders should be used at an early stage for several days; they should be inhaled into the nose twice or thrice daily, according to the amount of irritation which they produce; a pinch being taken into each nostril, so that the powder may reach all the anfractuosities of the nose. The fœtidity often disappears a few hours after the first inhalations; but the effect is only temporary, and the treatment must be persevered in, regard being paid to the irritation of the mucous membrane which may be produced.

For children, M. Trousseau uses injections of nitrate of silver, sulphate of copper, sulphate of zinc, chlorate of potash, or corrosive sublimate. (*Bulletin de Thér.*, and *Gaz. Méd. de Paris*, 31 Octobre, 1863.)

Fracture of the Lower End of the Radius; Mode of Reduction; Time Required for Consolidation. M. Jarjavay thus describes the method which seems to him best fitted for reduction of fracture of the lower end of the radius. The forearm is placed in a state of pronation, the hand hanging down, while an assistant fixes the elbow. The four fingers of the two hands being crossed together, the edge of the hand next the index finger is placed below the upper fragment, and the two thumbs are crossed over the dorsal aspect of the carpal fragment. The lower end of the forearm is thus embraced in a circle of which the posterior and inferior part rests on the upper fragment, and the anterior and superior part on the lower one. Then, by a simultaneous movement of pronation in both hands, the first of these fragments is pressed towards the dorsal aspect of the forearm, and the last towards its anterior surface. M. Jarjavay says he never hesitates to use any amount of force required, and has not observed any bad results.

As to the time required for consolidation, M. Jarjavay says that in the fourth or fifth days, and *à fortiori* on the seventh, eighth, or ninth, after a fracture of the lower end of the radius, the surgeon may remove the splints, and leave the arm in a sling, allowing the patient to use his hand carefully. If, on the same or the next day, it be ascertained that there is too much mobility or a fresh displacement, the apparatus can be readily re-applied; but if no indication for this appear, the patient will have the advantage of recovering the use of his hand more rapidly than if the splints, etc., had been retained. Of eight patients, the fracture was consolidated in four on the sixteenth day; in one on the fifteenth; in two on the fourteenth day; and in one on the twelfth day. Hence M. Jarjavay concludes that fracture of the lower end of the radius is consolidated

more rapidly than is generally supposed, and that there is at least no danger in removing all apparatus on the sixteenth day, even if the surgeon fear to remove it before this time. (*Bull. Génér. de Thér.*, and *Gaz. Méd. de Paris*, 31 Oct. 1863.)

Reviews and Notices.

GUY'S HOSPITAL REPORTS. Edited by SAMUEL WILKS, M.D., and ALFRED POLAND. Third Series. Volume IX. Pp. 339. London: 1863.

THIS volume of *Guy's Hospital Reports* contains ten papers.

Dr. WILKS contributes the first paper, which is one on Syphilitic Affections of Internal Organs. The author's object is to bring proof, from the resources of Guy's Hospital, in support of the doctrine recognised in modern times—that the internal organs may be affected with syphilitic disease equally with the external. He attributes the non-recognition of this fact until lately, to the circumstance that syphilis has been regarded as a *surgical* disease, and that its manifestations have been looked for only in those parts of the body which are within the reach of sight or touch.

The effects of syphilis on the system are, Dr. Wilks observes, characterised by effusion of lymph; giving rise, for instance, to nodes, condylomata, tubercular eruptions, etc. This effusion takes place not only in external but in internal organs; and Dr. Wilks brings forward from the museum of Guy's Hospital instances which he believes to prove its occurrence in the liver, spleen, lymphatic glands, lungs, larynx, trachea, and bronchi, stomach and intestines, pharynx and œsophagus, muscles and heart, blood-vessels, brain and nerves, eye, teeth, ear, skin, testes, and bone.

The peculiar characters of the syphilitic deposit are thus described by Dr. Wilks. He takes the deposit in muscle as an example. The tumour which may be felt through the integuments,

"Differs from the ordinary class of tumours known as new growths; since the latter proceed from a small point or centre and continually grow on the surface, whereby they become circumscribed, and are constituted wholly of the new material that has been thrown out. This is the case in cancer or tubercle. In the syphilitic tumour, however, the exudation appears to have been in the first place of a soft and albuminous character, and, being poured out in large quantity, has infiltrated the tissue; consequently, when examined, the lymph and the original structure of the part are found incorporated. At a subsequent period, when the tumour has become hard, if a portion be examined by the microscope, the muscular structure will still be found present in the apparently simple, hard, fibrous mass; and thus it is that, if appropriate remedies be given at an early period, the tissue will be left in its integrity after the adventitious material has been absorbed.... The diseased mass is not so circumscribed as a new growth, and the lymph or fibre will be found radiating into the muscular tissue beyond.... If not absorbed by remedies, these tumours become very hard, and then more circumscribed, and remain inert for many years." (P. 17.)

Mutatis mutandis, the same process occurs in the liver, etc.; and, when the fibroid nodules are not seen until they have existed several years, they are characterised by a remarkable cicatricial appearance of the neighbouring parts, the result of contraction of the deposit. It is this interstitial deposit of lymph, and subsequent contraction, which, Dr. Wilks observes, constitutes the disease.

The second paper is one by Dr. HABERSHON, on Pulsating and Aneurismal Tumours of the Abdomen. He gives a very complete account of the symptoms, terminations, diagnosis, causes, duration, and treatment, of abdominal aneurism, carefully noticing those conditions in which pulsation may be produced though an aneurism be not present. The causes of abnormal pulsation in the abdominal region, independently of aneurism, are enumerated as being, hysteria, dyspepsia, functional disease of the ovaries, and pregnancy, local disease in the parietes leading to suppuration, anæmia, dilatation of the heart, aortic regurgitant disease, displacement downwards of the heart by thoracic effusions, and pressure of tumours or enlarged glands on the aorta. Dr. Habershon gives, in conclusion, the histories of sixteen cases — thirteen of abdominal aneurism, and three of non-aneurismal but pulsating tumours.

The third and fourth papers are by Mr. TOWNE, and are in continuation of a series of articles which he is contributing to the *Guy's Hospital Reports*. The first is on the Stereoscope and Stereoscopic Results; and the other on the Stereoscopic Test for the Retinæ. Both these papers must be read in the original to be fully comprehended; they show that the subject of stereoscopic vision has been most carefully investigated by Mr. Towne. The second paper is that which possesses most practical interest, as in it the author proposes the stereoscope as a means of testing the *functional* condition of parts of the eye, just as *structural* conditions are tested by the ophthalmoscope. For making the examinations, he uses slides on which are drawn semicircles to be seen by the nasal and by the temporal halves of the retinæ, and also others on which is drawn the entire field for both eyes. In various defective states of vision, it is found that—as is shewn by the records of a dozen cases—the ordinary stereoscopic results are interfered with, and instead of the two halves of the circle coming well together, one may be higher or lower than the other, or placed obliquely; or there may be a difference in the perception of colour and brightness on the two sides of the field. As far as we can judge, Mr. Towne's suggestion to thus apply the stereoscope to practical purposes merits the attention of ophthalmic surgeons.

The subject of the fifth essay, by Dr. WILKS and Dr. A. S. TAYLOR, is a Case in which a Large Quantity of Nitrate of Potash was taken Medicinally. The patient was a man aged 34, admitted under the care of Dr. Rees, for renal dropsy, and subsequently transferred to Dr. Wilks. In the course of the treatment, nitrate of potash was given, first in half-drachm doses, and subsequently in doses of a drachm and a half, three times a day. The secretion of urine was increased; and, at a period when the man was passing sixty-four ounces daily, the examination of a portion of it indicated that, while he was taking 270 grains of nitrate of potash daily, 158.7 grains of this salt were eliminated in the urine. As to the remainder, the authors do not decide whether it passed away in the form of sulphate or chloride, or by the intestines. The authors comment on the toxicological bearings of the case; and regard it as shewing that, notwithstanding that nitrate of potash

in large quantities is an irritant poison, doses of considerable size may, as in the present instance, be given at intervals, not only with impunity, but with positive benefit; the rapid elimination of the salt from the body preventing any poisonous effects. These remarks they intend to be applicable to other substances also, of a poisonous nature; such as arsenic.

Drs. Taylor and Wilks also contribute the sixth article, On the Cooling of the Human Body after Death. They give a table of 100 cases in which the temperature of the body after death has been noted at intervals. The paper is an interesting one; but its perusal only shews that we have yet much to learn with regard to the subject treated on by the authors.

The seventh paper belongs to the series of contributions to clinical surgery which Mr. Bryant has been placing before the profession. The subject of the present essay is Tumours; and the author discusses the subject in chapters; viz., 1. Some Points in the Pathology of Tumours tending to illustrate the Subject of their Diagnosis; 2. The Sebaceous or Steatomatous and Epidermal Tumours; 3. Certain Forms of Cystic Tumours; 4. Hydatid Tumours; 5. Fibro-cellular, Fibro-plastic, and Fibrous Tumours; 6. Recurring Fibroid Tumours; 7. Cancerous Tumours.

In the eighth paper, Mr. James Hinton describes a Case of Sebaceous Tumour within the Tympanum. The tumour originated in the external surface of the membrana tympani; and the cavity was occupied by bands of membrane.

Mr. Poland next gives a Collection of Cases of Foreign Bodies found in the Stomach and Intestines. He has collected from various sources, and evidently with much labour, the notes of fifty-nine cases in which foreign bodies of various kinds have been introduced into the stomach, small intestines, vermiform appendix, and large intestines.

The recorded cases of foreign bodies in the stomach—thirty-eight in number—denote that the following results may take place:

"1. The foreign bodies may be vomited up. 2. They may escape into the intestines and pass off with the fæces. 3. They may, as in the case of pin-swallowing, traverse the organ and appear at different parts of the body. 4. They may remain quiescent in the stomach for a long period, and the patient die of other causes. 5. They may cause gastritis, indigestion, impaired health, and slow emaciation, with exhaustion, terminating in death. 6. They may cause inflammation and adhesion of the stomach to the abdominal parietes, then produce ulceration and abscess of the parietes, which, when opened naturally or artificially, allows the foreign body to be extracted, and fistula almost necessarily results. 7. They may cause inflammation and ulceration of the stomach, and become engaged in partly traversing the parietes, and then, from want of effort in repair, and from some sudden separation of the adhesions, may perforate the peritoneal cavity, inducing violent peritonitis and death. 8. They may at once, from their sharpness, perforate the stomach immediately, inducing collapse and rapid peritonitis, such as is observed in ruptured viscera." (Pp. 305-6.)

When foreign bodies become lodged in the large and small intestines, the results, as far as can be gathered from the comparatively small number of cases recorded, are the following:

"The symptoms induced are very vague and uncertain, and give no evidence of either the presence or situation of the foreign body: they may consist of acute and chronic enteritis, cæcitis, and colitis, and even peritonitis. The foreign body may cause ulceration of the gut, and induce its symptoms; but it more often would penetrate through, causing the symptoms of perforation, collapse, and fatal peritonitis. It may, again, make its way to the surface of the body by progressive inflammation, adhesion, ulceration, and suppuration, ending in an external abscess, which, when opened, gives exit to the foreign substance. By far the most fatal and complicated condition is the impaction of the foreign body in some part of the gut, such as the lower part of the ileum, the cæcum, etc., causing at first partial, then total, obstruction of the gut, forming what is termed an internal strangulation or hernia." (P. 321.)

In the preceding remarks, Mr. Poland excludes altogether concretions acting as foreign bodies. He briefly alludes to the operations of gastrotomy and enterotomy for the purpose of removing the foreign bodies, and at present is not favourably disposed towards gastrotomy. He promises, however, to return to the subject on a future occasion, in introducing some remarks on penetrating wounds of the abdomen. In this way, he expects that we may "learn from nature her successful modes of performing the repair of accidental gastrotomy and enterotomy."

The last paper in the volume is a chemical one, by Dr. A. Dupré, entitled Some Observations on the Iodic Acid Test for Morphia.

"Having frequently observed," he says, "that students failed to obtain the blue iodide of starch by the action of iodic acid on morphia, even when using quantities of the alkaloid much more considerable than are generally alleged to yield the result, I have been induced to examine into the circumstances most favourable for the successful application of the test." (P. 323.)

Such is an outline of the contents of the last volume of *Guy's Hospital Reports*. The papers shew much work on the part of their authors, and, if not all considered of direct practical bearing, must still be regarded as presenting many points of scientific interest.

Transactions of the Pathological Society of London. Volume Fourteenth. Comprising the Report of the Proceedings of the Session 1862-63. Pp. 301. London: 1863.

This volume contains, as is the custom in the volumes of the Pathological Society's *Transactions*, accounts of various specimens exhibited at the meetings of the Society.

Among the cases of Disease of the Nervous System are some instances of plugging of the cerebral vessels by emboli, and of intracranial suppuration.

In the section alloted to Diseases of the Respiratory Organs, the principal contributor is Dr. Gibb, who exhibited numerous instances of various forms of laryngeal disease. Mr. Teevan gives two cases of very rare occurrence—a deposit of fat on the pulmonary pleura. In both cases, pleural adhesions existed.

In the section on Diseases of the Vascular System is a very able report on cases of Dissecting Aneurism, by Dr. Peacock. The term "dissecting aneurism" appears to have been first used by Maunoir, who described the lesion in 1802. Since that time—and especially since 1849—a large number of cases have been recorded; so that Dr. Peacock has been able to

obtain the histories of eighty cases where the disease existed in a well-marked form.

He describes this form of aneurism as presenting three stages. In the *incipient stage*, "there is a rupture or destruction of a part or the whole of the internal coats of the vessel, and an extravasation of blood to a limited extent between the external and middle coats, or, more probably, in the laminæ of the latter." In the second or early stage of the fully formed aneurism, the blood is extensively effused between the middle and external coats, or between the laminæ of the middle coat. Most of the recorded cases have been in this stage. In the *advanced stage*, there is "an opening through the internal coats of the vessel, leading into a sac situated within the arterial tunic, and extending to a greater or less distance along the course of the vessel. The sac is lined by a distinct membrane very similar to the natural lining membrane of the arteries;" and not unfrequently it reopens into the vessel or into some of its primary branches.

With regard to the relative frequency of dissecting aneurism in the two sexes, Dr. Peacock finds that, of 72 cases, 39 occurred in males and 33 in females. As to age, the records of 68 cases shew that in 11 instances the patients were between 40 and 50; in 18, between 50 and 60; in 10, between 60 and 70; in 10, between 70 and 80; while in 12 the ages varied from 17 to 40, and in 3 the patients were respectively 84, 88, and 95 years of age.

As to the situation of the perforation and extent of separation of the arterial coats, Dr. Peacock has given a very careful analysis of 73 cases. We cannot follow him through all his details, but will note a few of the principal points.

"Of 73 out of the 80 cases collected, including those only in which the disease was fully formed or of the second and third stages, the internal rupture was situated near the origin of the aorta, or in the ascending portion of that vessel, in 55 cases .... near the origin of the arteria innominata, in 7 cases .... at the commencement of the descending thoracic aorta and beyond the origin of the left subclavian artery, in 8 cases .... in the abdominal aorta, in three cases."

The lesion in all cases appears to arise primarily in the aorta; but it may extend to other vessels, especially—as would be expected—those arising from the lower part of the vessel. Thus, while it does not seem that the separation of the coats ever affects the carotid or subclavian arteries, instances have been observed in which it has reached the renal arteries, the iliacs, and even the popliteals.

After some statistical observations on the state in which the aorta has been found (*i.e.*, generally diseased), and on the mode of formation of dissecting aneurism, Dr. Peacock notices the cause of death. The following are the conclusions at which he arrives from an analysis of the recorded cases.

"1. When the internal ruptures are situated near the heart or in the ascending aorta, or at the commencement or transverse portion of the arch, the probability is that the patient will die suddenly, or only survive for a few days. The fatal result is usually in such cases determined by the escape of blood into the cavity of the pericardium, or more rarely into the cellular tissue and left pleural cavity, or by the rupture of the whole of the coats of the vessel in some other part, or of one of the cavities of the heart. The patient may, however, rally from the first effects of the shock, and survive for some months or years, and die ultimately from the cardiac disease and symptoms of obstruction to the circulation occasioned by the formation of the aneurism, or from secondary disease of other organs.

"2. When the internal ruptures are seated at the termination of the arch or in the descending portion of the thoracic aorta, the patient may also die suddenly, or may only survive for a few hours or days, the fatal event being determined by the escape of blood into the left pleural cavity, or more rarely into the cavity of the pericardium or cellular tissue of the mediastinum. The patient is also more likely to survive than in the former case, and only to sink ultimately from secondary disease of the heart and other organs.

"3. When the disease is situated in the abdominal aorta, the immediate effects of the rupture are less obvious, and the patient will probably die from slowly induced disease of the heart and aorta, or from other affections.

"If the disease be situated near the origin of the aorta, when the sac ruptures the external laceration generally follows a longitudinal direction, and the pericardium may give way at the same time, or may temporarily resist the pressure, so that blood may be effused beneath it and into the cellular tissue of the adjacent parts. The pericardium may be extensively torn, or the blood may escape by a small opening, or may transude without any distinct fissure." (Pp. 98-9.)

This able report is rendered complete by a carefully compiled table of the eighty recorded cases of dissecting aneurism.

Dr. Peacock also contributes, in the section on Diseases of the Organs of Digestion, an historical report on diaphragmatic or phrenic hernia.

In the same section, Dr. Leared notes a case which he saw in the summer of 1862, in the practice of Dr. Hjaltelin of Reykiavik in Iceland. The patient was a boy aged 10, affected with hydatid cystic disease of the liver. Dr. Hjaltelin punctured the cyst, and removed by a trocar a large quantity of turbid fluid with portions of the cyst-membrane. Subsequently other portions were expelled, and the boy made a good recovery. Cystic disease causes one-seventh of the mortality in Iceland.

As a record of specimens of disease, apart from any attempt to enter on the question of treatment, this volume of the *Transactions of the Pathological Society* is as interesting as any that have preceded it. It is pleasing to notice the steadily continued interest which the members of the Society take in its proceedings.

Report on Gun-shot and Sabre Wounds of Invalids sent to Fort Pitt during the Years 1860 and 1861. By Thomas Longmore, Esq., Deputy Inspector-General, and Professor of Military Surgery, Army Medical School. Pp. 30. Extracted from the Statistical, Sanitary, and Medical Reports of the Army Medical Department for the Year 1861. Issued October 1863.

This, it will be seen, is only a fragment of a larger report; but in itself it is interesting to the surgeon, as, when a large number of non-fatal cases of gun-shot injury are, as in the present instance, brought together, it can scarcely happen but that one or more of them will present some points of pathological interest, or illustrative of the self-reparative powers of the human body. Mr. Longmore has here arranged, under the parts of the body injured, 108 cases of gun-shot wound admitted

into Fort Pitt during 1860 and 1861, and calls special attention to some of the more remarkable of them.

Among the cases of gun-shot wound of the chest, is one which is regarded as being of special interest, as the patient had been sent home from India with the history of an undoubted perforation of the lungs; whereas the progress of the case, and the state of the wound on the man's arrival at Fort Pitt, left no doubt that the ball had passed externally to the pleural cavity, but had at the same time severely injured the contents of the chest. The patient, a private of the 28th Regiment, was struck between the third and fourth ribs on the left side by a matchlock ball, which escaped at the inferior angle of the scapula. The injury was immediately followed by considerable hæmorrhage, hæmoptysis, dyspnœa, cough, and febrile excitement. These symptoms were accompanied during a fortnight by copious muco-purulent and occasionally bloody expectoration, and by much purulent discharge, with air-bubbles, from the wound in the chest. The posterior wound soon closed; the anterior wound remained for some time in apparent communication with a bronchus, but ultimately also healed. The symptoms certainly would lead one to think that the ball had passed through the lung; but, on the man's admission into Fort Pitt, nearly eleven months after the receipt of the injury, the medical officers of the institution were led to the conclusion that the ball had passed externally to the pleural cavity, principally from the absence in the cicatrix of deep puckering or adhesion, which would have been present if the lung had been injured.

That symptoms apparently denoting perforation of the lung may be produced when such an event has not occurred, has been proved by *post mortem* examination. Surgeon Home, of the 90th Regiment, says:

"I saw all the symptoms of a gun-shot wound of the lung, including copious spitting of blood, and intense dyspnœa, with subsequent inflammation of the lung, in a case where, after death, I ascertained that the bullet had simply coursed *outside* the chest, fracturing the scapula and one rib. I could not make out that any spicula even had perforated the pleura."

On the other hand, perforation of the lung may occur without producing the symptoms which are generally described as necessarily arising in such cases. Of this Mr. Longmore gives an instance—the nature of the injury having been proved by *post mortem* examination.

Among the cases of wounds of the face, Mr. Longmore gives the history of one which he believes to be unique, inasmuch as it was followed by total dumbness, without direct injury of the organs of voice.

"The patient, James Davis, 1st Dragoon Guards, a stout healthy soldier, was struck, just below the centre of the lower lip, during a charge of his regiment, on the 21st of September, 1860, at the general action of Pal-i-chou, near Pekin, by a small matchlock ball weighing 7 drachms. The ball penetrated; carried away part of the alveolar process, four teeth—viz., two incisors, one canine, and one bicuspid—on the left side; travelled downwards behind the symphysis, clearing away the origins of the genio-hyo-glossi muscles in its passage, and lodged in the soft tissues of the floor of the mouth, behind the frænum linguæ. According to the history of the case, loss of the power of articulation immediately followed the wound, and never returned in the slightest degree, either in China, or during the voyage home to England. The ball was not removed till the twenty-third day after the injury; it was then extracted from within the mouth.

"When this patient was examined in Fort Pitt, the inferior maxillary bone was found to be a little thickened at the seat of injury; viz., at the symphysis, and for about an inch and a half of the left side of the body of the bone. The power of opening the mouth was slightly more limited than natural. The gum was sunk at the place from which the alveolar process had been removed by the projectile. The tongue appeared to be somewhat wasted, and its movements, upwards towards the palate, and forwards towards the lips, rather more limited than natural. There was no evidence of muscular paralysis. The sense of taste was unimpaired, nor was there any loss of ordinary sensation. The larynx seemed unaffected. The usual laryngeal sounds could be uttered, but none of their modifications necessary for speech could be effected. The power of whistling was gone. It did not seem clear to what special cause this total deprivation of the power of articulation was due. Neither injury to the hypo-glossal nerve, if such had occurred, nor the separation of the genio-hyo-glossi muscles, seemed sufficient to explain such a total loss of speech; for no similar result has been noted after any of the numerous gun-shot wounds of the jaw, or surgical operations performed upon it, as far as surgeons have recorded the cases."

In order to ascertain that there was no malingering, Mr. Longmore requested Mr. Legge of Wiveliscombe, in which neighbourhood the man was settled as a pensioner after his discharge from hospital, to examine into his condition; it being concluded that, as nothing further could be gained by imposition, he would be no longer speechless if he were malingering. Mr. Legge, in his reply, states that from inquiries among the neighbours, and from an examination of the man himself, he was satisfied that the dumbness was real.

The examination by Mr. Legge took place at the beginning of June 1861; and, at the end of July 1862, the man suddenly recovered his speech while in a state of excitement, during an altercation in a public-house. In December 1862, the following was his state, as reported by the district staff-officer.

"His articulation was good, free from hesitation or any other defect; he has no difficulty in pronouncing each letter of the alphabet distinctly; he can now whistle, but not so well as he could do before his wound; he can masticate food thoroughly, but does so chiefly on the right side of the mouth, the opposite to that originally injured."

Dr. Aitken, the author observes, attributed the loss of speech in this case to the injury of the insertions of the genio-hyo-glossi muscles, and to the probable disturbance of the ninth pair of nerves by the inflammatory action exerted in the neighbourhood of the spot where the ball lodged. Mr. Longmore objects, however, that if the aphonia had depended on these injuries, and its restoration on their repair, the speech should have been recovered not suddenly, but gradually, as the injured parts recovered and regained strength. He is rather inclined to attribute the dumbness to "nervous shock", in addition to the structural lesions, and to class the case with those instances of temporary aphonia which sometimes occur from hysteria, fright, etc., and where the recovery of speech is often sudden.

This pamphlet of Mr. Longmore's is an interesting and valuable contribution to military surgery.

British Medical Journal.

SATURDAY, DECEMBER 19TH, 1863.

IRIDECTOMY.

As our remarks on the operation of iridectomy have been in some quarters misunderstood, we will again state broadly the grounds upon which we have thought it right to bring the subject so prominently under the consideration of the profession.

We on a former occasion remarked, that iridectomy differed from all other operations in surgery in this remarkable particular, that those who practise it can give no satisfactory account of its manner of action; that, in fact, it has no clear and well definable principle to rest upon, such as all other operations in surgery have. Of course, we readily admit that this is no proof that the operation is not a good and useful one; it merely indicates that it differs in this striking particular from other operations in surgery. Moreover, it must be remembered that iridectomy has not been universally accepted by surgeons as of service. If it had, there would not have been another word to say on the subject, even though its principle was unexplained. It would have been left to be judged of by its fruits. But such is not the case. Consequently, the profession at large naturally demand especial proof of its production of good results, before they admit it into the position of an established operation.

We assuredly have no other object in discussing the matter than that of attempting to bring about an early settlement of a question on which manifestly depends the loss of sight or the gain of sight to a large number of our fellow-creatures. If iridectomy be a proper and needful operation, then those who do not practise it *must*, according to iridectomists, sacrifice many of their patients' eyes; and, *per contra*, if it be a useless operation, or one which should be only rarely resorted to, it must be a very injurious operation as at present practised. No one, therefore, can object to a calm discussion of so important a matter. Only out of such discussion can come what all desire—truth.

We believe we are stating what is accurately true, when we say that no metropolitan master-oculists, excepting Mr. Bowman and Mr. Critchett, have given in their adhesion to the practice of iridectomy, at least as practised by those gentlemen. It is true that many distinguished gentlemen of the rising generation of oculists, who will doubtless one day be our master-oculists, have accepted and practise the operation; but these gentlemen do not yet occupy the position of the highest authorities in ophthalmic surgery in the profession. What, indeed, leads us to desire a free discussion of the subject is the fact that the large body of those gentlemen to whom we especially look, as to our authorities, in matters oculistic, do not perform, but rather reject, the operation, or perform it only in the rarest instances. Mr. Bowman's name, it is true, is a host in itself; but still we are sure that he would not be the man to tell us to slight or undervalue the opinions of men of the position and experience of Dr. Jacob, of Dr. Mackenzie, of Mr. Lawrence, Mr. Wilde, Mr. Dixon, Mr. White Cooper, Mr. Haynes Walton, Mr. Hancock, and others of their great authority. The opinion of these gentlemen (although we speak without authority), unless we are much mistaken, is decidedly adverse to the operation of iridectomy, as at present practised. True, mere authority cannot settle a question of this kind; but when such an array of special oculistic talent—not of bigoted men, but of men who have shown themselves on all occasions to belong to this age of advanced science—do not give their assent to iridectomy, surely we have a right to hesitate before we admit that the problem—this operation—has yet been definitively solved. If Mr. Bowman, and those who are of his school in this matter, are right in their judgment and practice, then clear as the day is it that the negative practice of the famous ophthalmic surgeons above named must be most prejudicial to the interests of their clients. Mr. Bowman says: If you iridectomise not that tensioned eye, the eye will be irrevocably lost. His own words, again, are: "Those who reject it have to explain whether they still employ these unavailing remedies (bleeding, mercury, leeches, etc.), or leave their patients practically untreated."

Now, these men of large practice, into whose hands, therefore, must daily fall the very cases which, according to Mr. Bowman, demand this in his view inevitable operation, do not perform it. Consequently (and still following Mr. Bowman's argument and views), they must daily sacrifice the eyes of those who fall into their hands afflicted with orbital tension. And, *per contra*, if these gentlemen are right—if iridectomy be not an inevitable, be not a necessary, be not a desirable operation—if it be an operation in whose performance is necessarily involved more or less of a spoiling or damaging of the organ—if it be an operation necessarily attended with more or less of risk to the organ—if, in a word, it be an operation not required or proper for the cure of the affection for which it is practised by iridectomists—we need hardly say, that the sooner the fact be declared, the better for ophthalmic patients.

Hence, then, it is manifest, whichever side of the question be the true one, that for the sake of humanity's vision, the sooner the differences of opinion be healed up, the better. We do not presume to offer any opinion on the merits of the operation; but

every one is able, without any special knowledge on the subject, to argue upon the position of the operation—upon facts of this kind, when they are brought under his notice; and it is our duty so to argue them. Manifest, as we have said, must it be to every one, that the sooner an agreement is come to upon the subject between ophthalmic surgeons, the better will the interests of their patients be served. *In the present position of the question, humanity's vision is evidently a sufferer.* We must once again press home this unanswerable position: If, in a numerous class of eye-affections, the vision cannot be saved except by iridectomy, those gentlemen who do not perform iridectomy must sacrifice a large number of their patients' eyes to the non-performance of it. Indeed, Mr. Bowman tells them that they do in fact, by not performing iridectomy, leave their patients thus untreated, and so subject them to irreparable loss of vision. If, on the other hand, in the same class of eye-affections, vision can be restored without the performance of iridectomy, or if the vision do not suffer or be not permanently lost through the non-performance of iridectomy—if, in a word, the operation be superfluous—then those gentlemen who perform iridectomy in all cases of ocular tension must perform an unnecessary operation—an operation in which serious injury may be done to the ocular apparatus, and which may produce even destruction of the organ; and, we suppose we may safely add, occasionally does do so.

Such is the exact position of the case, as it presents itself before us. The dilemma is manifest, and is not of our making. We merely record it; and it is, for obvious reasons, a very painful and serious dilemma. Every one, therefore, from whatever point of view he regards the operation, whether favourably or with disfavour, must perforce admit that it occupies a very undesirable position in the hands of the profession and in the face of the public, one decidedly opposed to the interests of humanity and to the renown of the profession.

In conclusion, we would recommend the above particulars to the consideration of the *Medical Times and Gazette*, that journal having, with remarkable sagacity, assured the profession that, if iridectomy be a good operation, it is so; and that, if it be not, it is not so; and, therefore, that there is nothing more need be said about it.

VILLAGE HOSPITALS AND GRATUITOUS SERVICES.

Mr. Napper is labouring under a mistake. We have never said one word in disfavour of village hospital. On the very contrary, we have on several occasions praised them as highly desirable institutions. We hope, in fact, that they may rise up all over the country. Their benefits are manifest. They bring to the door of the poor sick man the blessings of a hospital, and of a hospital in the country. They are much more economically managed, and more healthy than large hospitals in cities can be; and they enable the village surgeon to perform the great operations of surgery under satisfactory circumstances. All this we have said, and still say, in praise of village hospitals. But we have opposed, and still oppose, their being carried out on the gratuitous medical services principle, just as we oppose that principle as adopted in our hospitals and dispensaries. We are anxious not to see through them so vicious a principle—one, as we judge it, so injurious to the standing and credit of our profession—carried out still further into practice, as it will be, and on a most extensive scale, if village hospitals are to spring up all over the country, and to be worked on such principle.

Let us see what Mr. Napper has to say in favour of this method of giving gratuitous medical advice. He tells us, in the first place, that medical men give their services gratuitously, in part, out of a pure love of charity. Now, we cannot say that there may not be some few spiritually minded doctors who do this work for conscience sake; but, certainly, every one knows that gratuitous medical services are, as the general rule, given not for charity's sake, but out of pure selfishness—*i. e.*, because the giving of those services is supposed to promote indirectly the worldly interests of the giver of them.

If the pure love of charity ruled in our medical hearts in this matter, how comes it that so many of our best and wisest men throw up the giving of these gratuitous services when they have "got into good practice?"

Again, ask the public what they think of the "charitable" motives of hospital aspirants who pay £1000 election expenses for the honour of giving gratuitous services. The public has long since taken our measure on this score, we may be very sure. It appears, moreover, that village hospitals are of use as easing the labours of the parish doctor; that, in fact, they assist in doing the work of the parish!

Mr. Napper does not answer the main question; viz., why should not the village at large—*i.e.*, society—find this medical relief for its poor just as it finds bread for them? Why should the doctor give advice gratis any more than the butcher his beef, or the baker his bread, to those hospitals? We have long and seriously studied the subject of gratuitous medical services, and we have been forced to the conclusion that the giving of them has degraded, and is degrading fearfully, the social position of our profession; and is the main cause of the wretched condition of our Poor-law medical officers.

As for acts of true and real charity, what doctor is there who has not abundant opportunities of exercising them in private; and in cases, too, where he

knows that his gratuitous services will be rightly applied—*i.e.*, not abused? But this unknown and private exercise of the gift is not enough for us; we must ask permission to do the charitable in public! Well, let Mr. Napper, or any one else, tell us the grounds upon which a medical man alone, of all members of society, is to be called upon to come forward and do the work of society gratuitously. Let any one give us a satisfactory reason why he should not be paid for the work, as every other member of society is paid. We have long asked for a good answer to this simple question; but we have in vain waited for an answer to it. When one can be given, then will we admit that gratuitous medical services are justified.

We can only repeat, that we regard village hospitals as blessings to the poor; that it is not against them we wage war, but against the system which brings medical men to do the work of them gratuitously. Mr. Napper must have strange ideas of the real interests of the provincial practitioners, if he imagine that we oppose those interests by endeavouring to obtain for our medical brethren in the country something like a remuneration for their services. We give Mr. Napper all praise for his labours in this direction; and we are sure, that if he will only study the question, he will ere long confess with us, that if it be the duty of society to provide a village hospital, it is equally the duty of society to pay the village surgeon who does the work of it. We must repeat it again, that we firmly believe nothing has done more to degrade and lower our profession in the estimation of the public than the enormous system of gratuitous medical services carried on by us; and, therefore, it is that we proclaim against an extension of this system into village hospitals. If it is so extended, the result will be, that throughout the kingdom we shall have the village doctors falling down on their knees before the village butcher and tailor, etc., subscribers of five shillings each to the charity—just as we now have London doctors falling down before city merchants—begging those gentlemen to bestow upon them the honour of doing the work of society, gratuitously. And we shall have the butcher and tailor graciously condescending to accept those services, and then laughing in their sleeve at the folly of the doctors; and, what is worse, we shall still further lower the value, the money-value, of our services in the eyes of the public, and our own reputation.

THE COLLEGE OF PHYSICIANS.

The College of Physicians have accepted a medallion from the friends of the late Dr. McWilliam, and have resolved that the same shall be suspended on the walls of the College.

The College has also appointed a Committee to meet a Committee of the Society of Arts to decide, in January 1864, who shall be the next recipient of the "Swiney Prize." Our readers may remember that the prize is a quinquennial one, and that the Society of Arts and the College of Physicians have agreed that the prize shall alternately be given to the author of the best work on General Jurisprudence and of the best work on Medical Jurisprudence. Three prizes have already been allotted. The first was adjudged to Dr. Paris; and the third to Dr. Taylor. The next prize will be given, therefore, for General Jurisprudence. The United Committee have agreed between themselves that the College shall virtually have the appointment of the medical jurisprudential prizemen; and to the Society of Arts is left the selection of the general jurisprudence prizemen.

Thirteen candidates were, on the 1st instant and subsequent days, examined by the College of Physicians for the first professional examination, and of them ten were accepted. On the 8th inst. and following days, nineteen candidates for the passing of the final examination for licence appeared, and of them fifteen were approved.

We are very glad to find that the delivering of the Harveian oration in Latin will, at an early day, be brought as a question before the College. We apprehend, most physicians must feel that this Latin oration is, at the present time of day, a complete anachronism. Science, fortunately or unfortunately, has to a very great extent, put out the light of classical lore with men of medicine. At all events, it is a fact, that the Fellow of the College who is capable of delivering a classical oration in the Latin tongue is a very rare personage; and it is equally a fact, that if an erudite and elegant classic were to deliver himself even with Ciceronian cadences within the walls of the College, his words would fall on the ear of the multitude of his auditors as "caviare into the mouth of the general." One cannot, it is true, look back without a sigh to the days when our physicians played the part of scholars before the world as well as of practitioners of medicine. Nor can we conceal from ourselves the fact, that the social position and the public influence of the profession were then much higher and greater than they are now. However, we must accept things as we find them; and, therefore it is, in the name of the fitness of things, we cannot but hope the College will come to the conclusion that in future days (if the charter says nothing to the contrary), the Harveian oration shall be delivered in a tongue, which the Fellows, as a body, can handle with some effect, and comprehend without the aid of a dictionary.

POOR-LAW BOARDS' LAW.

The following letter from a medical man at Leighton Buzzard, in the *Times*, affords another specimen of the systematic ill-treatment of Poor-law medical men by their masters. When will the members of our profession be wise enough and bold enough and patriotic enough to combine together, and so for once and all put an end to the degradation played off upon them by the public through their own want of union and professional sympathy?

"In July of this year, the medical officer of the Leighton Buzzard Union died of fever, contracted in the exercise of his duties. Pending the appointment of his successor, I performed a part of the duties of medical officer, and found that in the village of Wing (where fever and small-pox were prevailing) between 30 and 40 per cent. of the inhabitants were unprotected by vaccination. By verbal authority of the Board, I vaccinated nearly 300 persons, and arrested the pestilence. The Board of Guardians now inform me they are unable to pay my fees, some recent regulation of the Poor-law Board not having been observed."

THE WEEK.

There is one suspicious fact attached to the evidence given by Dr. Forbes Winslow in favour of the lunatic state of mind of Townley the murderer, which we are surprised was not alluded to by the judge presiding at the trial. It seems to us, that the murderer Townley must indeed have been utterly imbecile had he not guessed the meaning of Dr. Winslow's two visits to him. He might have been ignorant as to who his questioner actually was; but it seems absurd to think that he could have had such questions put to him for an hour at a time without suspecting the object of them; and if so, what more natural than that he should give the outrageous answers he did to Dr. Winslow, it being manifestly his interest to do so, if he wished to save his neck. Dr. Winslow deemed the case to be one of "general derangement"; but there was no proof of the existence of any such derangement in him at the time of the murder. Again, the suggested delusion of a conspiracy which Townley communicated to Dr. Winslow, was heard of by no one else, we believe, besides Dr. Winslow; and certainly, if real, only appeared after the murder. We must say, that a suspicion must naturally attach to the value of conclusions drawn from conversations with a man who, as a reasonable man, would naturally, under the circumstances, attempt to produce in the mind of a questioner an idea of his insanity. We have, on many occasions, laboured to save the necks of murderers, whom we could not but deem lunatics, from the hangman's rope; but we really cannot find any excuse on the ground of insanity to put forward on behalf of Townley. We were pleased, however, to notice that the judges are coming round to more reasonable views on the subject. Judge Martin made a great advance for the bench when he gave it as his opinion, that delusion, if the cause of the crime, will excuse it. This is a vastly different doctrine from the old one of a knowledge of right and wrong. Judge Martin, indeed, seemed to treat the whole question in a much more kind and calm way than we have of late seen it handled by the bench. Dr. Seymour and Dr. Tuke were present at the trial on behalf of the Crown; but it was not thought necessary to call them. It is very probable that Baron Martin may yet have the man examined by a Visitor in Lunacy.

The right of the King and Queen's College of Physicians will, we are glad to find, be at last brought to its proper and only real test—a legal one. Trinity College has questioned the right, and has called upon the King and Queen's College to make it good in Chancery, if it can. The Chancellor has, however, refused to decide the matter, as he is Vice-Chancellor of the Queen's University, which is interested in the result. The question has, therefore, been sent to the Master of the Rolls; and, if an appeal be made, will then probably go to one of the common law judges—the chancery judges being vice-chancellors, one of the University of Dublin, and the other, as said above, of the Queen's University. We may remark, in reference to this case, that some of our cotemporaries have entirely mistaken the purport of the trial. Two journals have stated that the decision will settle the question of the title of "Doctor"; but it will, in reality, have nothing whatever to do with it. The question to decide is simply whether the King and Queen's College has or has not the right, which it has assumed since 1860, of granting degrees in medicine, just as universities have. The question of the title of Doctor is, we consider, settled. Every member of a College of Physicians can assume the *courtesy* title of Doctor—*i. e.*, prefix the Dr. to his name; but assuredly he has no right to call himself Doctor in Medicine, or write M.D. after his name, as the King and Queen's College assert that their Licentiates have, unless he possess a university degree. We believe that the thanks of the profession are greatly due to this Journal for having urged on them the necessity of such a settlement of the position assumed by the King and Queen's College of Physicians.

We trust Mr. Dickens felt a blush tinge his cheeks when he lately read in the *Times* "A Horrible Story". At the very time when Dr. Byrne of Falmouth was engaged, and labouring out of pure philanthropy, in putting an end to the tortures inflicted on a poor idiot at Flushing, Mr. Dickens, through his head sensation-novelist, Mr. Reade, was holding up the medical profession to the indignation of the

country as a set of scoundrels, ready, for a few guineas, to immure and keep immured in a madhouse any person whom it was convenient to his relatives to put out of the way. Mr. Dickens may be well assured that the slur attempted to be cast, with his permission, through *All the Year Round*, on the medical profession, is not a thing which will redound to his credit or will add to his laurels. When literature condescends to seek popular applause by slandering an honourable profession, literature has descended to the position of a mere mercantile transaction.

The regretted death of Mr. Green makes a vacancy in the Court of Examiners of the College of Surgeons; and the occasion offers a favourable opportunity to the Council for the carrying out the intention of the Charter—one of the express objects of the Charter which has hitherto been completely disregarded—we mean the appointment of an Examiner from the Fellows outside the Council. The Council can no longer say there is no precedent for such a thing, because now, in consequence of a most unexpected *force majeure*, Mr. Cæsar Hawkins is an Examiner, although no longer on the Council. We sincerely trust that the Council will seize this opportunity of showing by its practice that it really intends to inaugurate the new era of liberalism which, it is supposed, has begun to prevail within its body; in fact, that it will carry out the Charter in spirit and in letter.

At the end of every session, the Royal Medical and Chirurgical Society is overwhelmed with papers, and consequently with the complaints of their authors that they can only be read in brief; and, on the other hand, at the beginning of every session there is usually a perfect dearth of papers. We notice that, at the present moment, there is not a single paper set down for reading on the paper-list suspended in the library of the Society. Perhaps this hint may be of service to the slow of pen and the full of knowledge.

Two new journals are announced in France literary and scientific—*Le Revue des Cours Littéraires*, and *Le Revue des Cours Scientifiques*. They are reproductions of the lectures delivered in the College de France and the Museum. Scientific journalism appears to be a better trade on the continent than it is in England, Scotland, and Ireland.

For the first time since its foundation—that is, for forty-three years—the Academy of Medicine has exercised its right of excluding an offending member. The offender is a Dr. Priou; and his offence that of placarding and disfiguring the walls of Rouen with unseemly advertisements. Doubtless the doctor finds the placarding business pays better than academical honours.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
West Somerset. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20, 1864.

PAYMENT OF SUBSCRIPTIONS: SPECIAL NOTICE.

Members who have not yet paid their subscriptions for the present year are earnestly desired to remit them to the General Secretary before the end of December. Their attention is directed to the following laws of the British Medical Association.

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

10. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, December 1st, 1863.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The second ordinary meeting of the session was held in the Victoria Rooms, Clifton, on November 27th; Francis K. Fox, M.D., President, in the Chair. There were present thirty-nine members and six visitors.

New Member. Benjamin Maurice, Esq., of Thornbury, was elected a member of the Association, and of the Bath and Bristol Branch.

Papers. The following papers were read.

1. Cases of Obscure Brain-Affection. By F. Brittan, M.D.

2. Case of Malformation of the Temporal Bone. By C. Leonard, Esq.

3. On Laryngismus Stridulus. By E. L. Fox, M.D.

Several other papers had to be postponed, on account of the late hour of the evening.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A general meeting of the above Branch was held on Thursday, December 10th, in the Medical Department of the Library, Union Street, Birmingham; Alfred Baker, Esq., President, in the Chair. There were also present sixteen members.

New Members. The following gentlemen, having been elected at a previous meeting of the Council members of the Association, were unanimously elected members of the Branch:—1. Dr. Robert Alexander Davis, County Asylum, Stafford; 2. Mr. Thomas Kelly, Princes End, Tipton; 3. Mr. Edmund Gibbs, Digbeth, Birmingham; 4. Dr. Thomas Albert Carter, Leamington; 5. Mr. Ed-

ward Welchman, Southam; 6. Dr. S. S. Roden, Droitwich; 7. Mr. T. W. Walsh, Worcester; 8. Mr. Thomas Taylor, Bennett Hill, Birmingham; 9. Mr. B. S. Wilders, Birmingham; 10. Mr. G. Yates, Bath Row, Birmingham; 11. Dr. C. B. Suckling, Birmingham.

Papers. The following papers were read.

1. Therapeutical Inquiries. III. Oil of Male Fern in Tapeworm. By A. Fleming, M.D.

2. The two Circles of the Blood historically considered. By J. S. Gamgee, Esq.

3. Case of Hæmorrhage from Retained Placenta, after Abortion, terminating fatally. By G. Lowe, Esq.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

NOVEMBER 25TH, 1863.

ALFRED HIGGINSON, ESQ., Vice-President, in the Chair.

Trough Water-Closets. Mr. HAKES said that the use of trough water-closets for the courts in this town was now under consideration, he should be glad if any one could inform him as to the nature of these troughs.

The CHAIRMAN said they were already in use in some of the charity schools and other institutions in this town. A trough, built sometimes of brick, but more frequently made of cast-iron, is placed under half a dozen seat-holes. There is a decline of several inches from one end of the trough to the other. The whole apparatus is kept under lock and key, and flushed out once a day.

Cauliflower Excrescence of the Uterus, removed together with a Portion of the Uterus. Dr. NOTTINGHAM shewed this specimen. The tumour filled the vagina; and it seemed doubtful whether the chain of the ecraseur could be passed behind it. By means of blunt hooks the uterus was brought down very slowly and completely, then a curved ecraseur was passed behind the disease and the vagina and uterus very slowly divided. This process took a quarter of an hour; no knife was used, and there was no hæmorrhage at the time, but a little occurred half an hour afterwards. The woman was about 38 years old, and the disease of about 18 months' standing; her general health was not affected.

Cancer of the Lip. Dr. NOTTINGHAM shewed a specimen, and also one of *Disease of the Tibia.*

Urinary Calculus. Mr. RAWDON shewed a stone peculiarly shaped, narrow in the middle and expanded at the ends, somewhat like a dumb-bell, removed from the bladder of a boy, aged 12, by Mr. Stubbs, at the Royal Infirmary.

Congenital Fibrous Tumour. Mr. RAWDON also shewed a congenital fibrous tumour, of the size of half a pigeon's egg, removed from a child's head.

Dry Gangrene of the Foot. Mr. RAWDON shewed a specimen of this disease, which occurred after fever. Mr. Bickersteth had amputated the foot at the ankle-joint.

Fracture of the Spine. Mr. LOWNDES shewed a specimen in which there was complete transverse fracture of the body of the first lumbar vertebra, and fracture of one of its transverse processes. The patient lived three weeks.

Disease of the Suprarenal Capsules. Dr. IMLACH read a case of this disease, and shewed a specimen of the same disease taken from another subject.

Uterine Hæmorrhage. Dr. E. WHITTLE read the following case. At 9 P.M., on Sept. 21st, 1863, he was called to see Mrs. L., aged 35, who had been attended all day by a midwife. This was her sixth confinement, and her last was five years ago; she was of hæmorrhagic diathesis. He was told that she had complained of slight pains all day, and when sitting up to take tea felt suddenly very ill, complained of abdominal pain, and fainted away. On his arrival he found her ghastly pale, collapsed, covered with cold sweat and nearly pulseless. The abdomen was hard and tender, but there were no uterine pains; she complained of great pain and tenderness over the region of the bladder; the os uteri was dilated to the size of a crown-piece; the head presented, and had not receded, and the membranes had ruptured. As the head had not receded, and the pain was not at the epigastium internal hæmorrhage was diagnosed. Brandy was given from time to time, and 20 minims of tinct. opii at once. At 10 P.M. there was a considerable rally, pulse 84, pretty steady; pains were now beginning, but the labour progressed slowly; a catheter was passed, but there was found to be no retention of urine. At midnight he gave a dose of ergot with the double purpose of assisting the labour and of checking any tendency there might be to *post partum* hæmorrhage. Sept. 22nd, at 2 A.M., as the patient's pulse was now 120, and she was getting exhausted, Dr. Whittle applied the forceps and removed a very large child that had evidently been dead some hours. Its removal was immediately followed by a very large clot, much resembling a liver in shape, about ten inches long, three in thickness, and from five to seven in width; one of its edges was thick and bound together along its whole length by a fibrous mass resembling the buffy coat of blood, the other edge thin like the thin edge of the liver. This clot would seem to represent nearly two quarts of blood. The after-birth followed immediately, and there was no hæmorrhage. Convalescence was tedious, and a troublesome diarrhœa commenced on Oct. 28th, which yielded gradually to the use of opium and counter-irritation to the abdomen. The large clot appeared to him to be the cause of the hypogastric pain, by distending the uterus and pressing the child down; the sudden abstraction of so much blood from the circulation would seem to have occasioned the death of the child.

The CHAIRMAN inquired as to the appearance of the child, whether it seemed to have been long dead; it is highly valuable to know in such a case whether the child is alive or no, and he finds the stethoscope very useful.

Dr. WHITTLE replied that the child seemed to have been dead some little time.

Mr. HODGSON inquired whether the opium was given directly after the hæmorrhage was supposed to have taken place; is opium useful or injurious in these cases?

Dr. WHITTLE said that some time had elapsed before the opium was given.

Mr. HAKES said that he had seen cases of internal hæmorrhage where the child had died and very large clots had passed afterwards, but in these cases the membranes are generally unruptured.

Dr. NOTTINGHAM thought the appearance of the clot with its firm fibrinous back would lead us to suppose that its formation would take a longer time than the history of the case would point to.

JUNIOR MEDICAL SOCIETY OF LONDON.

TUESDAY, NOV. 17, 1863.

J. E. CHURCHILL, ESQ. (Vice-President), in the chair.

Pathological Specimens. The following specimens were exhibited:—

1. A Fibrous Tumour of the Uterus, of very considerable size. By Mr. Willson.

2. Portion of a Foot removed by a Modification of Chopart's Operation. By Mr. Fennings.

3. An Atheromatous Aorta which had Burst into the Pericardium. By Mr. Sutcliffe.

Treatment of the Earlier Stages of Phthisis. A paper on this subject was read by Mr. WILLSON (Charing Cross Hospital). The author first drew attention to the efforts of nature to effect a cure, as evidenced by *post*

mortem examination. The average duration of life, he said, was longer than was generally believed, tubercles being often found in the lungs with the inference that they had existed for a very considerable time. He dwelt next upon the symptoms and diagnosis of the very early stage of phthisis. The disease does not usually manifest itself until after the application of some exciting cause; that the principal indication in the treatment was to place the patient in as favourable external circumstances as possible; that diet, clothing, air, and exercise, should be especially attended to, in conjunction with the use of certain appropriate remedies. The system should in no wise be lowered; a diet of milk and eggs had been found of the greatest benefit. Cod-liver oil and the tincture of sesquichloride of iron were the remedies to be preferred amongst those usually employed. The author lastly referred to Dr. Churchill's plan of treatment, and fully concurred with him in the efficacy of the hypophosphites. He thought that, although much had been done of late years in improving the treatment of phthisis, still more was to be hoped from the use of hypophosphites. Whatever the treatment was, it must be rigorously persevered in. A prolonged discussion followed.

Correspondence.

IRIDECTOMY.

Letter from W. Bowman, Esq., F.R.S.

Sir,—The following letter, which I addressed to Mr. Walton with reference to his note in your Journal of the 5th inst., will show how anxious I am that those who still reject iridectomy in glaucoma should have every opportunity which I may happen to be able to afford them, of examining for themselves the kind of evidence on which it is supported. I regret that, in the courteous reply which I have received from him, Mr. Walton does not accept my offer; so that I think I may safely leave the question to rest for the present in the position in which my recent communications have placed it, reserving any further comments on his own opinions in particular, until he shall have explained the grounds on which they rest, in the paper he has promised to send you. I am, etc., W. Bowman.

5, Clifford Street, Dec. 15, 1863.

Letter from Mr. Bowman to Mr. Walton.

5, Clifford Street, Dec. 11, 1863.

My dear Walton,—I see by your note in the British Medical Journal of last week, that you have taken notice of the discussion that has been going on there relative to the use of iridectomy in glaucoma. I had an impression that some of my brethren in London put less confidence in this treatment than I do myself; but I confess I was not prepared for so absolute a disbelief in its efficacy as you avow, when you say that you "*have not been able to discover that the removal of a piece of the iris has ever exercised the slightest influence over any inflammatory condition of the eyeball, nor over the disease called glaucoma.*"

The issue you thus raise is a most satisfactory one to me—that, namely, of the simple question of fact; I and others adducing the evidence of plain facts in support of our assertion of the efficacy of a definite operation in a well defined disease, while you rejoin that you have not been able to discover the slightest advantage in this method of treatment.

Now as Nature is the same, whoever interrogates her, we may most probably best reconcile these conflicting opinions of men alike competent to observe, and alike conscientious in arriving at their results (excuse the compliment I am paying myself), by supposing that they have not witnessed facts of the same kind or order, though they may have seemed the same; or else, that the facts on the one side have been imperfectly investigated, owing to causes incidental to the novelty or the inherent difficulty of the subject matter.

The natural way of reconciling these differences, and one, I think, very suitable among men labouring in such a profession as ours, is for those who differ to meet, and examine the disputed facts in concert; to interrogate one another with the cases before them, and with a simple desire to arrive at sound conclusions.

This, surely, would be very easy in the present instance. We assert, you deny, the efficacy of iridectomy in glaucoma: our side of the question is of a positive, yours of a negative, character. If ours be true, a great boon has been provided for the patients of us all; if yours, we shall have still to treat glaucoma by the old methods, and with the old results, until some other remedy with more valid pretensions shall be discovered. It is impossible, therefore, but that you and all thoughtful men, having to treat glaucoma, should at present desire the benefits of iridectomy to prove real. Besides, as a question of scientific interest, few can be indifferent to it.

Now, what occurs to me is this. I have patients who have been thus treated, and whose cases may be placed fully before you, so as to enable you to form an independent opinion upon the results obtained. You express a determination to avoid controversy; and, of course, I have no wish for a conflict of words. But I think your position is such, and you make such use of it in writing adversely to iridectomy, that I have a claim to ask you to take some trouble, and spend some time if necessary, in examining the cases of alleged success. The profession at large do not feel competent to come to a decision, while men, whose opportunities they regard as equally great, are found so directly at variance on a simple matter of fact—one which seems to admit of being easily settled between the opposite parties, if they would only first come to an understanding as to the diagnosis of glaucoma, and then by touch and other equally indubitable means ascertain the physical condition of a glaucomatous eye, as to tension and visual power, before and after an iridectomy properly performed.

My object in now addressing you is to offer, with all the frankness of professional courtesy, and in the interest of our patients who are now suffering from glaucoma, to give you all the details in my power of such cases as may happen to be most accessible, and to show you the individuals who have been operated on. I will be present with you, and will promise you to have no reservations. It would be affectation in me, did I express the smallest doubt as to your coming to the same conclusion as myself regarding them, or as to the perfect readiness with which you would afterwards undertake a further trial of the method, and in due course publish your own approval of it to the world. There seems to me so much misconception prevailing (I know not why) on the whole subject, in spite of the efforts of myself and others to make it plain, and spread a correct knowledge of it, that I should be very glad that you should thus re-investigate it a little from what I may call our side, before committing yourself further by the practical statement of your present views, which you promise to send to the British Medical Journal as soon as you can find time to settle to the work.

I have only to add, as in duty bound, that I, on my part, shall have great pleasure in seeing in your company any patients of yourself or others, whose cases may have led you to your present opinions; and I am sanguine that I shall be able in a great measure to explain in what way they may be reconciled with the views I advocate. I am, yours sincerely,

Haynes Walton, Esq. W. Bowman.

LETTER FROM HAYNES WALTON, ESQ.

SIR,—I suspect that you will receive this week from Mr. Bowman the copy of a note which he sent to me, expressing his desire to show me his cases of iridectomy, and to examine patients with me; also a statement to the effect that I declined to acquiesce in his proposals. If I am correct in my suspicion, allow me a few words in explanation.

I wrote, in answer to his first note, to say that circumstances would prevent me from having anything to do with the subject in question for a week or ten days, and that I should not make any move in the matter in any way till I had communicated with him. In answer to this, he said that he must notice, in the coming number of the JOURNAL, my note published on the 30th of November; and continues: "*As it would not be desirable to say that you are not well, perhaps I had better say something to the effect, viz., that I have received from Mr. Walton a communication expressing his readiness to compare cases with me, which will afford me the hope of being able to bring the matter shortly to an issue, so far as his opinion is concerned.*"

Now, I was obliged to say "No" to this, because it would have prevented me from sending my opinions, which I have promised you; and I should have formally given up my judgment. Will any one say that I am to blame? Had I supposed that Mr. Bowman ever meditated publishing the private communications between us, and commenced by him, at the time that we were discussing the disputed subject in public, I should not have noticed his note. So little did I suspect it, that I never kept copies of my answers. The offer he makes certainly bears a very favourable impression; and many a man might say at once that this is an excellent means of adjusting differences; and so it would be between two men, one of whom was wholly ignorant of ophthalmic subjects, and one deeply learned. I have not stated my conviction at random and in ignorance, but after long investigation, with large opportunities at my command in private and in public, and with all the care, anxiety, and labour that an obscure subject demands from one who has ventured to appear before the profession as an author on ophthalmic subjects.

It would be utterly impossible even for one conversant with eye-diseases to tell, after an iridectomy had been performed, whether such an operation had really benefited the patient. This is a topic on which I shall have much to say.

When I was a student at St. Bartholomew's Hospital, the late Mr. Tyrrell, surgeon to the Royal London Ophthalmic Hospital and to St. Thomas's, introduced his system of incising the conjunctiva in purulent ophthalmia, as the only means of saving the eye, by preventing sloughing of the cornea. He thought, and so did his colleagues, and many of his professional brethren, and all his pupils, that this was the greatest discovery in ophthalmic surgery for the century. He gave several lectures on his new operation at the Royal College of Surgeons; he published scores of successful cases, and his work on the eye abounds with them. Great censure was cast on all who entertained any doubt. It happened that Mr. Wharton Jones undertook to question the propriety of all this, and to deny the theory on which the practice was founded. I read the controversy with much interest; and I was particularly struck with the invitation from Mr. Tyrrell to Mr. Jones, to come and see his cases, which he urged as an opportunity for affording Mr. Jones the fullest evidence of the correctness of his views. As a youngster, I thought this all decisive for Mr. Tyrrell. What is the state of the case now? Mr. Jones was right. Is Mr. Tyrrell's operation ever practised? or who believes in it as the all-potent remedy so much vaunted? Of course I do not cite this as a parallel, but I merely give it as an illustration of the difficulty and uncertainty in working out any fact in the treatment of disease in medicine or surgery from the issue of cases, when such are regarded through a wrong theory, or without any principle to correct observation.

Next week I shall send what I promised; and I shall trouble your readers no more with iridectomy.

I am, etc., HAYNES WALTON.

69, Brook Street, Hanover Square, December 1863.

LETTER FROM T. WHARTON JONES, ESQ., F.R.S.

SIR,—Lateral iridectomy, or lateral excision of the iris, has been long adopted as a valuable operation for artificial pupil in the cases fitted for it—cases, in particular, of central opacity of the cornea.

The value of lateral excision of the iris in cases of extensive synechia posterior, even when the pupil was not closed nor the cornea opaque in the centre, has been admitted by Dr. Mackenzie and myself in some cases.

As to the value of lateral excision of the iris as a cure of glaucoma: when the operation was vaunted as a means of curing glaucoma, both Dr. Mackenzie and myself demurred to its trustworthiness. In the numerous cases in which glaucoma (the form called chronic glaucoma) has been treated by lateral excision of the iris, the operation has not yielded very brilliant results. In cases of arthritic posterior internal ophthalmia, or, as it is called, acute glaucoma, lateral excision of the iris has been often followed by a very satisfactory subsidence of the inflammation, with corresponding improvement of sight. The operation in such cases has appeared to promote the subsidence of the inflammation more effectually than simple evacuation of the aqueous humour.

I am, etc., T. WHARTON JONES.

35, George Street, Hanover Square, W., December 7th, 1863.

SIR,—The iridectomy discussion quite puzzles me. If Mr. Bowman's account of the matter be right (and I must say I feel inclined to trust very much to whatever he says in such a matter), the number of blind must have greatly diminished during the past seven years. I say this because, from your account, I conclude that a very great number of operations for iridectomy are now performed in this country. But how must it be in those parts where this operation appears to be unknown? Mr. Bowman, in his last interesting letter, tells us that it is the only cure which, in a large number of cases, can preserve the patients from blindness; and yet I observe in the *Eye Report* of Mr. Wilde, just issued, that no reference whatever is made to iridectomy, although a very large number of operations seem to have been performed at the institution to which he is attached. At all events, if Mr. Bowman be right, those gentlemen who oppose him must be wrong. I hope the discussion will lead to a settlement of the question; and I must say that I think some explanation is due from men in the high position of Mr. Wilde, who thus publicly ignores the existence of this operation, which Mr. Bowman assures us is of such incalculable benefit. I am, etc.,

A GENERAL PRACTITIONER.

VILLAGE HOSPITALS.

LETTER FROM ALBERT NAPPER, ESQ.

SIR,—No one can fail to perceive, from the tone of your oft-recurring remarks on village hospitals, that you regard them in no friendly spirit. I am sorry for this, as it is much to be regretted that the Editor of the JOURNAL which was instituted by, and that for a long time represented, the interests of, the provincial practitioners, should entertain views so much at variance with those of many amongst them with whom I have had the pleasure of corresponding on this subject. The feeling in favour of these institutions appears to be universal,

and I feel sure your strongly expressed views in regard to our gratuitous services are urged under a misapprehension of the working of the system. You ask, "Do we do the work out of a pure love of charity, or is it to promote our own private ends?" I answer emphatically, for both; the first, by providing for the poor, comforts and efficient treatment, to be afforded by no other means; the second, by relieving ourselves of a great amount of labour, whilst, under their favouring conditions, we are enabled not only to confer hitherto unhoped-for benefits upon our patients, but by so doing "gain the respect and obtain the thanks of society." On the subject of gratuitous services, I have on previous occasions pointed out the hopelessness of attempting to establish a village hospital on the principle of payment for professional services, nor do I think we ought in reason to expect any larger compensation than the hospital itself is capable of affording. It must be borne in mind that a very large percentage of the patients are parish paupers, many living at great distances, entailing long, tedious journeys, and loss of time. Others, not entitled to parochical relief are incapable of affording the smallest compensation, and for these the surgeon can obtain no extra allowance of diet. The great saving in time and labour, the facilities afforded in treatment, with the good nursing, and liberal diet, thus secured, are no mean advantages to the parish doctor; added to this, he receives the usual fee allowed by the Poor Law Authorities for every pauper case admitted, whilst surgical appliances, medicines, etc., are provided.

The Fourth Annual Report of the Cranley Village Hospital is now in course of printing, and with it will be published an epitome of the cases treated during the first four years, amounting to one hundred, by which it will be seen that of this number 77 were parish paupers, 7 were persons totally unable to afford compensation to a surgeon, and the remaining 16 were all in humble circumstances. Of the 77 paupers 10 were cases of accident, for which the surgeon received the usual fees amounting to £36. And now, sir, I must respectfully ask, will "the baneful results of such gratuitous medical services as these, degrade the social position of our profession?" Having asked these questions, I must request the favour of your giving insertion to this reply, in justice to those who are working with me in promoting a scheme that we venture to hope will be attended with a very different result. I am, etc.,

ALBERT NAPPER.

Cranley, Dec. 1st, 1863.

THE PLEA OF INSANITY IN CRIMINAL CASES.

LETTER FROM FORBES WINSLOW, M.D.

SIR,—May I be permitted to state, in reference to the evidence I gave at Derby in the case of George Townley, that I pronounced no opinion as to his insanity on the 21st of August, the day he committed the murder?

Having, as I thought, recognised, in common with Mr. Gisborne, the surgeon to the prison, and Mr. Sims, the governor of the jail, mental derangement on the 18th of November, and on the 10th inst., I said, in reply to a question put by Mr. Macaulay, "*Assuming* the prisoner to have been in the same state of mind on the 21st of August as he was at the time of my examination of him in the Derby County Jail, I was of opinion that he was *then* (as he is *now*) deranged in his intellect, and consequently legally irresponsible." I purposely avoided propounding any speculative opinions on the subject of his alleged insanity at the time of the murder, rigidly adhering to a statement of facts observed by myself.

In the course of my analysis of Mr. Townley's state of mind, I could not altogether set aside his singularly perverted views on the subject of religion; but I carefully avoided all misconception on the subject by stating, in my written opinion, "that it would be most unphilosophical to infer the existence of insanity from the theological views of the prisoner or of any person."

I distinctly referred, in my evidence, to the prisoner's *intellectual* delusions, as contradistinguished from what may be termed his *moral* perversion.

He informed me that he killed Miss Goodwin in order to "recover" and "repossess" himself of property that had illegally been wrested from him by an act of violence. He was perfectly unable to appreciate the absurdity of this idea.

If a man were to throw a sovereign into the Thames, and, on being asked why he did it, were to reply that his object was to "recover" and "repossess" himself of the twenty shillings thus lost to him for ever, would he, if he persisted in this assertion, be considered of sane intellect?

As an additional proof of his intellectual derangement, I referred to his insane belief in the existence of a conspiracy against him, consisting of six persons, with a chief at their head. Mr. Baron Martin, in his charge to the jury, pointedly alluded to this delusion, and remarked that it frequently existed among insane persons.

I am, etc., FORBES WINSLOW.

Cavendish Square, December 16th, 1863.

Medical News.

ROYAL COLLEGE OF PHYSICIANS. At a general meeting of the Fellows, held on Monday, December 14th, 1863, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Atkinson, John P., M.D., 2, Carlton Road West, New Peckham
Close, Henry Ashlin, H.M. ship *Royal Adelaide*
Fleury, Charles Robert, Peninsular and Oriental Company's Service
Harrer, Charles J. J., M.D., Vienna
Haward, John Warrington, St. George's Hospital
Hayden, William Gallimore, High Wycombe
Hewitt, William, Upton, near Birkenhead
Hide, John, 1, Ebenezer Terrace, Turner Street, Mile End Road
Hunter, John Charles, 30, Wilton Place, Belgravia
Hyde, George Edwin, Worcester
Jones, Thomas E., Llanasa, Flintshire
Ranson, Wynne Staton, M.D., Wincanton
Sheridan, John Wilton, Stowmarket
Simpson, John Henry, Maidstone
Skinner, David Shorter, Headcorn

ROYAL COLLEGE OF SURGEONS. The following members of the College, having undergone the necessary examinations for the Fellowship, were reported to have done so to the satisfaction of the Court of Examiners, and at a meeting of the Council on December 10th, were confirmed. Those gentlemen with an * prefixed to their names, also passed the preliminary examination in Classics, Mathematics, and French.

England, William, Winchester: diploma of membership dated December 3, 1847
*Greenhill, Joseph Ridge, Army, Royal Victoria Hospital, Netley: April 13, 1860
Ilott, Edward, Bromley: July 14, 1848
Langdon, Thomas Charles, Winchester: March 19, 1858
*Nesbitt, Francis Albert, Wolverhampton: May 15, 1854

At the same meeting of the Council, the following members, having been *elected* Fellows at previous meetings, were admitted as such.

Alexander, Charles Linton, Great Dover Street, Borough: diploma of membership dated February 18, 1842
Brown, Richard, Brighton: February 17, 1843
Penny, Henry James, H.M.Indian Army: March 5, 1841

Admitted to the *ad eundem* membership—

Robertson, John Charles George, Lunatic Asylum, Hanwell, a Licentiate of the Royal College of Surgeons of Edinburgh: January 19, 1853

About eighty candidates are now undergoing their preliminary examinations for the membership of this College.

The following members of the College, having undergone the necessary examinations, were admitted Licentates in Midwifery at a meeting of the Board, on December 16th.

Amy, Frederic, M.D.Edin., Jersey: diploma of membership dated January 30, 1862
Andrew, James Lawton, Mossley, near Manchester: May 6, 1863
Benson, Joseph Henry, Hornsey Road: January 28, 1862
Bullmore, Charles Forrester, Falmouth: July 29, 1863
Cresswell, Alfred, L.S.A., Peninsular and Oriental Steam Navigation Company: May 18, 1858
Eaton, Frederick Bond, Lansdown Road: July 30, 1863
Emanuel, Leonard, M.D. St. And., Inverness Road: May 16, 1859
Hayden, Wm. Gallimore, L.R.C.P., High Wycombe: Nov. 20, 1863
Lydall, Wykeham Hawthorne, Westbourne Park Road: November 18, 1862
Mahon, George Annesley Derville, L.S.A., Aspley Woburn, Beds.: July 30, 1862
Ruddock, Edward Harris, Woolwich: July 31, 1863
Shaw, Charles Edward Martin, Crewkerne: November 19, 1863
Stott, William John, Haslingden, near Manchester: Nov. 18, 1863

University of London. M.B. Second Examination, 1863. Examination for Honours.

First Class. *Surgery.*
Beddard, James, Scholarship and Gold Medal, Guy's Hospital
Pye-Smith, Philip H., Gold Medal, Guy's Hospital
Stevenson, Thomas. Guy's Hospital
Rivington, Walter, London Hospital

Second Class.
Clarke, Julius St. T., Guy's Hospital
Edis, Arthur W., Westminster Hospital

First Class. *Medicine.*
Jones, John T., Scholarship and Gold Medal, University College
Pye-Smith, Philip H., Gold Medal, Guy's Hospital
Stevenson, Thomas, Guy's Hospital
Beddard, James, Guy's Hospital

Second Class.
Roberts, Frederick T., University College
Lanchester, Henry T., St. Bartholomew's Hospital
Hicks, John W., St. Thomas's Hospital

Third Class.
Clarke, J. St. T., Guy's Hospital
Gwyther, James, Manchester Royal Infirmary
Edis, Arthur W., Westminster Hospital

First Class. *Midwifery.*
Stevenson, Thos., Scholarship and Gold Medal, Guy's Hospital
Hicks, John W., Gold Medal, St. Thomas's Hospital
Pye-Smith, Philip H., Guy's Hospital
Beddard, James, Guy's Hospital

Second Class.
Clarke, J. St. Thomas, Guy's Hospital
Harries, Gwynne H., King's College
Jones, John T., University College
Roberts, Frederick T., University College

Third Class.
Gwyther, James, Manchester Royal Infirmary
Rivington, Walter, London Hospital

First Class. *Forensic Medicine.*
Stevenson, Thos., Scholarship and Gold Medal, Guy's Hospital
Jones, John T., Gold Medal, University College
Clarke, Julius St. T., Guy's Hospital
Rivington, Walter, London Hospital } equal.
Roberts, Frederick T., University College }

Second Class.
Beddard, James, Guy's Hospital } equal.
Pye-Smith, Philip H., Guy's Hospital }
Gwyther, James, Manchester Royal Infirmary

Third Class.
Edis, Arthur W., Westminster Hospital } equal.
Hicks, John W., St. Thomas's Hospital }
Axford, William H., King's College

M.D. Examination, 1863.
Hewlett, Richard W., King's College
Marriott, Charles H., University College
Money, Frederick J., St. Thomas's Hospital
Parson, Edward, King's College
Ringer, Sidney University College
Tonge, Morris, King's College
Woakes, Edward, St. Thomas's Hospital

Apothecaries' Hall. On December 10th, the following Licentiates were admitted:—
Fitzhenry, George, Brynmawr, Brecknockshire
Fox, Edward Lloyd Harries, University College Hospital
Hughes, David, Llangollen
M'Kenzie, J. J.
Rooke, William Foster, Scarborough

At the same Court, the following passed the first examination:—
Beckett, Francis Mears, St. Bartholomew's Hospital
Buckle, William Turbeville, King's College
Smith, Henry Richard, Guy's Hospital

Passed as an assistant:—
Clarke, Walter, Hereford Place, Commercial Road

APPOINTMENTS.

*Brown, Frederick James, M.D., appointed Consulting Surgeon to St. Bartholomew's Hospital, Chatham.
Radcliffe, John N., Esq., elected Non-Resident Medical Officer to the National Hospital for the Paralysed and Epileptic.
Rice, William, L.R.C.P.Ed., elected Assistant House-Surgeon to the Liverpool Southern Dispensary.
Robertson, John, M.D., elected House-Surgeon to the Carlisle Dispensary.

Poor-Law Medical Service.
Allan, William W., L.R.C.P.Edin., to District No. 1 of the Wharfedale Union, Yorkshire.
Brecknell, William H., M.D., to the Heworth District of the Gateshead Union.
Graham, J., Esq., to the Burningham District of the Teesdale Union.
Granger, William S., Esq., to the Parish of Owermoigne, in the Weymouth Union.
Hardisty, James J., L.R.C.P.Edin., to the Brookland District of the Romney Marsh Union.
James, David, M.D., to the Parish of Dunbar.
Olive, Eustace H., Esq., to District No. 6 of the Brixworth Union, Northamptonshire.
O'Neill, Timothy, M.D., to the Ballyduff Dispensary District of the Lismore Union, co. Waterford.
Radford, Thomas, Esq., to the Rishangles District of the Hartismere Union, Suffolk.
Sallers, William, Esq., to the Pilkington Nos. 1 and 2 Districts of the Bury Union, Lancashire.
Skaife, Henry, Esq., to the Kilburn District of the Thirsk Union, Yorkshire.
Steele, James, M.D, to the Parish of Cambusnethan, Lanarkshire.
Williams, Frederick, Esq., to the North Hill, or No. 2 Divided District of the Launceston Union.

Royal Navy.
Cannan, Richard, Esq., Acting Assistant-Surg., to the *Salamander*.
Ninnis, Belgrave, Esq., Assistant-Surgeon, to the *Curaçoa*.
Rattray, Alexander, M.D., to the *Salamander*.

Volunteers. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—
To be Honorary Assistant-Surgeon:—
Houseman, E. C., Esq., 17th West Riding R.V.
Riddell, R., Esq., 5th Berwickshire R.V.

DEATHS.

Braithwaite, Francis, Esq., Surgeon, at Hereford, aged 59, on December 2.
Green, Joseph H., Esq., D.C.L., F.R.S., President of the Medical Council, at Hadley, aged 72, on December 13.

Royal Institution. Considerable sums have been paid to the Donation Fund for the Promotion of Experimental Researches.

Bequest. The late Mrs. A. E. Ward has bequeathed to the Sussex County Hospital, £500, and the London Hospital, £500.

Middlesex Hospital. Twenty-seven engravings have been presented to this hospital by Mr. Graves. They have been distributed throughout the surgical wards.

A Fortunate Doctor. Dr. C. A. Campbell of Ottawa, Canada, is said to be the heir to the Breadalbane Estates, worth about £40,000 *per annum*.

The Academy of Sciences. Mr. Sylvester of Woolwich, the distinguished mathematician, has received the distinction of being elected corresponding member of the French Academy of Sciences.

Society of Arts. Dr. Cautor of the East India Company's service, left about two years ago all his property to be divided between the Society of Arts and the Wellington College. In consequence, the Society of Arts have arranged for the delivery of lectures, to be called "Cautor's Lectures."

Royal Medical Society of Edinburgh. Drs. David J. Simpson, William Rutherford, Montgomerie Bell, and Thomas Annandale, have been elected annual presidents of this Society.

New Zealand Birds. During his travels, Dr. Hester has made a discovery of a character extremely interesting to ornithologists, viz., recent traces of the *notornis*, a smaller species of the *dinornis* (moa.) He expects that this is the bird which has given rise to the many rumours of the moa having been seen. He hopes to capture one of these birds.

The Bath Municipal Corporation is represented at the present time, by no less than seven members of the medical profession, viz.: Drs. Barret, Falconer, Lloyd, Tunstall, and Messrs. Gore, Barter, and Cox. Within the short period of eight years, four medical men have been mayors of this city, viz.: Mr. William Bush, Dr. Falconer (two years in succession), Dr. Thomas Barrett, and Mr. Thomas Barter.

Indian Medical Staff Corps. We understand that the Indian Government are about to establish a local Medical Staff Corps, upon somewhat the same principle as the General Staff Corps in that country; and that the service will be open to all assistant-surgeons in the British army who are willing to volunteer, and who can reckon five years from the date of being gazetted. The pay will be six hundred *rupees* a month, with twenty shillings a day retiring allowance after twenty-five years. (*United Service Gazette.*)

Dr. Hofmann. We learn that the chair of chemistry at Berlin, rendered vacant by the death of M. Mitscherlich, has been offered to Dr. Hofmann, the able chemist of London, who has thus the alternative of a choice between Bonn and Berlin, for the University of Bonn has already made him a similar offer, and has placed at his disposal a sum of £20,000 for the establishment of a laboratory. Dr. Hofmann has, moreover, recently been elected corresponding member of the Academy of Sciences of Vienna. M. Bunsen refused the chair at Berlin, as he would not leave the circle of friends which he possesses at Heidelberg.

Royal College of Physicians of Edinburgh. At the annual election meeting held on Thursday, Dec. 3rd, 1863, the following office-bearers were elected for the ensuing year:—*President*—Dr. John G. M. Burt. *Council*—Dr. David Craigie; Dr. William Seller; Dr. John Moir; Dr. Robert B. Malcolm; Dr. Alexander Wood; Dr. William H. Lowe. *Vice-President*—Dr. David Craigie. *Examiners*—The President; Drs. Craigie, Seller, Wood, Douglas, R. Paterson, Wright, Keiller, Pattison, Cumming, Duncan, J. W. Begbie, Haldane, Sanders. *Treasurer*, Dr. Samuel Somerville. *Secretary*, Dr. Daniel R. Haldane. *Librarian*, Dr. J. Matthews Duncan. *Curator of Museum*, Dr. T. Strethill Wright. *Clerk*, Mr. Christopher Douglas, W.S. *Auditor*, Mr. Kenneth Mackenzie, C.A. *Under Librarian*, Mr. John Small. *Officer*, Thomas Marshall.

Symm *v.* Fraser and Andrews. Had the verdict been for the plaintiff it would have been natural to look for a crop of actions of a similar kind, and medical men would have exercised their profession under a restraint most injurious to the sick and afflicted, and liable at any moment to be hauled before a judge for saving the life of a fellow creature. The medical profession guards jealously its honour, and, under the laws as they stand, there is a *maximum* of chances against any violation of the liberty of the subject from their conduct. It is as regards lunacy, or alleged lunacy, mainly, that the greatest watchfulness is demanded from the law; because an alleged lunatic has been taken away from friends and relatives, and literally placed in arrest. But in the case of patients suffering from transient delirium, the consequence of disease, the treatment to which they are subject goes on in their own homes, and under the eyes of friends who are cognisant of and consenting parties to the restraint demanded for the safety of others as well as the patient. The law should and does guard with vigilance personal liberty, but at the same time it should and does guard also a profession whose members are bound sometimes to direct that the actions of a patient should be restrained. Dr. Fraser and Dr. Andrews have suffered a pecuniary loss by being put on their defence, quite as much in the interests of their profession, and in the interests, we may add, of the public, as in their own interests; and we trust the suggestion that their brethren should subscribe to pay the costs of this action will meet with a ready response. (*Globe.*)

Death of Joseph Henry Green, Esq., F.R.S. This estimable and learned member of the profession died at his residence, the Mount, Hadley, near Barnet, on the 13th inst. The deceased was an only child of wealthy parents, from whom he received a first-class elementary education. His mother—the sister of the celebrated Henry Cline, then the principal surgeon to St. Thomas's Hospital, accompanied her son to Berlin, where she remained during the whole of the time he was perfecting those studies which laid the foundation of his fame. He acquired his professional knowledge at St. Thomas's Hospital, under Mr. Cline, and was admitted a member of the Royal College of Surgeons on December 1st, 1815, having for two years previously acted as demonstrator. In 1818, he joined Mr. afterwards Sir Astley Cooper, as joint lecturer on anatomy and physiology. In 1820, he succeeded the younger Cline as surgeon to St. Thomas's Hospital, and with Sir Astley Cooper then delivered lectures on surgery and pathology. Lithotomy, having in 1827 operated in forty cases, and lost only one patient; this success is unequalled. In 1830 he was appointed to the professorship of surgery in King's College, of which institution he was at the time of his death a member of council. In 1831 he wrote a pamphlet, called *Distinction without Separation*, addressed to the President of the Royal College of Surgeons, to prove that the distinction between physician and surgeon did not really exist, and that such division was highly injurious where it did. In 1834 he wrote a memorable letter to *The Times*, suggesting a plan of medical reform, to the effect that the medical student should have a sound, classical, and mathematical education, and proposing a higher and a lower grade or distinction. In 1835, on the death of Mr. Lynn, Mr. Green was unanimously elected to the chair in the councils of the college. In 1840 he delivered the annual oration in memory of Hunter, afterwards published under the title of *Vital Dynamics*; and again in 1847, he became Hunterian orator, and published the lectures under the name of *Mental Dynamics*. Neither were considered popular discourses; they were full of the metaphysical notions entertained by the celebrated Coleridge, his intimate friend. In 1846, on the resignation of Sir Benjamin Brodie, he was elected a member of the Court of Examiners, and in 1849 obtained the President's gown—an honour again conferred on him in 1858. From Her Majesty's Government he received the appointment of President of the Council of Medical Education and Registration of the United Kingdom, on the resignation of Sir B. Brodie. The death of Mr. Green, though at last sudden, was not altogether unexpected; he had been labouring for some months under a severe attack of gout, complicated with disease of the heart. He had so far recovered as to be able to visit his sitting-room, when on Sunday last he was suddenly seized with his fatal illness, which carried him off in his seventy-second year. He leaves a widow and a large circle of friends to deplore his loss.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M. —Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.— Great Northern, 2 P.M.— London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M.

TUESDAY. Royal Medical and Chirurgical Society, 8 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

JOURNALS WANTED.—Wanted, to complete sets of the BRITISH MEDICAL JOURNAL, a few copies of the volumes from July to December 1861, January to June 1862, and July to December 1862; also of the number for January 3rd of the present year. Gentlemen who have these copies, and do not further require them, will greatly oblige by forwarding them to the publisher, Mr. Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W C.

WE are glad to hear that St. Bartholomew's Hospital has, for some years past, had a chloroformist on the regular staff of the hospital, and that his services are remunerated by a suitable salary. The office has been held by Dr. Black, Dr. Martin, and at present, we believe, by Dr. Andrew.

T. B. T.—The book is published by Longman and Co., Paternoster Row, London; and by Webb and Hunt, Liverpool.

OUR readers will see by the following advertisement, which is cut from a prominent position in the *Times*, that Messrs. Savory and Moore possess a specific for asthma.

"*Asthma Specific.*—Datura Tatula.—By immediate contact with the air-cells and passages, the fumes of this plant afford instantaneous relief. The remedy is adapted for use by all patients. Introduced into this country and prepared only by Savory and Moore, chemists to Her Majesty and H.R.H. the Prince of Wales."

Such is the "last new thing" in asthma! We recommend Messrs. Savory to head their next advertisement with "Physicians Superseded." "Every Man His Own Doctor." What use is there in asthmatics applying to doctors, when Messrs. Savory and Moore can do the needful for them without a fee?

GRATUITOUS SERVICES AND THEIR REWARD.—M.D. says: "Allow me to call your attention to the enclosed letter, taken from one of our local newspapers. It is a good specimen of the modern notion as to one of the uses to which hospitals should be applied; viz., to rob the medical man of his hard-earned dues. How is the public to be disabused of this most *uncharitable* notion?

"*Addenbrooke's Hospital.* Sir,—Allow me, as one feeling deeply interested in the prosperity of the above institution, to make one or two suggestions for consideration in the contemplated alterations. Seeing by the reports that it is said, and no doubt correctly, that many persons are admitted, which, some think, ought not to be from their circumstances in life, would it not be desirable to arrange in the new building a few comfortable rooms for the admission of patients, who, upon paying a weekly sum, might have the opportunity of enjoying the advantage of the best of skill, with all the necessary appliances and comforts of a home, thereby making the same provision for persons afflicted in body, as is made by our lunatic asylum for affliction of mind? And also appointing collectors and canvassers for the institution, as I well know many persons, if applied to, would gladly contribute to the funds. "A WELLWISHER.

"Cambridge, November 25th, 1863."

COMMUNICATIONS have been received from:—Mr. OLIVER PEMBERTON; Mr. R. M. CRAVEN; Mr. LOWNDES; Dr. FREDERICK J. BROWN; Mr. T. M. STONE; Dr. S. MONCKTON; Mr. WILLIAM COPNEY; Dr. HENRY MARSHALL; Dr. FLEMING; Dr. HUMPHRY SANDWITH; Dr. BURROWS; Dr. ROUTH; Dr. WILSON; Dr. FORBES WINSLOW; Mr. BOWLES; Mr. T. B. THWAITES; Mr. HAYNES WALTON; Mr. W. BOWMAN; Mr. T. S. FLETCHER; THE SECRETARY OF THE PHARMACEUTICAL SOCIETY; and A POOR CLUB-DOCTOR.

NOTICE.—The first number of a New Series of the MEDICAL CIRCULAR (Vol. 24th) will be sent on Wednesday, January 6th, 1864, to every Member of the Profession whose name appears in the Medical Directories for England, Scotland, and Ireland. The intention of this large issue of the Journal is to draw attention to its many improvements, in size, in paper, and in the arrangement of its contents, which, under new Editorial management, will be of a more practical character, and better adapted to the requirements of the busy practitioner than heretofore.

Advertisements on this occasion cannot be received later than Saturday January 2nd.

OFFICE: 20, KING WILLIAM STREET, STRAND.



BENSON'S WATCHES AND CLOCKS.

"PERFECTION OF MECHANISM."—MORNING POST.

J. W. BENSON,

WATCH AND CLOCK MAKER,

BY SPECIAL WARRANT OF APPOINTMENT TO H.R.H. THE PRINCE OF WALES

Manufacturer of the Great Clock of the International Exhibition, 1862.

PRIZE MEDAL, CLASS 33. HONOURABLE MENTION, CLASS XV.

OPINIONS OF THE PRESS.

"To this department of Art-manufacture, Mr. Benson has paid especial attention."—*Art Journal*, August, 1862.

"Undoubtedly, however, the finest show is made by Benson, who offered prizes for designs for Watch Cases at the South Kensington Museum, and who, by this means, has secured some of the most exquisite ornamental details for watch cases that are shown in the building."—*Times*, May 7, 1862.

See also *Times*, June 11, 1862; *Daily News*, May 29, 1862; *Standard*, June 2, 1862; and others of the Daily and Weekly Press.

BENSON'S ILLUSTRATED WATCH PAMPHLET, Post free for Two Stamps, contains designs and prices, and all the information necessary for the Purchase of a Watch.

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Addresses and Papers

READ AT

THE THIRTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in BRISTOL, AUGUST 5th, 6th, and 7th*, 1863.]

VACCINATION, AND THE BEST MEANS OF EXTENDING IT.

By T. S. Fletcher, Esq., Bromsgrove.

The subject of vaccination must ever be one of great importance; for, if vaccination could be universally adopted, we should have no small-pox; and in proportion as it is neglected, so will small-pox prevail to a lesser or greater degree. I bring the subject before you at this time, because various circumstances have occurred which render it evident that Government must do something to extend vaccination; and it is generally understood that Government will introduce a bill for this purpose in the next session of Parliament; and I think this Association may now, as it did on a former occasion, offer some useful suggestions.

The vaccine disease is not met with amongst oxen or grazing cattle; in our dairy-cows, it is found in those parts handled by persons milking; and as small-pox has become so much less common than before the days of Jenner, so we now seldom or never meet with cow-pox in the cow. We therefore have strong presumptive evidence that cow-pox is a disease accidentally or designedly produced in the cow by the inoculation of thuman small-pox. Mr. Ceely of Aylesbury has not left his a presumptive or doubtful question; for he, by inoculating a cow with small-pox matter, procured cow-pox. The small-pox, in passing through the cow, lost all its virulent and infectious properties, but retained the power of communication by contagion, and of protecting persons from small-pox, in the same manner as small-pox itself would have done.

When persons are inoculated for small-pox, the specific poison enters into the constitution and produces an eruption on the skin, and (as a general rule) renders them proof against a second attack; and exactly in the same manner, cow-pox enters into the constitution, produces an eruption at the places vaccinated, and protects the individual. The protection afforded by small-pox is not in proportion to the eruption; and, where many or all the pocks have been destroyed, the protection has remained the same. It must therefore be very doubtful if the eruption be essential to protection. As regards cow-pox, certain experiments have been made, by removing the pustules as soon as the red specks appeared; yet the persons in whom the pustules were thus treated resisted small-pox inoculation, and were evidently as equally protected as others, in whom the pustules had run the usual course. May we not define cow-pox to be a harmless, contagious variety of small-pox; and conclude that the peculiar principle (be that what it may) which gives protection in cow-pox, is the same as that possessed by small-pox?

On Dr. Jenner's examining the first case he vaccinated, he says—"The appearance was new to me; and I ever shall recollect the pleasing sensation it excited, as from the similarity to the pustule produced by variolous inoculation, it incontestably pointed out the close connection between the two diseases, and almost anticipated my future experiments." Elsewhere he speaks of cow-pox as being the same disease as small-pox in another form; and in his last treatise he says—"My opinion is, that the small-pox and cow-pox are the same disease under different modifications."

Mr. Marson contends that "cow-pox is not a disease natural to man, and incapable of communication by infection, therefore differing from small-pox, small-pox being unchangeable, it being now what it ever has been and ever will be."

Various experiments have been made to communicate small-pox to cows by infection, but without success. It therefore is with cows, like cow-pox, not an infectious, but a contagious disease; and cow-pox, like hydrophobia and glanders, is not an infectious but a contagious disease, and like them not a disease natural to man. Yet why, on these accounts, should we suppose there can be any liability to change, or require a greater amount of the specific animal poison (than the minute quantity necessary to affect the constitution) in cow-pox, than in hydrophobia, glanders, or small-pox? Are we to suppose that, if hydrophobia (which is not an infectious disease, or natural to man) had been transmitted, like cow-pox, from man to man, for sixty years, its specific properties would have undergone, or be liable to, any change? Certainly not.

Cow-pox, like hydrophobia, is unchangeable; yet some persons say it has, by time, become deteriorated, and bring forward tables to prove the fact. But the following simple experiment shows the fallacy of supposing any such change could take place. Vaccinate a child in two places, the one with matter fresh from the cow, and the other with old human lymph. The pocks will be similar, and there cannot possibly be any difference, in their protective powers.

The opinion of the National Vaccine Institution is: Lymph does not lose any of its prophylactic power by continued transit through the human body.

Another, and a highly important question is, Can we have different degrees of quality of lymph? As we have only one quality of small-pox, so I believe we can have only one quality of cow-pox. But some persons, of the highest authority, say—"the like will produce the like;" and if you have no regard to this rule, and take lymph from small inferior pocks, you will produce the same degenerated kind. On the other hand, by selecting lymph from the best pustules, you may improve the quality to the highest degree.

Thus, we are told, on the day of the marriage of the Prince of Wales, no children were present at the Surrey Chapel Vaccination Station; and the following week there was consequently no means of carrying out the usual arm-to-arm vaccination, and Mr. Marson was thus driven to use preserved lymph to vaccinate twenty-two children on that day. The effect was, the lymph for some time afterwards, although it took effect, did not produce such fair vesicles as before the interruption; but by selecting the best arm of the day to vaccinate from, Mr. Marson has now worked it back again to as good a state as before. Not only does this case of Mr. Marson's prove to us that he believes there are different qualities of lymph, affording different degrees of protection, but that arm-to-arm vaccination affords the best quality of lymph and the highest degree of protection; while dry lymph, on ivory points, produces an inferior lymph, and a less degree of protection.

Let us seriously consider if there possibly can be any difference in quality. Cow-pox, like small-pox, when introduced into the system, will, by multiplying itself, affect the whole body and protect it from a future attack; and no difference can possibly arise, whether the poison were from a small or large pustule, or fluid or dry lymph. It is unchangeable, and incapable of producing any other than one, its own specific effect. Those who believe in these different degrees of quality of cow-pox, say that the most inferior degree affords a perfect protection from death by small-pox till after puberty! Then, is it not natural to suppose that, when small-pox does happen after that period, it arises from the peculiar constitution of the person having regained the same state it formerly

possessed before vaccination, and not from any degree in the quality of the lymph employed? If a person have inoculated small-pox, the having a second attack does not depend upon any degree in the quality of the small-pox used in the inoculation, but upon his constitution; and so with vaccination.

Another question is, regarding quantity, or, as it is called, "a high insertion success," numerically speaking.

Mr. Marson, in a petition to the House of Commons, says, the mortality among the vaccinated attacked by small-pox is seven per cent. taken generally. But among what he characterised as badly vaccinated it is fifteen per cent.; among those, on the other hand, who may be considered to have been well vaccinated, that is to say, who have four or more good vaccine cicatrices, the mortality is less than one per cent. Thus, says he, the necessity of carefully conducted vaccination is rendered strikingly manifest by the mortality of fifteen per cent. in the badly vaccinated, and only three-fourths of one per cent. in the well vaccinated, when attacked by small-pox.

"It is," says Buchanan, "a matter of exceeding importance that the vaccination should be performed in such a manner as to insure a high insertion success, numerically speaking. For if a child have been vaccinated, if the vaccination have taken at all, the operation is at an end; and the individual remains afterwards with the degree of protection afforded by the first vaccination, whatever that may be. A child in whom, for instance, the arm has taken, in one place, remains protected only to that extent; and it is not possible subsequently to confer a greater degree of protection by a better vaccination." Dr. Stevens, a Government Vaccination Inspector, strongly recommends three punctures in each arm. So strong a believer is Dr. Hewitt in the "numerical-insertion-success"-system, that he recommends a series of four very minute punctures to be made very close together, so close as to leave an almost imperceptible space between them; and it is intended to produce one pustule only by the four punctures. Five or six sets of punctures should be made, so as to produce five or six scars, the object in making the four minute punctures being to insure the introduction of the lymph, and to increase the "insertion success."

Here we have Mr. Marson advancing a theory that protection depends upon the quantity of vaccination employed, and a Government Vaccination Inspector lamenting that greater protection cannot be given to a child with a single vaccine pustule; "for," says he, "it remains protected only to that extent." Evidently believing had it had four pustules, its protection would have been four-fold greater than with one. And we have a lecturer in one of the first London schools recommending twenty to four-and-twenty punctures to insure the introduction of the lymph, and to increase the quantity, or, as he calls it, "the insertion success," numerically speaking. It is true, he says, make the punctures small; but what does it matter if the punctures are large or small, so that the lymph is introduced; for, let it be ever so minute or extensive, it will, as I said before, by multiplying itself, affect and protect the whole body. And, if it be thus protected up to puberty, the failure of protection afterwards does not depend upon the quantity of lymph introduced, or the number of punctures made, but upon the constitution of the person vaccinated.

The facts related by Mr. Marson are the result of nearly 6,000 cases, carefully recorded, at the London Small-Pox Hospital. They therefore demand our most serious attention; for if all other cases are like these 6,000, then it is manifest that, by adopting his recommendation to vaccinate so as to insure at least four good cicatrices, we render protection to life from small-pox, as he says, almost perfect. Whereas, on the other hand, if his views be correct, and we remain satisfied with vaccination producing one bad cicatrix, nearly fifteen in every hundred of those thus vaccinated, who may happen to have the small-pox, will be victims to our carelessness or our opinions.

I wish, therefore, my views should be received with the greatest caution. But what says Dr. Jenner? *He* makes a marked difference between the local effect and the effect on the constitution. He says: "It is singular that, in most cases of secondary small-pox, the disease in the first instance has been confluent, so that the extent of the ulceration on the skin (as in cow-pox) is not the process in nature which affords security to the constitution." And, again, he says: "As cases of vaccination multiply, I am more and more convinced of the extreme mildness of the symptoms, arising merely from a primary action of vaccination on the constitution; and those symptoms which, as in accidental cow-pox, affect the patient with severity, are entirely secondary, excited by the irritating process of inflammation and ulceration. A single cow-pox pustule is all that is necessary to render small-pox ineffectual.

Mr. Marson's views are therefore contrary to the preconceived opinions of scientific men, who believed one vaccine vesicle was as good as a thousand. And we must bear in mind the percentage he gives is not that on persons vaccinated, but on those who, after vaccination, have the small-pox; and that his tables are not corroborated by those of others. There, therefore, may perhaps be something in the locality affecting other circumstances besides the death-rate he gives, which is most disproportionate when compared with other tables. The average number of deaths after vaccination, taken generally, is according to Mr. Marson 7 per cent., or 1 in 14, within a fraction; whereas Mr. Thomson of Edinburgh only lost 3 in 1,500 cases, or 1 in 500. The one losing 1 in 14, the other 1 in 500, the difference is as 1 is to 35. And perhaps this may explain why, when our country schools are inspected, on Mr. Marson's theory, only ten per cent. of those vaccinated are supposed to be protected from small-pox, which never was, and I hope never will really be the case.

Neither are Mr. Marson's tables borne out by the finest possible test; namely, re-vaccination. For the re vaccination of nearly 14,000 soldiers in the Würtemburg army shows that insusceptibility to cow-pox evidently does not depend upon any original ineffectiveness in the former vaccination; and the experience of other countries confirms the general accuracy of the Würtemburg tables. Surely, then, Mr. Marson's theory requires other practical corroboration than that of London, before Government Inspectors should report that only ten per cent. of those in our schools who are vaccinated are safe; and carry out these views by obtaining the dismissal of private practitioners as public vaccinators, to insure a better kind of vaccination by appointing union surgeons the only public vaccinators.

Vaccination of the Würtemburg Army.

13,681 of the 14,384 Military Vaccinations of the above army, being classified according to the marks of previous vaccination or small pox, the results were as under.

Degree of success of re-vaccination.	Of cases with *normal* cicatrices of vaccination there were 7845, and among these the results per 1000 were—	Of cases with *defective* cicatrices of vaccination there were 3545, and among these the results per 1000 were—	Of cases with *no* cicatrices of vaccination or small-pox there were 2025, and among these the results per 1000 were—	Of cases bearing marks of previous small-pox there were 266, and among these the results per 1000 were—
Perfect.....	310·4	280·7	337·3	319·5
Modified	280·5	259	191·1	248·1
None	409·2	460·4	471·6	432·3

Those who believe in Mr. Marson's theory, insist

most strongly upon vaccination being performed on a large scale by a limited number of public vaccinators at public vaccination stations. And, where the smallness of the population requires it, to have these vaccinations performed, periodically or otherwise, at times of longer or of shorter duration.

This plan is only increasing the worst evils of the arrangements under the present Act, and cannot fail to retard vaccination. You may (as proposed) employ individuals to send persons to these vaccination stations, and, if they do not comply, you may fine them, and, as also proposed, placard them, as railway officials do those infringing their Act. But it will do no good. It will fan what is now only carelessness respecting vaccination into a bitter hatred against the law and vaccination itself. Let us do as we would be done by! Would we like to have our children—would the rich like to have their children—vaccinated at public vaccination stations? Certainly not! Then why expect the poor? The measure has been tried for twenty-three years, and found most singularly to fail; then, why try, not only to continue, but to increase the evil? Lord Lyttelton, who introduced the Compulsory Vaccination Act, never intended that public vaccination should be limited to union surgeons, but that any surgeon who chose should be appointed. He is chairman of the Board of Guardians to which I am surgeon; and no sooner did his Act come into operation, than, on his lordship's suggestion, all the medical men in the Union were appointed public vaccinators: and the following table clearly shows the formation of the Union into districts; and the confining the gratuitous vaccination in some of these districts to one vaccinator has been a great hindrance to vaccination.

Bromsgrove Union.

No. of District.	Vaccinators.	Percentage Vaccinated.
1	5	100
2	3	79
3	1	26
4	1	22
5	1	16

The machinery of the Vaccination Act being so much connected with the working of the Poor-Law Act, the formation of districts, the appointment of public vaccinators, and vaccination stations, and the interference of the law with the vaccination itself, are, I am sure, serious impediments to vaccination. I want to see the plan carried out recommended by the Epidemiological Society. They say: "It is not desirable any public arrangements should put any obstacle in the way of the employment of medical men willing to undertake this great public duty; on the contrary, there is no way by which the people will be more surely attracted to vaccination than by their being able to select the practitioner by whom they wish it performed."

I would, therefore, propose that the law should insist upon all children being vaccinated before they are three months old (when, where, and by whom the parents please), so that the vaccination is certified by a medical man, and the certificate registered at the office of the registrar of the district in which the child was born; and no child to be considered as vaccinated until the vaccination is registered. Having done this, the law must (as it now does, but in a very different manner to the present) provide gratuitous vaccination for those who cannot or will not pay for it. To do this, the registrar should, when registering a birth, issue a form (Schedule A), to be filled up and returned to him. Those certifying gratuitous vaccination, the registrar should, at the end of the quarter, present for payment of one uniform fee, to come from the same source whence he receives his fees for registering births; these fees should then be paid to the medical man who certified to the gratuitous vaccination. If out of the registrar's district, by a post office order, unless otherwise arranged. I would not interfere with, but increase the powers of the Board of Health as regards government vaccinators and vaccination stations for the supply of lymph; and have also county vaccination inspectors, and a central vaccination board. The above plan is simple, effective, prevents fraud, treats all alike, and if adopted, would, I think, meet with the hearty co-operation of the public and the profession.

The importance of a systematic re-vaccination is now unquestionable. I would therefore propose that one successful re-vaccination should be gratuitously paid for, in somewhat the same manner as the first, providing it is after the child is ten years of age; seven is early, but they will not be so likely to have left home. Wherever small-pox may be prevalent, gratuitous re-vaccination should be most liberally performed.

I could have wished to have said something on the necessity of great attention in procuring lymph, on inspecting the pustule after it is formed, on the supposed power of vaccination in transmitting diseases, and of the question of the influence of disease on vaccination; but I have said much more than I at first intended; and my chief object has been to recommend a safe and popular measure as the best means of extending vaccination.

SCHEDULE A.—*A Notice Paper for Vaccination.*

No. in the Vaccination Register.

To all to whom it may concern, especially to the parents or person having the care of or custody of , the child of , of .

I give you notice and require you to have the above child vaccinated before it is three months old, and to take it on the eighth day after for inspection; and I further give you notice that the child is not in law considered vaccinated till the underneath Vaccination Certificate is properly filled up, and registered at my office. Should you neglect doing so, you will be liable to a fine not exceeding 20*s.*; and, if not paid, to an imprisonment for a period not exceeding seven days. And should you afterwards continue to neglect, you will be liable to the same proceedings.

Dated this day of , 186 .

Name.
Registrar of.

Certificate of Vaccination.

The above child was* on the day of 186 ; and it was inspected by me on the day of , 186 ; and the vaccination has taken successful effect. +

Name.
Title.
Address.

* Here state if "vaccinated" or "gratuitously vaccinated".
\+ If inspected by a *qualified pupil*, insert name, and for whom.

The filling up the following is optional, excepting in cases of gratuitous vaccination.

The above child was vaccinated from , child of , of , by fluid dry lymph; and punctures on the left and punctures on the right arm have taken effect.

Signed.

Request.

The above child has been gratuitously vaccinated at my request.

Name.
Address.

Claim of Exemption.

I claim an exemption from having the vaccination of the above child registered, for the undermentioned reasons.

Dated this day of , 186 .

Signed.
Residence.

SCHEDULE B.—*Vaccination Register.*

No. in this and Register of Birth.	Christian and Surname.	Residence.	Date of Birth.	Date of registration of vaccination, permanent exemption, or death.	Name of person signing certificate, and of vaccination gratuitously performed. Yes or no.	Date of registration of temporary exemption.	Date of re-vaccination. If gratuitously performed. Yes or No; and by whom.

Original Communications.

CURIOUS CASE OF EPILEPSY.

By HUGH ROBINSON, M.R.C.S., L.A.C., Pershore, Worcestershire.

W. G., aged 23, a strongly made but bilious-looking subject, had never had a day's illness (not even fits during dentition) until he was ten years old, when he was thrown from a horse, and fell on the *right* side of his head, and was insensible for some time, but gradually recovered. He has held for the last three years the situation of groom, and has led a somewhat dissipated life.

On July 23rd, 1863, while riding, he felt a peculiar tingling sensation down the left side. This passed off; but, on awaking next morning, he was seized with a most violent epileptic fit; and on the following morning had another. He then came home, and for some few days had no return of the fits, but was exceedingly depressed, and was treated accordingly with stimulants, and appeared to be much better.

July 30th. I was sent for, and found him in a most violent epileptic convulsion; the *left side* only being attacked, the right side not being affected in the slightest degree. The left eyebrow was firmly contracted; the left eye was drawn upwards and towards the left side; the left hand was firmly clenched, with the thumb drawn inwards towards the palm; the left arm and leg were most violently convulsed, requiring three persons to hold them. The tongue was severely bitten; and the mouth, which was drawn to the left side, was covered with bloody foam. The diaphragm was most violently convulsed, contracting and relaxing on the abdominal viscera, causing a most curious noise, which could be heard in the room below. The breathing, at first embarrassed, became for some seconds completely suspended. The face became turgid and livid; he fell back as if dead. I thrust my finger into his mouth, and hooked up the epiglottis, which I found firmly pressed down on the top of the larynx. He gave a sort of spasmodic gulp, and gradually recovered. He then became perfectly motionless, and had the appearance of a person in a deep sleep. After remaining with him for about ten minutes, I noticed a slight twitching of the left eyebrow, which gradually extended downwards to the face, arm, side, and leg; and then followed the same symptoms which have been described before. The pupils were slightly contracted; the tongue was furred; the bowels confined; and the pulse moderately strong. I ordered the head to be shaved, and cold lotions to be applied to it; mustard poultices to the calves of the legs; hot-water bottles to the feet; flannels wrung out of boiling water to be applied to the nape of the neck, and to be immediately followed by hot flannels steeped in a liniment composed of strong liquor ammoniæ, extract of belladonna, and soap liniment; a calomel and jalap purge; an assafœtida and turpentine enema; with sal volatile and effervescents; beef-tea and brandy; and I directed a piece of cork to be placed between the teeth each time that the fits occurred.

August 1st. He appeared much the same. The number of fits had varied, being sometimes three, sometimes six, sometimes more, during the hour. The pupils were natural.

August 2nd. The number of fits from 7 P.M. to 7 A.M. was 80. He talked quite incoherently; and had taken the most peculiar fancies into his head, one of which was, that his father would not give him enough to eat, although this was anything but the case. The liniment was ordered to be discontinued, and a blister to be applied to the nape of the neck.

August 3rd. The fits were so numerous that it was quite impossible to keep an account of them; in fact, he never appeared free. No sooner was one over than another was present. In other respects, he was much the same.

August 4th. The fits were still as numerous.

August 5th. He was much the same. He was placed under the influence of chloroform for three-quarters of an hour. After being under for about twenty minutes, I allowed him partially to recover; but the twitching immediately appeared, commencing, as before, in the left eyebrow. I therefore reapplied the sponge, and kept him under its influence for the remaining thirty minutes. On its removal, he had a very strong fit.

August 7th. He appeared much the same. The fits were quite as frequent, but not nearly so violent.

August 8th. He slept the previous night for about three hours, without having a fit. He appeared better.

August 9th. The fits were not as frequent, but now they seemed perfectly changed in character. No longer was there insensibility while they were present, or sleep while they were absent. The left side was still the affected one. He explained where there was most pain; and, even while the attack was the most severe, he pointed to the muscle most affected. Some fits seemed to be more severe than others. During the slighter ones, he frequently asked the persons holding his leg and arm to "hold them tighter down". He said that, while he could keep his eyes still, fixed on an object, the fits did not occur; but this he said he was unable to do for any length of time; but the moment he moved them, he was then seized. He had no foaming at the mouth; neither did he bite his tongue. He had lost power over his bladder and rectum; and, while the fits were absent, he had neither use nor sensation in the left side, but complete in the right. These attacks still commenced with the twitchings already described. A blister, three inches by eight inches, was ordered to be applied from the nape of the neck down the spine; and a mixture, composed of chloroform and extract of belladonna, to be taken every three hours.

August 12th. The blister had been kept open. The fits were not so numerous or as violent. Sensation was beginning to return in the arm and leg. He had regained the power over his bladder and rectum; and his peculiar fancies and craving for food had left him. He had about two fits during the hour.

August 20th. During the past week he had been improving; but this day the fits seemed to be increasing in severity, and slightly in number. Tincture of lobelia was substituted for the extract of belladonna.

August 22nd. He seemed much improved; had perfect sensation in both his arm and leg, and some power in each. When he put out his tongue, it inclined to the left side; and he talked as if he had not complete power over it.

August 24th. He was not so well; and was extremely restless. The fits were increasing in number. Tincture of henbane was added to the tincture of lobelia and chloroform.

August 26th. He was much improved. The restlessness had disappeared. The fits were gradually decreasing in number and severity. He had regained the entire use and sensation in his arm and leg.

September 4th. All that remained now was slight occasional twitchings of the left side of the face. He was much stronger, and went out daily. He was ordered to take small doses of sulphate of zinc and extract of henbane three times a day.

October 20th. He had now lost all traces of the twitchings, excepting very occasionally, and then only very slight. He has perfect use of his arm and leg.

October 27th. He returned to his situation, as he said, "as well as ever he was".

PATHOLOGICAL AND PRACTICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS.

By Edward Meryon, M.D., F.R.C.P.

[*Continued from page* 451.]

Paralysis from Dislocations and Fractures of the Vertebræ.

The functional disturbance of the spinal cord which attends almost all cases of dislocations and fractures of the vertebræ imparts an interest to such particular injuries, which the same accidents to other bones do not possess.

The shortness of the vertebræ, the intricate manner in which they are interlocked, the large surfaces by which their bodies are connected, and the small amount of motion admitted between any two of them, render it almost impossible that either dislocation or fracture can occur without considerable violence and mischief being done to the spinal marrow; and yet we do occasionally hear of fractured spines without paralysis, but they are exceptional cases.

Paralysis of every part of the body which is supplied with nerves proceeding from the spine below the seat of injury is the all-important symptom, and in almost every case it will be found that retention of urine and difficult defecation exist also. The former of these symptoms, however, is not dependent on a palsied state of the muscular fibres which surround the bladder, for that organ empties itself perfectly when a catheter is introduced. The detrusor urinæ is a voluntary muscle, and its loss of power would in some degree account for the difficult micturition; and it is chiefly to the loss of voluntary relaxation of muscles which surround the urethra and the rectum to which the symptoms in question are due. Like all other voluntary muscles of the body, they are under the influence of the spinal cord, and, as we have seen in most of the cases thus far recorded, retention of the excretions results from a severe injury or division of the cord. Incontinence is a common symptom when disease of the cord comes on gradually. It implies either irritation of the cord or of the bladder, in which latter case it is simply a reflex action, and as such, appears when the sphincter muscles of the bladder and rectum have lost their contractility shortly before death takes place.

Two instances of dislocation are contained in the *Leçons Orales* of Baron Dupuytren (*On the Injuries and Diseases of Bones.* Translated and edited by F. Le Gros Clark. Sydenham Society.) These typify all dislocations at the lower part of the cervical region, and tend to illustrate the fact, as stated by that illustrious surgeon, that the cause of death is, apparently, "the upward extension of disorganisation of the spinal cord, so that the origin of the phrenic nerves is ultimately involved, and death takes place from asphyxia."

MM. Hamon and Mercier have related two cases of fractured sacrum, in each of which, together with partial paralysis of the lower extremities, there was retention of urine and fæces. So also in a patient of Dupuytren's, who threw himself from a third story window. "There was deformity and abnormal mobility near the lumbar region. The paralysis did not at first extend above the lower parts of the thighs, but the bladder and rectum were included. There was a temporary improvement, but soon the paralytic condition involved the whole of the lower limbs; an extensive slough formed on the sacrum, and the patient sank, preserving his intellectual faculties to the last. The spinal cord was found more voluminous than natural, especially at its lower part. Opposite the tenth dorsal vertebra was a cyst filled with pus, and formed in part by the medullary substance reduced to a fluid consistence; the body of the second lumbar vertebra was fractured" (*Ibid.*, p. 365.)

The subject of the following case, also described by Dupuytren (*Ibid.*, p. 358-9), gives us some idea of the time required for the restoration of nerve-fibre after it has suffered solution of continuity.

Case. "Charles Millié, aged 21, carman, was admitted into the Hôtel Dieu in 1825, with paralysis of the bladder and extremities, caused by a fall on the neck. The paralytic condition was more marked on the left side than on the right, and in the lower than in the upper extremities. After two months and a half of entire rest, combined with blood-letting from the arm, as well as by cupping and leeches, he was convalescent, and quitted the hospital with only slight weakness in the left leg, and the head a little bowed forwards.

"In spite of injunctions to be very cautious in taking exercise, he undertook a long walk, and whilst out was attacked with paralysis; he fell down, and remained in the open air all night. When conveyed to the Hôtel Dieu on the following day, the paralytic condition was much more complete than on the former occasion, involving the lower extremities, which were entirely powerless and insensible, and also the arms from the shoulders to the hands. At the lower part of the neck there existed a pain which extended to the left shoulder; neither bladder nor rectum acted.

"The patient was bled twice and the catheter passed. Some days afterwards, he was affected with spasmodic contractions of the limbs and bladder, and the catheter was no longer required. A moxa was applied between the shoulders, but without benefit; the skin over the sacrum and trochanters began to slough, diarrhœa set in, and the patient sank exhausted thirty-four days after the fall.

"On examining the spine, a fracture through the lower part of the body of the fourth cervical vertebra was found; it extended obliquely downwards and forwards, but the parts were prevented from being displaced by the articular processes. The left transverse and articular processes of the fifth vertebra were fractured, so as to permit the fourth to slip forward and compress the cord at this point. The intervening fibro-cartilage between the fourth and fifth vertebræ had disappeared; and along the line of fracture in front of their bodies was an osseous deposit, resembling callus; which itself presented a fissure, as if consolidation had taken place, but the parts had again yielded to violence.

"Opposite the point of compression the cord exhibited an annular constriction, abrupt and well marked, and very analogous to that presented by the intestine in some cases of strangulated hernia. When incised longitudinally at this spot, the colour and consistence of the cord were found altered to a brownish hue, and the density and firmness of fibrous tissue; a small circumscribed spot, about a line in extent, was especially characterised in this way. The membranes were also more adherent here than elsewhere. It was inferred that the seat of this peculiar change was that of the original

lesion, and that the above appearance constituted a true cicatrix of the spinal marrow."

In another instance, the details of which are contained in the *Rapport de la Société de Chirurgie* (*L'Union Médicale*, 1860, p. 525), about the same period of time was required for restoring the integrity of the spinal cord after an incised wound.

Case xxv. A boy, aged 15, received a wound from a cutting instrument in the back, which penetrated between the tenth and eleventh dorsal vertebræ, and probably divided the right half of the spinal marrow. There was complete paralysis of motion, and incomplete loss of sensibility of the right thigh and leg. The patient made a good recovery, and, at the end of two months, was able to walk four or five miles. A remarkable symptom in this case, which has been often noticed before, was the quantity of cerebro-spinal fluid which escaped from the wound during the first twelve days after the receipt of the injury.

A somewhat similar, though less successful case is reported by Herr Schwanderer, in which a punctured wound was inflicted in the spinal marrow between the second and third dorsal vertebræ. There was paralysis of the right foot and leg, shortness of breathing, and involuntary discharges of fæces and urine. The foot remaiaed partially paralysed.

The next case which fell under the observation of Mr. Belcher of Burton-on-Trent, is interesting, not only as illustrative of fractured spine generally, but as an example of reflex action induced by the first shock given to the spinal marrow. The details are contained in the British Medical Journal for November 22nd, 1862, pp. 531-2.

In all these accidents there is so definite a correspondence between the extent of paralysis and the seat of the injury that the diagnosis is seldom difficult; and with the additional evidence afforded by the deformity, the abnormal mobility, the crepitus, and the absence of cerebral symptoms, the nature and measure of the mischief may be determined with tolerable certainty. It should be remembered, however, that concussion of the spine, without either dislocation or fracture, has been known to produce paralysis; and Dupuytren has ascribed some cases of diseased cervical ligaments which have led able practitioners into error (*Op. cit.*, pp. 346-9).

But when either dislocation or fracture of the first or second cervical vertebra involves the phrenic nerve in the lesion which destroys the function of the other nerves which associate the muscles of the chest in the act of respiration, there is no time given for diagnosis. In the cases just described, a patient may drag on a painful existence for a time, but when such an injury is inflicted on the cord at the base of the medulla oblongata death is the immediate result—another breath is not drawn. Two instances of this are recorded by Sir Charles Bell ("On the Nerves which Associate the Muscles of the Chest in the actions of Breathing, Speaking, and Expression." *Philosophical Transactions*, 1822, p. 302).

In both cases, the injury of the medulla oblongata arrested the act of respiration on the instant of its occurrence. Not only is the attempt to reduce either dislocation or fracture inexpedient, but it is positively dangerous; for the force required to effect the desired object would necessarily implicate the spinal cord in the extension, and intensify the mischief which compression may have set up. Therefore, with whatever reluctance we may feel, yet must we regard these injuries as incurable and mortal.

If, however, as sometimes happens from gun-shot wounds, the spinous process only of a vertebra be fractured the mischief is not very serious. I remember to have seen a case in which the spinous process and the posterior portion of the arch of one of the lower cervical vertebræ was shot away so that the theca of the cord was exposed. The subject of the accident was an officer, who received the wound in the Crimean war. When he arrived in England the external wound had healed, but pressure over the part produced numbness and a sense of heaviness of the arms. By wearing a metallic shield over the part he suffered no great inconvenience.

Perfect quiet on the back is the best remedy in all fractures and dislocations of the vertebral column; but great care is necessary to protect the paralysed and insensible surface from bed-sores. Active treatment may be necessary to subdue local inflammation; and if much flatulent distension of the abdomen exist, a warm purgative enema may be given. If requisite, the urine must be drawn off by a catheter. In cases of diseased ligaments of the spine issues are of great service.

It will be observed that, I have endeavoured to illustrate the relationship between the symptoms of disease and the anatomical structure of the parts on which those symptoms depend. This course, I venture to think, is more useful than the search after rare and exceptional cases in which, supposing the *post mortem* examinations to have been perfectly conducted, we are compelled to admit the marvellous and inexplicable nature of the disease.

The most extraordinary that I remember to have read of is contained in the *Journal de Chirurgie* (tome iv, p. 137, 1792). The subject, J. P. Ripert, aged 21, was admitted into the Hôtel Dieu on August 10th, 1792, in consequence of a gun-shot wound just below the inferior angle of the scapula, and which had occasioned effusion into both sides of the thorax. He survived the wound twenty-six hours, during which no other symptoms than those of effusion manifested themselves. He voided his urine freely, had no paralysis of the inferior extremities, but, on the contrary, continued to move them in an agitated manner until he died.

On tracing the course of the ball after death, it was seen to have penetrated the chest between the eighth and ninth rib, to have traversed the inferior lobe of the right lung, thence through the right side of the body of the tenth dorsal vertebra into the vertebral canal where it had entirely divided the spinal marrow. From the spinal canal it passed into the left cavity of the thorax, which, like the right, was found full of blood, and carried out with it a portion of the inferior lobe of the left lung between the seventh and eighth ribs, near their angles.

Two cases are reported in the *Archives Générales de Médccine* (Memoire sur quelques alterations de la Moelle Epinière dont les observations principales ont été recueillies à la Clinique et sous les yeux de M. le Professeur Bougon, tome vii, p. 329). The subject of one was a soldier, who had received a sword thrust through the posterior part of the twelfth dorsal vertebra, between the spinous and oblique processes. The wound passed through the spinal cord, the point of the sword extending to the right side of the eleventh dorsal vertebra, whence it was extracted after death. Yet the man marched eighty leagues after the infliction of the wound; and Velpeau vouches for the accuracy of the details of the case.

The other was a tailor, aged 17, who had diseased vertebræ and spinal curvature, together with a fistulous abscess in the left thigh. He died without any paralysis, yet were there two vertebræ and the lower half of the lumbar swelling of the cord absolutely destroyed.

The case reported by my late friend, Mr. Stanley, to the Royal Medical and Chirurgical Society, is so generally known that I ought, perhaps, to apologise for quoting it. The disease was not the result of an accident, but came on spontaneously and increased progressively. Loss of motion became complete throughout the whole extent of each lower extremity, but in no part was there defect of sensibility; scratching, pricking, or pinching being attended by sensations as acute as ever.

On examining the body, no disease was found in the anterior columns of the cord, but the whole of the posterior from the pons to the lower end of the cord were changed in colour and consistence. (*London Medical Gazette*, February 7th, 1840.)

An exactly similar case has been reported by Dr. Budd. Considering the marvellous uniformity which exists in the anatomical structure of every organ, and the special function of each individual tissue; considering, too, the unvaried results of experiments when performed on the same parts of the nervous system, in the same manner, and under precisely the same conditions, in the lower animals, I am more disposed to believe in the incomplete examination of pathologists than in any freaks of nature. How seldom, for instance, is the grey substance of the cord adequately examined during a *post mortem* investigation; and yet there it is—if the starting point of every nervous fibre contained in the anterior roots of nerves mean anything—that we should look for an efficient cause, for there it is that every muscular motion must originate. Then, again, to what false conclusions may the varying conditions of the spinal marrow lead us when it is examined after death! It has been already observed that, no part of the animal body undergoes such rapid changes as does the nervous system when its vital action has once ceased; and yet how prone are we to infer that as we find it, such was its state at the last moment of life; and, thereupon to dilate on the discordance between its physiological action and its morbid condition.

Lateral Curvature of the Spine produced by Paralysis of the Muscles of Respiration. Before I leave this part of my subject, a few observations on the ingenious theory of Dr. Stromeyer (*Ueber Paralyse der Inspirations-Muskeln.* Hannover, 1836), which attributes to partial paralysis of the muscles of respiration the ordinary form of scoliosis, may not be considered out of place.

The dependence of the muscular tissue for its healthy contractile power upon a constant and adequate supply of arterial blood is too universally admitted to require being insisted on here. On this axiom, Dr. Stromeyer conceived a doctrine which is worthy of our best consideration, seeing that it may suggest means both of prevention and cure, available for the purposes of everyday practice.

The accessory muscles of respiration possess two distinct functions, the one appertaining to voluntary motion, the other to respiration; and these functions are dependent on two distinct sets of nerves.

The *sterno-cleido-mastoideus* and *trapezius* muscles have nerves going to them from the cervical plexus for the purpose of moving the head and shoulders, whilst they also receive a special nervous influence from the spinal accessory nerve.

The *serratus magnus anticus*, too, has nerves from the dorsal plexus, because it has to assist in the motions of the body in locomotion; but it receives also the so-called external respiratory nerve, which is, as Sir Charles Bell first called it, the counterpart of the internal or phrenic nerve.

To make this part of Dr. Stromeyer's theory more intelligible, I will take the liberty of transcribing Sir Charles Bell's observations on these three muscles.

1. "The *sterno-cleido-mastoideus*, by its attachment to the sternum, and to the clavicle, raises or heaves the chest. The usual description of the muscle is to consider it as a muscle of the head, the lower attachments being the origins; but when the head is fixed, it becomes a muscle to raise the chest, and its operation is evident in all excited states of respiration, in speaking, and still more in singing, coughing, and sneezing. But there is something necessary to the full effect of this muscle on the chest, for otherwise it will be a muscle of the head, and not of the chest. This leads us to the next muscle."

2. "The *trapezius* must fix the head or pull it backwards before the mastoid can act as a respiratory muscle; and how they are combined we shall presently see. The position of the head of the asthmatic during the fit, as well as the posture of the wounded or the dying, prove the influence of the upper part of the trapezius in excited respiration; that is to say, when the shoulders are fixed, this muscle, usually described as a muscle of the superior extremity, becomes a muscle fixing the head." "The trapezius has a still more powerful and important influence in respiration when the action rises above the ordinary condition, and that is by drawing back the scapula, to give necessary effect to the action of the serratus magnus on the ribs."

3. "The *serratus magnus anticus* being extended over the whole side of the chest, and attached in all the extent from the second to the eighth rib, is very powerful in raising the ribs and holding out the margins of the chest, which would be otherwise drawn in by the diaphragm; and to this effect the intercostal muscles alone would be insufficient in the high or excited state of respiration. But it cannot exert this power independently of the trapezius, since, without the combination explained above, its force would be exerted on its more common office of moving the scapula and not the ribs. Unless the scapula be fixed, or pulled back by the trapezius, the serratus is not a muscle of respiration."

"In this manner do these three powerful muscles hold together in their action, combining with the diaphragm to enlarge the cavity of the chest in all its diameters. These external muscles do not interfere with the gentle actions of breathing. But if the apparatus of respiration is to be employed in any excess of action, in passion, in dying, in speaking, singing, coughing, yawning, etc., these become powerful instruments.

Now, it is to the defective energy of these accessory muscles, that Dr. Stromeyer attributes scoliosis or lateral curvature of the spine.

The action of the serratus is to keep the ribs stretched outwards, backwards, and upwards—to raise them and hold out the margins of the chest; but, when from any cause as in individuals whose exercise is inadequate to the maintenance of a healthy circulation and vigorous muscular action, the serrati fall into weakened and diminished action, their opposing muscle, the diaphragm, draws the sides of the chest downward and inward, and, as the left serratus is generally less active than the right, there is a resulting concavity of the left side of the chest. This begins immediately under the axilla, and no sooner is the equilibrium disturbed than the serratus of the concave side acts under unfavourable circumstances. Thus the more it is enfeebled the more does the diaphragm pull in the ribs of that side, and the trapezius of the arched side comes to assist in the distortion of the bony framework of the entire trunk.

It must be admitted that the theory is exceedingly ingenious, and it has the incidental advantages of harmonising with the most recent investigations on the influence of the vaso-motor nerves on the functions of respiration and nutrition; and of indicating a system of treatment the most likely to improve the general health by increasing the tone of the inspiratory muscles.

Advance of Nations. Those nations are furthest advanced intellectually and physically which are most thoroughly composite in their character." Dr. Hammond remarks, "that numerous examples of the improvement of races have been furnished in the history of the world;" and that "in the United States we have the most striking example of all. Who can doubt that the activity both of mind and body, the ceaseless energy, the superb physical development of the people, are due to the commingling of the blood of all the nations of Europe? To be an American is to be a cosmopolitan."

Progress of Medical Science.

Fatty Degeneration in Poisoning by Phosphorus. MM. Ranvier, Verliac, and Fritz, have studied the fatty degeneration which is produced in various viscera in certain cases of poisoning by phosphorus, and which has been specially described in Germany in recent years. This memoir is based on the observation of two hospital cases and of several experiments on animals. The following are the pathological results at which they have arrived.

They have found fatty degeneration in the liver, kidneys, heart, and voluntary muscles; but have in vain sought it in other organs.

In the *liver*, the form, size, consistence, colour, and structure of the organ, vary with the amount of change which it has undergone. When the fatty degeneration is general and far advanced, the liver is increased in size; its edges are slightly rounded; its consistence is diminished; and it has an uniform yellowish-white opaque colour. The parenchyma of the organ then is found to consist of a few cells gorged with fat, of granules, and free drops of oily matter scattered through a cellulo-vascular stroma. The fatty degeneration, though occupying all the lobes of the liver, may be unequally distributed through them; the organ then, both externally and internally, seems to be constituted of a yellowish opaque mass, through which are regularly scattered red translucent points, of nearly equal size everywhere. These red points, on examination with the microscope, are found to contain cells nearly in a healthy state. Beyond them, the cells became gradually charged with fat, and at last entirely disappear and give place to granules and drops of oil. The authors of the memoir have observed in animals considerable portions of the liver remaining healthy in the midst of the degenerated parts.

In the *kidney*, when the fatty degeneration is in an advanced stage, the cortical substance is yellowish and opaque; the vessels are engorged with blood, and the glomeruli are red and very distinct. On examining with the naked eye a section placed between two glass plates, transparent points having the linear arrangement of the glomeruli may be distinguished in the midst of a grey opaque mass. The medullary substance preserves its normal appearance. Microscopic examination shews that the tubes of the cortical substance are filled with a considerable quantity of fatty granulations, replacing the normal epithelium. The glomeruli are all covered with healthy cells and contain no granulations. This state of the glomeruli the authors believe to be constant; and they suggest that it may have some relation to the modern theory of the different functions of the epithelial cells of the tubuli and of the glomeruli. The tubes of the medullary substance present some doubtful traces of fatty degeneration. When the degeneration of the kidney is studied in its early stage, it is found that, although the cortical substance may appear to the naked eye to be scarcely altered, it may yet be in an advancing state of degeneration. Thus some of the tubuli are healthy; others contain fatty granules within or without the cells; while others are loaded with fat. In one instance, the cortical substance of the kidney of a young cat, which had undergone fatty degeneration, was found to weigh 1.40 *grammes;* on treating it with ether, 0.75 *gramme*, or 53 per cent., of fatty matter was extracted.

In the *heart*, the morbid change follows a course analogous to that in the liver and kidneys. Sometimes the degeneration attacks the entire organ; sometimes isolated points alone. The fatty transformation may be quite complete; or it may consist of granulations scattered at distances throughout the fibres, which appear to have lost their striated character. In the two cases in the human subject, the degeneration, in a slightly advanced stage, was uniformly distributed throughout the heart. In one of the animals on which experiments were made, the fatty degeneration appeared in distinct nuclei; the rest of the organ being healthy.

As regards the *muscles*, the authors found in those of the tongue, diaphragm, trunk, and limbs, some of the fibres having undergone perfect fatty degeneration lying among others in a healthy state. Hitherto they have found the degeneration of the muscles in those cases only where that of the liver, kidneys, and heart, was far advanced. (*Archives Génér. de Méd.;* and *Gaz. Méd. de Paris*, 11 Octobre, 1863.)

Structure of Indurated Chancre of the Prepuce. In a paper read before the Société de Biologie in Paris, M. Ordonez has given the following summary of the appearances observed by him on making a histological examination of indurated chancre. 1. The epidermis is considerably thickened around the ulcerated part. The most superficial cells all present a central nucleus, tolerably large, with from one to four nucleoli; contrary to what is met with in healthy epidermis, where the cells lose their nuclei as they approach the external surface of the skin. 2. The interpapillary digitations in the true skin are larger at the level of the chancre than in the healthy skin. The epithelial cells are very closely packed, larger than in the normal state, and infiltrated by a very transparent fluid, coagulable by alcohol. 3. At the level of the papillary layer of the skin, small hæmorrhagic clots may readily be detected, produced, no doubt, by the rupture of the small capillary loops distributed in the papillæ. Hæmatosine, mixed with red corpuscles in various stages of change, is effused in patches, between the papillary and the mucous layers. 4. The meshes of the cutis vera, from the papillary layer to its deepest portion, are infiltrated with a large quantity of plastic lymph. On merely making thin slices of the chancre, a large quantity of a very transparent, slightly viscid fluid, coagulating slowly on contact with the air, may be made to escape by pressure or by the action of the cutting instrument. This liquid, examined microscopically and with the aid of reagents, appears to be plastic lymph, or blastema. 5. The papillæ are increased in size, without being altered in shape. They are infiltrated with a large number of embryonic or transitory elements of the fibrous or connective tissue. These consist of round or oval nuclei, varying in diameter from ·00016 to ·00028 and ·00036 of an inch; of small fusiform, fibro-plastic bodies in an ordinary state of evolution; and of small bundles of fibres of fibrous or connective tissue in progress of formation, and still presenting nuclei. 6. In the substance of the derma are to be found a number of fibrous cords, with perfectly developed fibres, and presenting a brilliant white aspect, contrasting remarkably with the adjacent tissue. This appearance is best presented by recent sections of the induration, examined by the aid of distilled water; it is also present, but less distinct, in specimens that have been preserved in alcohol or glycerine. M. Ordonez thinks that the alterations in the skin which he has described, satisfactorily explain the peculiar induration characteristic of the infecting chancre. (*Gaz. Méd. de Paris*, 11 Octobre, 1863.)

Extensive Development of Cysticerci in the Human Body. Pierre Massot, aged 77, was admitted into the Hôtel-Dieu at Lyons in November 1862, with pulmonary catarrh and general weakness. On February 9th, 1863, he broke the neck of the left thigh bone, and was consequently removed into the surgical wards, under M. Delore, where he gradually became weaker, and died on April 16th. M. Delore had noticed, during the man's life, a number of small tumours on the chest,

along the arms, on the elbows, and in the armpits. The lower limbs were very œdematous, so that the presence of any tumours in this situation could not be ascertained. The swellings were subcutaneous, and were not adherent to the skin nor to subjacent parts. Some of these seemed to be united by fibro-cellular bands, as they were easily moved together. The skin over them was unaltered; they were of the size of haricot-beans, very hard, and presented no trace of fluctuation. It was thought that they were of fibro-plastic character.

Thirty-hours after the man's death, the tumours were examined by MM. Delore and Bertholus, and were recognised to be due to the presence of cysticerci. Several cysticerci were found in the subcutaneous tissue of the conjunctivæ. The muscles were pale and easily torn; all those of the trunk and limbs contained numerous cysticerci; in the diaphragm there was one nearly as large as an almond. It was estimated that the subcutaneous conjunctival tissue and the subaponeurotic and intermuscular tissue contained about 2,000 of these bodies. They occupied principally the points of insertion of the muscles; their longest diameter lay parallel with the fibres, which they separated without destroying them; they were also lodged in the intermuscular spaces. No cysticerci were contained in the bones. The head of the thigh-bone was broken outside the capsule, and the great trochanter was also detached. Union had not taken place. There were no cysticerci in the eyes; nor at the base of the tongue, where they are always present in measly pigs (up to the present time, only one case of cysticerci in the human tongue has been noticed; it is related by Rudolphi). The liver, spleen, and kidneys were quite healthy; the latter presented numerous cysts on their surface. The pancreas contained one cysticercus. The mesentery was literally crammed with them. The parotid glands contained several. Three or four were found in the sides of the larynx. There were sixteen on the surface and in the tissue of the lungs. One was placed superficially on the anterior wall of the heart. The intestines were carefully washed and examined; but no tæniæ nor worms of any kind were found. In the nervous centres, 111 cysticerci were found; viz., 22 in the membranes, 84 in the cerebrum, 4 in the cerebellum, and 1 in the medulla oblongata. None were present in the spinal cord. On the surface of the brain, a rather large number of cysticerci had formed a small cavity in the substance of the convolutions; others were seen through a thin layer of cerebral substance. The ventricles, choroid plexus, and optic thalami, contained a considerable number. The brain was soft and diffluent.

An examination of the parasites showed that the vesicles varied much in size, and that they contained scolices having a double range of hooklets varying from thirty to thirty-four in number.

Very little information could be obtained as to the antecedent history of Pierre Massot. As far as could be ascertained, he was a beggar, led a wandering life, and was frequently intoxicated. His food ordinarily consisted of bread, cheese, and pork. In the part of the country where he lived, measly pork is common; but no cases of tæniæ have been noticed there.

Cases where the muscles and organs have been generally occupied with cysticerci are very rare. M. Delore has met with only two such instances; one related by Werner, the other by Demarquay. In the latter case, most of the muscles contained cysticerci; but among the internal organs, the lungs alone. In a case of ununited fracture of the humerus, under the care of Dupuytren, where resection was performed, several hydatids were found in the fragments. The fracture was attributed to their presence, as the patient had broken his arm in throwing a stone with moderate force. (*Gazette Méd. de Paris*, 3 Octobre 1863.)

Etherisation followed by Death. At the meeting of the Imperial Society of Medicine in Lyons, on July 20, M. Chassagny communicated the case of a lady aged 40, to whom ether was administered previously to the removal of an urethral polypus and two sebaceous cystic tumours on the head. Thirty *grammes* of ether (rather less than an apothecary's ounce) were used; but the anæsthesia produced was incomplete, and the patient was aware that the operations were being performed. The administration of the anæsthetic was not pushed further, because the stage of excitement did not manifest itself, and because, on the contrary, general coldness, and slowness of the pulse, were present. On the completion of the operation, which occupied a quarter of an hour, vomiting set in; the coldness increased, and was accompanied by clammy sweats; and the patient had convulsions, attended with foaming at the mouth. The attack passed away in a few moments, but soon returned with equal intensity. After the fourth attack, the patient died. M. Chassagny considered that the patient had died of eclampsia induced by etherisation, which was thus the indirect cause of death. She had previously been subject to epileptic vertigo. (*Gaz. Méd. de Lyon*, 16 Octobre, 1863.)

New Cure for Hysteria. The *Presse Médicale Belge* relates a case of violent hysteria which was instantaneously checked by a singular mode of treatment. The patient was a prostitute, who seemed threatened with imminent asphyxia, and in whom orthopnœa was followed by an immobility which might have been mistaken for actual death. Professor Thiry, who was summoned to her assistance, was induced by a tremulous movement of the lids, combined with spasmodic action of the ocular muscles, to admit the presence of hysteria. He remarked that pressure exercised over the hypogastric region relieved the symptoms, which relapsed as soon as the pressure was removed. Under these circumstances, M. Thiry, conceiving that more energetic pressure was required, grasped with both hands the inferior part of the abdominal walls, and suddenly twisted them round; the patient uttered a slight scream, sighed deeply, and experienced immediate relief. This singular manipulation was continued for ten minutes, and at the expiration of this short period nought remained, but the sense of general *malaise* which invariably follows great convulsions of the system. (*Jour. de Méd.*)

Reviews and Notices.

Introduction to Anthropology. By Dr. T. Waitz. Translated by J. F. Collingwood. Pp. 404. London: 1863.

A Society, called the Anthropological, was founded at the beginning of this year (1863); and, amongst other promises published in its programme, was this, that it intended to issue a series of standard works on anthropological science, and that the first of them would be the volume of Dr. Waitz. This work was so chosen, because, in the opinion of the Council of the Society, no modern work contained so good an epitome of the subject referred to.

The science of anthropology, like this Society itself, is in its infancy; and, therefore, every systematic work on the subject must, at the present day, be very imperfect; but still it is well to be able to lay hand on a work which contains references to all the best authorities. The personal opinions of any author in this matter are only of secondary value. What is now required is a collection of authentic

facts, from which may ultimately, perhaps, be drawn true and grand conclusions concerning the nature of man. This is how the Council argue. The name of Dr. Waitz is probably not familiar to many of our readers; but he is well known in his own country as a candid, erudite collector of facts. His book shows him to be a man of immense research.

The First Part of the volume contains The Physical Investigation of the Human Species, discusses the nature of species, tells of the nature and extent of the physical agencies to which man is subjected (or to use the not very lucid language of the translator, "the mode and magnitude of the physical changes to which man is subject.") Here, also, are detailed the Chief Anatomical and Physiological Differences which distinguish Different Races; The Results of Intermixture of Different Types; and The Peculiarities of the Mongrels. In the fourth and fifth sections of the First Part, we have also a Review of the Principal Theories regarding the Unity of Mankind; and a chapter On the Classification of Mankind.

The Second Part of the work is an Investigation into the Psychological Character of Man. We have a chapter on The Specific Characters of Man; another on The Primitive State of Man; and one, The Various Degrees of Civilisation, and the Chief Conditions of its Development.

We need hardly say, that it is quite out of our power to give any detailed account of this volume. It is itself a volume of details. Its nature, character, and value, may be gleaned from the criticism bestowed upon it by the Anthropological Society, and by the fact of its being their first offering to their members. There can be no doubt that it is the best epitome of matters anthropological now contained in our language; and will be of great service to the student as a book of reference.

British Medical Journal.

SATURDAY, DECEMBER 26TH, 1863.

MR. SYME ON MEDICAL EDUCATION.

LAST week, the Edinburgh College of Surgeons held a very successful *conversazione;* the success having been promoted, in the main, by the announcement that Mr. Syme would then and there deliver himself of his views on medical education. Mr. Syme has every claim to a hearing on this score. He has been upwards of forty years a teacher of anatomy or surgery; and must, therefore, know pretty well what kind of food is best adapted to the mental digestion of the student, and for the manufacture of a useful practitioner of medicine.

Mr. Syme, during the last session of the Medical Council, proposed the following resolution, which was carried unanimously.

"That the Medical Council resolve to take into consideration, at the next meeting, the propriety of recommending a reduction in the number of courses of lectures which the regulations of the various licensing boards at present render obligatory.

"That, with the view of facilitating the consideration of this subject, the General Council request to be favoured with the opinion of the bodies in Schedule A on the possibility and propriety of this before next meeting."

In consequence of these resolutions, the licensing bodies will be called upon to express their opinions on the subject of medical education; and Mr. Syme, therefore, thought the moment opportune for a few public remarks on the subject. These are his views.

Mr. Syme tells us that the period has arrived when it is necessary to relieve the student from the overwhelming burdens which now oppress him, or rather his memory. The approach of this period has been long anticipated by some teachers; for already, from England, Ireland, and Scotland, voices have been sent to the Council calling attention to the evils which result from the present insatiate system of overteaching.

Only compare the curriculum of thirty or forty years ago with that of the present days, and you at once see the nature of the impossible burthens laid upon the modern student. He has neither time for thought nor reflection. His whole day is mainly occupied in cramming his mind with impracticable details. "Chemistry, in my student-day," says Mr. Syme, "was a science of which any ordinary intelligence could embrace the details; now it requires the entire devotion of a man's life. Botany, again, was an agreeable recreation then; now it is an oppressive weight on the student's mind. In anatomy, moreover, the expansion of ideas is no less remarkable." In fact, all departments of medical study have so expanded that "the education of our profession has become an effort of memory, rather than a process of mental training—no time being left for observation or reflection."

No one can, we think, deny the truth of the statements so courageously, and we must say skilfully, stated by Mr. Syme. But how is the relief to come? Here lies the pinch. No man likes to be his own executioner; and yet it is evident that, if the student is to obtain the relief desired, some of our professors must submit to the partial or total immolation of their own pet scientific lambs. There is no use attempting to blink the matter. Professors—some of them, at all events—must moderate their pretensions, if the reform be carried out, painful as the self-sacrifice must be.

Mr. Syme tells us what, in his opinion, ought to be done. The curriculum and examinations of licensing bodies must be regulated by superior authority; and so also must the lectures of the individual professor. The shepherd requires looking after, as well as his flock. *Imprimis*, as regards details, what should be especially provided for is, that the student should be enabled to imbibe thoroughly

those things which are most essential to him in after life as a practitioner of medicine, and which can only be obtained during his period of education. Of these, above all stand preeminent anatomy and hospital teaching. But, under the present system, such is the multiplicity of classes forced upon the students, that they have no sufficient time for these things. Scarcely have they put on their anatomical aprons than the bell rings, and away they have to trot to classes—to the ding-dong lecture-room!

But, however injurious be the exceeding number of classes, the mischief of them is as nothing, compared with the present system of examination.

"After thirty years' experience as an examiner," says Mr. Syme, "I feel quite satisfied that the means of ascertaining the extent of qualification are productive of little good and very great harm, since they afford no trustworthy criterion of real knowledge, and most seriously interfere with the concentration of mind requisite for obtaining a firm grasp of it."

The candidate, as matters now go, presents himself for examination with his memory well stocked with answers ready fitted for the questions which he knows or expects the professor will put to him, and he passes a capital examination. But, if the same man be really tried with any simple practical test, he often fails completely in his reply. This all results from the fact that, instead of storing his mind with healthy knowledge, he has been occupied in slavishly getting up the answers which he expects will be required of him. The demonstrator of anatomy, Mr. Turner, tells Mr. Syme that he has noticed a progressive falling off in dissection since the new regulations came into force; and he attributes this mainly to the circumstance that the students are improperly occupied with the preliminary education. Hence the whole plan of the present system of examinations, Mr. Syme unhesitatingly asserts, requires entire alteration.

"The great object of teaching is to promote the acquisition of learning; and, unless it accomplishes this, it may be regarded as useless, although characterised by the most brilliant eloquence and the profoundest science. It has been too generally supposed that the mere enunciation of facts and opinions constitutes teaching; but this may require for its reception only an exercise of memory, while learning is an act of the mind that may be likened to the digestion and assimilation of bodily nourishment. The teacher should excite and maintain the appetite for this mental food, and supply it in such quantity, quality, and order as may be most conducive to the end in view, taking care not to oppress the memory with unconnected crudities, or confuse it with conflicting theories."

Mr. Syme, having thus explained the nature of the evil he has to do with, goes on to tell of the remedy which he proposes for the cure. *Imprimis*, it is essential that the examination for preliminary education be satisfied before the strictly professional course be commenced; next, the professional course ought not to be commenced before the pupil has attained a reasonable age; thirdly, four years' study in a school, where ample means for anatomy exist, and to which a large hospital is attached, should be required; fourthly, "I would require attendance upon all the classes that seemed really necessary"; and, fifthly, would demand from the candidate for diploma a certificate from each of his teachers of his due proficiency in their respective departments. More than this, Mr. Syme would subject the teachers, *ipsos custodes*, themselves to a healthy criticism; for they, also, it appears, require looking after as much as their pupils.

"I would have every lecturer called upon from time to time by the body from which he derives authority to produce a syllabus of his course; and if it should thence appear that he loaded the memories of his pupils with undigested or indigestible details, or allowed an unruly hobby to carry him away from the field of practical utility into the regions of unprofitable speculation, or, still worse, taught doctrines not conducive to sound practice, I would endeavour to correct the evil of his ways by remonstrance, by censure, or, if necessary, by deposition."

These opinions of Mr. Syme were delivered before a large assemblage of his medical brethren—the *élite* of the Edinburgh profession; and it is well that we should add, were most cordially received. The speaker, we read, "sat down amidst long and protracted cheering."

Dr. Christison and several other persons, on the same occasion, expressed their views on the subject. Dr. Christison's were, in the main, exactly those of Mr. Syme. He said that the subject had attracted his attention ever since he had held a professorial chair.

"The great difficulty was, as Mr. Syme had stated, that the range of education had extended to such a degree that it was perfectly impossible for any student to master all the different branches of study. In the practice of surgery, Mr. Syme had borne testimony to the extension of the course; and in that of medicine, he could, from an experience of forty years, state that in several of its branches it had extended to an incredible degree. But, in addition to the practical courses, they had the fundamental studies of chemistry, botany, anatomy, physiology, and natural history; and the first point of difficulty being the extent of available knowledge, the next point was how much of all these sciences was to be taught—how much the student must acquire to qualify him for the profession? There was no doubt great difficulty in saying where they might retrench; but he thought he could see some subjects which might be usefully curtailed; and he thought that if those who were well instructed in the teaching of the several branches were to put their heads together, and take up the matter impartially, they would be able to come to some tolerably clear understanding of what the teachers ought to be expected to give. It was impossible to go into details here, and they had yet a good deal to learn as to details; but he believed all would agree in the general necessity of some curtailment taking place. As to examinations, he hoped the Medical Council would act decisively; for he was quite satisfied that the system of examinations had extended a great deal too far. He thought the former system produced as good graduates as the present; perhaps better. Not that the teaching in itself was worse, or the students less diligent; but he thought the system of constant examination both in class and by faculty was injurious to calm reflection on

the part of the student. He thought that examination had been too highly estimated as a means of ascertaining the capabilities of the student; and as an examiner of thirty-one years' standing, he could assure them that very frequently indeed, examination was a very feeble test of a man's ability as a practitioner. In the practical departments of medicine and surgery, he did not think that a man could have too much examination; but it was a great hardship to subject students at the end of their course to an examination which rendered it necessary for them to keep up the mere details of their fundamental studies."

We are exceedingly glad to find that this most serious question of medical education is likely to be made the subject of discussion in the Medical Council, and in the direction pointed out by Mr. Syme. No unprejudiced person who is acquainted with the medical education of the present day, can do otherwise than feel that the student is compelled to undergo the infliction of a great many lectures which, under the circumstances, are worse than useless to him, and chiefly for this reason, that they obstruct his progress in the acquisition of other much more important knowledge. Besides this, on the face of it, the present system bears the plain signs of absurdity and contradiction. What can be more utterly absurd, than compelling the student to run from class-room to class-room, hour after hour, and expect him to imbibe the instruction of the teacher he meets with in each of them. The process is literally and simply the same as cramming a jaded stomach with loads upon loads of viands more or less heavy or highly-spiced, and then expressing surprise that nausea and weakness result, instead of the genial warmth and constitutional strength of a reasonably supplied appetite. We do this, and yet call ourselves medical men, physiologists, and partly psychologists.

Really, we cannot imagine that any professors will be found to support such an outrageous system in argument. But the practical struggle required for its alteration will require self-sacrifice, and of course no professor will care to be the victim; and naturally, also, most professors will believe their own pet study to be the most important in the scheme of education. How, then, is any real settlement of the difficulty to come? Has the Medical Council either the courage or the virtue to lay down laws in accordance with reason? Has it patriotism enough to make the necessary sacrifice? We shall see. In the meantime, we recommend Mr. Syme's "conversation" to the consideration of the profession; and will, on another occasion, point out what seem to us to be the courses of lectures which, above all others, require pruning or suppressing.

BOARDS OF GUARDIANS AND THEIR MEDICAL OFFICERS.

The Blackburn Board of Guardians, as well as the Southampton Board, is at difficulties with its doctor. The Blackburn Board has, it appears, been pleased to censure their officer, Dr. Gillibrand; and Dr. Gillibrand has, we are rejoiced to see, cast back their censure at them; and told them to look out for another to fill his place. The doctor is accused of neglect in visiting a patient; and if he would have cried peccavi and apologised all would have gone well; but he would do nothing of the kind. He is, therefore, more than censured; and saves further trouble by the following reply:

"You expected me to apologise—that is, to cringe and play the toady. You have mistaken your man; it forms no part of my system to practise sycophancy with physic. I have to inform you that I shall resign so thankless an office; but, for the following three reasons, not till the current quarter terminates, provided always that this shall be agreeable to your majesties:—Firstly, to enable the Poor-law authorities to make such investigation as they may think the case requires; secondly, that the question of arrears of which your *very honourable board* have so long defrauded me, may be laid before the judge of the County Court, of which proceedings you will be informed to-day; thirdly, and though last not least, in order that you may have sufficient time to appoint a successor, that the poor paupers, in whom you take *such a holy* interest, be not left uncared and unprovided for."

Really, it is time that this huge farce of Poor-law medical relief should be held up in its true light before the world. Seriously, we ask those members of our profession who are engaged in the work, whether it is possible for them properly—or with justice to the poor—to perform the labours thus iniquitously thrust upon them.

How often have we not had to record the virtuous indignation of "the Board" at the neglect of the doctor, their usual scapegoat, for not duly visiting some unfortunate pauper, when, as they must well have known, his physical powers were unequal to the work imposed upon him. In a populous district, like that of the Southampton District, if a man were occupied every hour of the day and of the night, he would not have time enough to properly do the work which falls to his hands.

But the doctor's hardships are not the worst part of the affair. The real sufferers in this iniquitous—for we can use no milder term—payment of the doctors—the silent, and perhaps the unconscious victims of the abominable system—are evidently the poor patients themselves.

The world has no right to expect from medical men more than from other members of society; and we put it to the profession, what sort of a "medical visit" is that likely to be which is paid for at the rate of one farthing (as Dr. Griffin tells us he was paid)? What sort of physic is the patient likely to get for a farthing? And then, again, are we wrong in asking, if the patients do not, in the very largest majority of cases, want food rather than physic? Is it not true, again and again, that a bottle of physic is given where a pound of flesh would be much better applied? Is it not a fact, that medical gentle-

men who conscientiously give frequent orders for food and extras of that kind fall into great disgrace with the Guardians? Is it not the fact, that medical relief too frequently acts most injuriously to the interests of those whom it is meant to relieve in the way described; viz., that through its intervention the patient often gets a stone instead of bread—a bottle of physic instead of beer and beef? Let any one refer to Dr. Griffin's account of his labours, and say, is it possible to call such practice the practice of medicine? Dr. Griffin's letter, we must say, has made revelations, in set terms, which throw a new light into this dark business. He demonstrates the fact, that two men cannot do the work which he is supposed to do. And we cannot help, when we hear this, but think of the wretched poor. Them we regard as the real victims of this heartless system; and we earnestly ask all those of our professional brethren who are engaged in these employments, under similar terms to those related by Dr. Griffin, whether they are doing justice to their fellow-creatures, the poor, in undertaking work which they know they cannot perform?

We cannot but regard the conduct of many Poor-law Boards of Guardians as little better than a conspiracy against the life of the poor. Well, in the case of the Southampton Board, what shall be said of their conduct, if they still maintain their present system, after the receipt of Dr. Griffin's letter and the appeal from the Southampton Medical Society? Can it be regarded as much other than what we have here denounced it to be? And if so—we put it to the profession—can it be right that members of our medical profession should enter into terms with such conspirators, to carry out a system which must produce most melancholy results?

Since these lines were written, we find that the Southampton Board of Guardians has been shamed by Dr. Griffin's *exposé* into doing something. The Board has, in fact, divided the district into three, and gives each of the medical men £125 per annum. But this change was not caused without a fight. We should like much, at the end of six months, to have another such a statement as that put out by Dr. Griffin, and learn what is the work done for the pay at present given.

THE WEEK.

We sincerely trust that George Townley may not die on the scaffold; because if he does not, no murderer can ever be justifiably hanged in this country for the future. If the plea of madness is to avail in his case, some score of judicial murders have been committed in this country during the past few years. We could point to several hangings during the past year, where the hanged presented the distinctest signs of insanity at the time they committed the murders. But we really cannot, in this case of Townley, find any pretence of the kind. The stated signs of lunacy in his case, appear to have been derived mainly, if not entirely, from the outrageous language used by him to Dr. Winslow, of which conversation we have already pointed out the suspicious character. And besides, there is an account of hereditary madness in the family. Beyond this, there does not appear to have been a single symptom of the man's mind being disordered; at all events, not at the time he committed the horrible murder. We can only say, that if this man be not hanged, the hangman's office must be abrogated in this country; and our own wish is that it may be.

They manage these things differently in France, if not better. The government publicly acknowledges the existence of scientific medicine. On the 16th inst., for example, we find the Minister of Public Instruction "assisting" at the meeting of the Academy of Medicine. He wished thereby to show to the Academy the interest which the government took in the labours of the Academy. "The Academy is the council of the government in matters touching the public health," the minister said to the Academicians, "and in this sense its doings are worthy of the greatest attention. By the aid of medical science, the mean life of man has been prolonged twelve years during the last half-century. Go on, gentlemen, in this direction, and prolong the duration of human life. We, in the meantime, at the University, will try to make mankind better and more worthy." The minister wound up with a *mot charmant*. "In listening to your *secretaire perpetuel*, I thought myself in the Academy of Sciences; and in hearing your annual secretary, I thought myself transported to the Académie Française."

The scheme lately brought forward for settling the Indian army medical staff has, it appears, turned out a failure, or rather has been abandoned. The result of this is that the assistant-surgeons are now placed in a hopeless position. Most assuredly, we should strongly advise all young medical men who are starting in life to think twice before they engage themselves in such a doubtful service.

The election of president of the Medical Council is in the hands of the Council, not of the Government, as we have seen it stated. The Council can choose either one of themselves, or can go outside the Council for a president, and, if they please, elect even a layman to that high office. Sir B. Brodie was the first president; and when he retired, Mr. Green was elected from out of the body of the Council; and, consequently, a vacancy was created in the Council.

The vacancy was filled by Mr. Arnott. Whom will the Council elect? We cannot pretend to prophesy; but as two surgeons have held the office, it seems natural that a physician should now try his hand at ruling the Councillors. And if a physician be the man, then, we fancy, all eyes must be naturally turned towards the President of the College of Physicians. For our own part, we can safely say, that we know of no member of the profession better fitted by his high professional position, and his dignified and most business-like way of directing the process of business, than Dr. Watson. His election would, we imagine, have the rare quality of being acceptable to all "parties."

Dr. Robert Wollaston is, we find, a candidate for the office of coroner of the Midland Division of the county of Stafford. We need not repeat to our readers the many arguments which have so often been adduced in favour of medical coroners. The excellent way in which medical coroners perform their duties in the country shows the propriety of their election. It is the duty of our brethren, therefore, to assist every properly qualified gentleman who undertakes the fight necessary for obtaining such an appointment; and we sincerely trust that the profession in Staffordshire will not fail to give their cordial assistance to Dr. Wollaston, who has, no doubt, a hard battle to go through in the matter.

Mr. Lawrence has been elected, by the Academy of Sciences in Paris, a corresponding member of the Institute.

The General Hospital of Vienna possesses a special electrical operator. Dr. Fieber, we read, has just been appointed to the place, to fill the death-vacancy of Dr. Klimpacher.

M. Chevreul has, he says, studied the composition of suet for forty years; and now points out the difficulties which surround its analysis. He will shortly show the existence in it of a dozen new organic compounds.

Bigotry. Dr. Cullen repeats a charge brought against the managers of the Adelaide Hospital in Dublin. A Roman Catholic patient, who was to undergo a very hazardous operation, naturally wished to prepare himself for its possibly fatal termination, and requested that a priest might be brought to him. But, according to the rules of the institution, no priest or nun can be admitted within its walls, and his request was peremptorily refused. He had therefore to be carried in his bed, on a cold winter's night, into the street, where, in the open air, the consolations of his religion should have been administered to him, but for the charity of some one in the neighbourhood, who gave the sick man a shelter in his dwelling while the clergyman performed his office. Such a tale as this requires confirmation. It is incredible in the year 1863.

Correspondence.

IRIDECTOMY.

Letter from W. R. Wilde, Esq.

Sir,—I have read with much interest all the communications which have appeared in the British Medical Journal during the past three months upon the subject of iridectomy as a cure for the disease now called glaucoma, and in reply to your letter asking for my opinion about iridectomy, I have, in the first place, to refer you to a tract on *Medical Epidemics—Glaucoma and Iridectomy*, of which I have forwarded you a copy, and which originally appeared in the *Dublin Quarterly Journal of Medical Science* for August 1860; and, in the second place, to state that from all I have observed and read since the publication of that primary objection to iridectomy, I see no reason to alter the opinions therein expressed.

I have known cases of ocular diseases in former patients of mine, where the operation of iridectomy was performed and attended with the worst results. I have known cases in which patients labouring under glaucoma and cataract, with whom I have refused to meddle, proceeded to London and were operated on, but without the slightest relief. I have known diseases called glaucoma which bear no resemblance to any of the forms of that affection, even as detailed by modern writers. I have known traumatic cataract produced by the operation. I have seen several cases in which a piece of the iris had been removed, and in which the patients said they were "greatly benefited," but when I came to test critically the amount of vision obtained by the operation, it was not that stated by these patients. In examining a case of this kind, especially where the patients having, perhaps, previously received an adverse opinion with respect to the results of an operation, it should be borne in mind that such persons are apt to imagine and to exaggerate to others the benefits they have received from any rare, new, or extraordinary practice. To be admitted as evidence in a court of calm professional judgment, all such cases should be seen by the jurors and carefully examined *prior to the operation*. In the disease called acute glaucoma, or violent inflammation of the internal structures of the eye, attended with partially dilated pupil, etc., I think the removal of pressure by evacuation of the aqueous fluid (and, if it please the operator, the excision of a piece of iris also) a very safe practice in so formidable a disease, but it is not new, as the readers of Wyseheart, Middlemore, Wardrop, and others, must know. Such is also the opinion of Mr. Dixon; but cases of that nature are comparatively rare, and they very often occur in damaged eyes,—previously partially or altogether amaurotic.

I quite agree with the opinion expressed and reiterated by "A Surgeon," that cases of chronic glaucoma must have been as common formerly as now, and therefore should have been met at the corner of every street. In Ireland they certainly are comparatively rare; and I have yet to learn that the inhabitants of this country have derived any ostensible benefit from the introduction of this novelty, for an affection which a patient of mine lately styled "the new German disease."

I have yet to learn the *rationale* or principles upon which the operation is performed, notwithstanding all that has been written on the subject. I do not believe it is explainable. But, say the upholders of the operation, the results are manifest; the cures are abundant. Here I join issue with them; but having, in my former investigation of this subject, met with much discourtesy, both *viva voce* and in print, I have no desire to again enter into a field likely to bring me into personal colli-

sion with gentlemen and friends who hold adverse opinions. I could do it (but the task would be an invidious one); of again taking up the reports of "cures" of chronic glaucoma by iridectomy, and shew, from internal evidence contained in their recital, that they required emendation to render them thoroughly worthy of acceptation.

If iridectomy is a cure for any ophthalmic diseases not otherwise amenable to treatment, it is a truth, and will prevail, no matter how it may be opposed here or elsewhere.

If, on the other hand, it is not a cure for such affections, and only tried as a novelty on account of the great authority of its supporters, it will soon come to an end.

A third case may, however, arise in process of time, after the subject has been fairly tested and sifted in all its bearings; that is, that there may be a few cases in which it is applicable out of the multitude to which it is now applied. Time, that tests all things, alone will effect this. Meanwhile, I think the profession owe you much for the fair manner in which you have permitted this matter to be discussed in the columns of your JOURNAL.

In conclusion, I beg to refer you, in addition to the tract which I have just sent you, to the pages of the *Dublin Hospital Gazette* from August to October 1860.

I am, etc., W. R. WILDE.

Dublin, Dec. 19, 1863.

P.S. Since writing the foregoing, I have just seen your JOURNAL of this date, containing Mr. Bowman's proposal to test the efficacy of the new plan of treatment now under discussion, by showing his patients to skilled and experienced oculists "*before* and after an iridectomy properly performed."

This I think fair; but to be effective, the patients should be examined and reported on before any operation is performed, and the cases pronounced to be really ones of chronic glaucoma, without the complication of cataract, opaque cornea, or adherent iris; for, in many instances, in each of these three latter, artificial pupil, by means of lateral excision of the iris, will, if successfully performed, be beneficial. Such mode of treatment is even applicable to cases complicated with those affections known to our forefathers as amaurosis.

Dr. Bader's tabular statement, with respect to the eighty-four cases operated on at Moorfields Hospital four years ago, shows what was the result of the trial made at that time; but I am sure that no sound oculist would now think of operating upon cases so "rotten" as were then subjected to iridectomy. The "epidemic" alluded to in the *Dublin Quarterly Journal* of 1860 has somewhat subsided; and I presume better selected cases have been operated on, and the errors of the past have led to present improvement in this matter. I, therefore, again say, I think Mr. Bowman's offer a fair one; and, as cases of glaucoma are so common in London as we read of, there can be no difficulty in testing the matter.

LETTER FROM JAMES DIXON, ESQ.

SIR,—I had intended not to have taken part in the controversy about iridectomy, which is now being carried on in your pages; but in the editorial article of this day's JOURNAL, I am mentioned in such a manner as to demand my immediate notice.

My name is associated with the names of several eminent ophthalmic surgeons of the present day, of whom the writer of the article says, "Their opinion is decidedly adverse to the operation of iridectomy, *as at present practised*." And further on, the same surgeons, myself included, are mentioned as not giving "their assent to iridectomy." If the writer, instead of the passage I have marked in italics, had employed the words "as at present *abused*", I should probably have still maintained silence; but while I deplore the reckless manner in which iridectomy is so often resorted to, I cannot let it be supposed that I am indifferent to its very great value in suitable cases.

The manner in which iridectomy was first brought under the notice of the profession, without any attempt towards a rational explanation of its action; the hasty way in which it was taken up by the inexperienced and misinformed; the gross mistakes and consequent ruin of eyes that resulted from it; all this impelled me, as I happened to be publishing just at the very time of this *furore*, to raise a warning voice against the hasty practice of an operation requiring for its safe performance great care and skill, and the indications for which, in the absence of all rational explanation of its *modus operandi*, could hardly be appreciated by those who were in such a hurry to practise it.

My litrle work was specially intended for those commencing the study of diseases of the eye; and for their benefit, I mentioned some of the instances in which I had known iridectomy to be followed by the most destructive results; and I might have cited many more, had my object been simply to decry the new invention.

Some time afterwards, my friend Mr. Wilde wrote to ask my opinion of the operation; and, still anxious to protest against the reckless way in which it was being performed, I stated what I had seen of its disastrous results. (*Dublin Hospital Gazette*, September 1, 1860.) At the same time, I mentioned that, under certain conditions, and in peculiar cases, I had found "permanent benefit" to result from its employment.

During the last three or four years, I have performed iridectomy for "acute glaucoma" on a large number of patients, both in public and in private; and in suitable cases—and here is the important point of the question—it is a cure, or rather, I should say, *the only cure*, for an affection which formerly always hurried, and still, but for this operation, does hurry, the patient into utterly hopeless blindness within a few days, or even hours, from the onset of the attack.

No doubt, a great deal of the confusion now existing in the minds of medical men, as to the value of iridectomy as a cure for glaucoma, arises from the fact that, for want of a better term, we have employed one already in use in ophthalmic surgery, as designating a disease most familiary known in its chronic, incurable form.

True acute glaucoma—the disease for which iridectomy is a cure—is the very first outburst of an inflammation which, if left unchecked, causes a degeneration of tissues, leading to total blindness, admitting afterwards of no alleviation either by medical or surgical means. But numbers of these hopeless chronic cases are now-a-days operated upon by the blind—I mean morally blind—advocates of iridectomy. And I still maintain what I expressed three years ago, in my letter to Mr. Wilde, that no mode of surgical procedure proposed within my remembrance, has been more frequently done without benefit, or even with positive damage to sight."

Without going into a full description of the symptoms which indicate the operation of iridectomy, I may just observe that two marked signs have been pointed out as sure guides: cupping of the optic nerve, and abnormal tension of the globe. Now, as regards the cupping of the nerve, it very often cannot be detected by the ophthalmoscope in the worst cases, just those in which an operation is imperatively and urgently required. As for the tension of the globe, it is present in several inflammatory conditions in which iridectomy is wholly inadmissible. Mr. Bowman, in one of his recent letters, goes so far as to say that "all diseases attended with augmented tension of the eyeball, should now be embraced within the term glaucoma, and as a class should be treated by iridectomy." (P. 593.)

We can only judge of *tension* by its phenomenon *hardness;* and to say that all inflamed eyes which are harder than natural are to be subjected to iridectomy, will be to inflict that operation upon numberless cases of iritis, keratitis, etc., which can be perfectly and readily cured by judicious medical means. I am, etc.,

JAMES DIXON.

Portman Square, Dec. 18, 1863.

Medical News.

BIRTHS.

THOMAS. At Llanfair Caereinion, on December 16th, the wife of *W. W. Thomas, Esq., of a son.

WILLIAMS. At Birmingham, on December 16th, the wife of *T. Watkin Williams, Esq., General Secretary of the British Medical Association, of a son.

DEATHS.

BLOUNT. Samuel, Esq., Surgeon, at Offord Road, Barnsbury Park, aged 73, on December 16.

BRYDON. On December 14th, at Pau, Eliza Home, widow of the late James Brydon, M.D., Bombay Artillery.

HARRISON. On October 31st, at Kussolie, North Western Provinces, India, Emilie Louisa, wife of J. B. Harrison, M.D., Surgeon 27th Bengal Native Infantry.

HISLOP. On December 17th, at Stepney, aged 67, Selina, widow of Thomas Hislop, M.D.

*KEAL, J. T., Esq., at Oakham, aged 31, on December 13.

KENDALL. At King's Lynn, on December 4th, aged 7 months, Sarah, infant daughter of *Thomas M. Kendall, Esq.

MCCLURE. On October 17th, at Invercargill, New Zealand, Lydia Le Mesurier, wife of William G. McClure, M.D.

PRIEST. On December 16th, at Waltham Abbey, Essex, aged 12, Arthur A. H., eldest son of Arthur Priest, Esq., Surgeon.

COMPULSORY VACCINATION. On January 1st, 1864, an Act of Parliament will come into force, making it compulsory in Ireland to have all children born after that day vaccinated within six months, under a penalty of ten shillings.

THE MEDICAL ACT. A numerously attended meeting of owners of proprietary medicines was held on Tuesday week, at Anderton's Hotel, Fleet Street, for the purpose of adopting measures for opposing in the ensuing session of Parliament the insertion of clause 57 in the Medical Act. Mr. R. Barclay occupied the chair, and stated that if the General Council of Medical Education succeeded in engrafting upon their present Act the contemplated clause, its effect would be to render valueless some £2,000,000 of invested property now regarded as a sort of copyright, and which, in fact, is the sole maintenance of some thousands of persons. A committee was appointed armed with the necessary powers for resisting the passing of the proposed bill, and nearly £3,000 was subscribed towards raising a fund for defraying the expenses.

ALKALI WORKS. On January 1st, an Act passed in the late Session for the more effectual condensation of hydrochloric acid gas in alkali works will take effect. The term "alkali" is to mean every work for the manufacture of alkali, sulphate of soda, or sulphate of potash in which hydrochloric gas is evolved. The object of the statute is to secure the condensation of the gas to the satisfaction of the inspector or subinspector appointed under the Act. If it should appear to the Court before whom any proceeding for the recovery of a penalty is instituted that 95 per cent. at least of the hydrochloric acid gas evolved has not been condensed, a penalty not exceeding £50 will be levied, and for a second offence £100. The owner is to be liable for the offence in the first instance, unless he prove that the offence was committed by some agent without his knowledge, in which case the agent is to be liable. The Board of Trade is to appoint inspectors, and alkali works are to be registered.

THE LIBRARY OF ST. BARTHOLOMEW'S HOSPITAL. Within the last week, Dr. Latham has performed an act of generosity which is so full of suggestion for those who, like him, have retired from the public duties of their profession, that it seems well worthy of being publicly recorded. He has presented to the library of St. Bartholomew's between fifty and sixty volumes of manuscript notes of cases which were under his charge during the seventeen years in which he occupied the post of physician to the hospital. The notes were taken by his clinical clerks, many of whom are medical officers of St. Bartholomew's and other hospitals, whilst others, as Dr. Roupell and Dr. Baly, are now dead. The chief present value, however, of these notes consists in the fact of each volume, as it was finished, having been carried home by Dr. Latham, who just studied it, and then wrote an index to it—a work which must have cost very much time and trouble, but not too much for the object in view, namely, that it should present an accurate epitome of the facts which each volume contained, and make all of them, pathological and practical, of easy reference. It is much to be hoped that the example thus set by Dr. Latham may be followed by others who have the opportunity of doing the like, and remembered also by those who are now doing what he did, so long and faithfully, in the wards of St. Bartholomew's. The value of such records as these—stamped, as they are, by the master's hand—cannot be over-rated; they form a store of knowledge not easily to be exhausted; and will stand a fitting memorial of well done work, long after the generation of those who wrote them has passed away.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY.....Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

IRIDECTOMY.—The letters of Mr. Critchett, Mr. Bowman, and Mr. J. E. Smith, are unavoidably delayed. They shall appear next week.

CLUB APPOINTMENTS.—SIR: Knowing your willingness at all times to advocate the claims of medical men in your valuable JOURNAL, I send you the facts of a case which has just occurred in my neighbourhood. A branch of the Rational Sick and Burial Association, at their annual meeting held last night, though contrary to law, thought proper to elect two medical men to attend its members, subject to the approval of the Executive Board at Manchester. I therefore declined to act, should the Board sanction such an unjust proceeding. Why should there be two medical men, more than two secretaries or two treasurers, etc.?

I should be glad to know the opinion of my brethren on the point, which must be my apology for thus troubling you.

I am, etc., A POOR CLUB DOCTOR.

COMMUNICATIONS have been received from:—Dr. EDWARD MERYON; Mr. BRODHURST; Mr. T. M. KENDALL; Mr. WILLIAM COPNEY; Mr. W. R. COOKE; Dr. GIBBON; Mr. WM. BOWMAN; Dr. F. J. BROWN; Dr. ROUTH; Mr. W. M. BAKER; Mr. J. VOSE SOLOMON; Dr. Waters; Mr. HUMPHREYS; Mr. LAWRENCE; Dr. WOLLASTON; Mr. HUGH ROBINSON; and Mr. J. E. SMITH.

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